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South Dakota Agricultural Land Market Trends: 1991-2004

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Results from

THE 2004 SDSU SOUTH DAKOTA FARM REAL ESTATE SURVEY

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Foreword

Agricultural land values and cash rental rates in South Dakota, by region and by state, are the primary topics of this report. Target audiences for this report are farmers and ranchers, landowners, agricultural professionals (lenders, rural appraisers, professional farm managers), and policy makers interested in agricultural land market trends. This report contains the results of the 2004 SDSU South Dakota Farm Real Estate Market Survey, the 14th annual SDSU survey developed to estimate agricultural land values and cash rental rates by land use in different regions of South Dakota.

We wish to thank our reviewers for their constructive comments on an earlier draft of this report. The reviewers are Dr. Richard Shane, department head, and Dr. Matt Diersen, Extension economist, of the SDSU Economics Department; and Mary Brashier, Agricultural and Biological Communications Unit, SDSU.

Eric Gerlach, graduate student in economics and co-author, also handled many of the daily tasks during the survey period including survey administration, data input, and updating tables and charts. We also wish to thank Janet Wilson for developing and maintaining the mailing lists and Barbara Dininger for assistance with various survey tasks. Janet and Barb are secretaries in the Economics Department.

General funding for this project is from the SDSU Agricultural Experiment Station project H-252: Representative farm and agricultural land market analysis in South Dakota.

Finally, we wish to thank all of the 235 respondents who participated in the 2004 South Dakota Farm Real Estate Market Survey. Many have also participated in one or more past annual land market surveys. Without their responses, this report would not be possible.

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Summary

The 2004 SDSU Farm Real Estate Market Survey reports current agricultural land values and cash rental rates by land use in different regions of South Dakota and shows comparisons to values from earlier years. Key findings are highlighted below.

• The most recent annual change (2003 to 2004) in agricultural land values of 17.1% is considerably above the 9–10% annual rates of increase reported in the 3 previous years and considerably above the average annual rate of increase of 6.8% from 1991 to 2004.

From 2003 to 2004, annual rates of increase exceeded 20% in the northeast, east-central and south-central regions. The smallest increase was 8.6% in the northwest region, which was hardest hit by the drought. In all regions, the most recent annual percentage change in value was greater than their long-term (1991–2003) regional percentage changes in value.

• Statewide, cropland and rangeland per-acre values have doubled since 1995.

During the same time period, statewide per-acre average cash rental rates increased 67% for cropland and 52% for rangeland. Thus, gross cash rent to value ratios, a measure of current returns to land, declined during this time period. These trends in land values, cash rental rates, and rent to value ratios are closely related to:

(1) sharp declines in farm mortgage interest rates since early 2001;
(2) federal farm program provisions of the 1996 and 2002 farm bills, especially the level of crop subsidies and removal of planting restrictions; and
(3) general economic conditions of low inflation rates.

• Cash rental rates per acre for cropland and rangeland/pasture increased in all regions from 2003 to 2004.

In general, cash rental rate increases were strongest in those regions where substantial land value increases were also reported.

In other words, land values rapidly respond to increases in cash rental rates stemming from record crop yields, farm program payments, and favorable calf prices. From 2003 to 2004, the average amount of increase in cash rental changes for cropland varied from less than $1.00 per acre in the western regions to increases between $4.00 and $5.00 per acre in the south-central and eastern regions of South Dakota.

[1] Professors of agricultural economics and graduate student, Department of Economics, South Dakota State University. Janssen has teaching and research responsibilities in agricultural finance, farmland markets, and economic development. Pflueger is Extension farm financial management specialist and also teaches an undergraduate course on agricultural cooperatives. Gerlach is a graduate student in economics and was previously a loan officer with the USDA Farm Service Agency.

• Economic conditions in South Dakota agriculture are viewed as the major reasons for increases in land market values and cash rental rates.

For example, farmland values have increased more than the rate of general price inflation from 1991 to 2004 in all regions and for all land uses in South Dakota. Also, cash rental rate increases continue to provide underlying support for increases in land values. These two basic economic factors, along with declining mortgage interest rates, attract interest in farmland purchases by investors and by farmers expanding their operations.

• Agricultural land values differ greatly by region and land use.

In each region, per-acre values are highest for irrigated land, followed in descending order by nonirrigated cropland, hay land or tame pasture, and native rangeland. For each land use, per-acre land values are highest in the southeast or east-central region and lowest in western regions of South Dakota.

The average value of nonirrigated agricultural land (as of February 2004) in South Dakota is $527 per acre. Nonirrigated agricultural land varies from $1,163 per acre in the east-central to $189 per acre in the northwest. Average nonirrigated cropland values vary from $1,346 per acre in the east-central to $705 per acre in the central region and $294 per acre in the northwest.

This is the third year that average cropland values exceed $1,000 per acre in the east-central and southeast regions.

In 2004, average cropland values exceed $1,650 per acre in several counties of eastern South Dakota. Average rangeland values vary from $764 per acre in the southeast to $167 per acre in the northwest. Within each region, differences in land productivity and land use account for substantial differences in per-acre values.

• Average cash rental rates differ greatly by region and land use.

Average rental rates are highest in the southeast and east-central regions and lowest in western regions of South Dakota. In each region, cash rental rates are highest for cropland and lowest for pasture and rangeland.

For example, average cash rental rates in 2004 for nonirrigated cropland are $100 per acre in some counties of east-central South Dakota and only $21-$23 per acre in western South Dakota. Average rangeland rental rates are nearly $45 per acre in a few counties of southeastern South Dakota compared to an average of $7.90 per acre in northwest South Dakota.

• Current average rates of return on agricultural land in South Dakota are lower in 2004 than in any previous year since the survey was started in 1991.

Respondents' estimates of net rates of return to farmland in their localities, given current land values, were 4.3% for all agricultural land, 4.9% for nonirrigated cropland, and 3.9% for rangeland. This implies that relatively large down payments are necessary before land purchases can cash flow from net returns. Despite lower mortgage interest rates, continued caution in farm real estate debt financing is essential.

• Farm expansion and investment potential are the major reasons for purchasing farmland. Retirement from farming and favorable market conditions are the major reasons for selling farmland.

Low interest rates, strong commodity prices and yields, and investor interest in farmland are listed as the major positive factors influencing farmland markets.

Drought conditions in portions of South Dakota, low returns, or higher input costs are listed as the main negative factors affecting farmland markets.

South Dakota

Agricultural Land Market Trends 1991–2004

The 2004 SDSU Farm Real Estate Market Survey is the 14th annual survey of agricultural land values and cash rental rates by land use in different regions of South Dakota. We report on the results of the survey and also include a discussion of factors influencing buyer/seller decisions and positive/negative factors impacting farmland markets. Publication of survey findings is a response to numerous requests by farmland owners, renters, appraisers, lenders, potential buyers, and others for detailed information on farmland markets in South Dakota.

The 2004 estimates are based on reports from 235 respondents to the SDSU survey. Respondents are agricultural lenders, Farm Service Agency officials, rural appraisers, assessors, realtors, professional farm managers, and Extension agricultural educators. All are familiar with farmland market trends in their localities.

Copies of the SDSU Farm Real Estate Market Survey were mailed in February and March 2004, requesting information on cash rental rates and agricultural land values as of February 2004. Response rates, respondent characteristics, and estimation procedures are discussed in Appendix I.

Results are presented in a format similar to those of surveys published by Janssen and Pflueger from 1991 through 2003. Regional level information on land values and cash rents by land use (crop, hay, range, pasture, and irrigated crop/hay)[2] is emphasized in each of these reports. Current year findings are compared to those of earlier years. An electronic version of this report is available at http://agbiopubs.sdstate.edu/articles/C269.pdf

This report contains an overview of agricultural land values and cash rental rates across South Dakota. It may or may not reflect actual land values or cash rental rates unique to specific localities or specific properties. Readers should use this information as a general reference and rely on local sources for more specific details.

County data on cropland and pasture land rents and values are provided by the South Dakota Agricultural Statistics Service (SDASS) in their report, *South Dakota 2004 County Level Land Rents and Values*.[3] This SDASS report is based on a telephone survey of South Dakota farm/ranch producers and is the 10th annual SDASS survey of county-level land rents and values.

Major trends in per-acre cash rental rates and land values over time are similar in both the SDASS and SDSU surveys.

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[2] A major purpose of this survey is to report land values and cash rental rates by major uses of privately owned agricultural land, excluding farm building sites. The major nonirrigated land uses reported are crops, hay, tame pasture, and range. Rangeland is native grass pasture while tame pasture is seeded to introduced grasses. Agricultural land typically used for production of alfalfa hay, other tame hay, or native hay is considered hay land in this report. Cropland is agricultural land typically used for crop production other than hay production. Since most irrigated land in South Dakota is used for crop or hay production, we report the value and rental rates of irrigated land used for these purposes. These major land uses make up nearly 98% of privately owned land in farms in South Dakota (Janssen 1999).

[3] The SDASS report on county-level rents and values can be obtained from the Sioux Falls office. The SDASS phone number is 605-323-5600 and the mailing address is South Dakota Agricultural Statistics Service / P.O. Box 5068 / Sioux Falls SD 57117-5068. The report can also be accessed via the Internet at http://www.nass.usda.gov/sd/

Changing economic conditions in South Dakota agriculture

Most renters, buyers, and sellers of farmland are local area residents. Consequently, land market participants are influenced by many social, financial, and economic factors in their localities. Many of the influential factors are related to changing economic conditions in agriculture. Land markets tend to reflect these changing economic conditions as land market participants adjust over time to current and prospective conditions.

Land market trends usually lag behind changing conditions in the general and agricultural economy and are strongly influenced by land market participants' expectations of future trends and the availability of debt or equity financing.

Most of the 1990s were characterized by low inflation rates, declining to stable interest rates, and increasing export markets for grains, oilseeds, livestock, and meat products. The amount of farm debt, including farm real estate debt, gradually increased, and interest expense averaged between 9 and 11% of South Dakota farm production expenses. Net farm income trended upward from 1990 to 1996, but has usually been lower since then.

Average prices of the principal crops (feed grains, wheat, and soybeans) rebounded considerably in 2002 and 2003 from prices received in the marketing years of 1998 through 2001, the lowest average prices recorded in the past 15 to 20 years. Likewise, cattle and calf prices have generally increased since 1996, resulting in improved profit margins.

Crop yields were considerably above long-term trends from 1997–2001, before the drought reduced production in 2002. Many crops, especially hay, corn, and wheat, rebounded in terms of production and yields in 2003. However, the value of principal crop production decreased from 1996 to 2001, primarily due to price decreases.

Above-average yields buffered some of the impact of crop price declines. Nonetheless, the combined value of principal crops grown in South Dakota steadily declined from $2.9 billion in 1996 to about $2.2 billion in 2000 and 2001 and $1.9 billion in 2002 and then rose to $2.7 billion in 2003.

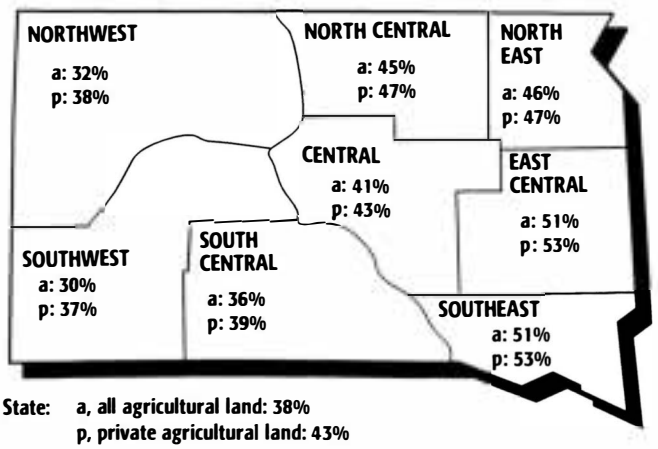
Farm real estate mortgage interest rates dropped substantially from 2001 through 2003 to their lowest levels in more than 35 years. For example, Farm Credit System mortgage interest rates annually averaged between 7.9% and 10% from 1991–2000 but declined to around 5.4% in 2002. Commercial bank mortgage interest rates were generally higher but also declined in the same period (USDA AIS-80, March 2003). Greatly reduced mortgage interest rates and low inflation rates for several years have had major positive impacts on real estate values, including farmland values.

Farmland values became more dependent on government farm program payments, especially from 1998 to 2001. Federal farm program payments in South Dakota increased from $230 million to $268 million annually during the 1995–1997 period to more than $700 million annually during 1999–2001. These payments increased from 5 to 6.5% of gross farm income from 1995-1997 to more than 14% of gross farm income in South Dakota from 1999–2001. Although federal farm program payments were less in 2002 and 2003, market participants generally expect federal program benefits to continue into the indefinite future if needed by the farm sector. A recent USDA-ERS study of farm program impacts estimated that 22% to 24% of cropland values in 2000 in the Northern Plains, which includes South Dakota, is attributed to commodity program payments (Barnard et al. 2001).

The strong employment base in many South Dakota trade centers provides off-farm employment for increasing numbers of South Dakota farm families. This permits greater economic stability and opportunities for many persons involved in land market decisions. Many investors, including farmland owners, have received capital gains from sale of stocks, land, or other investments that can be used for purchasing agricultural land for a variety of purposes. Credit has been readily available at greatly reduced interest rates in the past 3 years to help finance land purchases and farm operating expenses.

Based on data from the 1997 Census of Agriculture, 38% of South Dakota's agricultural land acres are in cash lease or share lease from private landowners or in per-acre cash lease from state, tribal, or federal agencies. The proportion of leased agricultural land varies from nearly 51% of farmland acres in the east-central and southeast region to 41% in the central region and 30% in the southwest region (Fig 1). However, this data does not include several

Figure 1. Proportion of South Dakota farmland leased, statewide and regional.



State: a, all agricultural land: 38%
p, private agricultural land: 43%

Source: Estimates from 1997 Census of Agriculture and other studies.

million acres of rangeland, primarily west of the Missouri River, leased on a per-animal unit or per-head basis in federal or tribal grazing permits.

In this report, we mostly focus on per-acre land values and cash rental rates for privately owned agricultural land in South Dakota, excluding more than five million acres of agricultural land owned by federal, state, and tribal agencies. We estimated that farmers and ranchers leased nearly 43% of South Dakota's privately owned agricultural land acreage, varying from about 37% to 39% in regions west of the Missouri River to nearly 53% of farmland in the east-central and southeast region (Fig 1).

South Dakota agricultural land values, 2004

Respondents to the 2004 South Dakota Farm Real Estate Market Survey estimated the per-acre value of nonirrigated cropland, hay land, rangeland, tame pastureland, and irrigated land in their counties and the percent change in value from one year earlier.

Responses for nonirrigated land uses are grouped into eight agricultural regions (Fig 1). The six regions in eastern and central South Dakota correspond with USDA Agricultural Statistics Districts. In western South Dakota, farmland values and cash rental rates are reported for the northwest and southwest regions. Due to the small number of irrigated land reports in several regions, responses for irrigated land values and rental rates are regrouped into six regions: western, central/south-central, north-central, northeast, east-central, and southeast.

The average value per acre and percent change in value was obtained for each agricultural land use in each region. Regional and statewide all-land (nonirrigated land) value estimates are weighted averages based on the relative acreage and value of each nonirrigated agricultural land use in each region of South Dakota (Appendix I).

As of February 2004, the average value of all agricultural land in South Dakota was $527 per acre, an estimated 17.1% increase in value from one year earlier (Fig 2 and Table 1). This is by far the highest rate of annual increase in land values during the past 14 years of the annual SDSU Farmland Market Survey.

This rate of increase is substantially above the 8 to 10% annual rates of increase from 2000 to 2003 and the longer-term average annual rate of increase of 6.8% from 1991 to 2004 (Table 1 and Appendix Table 2). The increase of $77 per acre during the past year is exactly equal to the dollar increase in per-acre land values from 2001 to 2003.

Overall, agricultural land values in South Dakota have doubled since 1995.

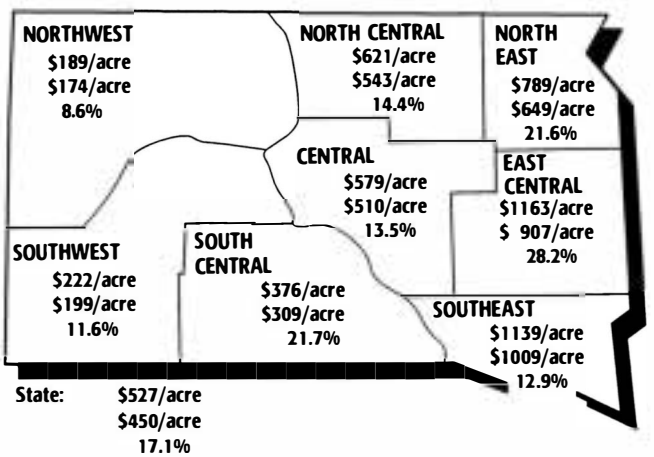
Agricultural land values increased in all regions of South Dakota with the strongest percentage increases (>20%) in the east-central, northeast, and south-central regions. The northwest region showed the lowest percentage (8.6%) and dollar amount (+$15 per acre) of increase in all-land values—a reflection of the severity of the drought in this region. In all South Dakota regions, the most recent annual percentage change in all-land values was greater than its longer-term (1991 to 2004) percentage change in land values.

Regional differences in all agricultural land values are primarily related to major differences in (1) agricultural land productivity among regions, (2) per-acre values of cropland and rangeland in each region, and (3) the proportion of cropland and rangeland in each region. Native rangeland is the dominant land use in western South Dakota, while most agricultural land in eastern South Dakota is nonirrigated cropland.

All-land average values are highest in the southeast and east-central regions with per-acre values ranging from $1,163 in the east-central region to $1,139 in the southeast region. This is the first year that all-land average values exceeded $1,100 per acre in any region. These two eastern regions contain the most productive land in South Dakota.

Agricultural land values averaging $789 per acre in the northeast region are considerably lower than in the east-central and southeast regions, despite similar land use intensity. Cropland and hayland are the dominant land uses in eastern South Dakota, comprising 76, 73, and 71% of farmland acres in the southeast, east-central, and northeast regions, respectively.

Figure 2. Average value of South Dakota agricultural land, February 1, 2004 and 2003, and percent change from one year ago.



Regional and statewide average values of agricultural land are the weighted averages of dollar value per acre and percent change by proportion of acres of each nonirrigated land use by region.

Top: Average per-acre value–February 1, 2004
Middle: Average per-acre value–February 1, 2003
Bottom: Annual percent change in per-acre land value

Source: 2004 South Dakota Farm Real Estate Market Survey, SDSU.

Table 1. Average reported value and annual percentage change in value of South Dakota ag land by type of land by region, 2001–2004.

Type of land	South-east	East-Central	North-east	North-Central	Central	South-Central	South-west	North-west	STATE
	dollars per acre								
All agricultural land (nonirrigated)									
Average value, 2004	1139	1163	789	621	579	376	222	189	527
Average value, 2003	1009	907	649	543	510	309	199	174	450
Average value, 2002	923	876	567	494	413	313	201	147	410
Average value, 2001	884	784	526	445	364	284	165	141	373
Annual % change 04/03	12.9%	28.2%	21.6%	14.4%	13.5%	21.7%	11.6%	8.6%	17.1%
Nonirrigated cropland									
Average value, 2004	1315	1346	973	822	705	541	318	294	886
Average value, 2003	1156	1040	793	716	631	443	290	281	744
Average value, 2002	1057	1019	691	665	524	445	311	244	687
Average value, 2001	1023	911	652	592	456	423	245	223	628
Annual % change 04/03	13.8%	29.4%	22.7%	14.8%	11.7%	22.1%	9.7%	4.6%	19.1%
Rangeland (native)									
Average value, 2004	684	764	465	396	456	312	196	167	275
Average value, 2003	609	580	389	345	397	257	176	153	239
Average value, 2002	538	543	353	297	325	260	172	127	215
Average value, 2001	488	478	315	270	284	232	143	124	193
Annual % change 04/03	12.3%	31.7%	19.5%	14.8%	14.9%	21.4%	11.4%	9.2%	15.1%
Pasture (tame, improved)									
Average value, 2004	754	818	517	424	518	337	217	198	505
Average value, 2003	683	710	448	389	493	294	191	163	452
Average value, 2002	639	607	391	327	345	287	193	156	389
Average value, 2001	564	522	342	301	332	258	176	153	350
Annual % change 04/03	10.4%	15.2%	15.4%	9.0%	5.1%	14.6%	13.6%	21.5%	11.7%
Hayland									
Average value, 2004	1008	992	586	432	516	391	265	245	498
Average value, 2003	932	770	488	379	486	310	228	227	431
Average value, 2002	863	770	412	352	375	325	238	204	397
Average value, 2001	844	735	359	332	337	281	201	181	364
Annual % change 04/03	8.2%	28.8%	20.1%	14.0%	6.2%	26.1%	16.2%	7.9%	15.5%

Type of land	South-east	East-Central	North-east	North-Central	Central/ S.Central	Western	STATE
	dollars per acre						
Irrigated land							
Average value, 2004	1793	1678	1259	1210	865	782	1183
High productivity	2164	2193	1523	1455	1038	1063	—
Low productivity	1434	1422	1032	933	698	530	—
Average value, 2003	1629	1085	1034	1032	817	630	1014
Average value, 2002	1613	1228	935	690	639	568	916
Average value, 2001	1425	1069	863	687	630	576	856
Annual % change 04/03	10.1%	54.7%	21.8%	17.2%	5.9%	24.1%	16.7%

Source: 2004 and earlier South Dakota Farm Real Estate Market Surveys

Average per-acre agricultural land values in the north-central and central regions are much higher than corresponding land values in western and south-central South Dakota and considerably lower than average land values in the eastern regions. Average per-acre values were $621 in the north-central region and $579 in the central region. Geographic location and land use differences are closely related to differences in reported value. Crop/hay land constitutes 62% of farmland acres in the north-central region, compared to only 52% of farmland acres in the central region.

Agricultural land values are much lower in regions west of the Missouri River than in the eastern and central regions of South Dakota. The average value per acre ranges from $376 in the south-central region to $222 and $189 in the southwest and northwest regions, respectively. Rangeland and pasture are the dominant agricultural land uses in these three regions.

Land values by type of land and region

In each region, per-acre values are highest for irrigated land followed by nonirrigated cropland, hay land or tame pasture, and native rangeland. For each nonirrigated land use, per-acre land values are highest in the southeast and east-central regions and lowest in the northwest, southwest, and south-central regions (Fig 3 and 4; Table 1). For the remaining regions, per-acre values of pasture and rangeland in the northeast and central regions are similar to each other and somewhat higher than corresponding land use values in the north-central region. However, cropland and hay land values are higher in the northeast region relative to cropland and hay land values in the north-central and central regions. These regional differences in land values by land use have remained consistent over time and are closely related to climate patterns, soil productivity differences, and crop/forage yield differences across the state.

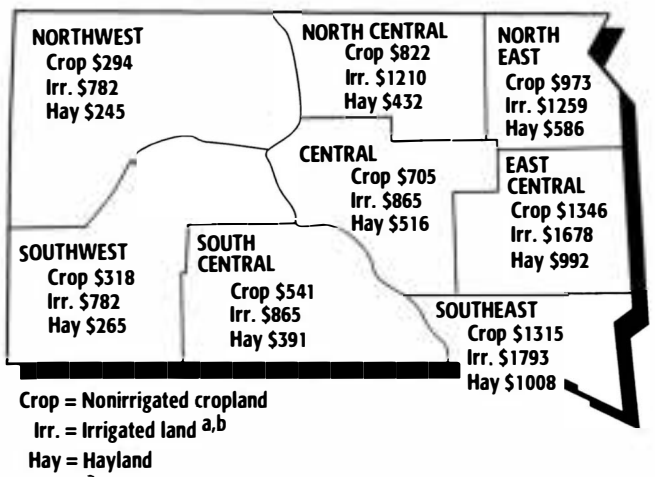
Cropland values

The weighted average value of South Dakota's nonirrigated cropland (as of February 2004) is $886 per acre, a 19.1% increase from 2003. This annual increase is much higher than the 9–10% annual rates of increase in the previous 3 years. Statewide, per-acre cropland values have doubled since 1995.

The pattern of cropland value changes from 2003 to 2004 across regions is similar to the pattern for changes in all-land values. Cropland value increases were lowest in the northwest (+4.6%) and southwest (+9.7%) regions and highest (>20%) in the east-central, northeast, and south-central regions.

The east-central and southeast regions have the highest average cropland values of $1,346 and $1,315 per acre, respectively. This is the first year that regional cropland values exceed $1,300 per acre in any South Dakota region and is only the third (fourth) consecutive year that average cropland values exceed $1,000 per acre in the east-central (southeast) region (Fig 3 and Table 1). These two eastern regions contain 30% of South Dakota's cropland. Corn and soybeans are the major crops in most counties of both regions.

Figure 3. Average value of South Dakota cropland, irrigated land, and hayland, by region, February 2004, dollars per acre.

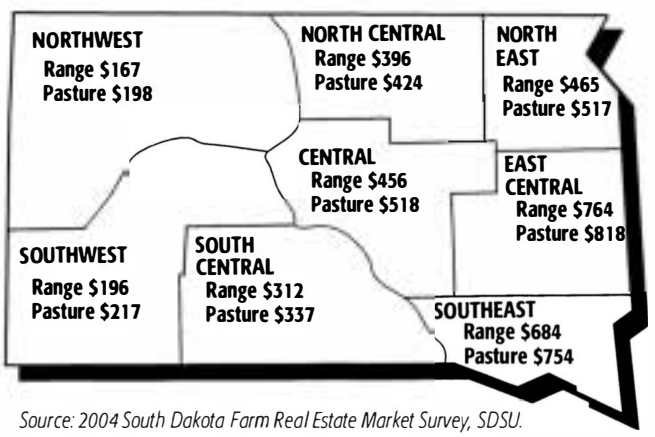


[a] Irrigated land values shown for the northwest and southwest regions are based on the average value reported for gravity irrigated land in both western areas.

[b] Irrigated land values shown for the central and south-central regions are based on the average value reported in both regions.

Source: 2004 South Dakota Farm Real Estate Market Survey, SDSU.

Figure 4. Average value of South Dakota rangeland and tame pasture, by region, February 2004, dollars per acre.



Source: 2004 South Dakota Farm Real Estate Market Survey, SDSU.

Corn, soybeans, wheat, and other small grains are the predominant cropland uses in most counties of the northeast and north-central regions of South Dakota. These two regions contain 34% of South Dakota's cropland acres. Average cropland values of $973 per acre are higher than the average of $822 per acre in the north-central region. Statewide average cropland values of $866 per acre in 2004 are between the average cropland values reported in these two regions.

As of February 2004, cropland values averaged $705 per acre in the central region and $541 per acre in the south-central region. These two regions contain 20% of the state's cropland acres. Wheat, corn, and grain sorghum are important crops in the south-central region while wheat, corn, soybeans, and sunflowers are the major crops in the central region.

The lowest cropland values of $294 and $318 per acre are found in the northwest and southwest regions, respectively. Wheat is the dominant cropland use in both western regions.

Hayland values

South Dakota hay land values averaged $498 per acre as of February 2004, a 15.5% increase from one year earlier (Fig 3 and Table 1). Extremely strong annual increases in hay land values (above 20%) are reported in the east-central, south-central, and northeast regions. The lowest annual rates of increase (from 6.2% to 8.2%) occurred in the central, northwest, and southeast regions. Statewide, hay land values have nearly doubled since 1995.

Average hay land values are highest ($1,008 and $992 per acre) in the southeast and east-central regions, respectively. This is the first year that average hay land values are close to $1,000 per acre in any region of South Dakota. Hay land values are considerably lower ($586 and $516 per acre, respectively) in the northeast and central regions but remain above the statewide average value of $498 per acre. In the other four regions, the highest average value of $413 per acre of hay land is in the north-central region and the lowest average value of $245 per acre is in the northwest region. Alfalfa hay is the most common hay in the eastern regions, while native hay is more common in the central and western regions.

Pasture and rangeland values

In February 2004, the value of South Dakota native rangeland averaged $275 per acre, while the average value of tame pasture was $505 per acre (Table 1 and Fig 4). Native rangeland is much more concentrated in the western and central regions of South Dakota, while tame pasture is dominant in the central and eastern regions.

This is the third consecutive year that double-digit (>10%) increases in both pasture and rangeland values occurred in South Dakota.

The statewide average change in rangeland and tame pasture values was an increase of 15.1% and 11.7%, respectively, during the past year (Feb. 2003 to Feb. 2004). Based on survey reports, double-digit increases in rangeland values occurred in all except the northwest region, while double digit increases in tame pastureland values occurred in all but the central and north-central regions. Statewide, pasture and rangeland values have doubled since 1995.

Average rangeland values are highest in the east-central and southeast regions ($764 and $684 per acre) and lowest in the southwest and northwest region, with average values of $196 and $167 per acre, respectively. In other regions, average rangeland values vary from $312 per acre in the south-central region to $465 per acre in the northeast region (Table 1 and Fig 4). Across regions, average values of tame pasture varied from 7% to 19% higher than the average value of rangeland.

In the cropland-intensive regions of eastern South Dakota and in the north-central region, the average per-acre value of nonirrigated cropland varies from 1.75 to 2.1 times the average value of native rangeland. In the more rangeland intensive central and western regions, the average per-acre value of cropland varies from 1.5 to 1.8 times the rangeland value. In the north-central and central regions, tame (improved) pasture values are nearly equal to hay land values and slightly (7% to 14%) above rangeland values per acre. In all other regions, tame pastureland values are in between rangeland and hay land values. Also, pasture and hay land values are considerably lower than cropland values in all regions of South Dakota.

Regional variations in rangeland values and cropland values are lower than reported for all agricultural land values. In 2004, average per-acre values of cropland and rangeland in the northwest region are between 22 and 25% of per-acre values for the same land uses in the southeast and east-central regions. However, due to the changing proportion of crop/ hay land and pasture/rangeland across the state, the average value of all agricultural land in the northwest is only 16 to 17% of all agricultural land values in the southeast and east-central regions (Table 1).

Irrigated land values

Irrigated land value reports are consolidated into six regions (Table 1 and Fig 3). The very few irrigated land reports from the central and south-central regions make it necessary to combine the reports from these two regions. The northwest and southwest regions also are combined into a western region because almost all irrigated land reports are for gravity-irrigated cropland in counties adjacent to the Black Hills. In all other regions, the value

Table 2. Average reported value per acre of agricultural land by South Dakota region, county clusters, type of land, and land productivity, February 1, 2004, 2003, and 2002.

	Southeast				East-Central			
Agricultural land type and productivity	*All*	*Clay Lincoln Turner Union*	*Bon Homme Hutchinson Yankton*	*Charles Mix Douglas*	*All*	*Minnehaha Moody*	*Brookings Lake McCook*	*Sanborn Davison Hanson Kingsbury Miner*
	dollars per acre				dollars per acre			
Nonirrigated cropland								
Average 2004	1315	1652	1150	937	1346	1822	1207	1088
High productivity	1683	2112	1536	1069	1731	2140	1775	1286
Low productivity	1007	1211	897	797	1083	1435	991	886
Average 2003	1156	1544	995	732	1040	1386	1042	896
Average 2002	1057	1363	918	645	1019	1452	1073	741
Rangeland (native)								
Average 2004	684	785	629	599	764	936	689	706
High productivity	811	915	776	687	947	1200	888	838
Low productivity	545	603	507	511	601	729	479	588
Average 2003	609	744	576	469	580	567	600	573
Average 2002	538	618	513	460	543	675	550	494
Pastureland (tame, improved)								
Average 2004	754	820	728	703	818	923	786	796
High productivity	894	996	863	798	1020	1275	1000	944
Low productivity	630	696	597	594	700	738	650	708
Average 2003	683	821	637	502	710	**	658	720
Average 2002	639	717	582	529	607	768	629	538
Hayland								
Average 2004	1008	1218	919	717	992	1300	902	855
High productivity	1229	1450	1177	836	1242	1662	1350	955
Low productivity	780	933	700	600	805	981	800	707
Average 2003	932	1210	803	593	770	1075	729	668
Average 2002	863	1056	761	571	770	1275	719	575

Source: 2004 South Dakota Farm Real Estate Market Survey, SDSU

Irrigation land values are not reported in this table, due to insufficient number of reports in most county clusters
** Insufficient number of reports to make estimates by county cluster

of irrigated land was reported for center pivot irrigation systems, excluding the value of the center pivot.

We continue to caution readers that irrigated land value data are less reliable than data on land values reported for other agricultural land uses. Irrigated land is not common (less than 1% of total acres) in most regions, and there are few sales of irrigated land tracts. Consequently, only 39% of all respondents were familiar with and able to provide information on irrigated land values.

Based on 92 responses, irrigated land value increases were reported in all regions. Statewide average irrigated land values are $1,183 per acre, a 16.7% increase from a year earlier. Regional average irrigated land values are considerably above the statewide average in the southeast and east-central regions ($1,793 and $1,678 per acre, respectively), and are close to the state average in the northeast and north-central regions. In the western and central regions of South Dakota, irrigated land values are much lower (Table 1 and Fig 3).

Variation in land values by land productivity and county clusters

Within each region and for each nonirrigated agricultural land use, there is considerable variation in land values. In this section, we report the February 2004 per-acre values of average quality, high-productivity, and low-productivity land by agricultural land use by region and by county clusters within several regions (Table 2).

Table 2. (continued)

Agricultural land type and productivity	Northeast				North-Central			
	All	Codington Deuel Hamlin	Grant Roberts	Clark Day Marshall	All	Brown Spink	Edmund Faulk McPherson	Campbell Potter Walworth
	dollars per acre				dollars per acre			
Nonirrigated cropland								
Average 2004	973	1059	1054	775	822	1094	552	653
High productivity	1351	1416	1500	1133	1112	1532	739	796
Low productivity	692	775	743	522	580	725	419	507
Average 2003	793	879	777	699	716	909	486	541
Average 2002	691	755	709	591	665	918	416	443
Rangeland (native)								
Average 2004	465	505	468	403	396	498	341	294
High productivity	592	646	564	534	476	615	399	335
Low productivity	357	401	350	298	300	369	264	228
Average 2003	389	429	383	347	345	383	321	263
Average 2002	353	395	338	321	297	348	270	223
Pastureland (tame, improved)								
Average 2004	517	516	565	479	424	535	391	267
High productivity	624	635	645	588	515	648	478	319
Low productivity	432	426	460	421	346	424	327	230
Average 2003	448	481	431	416	389	442	350	294
Average 2002	391	428	396	354	327	386	293	221
Hayland								
Average 2004	586	654	510	524	432	554	369	306
High productivity	741	823	605	697	530	685	452	351
Low productivity	417	486	365	334	335	423	281	254
Average 2003	488	611	455	364	379	422	345	313
Average 2002	412	460	382	340	352	408	524	264

A county cluster is a group of counties within the same region with similar agricultural land use and value characteristics. Three county clusters are identified in each of the following regions: southeast, east-central, northeast, north-central, and central. Land values are not reported for county clusters in regions west of the Missouri River because there are too few reports from most county groupings. This survey is not designed to reflect the substantially higher land values in or near the Black Hills.

Substantial variation in per-acre land value occurs by degree of land productivity for each land use in each region. For example, 2004 cropland values in the east-central region vary from an average of $1,083 per acre for low-productivity cropland to $1,731 per acre for high-productivity cropland. At the other extreme, the average value of low (high) productivity cropland values is $225 ($361) per acre in the northwest region.

Across regions, average values of low-productivity cropland were 51% to 66% of the average values of high-productivity cropland.

Rangeland values in the east-central region vary from an average of $601 per acre for low-productivity rangeland to $947 per acre for high-productivity rangeland. In the northwest region, at the other extreme, the average value of low (high) productivity rangeland is $121 ($226) per acre. The average value of low-productivity rangeland varies from 53% to 68% of the average value of high-productivity rangeland (Table 2).

In 2004, nonirrigated cropland values above $1,000 per acre became widespread across several county clusters in the north-central and all three eastern regions of South Dakota. Cropland values in 2004 exceed $1,000 per acre in eight of the 12 county clusters in these four cropland intensive regions of South Dakota. In 2003, average cropland values exceeded $1,000 per acre in only three county clusters.

Average values of nonirrigated cropland exceed $1,650 per acre in two county clusters in eastern South Dakota: Minnehaha-Moody ($1,822) and Clay-Lincoln-Turner-Union (CLTU) ($1,652). Average cropland values are considerably lower in the other county clusters of the southeast

Table 2. (continued)

Agricultural land type and productivity	Central: All	Central: Aurora Beadle Jerauld	Central: Buffalo Brule Hand Hyde	Central: Hughes Sully	South-Central: All	Southwest: All	Northwest: All
	dollars per acre				dollars per acre		
Nonirrigated cropland							
Average 2004	705	785	603	710	541	318	294
High productivity	884	937	740	1010	672	382	361
Low productivity	579	675	472	560	409	249	225
Average 2003	631	729	569	535	443	290	281
Average 2002	524	566	489	506	445	311	243
Rangeland (native)							
Average 2004	456	530	409	384	312	196	167
High productivity	550	620	531	440	388	239	226
Low productivity	377	463	309	312	249	144	121
Average 2003	397	511	353	270	257	176	153
Average 2002	325	418	289	245	260	172	127
Pastureland (tame, improved)							
Average 2004	518	586	463	450	337	217	198
High productivity	598	672	558	480	406	238	238
Low productivity	432	500	354	408	264	164	147
Average 2003	493	583	405	**	294	191	163
Average 2002	345	419	329	275	287	193	156
Hayland							
Average 2004	516	581	461	433	391	265	245
High productivity	609	658	574	528	463	284	290
Low productivity	412	489	325	360	309	202	192
Average 2003	486	569	446	305	310	228	227
Average 2002	375	420	368	283	325	238	204

and east-central regions. For example, cropland values vary from an average of $1,207 per acre in the Brookings-Lake-McCook cluster to $937 per acre in the Charles-Mix-Douglas cluster (Table 2).

Similar patterns occur for other land uses in the east-central and southeast regions. For example, rangeland values vary from an average of $936 per acre in the Minnehaha-Moody cluster to $689 per acre in the Brookings-Lake-McCook cluster to $599 per acre in the Charles-Mix-Douglas cluster. Average hayland values vary from $1,300 per acre in the Minnehaha-Moody cluster to $902 per acre in the Brookings-Lake-McCook cluster to $717 per acre in the Charles Mix-Douglas cluster (Table 2).

In the northeast region, the average values of cropland in 2004 were about $1,050 per acre in the Codington-Deuel-Hamlin and Grant-Roberts clusters and $775 per acre in the Clark-Day-Marshall cluster. Average per-acre values of other land uses were much lower than per-acre cropland value in each county cluster. The highest per-acre values of rangeland and hayland in this region were in the Codington-Deuel-Hamlin cluster.

Strong increases (often greater than 20%) were reported in land values in all county clusters of the northeast and east-central regions.

In the north-central region, average land values in Brown and Spink counties are much higher than those found in other counties, especially for cropland. Most cropland in Brown and Spink counties is located in the James River valley and is more productive than other land in this region. As an example, nonirrigated cropland values averaged $1,094 per acre in the Brown-Spink cluster, which is nearly double the $552 per-acre cropland value in the Edmunds-Faulk-McPherson cluster.

Hay, pasture, and rangeland values were lowest in the Campbell-Potter-Walworth cluster, averaging one-half to three-fifths of per-acre values in the Brown-Spink cluster. Average values of rangeland, tame pasture, and hay land in the Brown-Spink cluster are $144 to $248 higher than per-acre values found in the other county clusters of the north-central region.

Strong increases in per-acre values of all land uses were reported in the Brown-Spink cluster and for cropland values in all portions of the north-central region. Some weakness in pasture and hay land values was noted in the Campbell-Potter-Walworth cluster.

In the central region, land values increased dramatically (>20%) for most land uses in the Hughes-Sully cluster. Less dramatic changes in land values (<10%) were reported in the other central region clusters. Per-acre land values vary from an average of $384 per acre for rangeland in the Hughes-Sully cluster to $785 per acre for cropland in the Aurora-Beadle-Jerauld cluster.

For regions west of the Missouri River, average land values for each land use are highest in the south-central region and lowest in the northwest region. During the past year, land values increased more rapidly (>20%) in the south-central region compared to less than 10% in the northwest region.

Major reasons for purchase and sale of farmland

During each of the 14 years of the SDSU Farm Real Estate Market survey, respondents have been asked to provide major reasons for buying and selling farmland in their locality. Almost 95% of respondents provided one or two reasons in each category.

During all years this survey has been conducted, the top three or four most commonly cited reasons for purchase or sale of farmland have not changed. However, the relative importance of various factors has changed.

Farm expansion continues as the most common reason given for purchasing farmland. However, the percentage of respondents citing expansion as a reason for purchase has declined steadily from 43% in 2000 to 29% in 2004 (Fig 5).

Some other reasons for farmland purchases were related to farm expansion decisions such as location of tract, availability of land in the local area, and sale of leased land to a former tenant. Government farm programs and tax-related reasons were also motivating factors for land purchases.

Investment potential of farmland and hunting/recreation demand were the next most common reasons for purchasing farmland (Fig. 5). Responses indicating investment purposes or hunting/recreation purposes as the major reason(s) for purchasing farmland have increased from 23% of 1994 responses to about 40% of responses in 2003 and in 2004. This pattern is consistent with responses indicating farmland provides better returns than many alternative investments.

Favorable market conditions (high sale prices and attractive financing available to buyers) were cited as reasons for selling farmland more often in 2004 (33% of responses) than in any other year. Retirement (also 33% of responses) was the other most common reason given for farmland sales in 2004 (Fig 6). Additional reasons for selling include financial/cash flow pressures (17% of responses) and estate settlements (13% of responses).

Cash rental rates of South Dakota agricultural land

The cash rental market provides important information on returns to agricultural land. Three-fourths of South Dakota farmland renters are involved in one or more cash leases. The majority of farmland leases (57%) were cash leases and five-eighths of cash leases were annual renewable agreements. (Janssen and Xu, 2003).

Respondents were asked about average cash rental rates per acre for nonirrigated cropland, irrigated land, and hay land in their localities. Cash rental rates for pasture/range-

Figure 5. Reasons for Buying Farmland

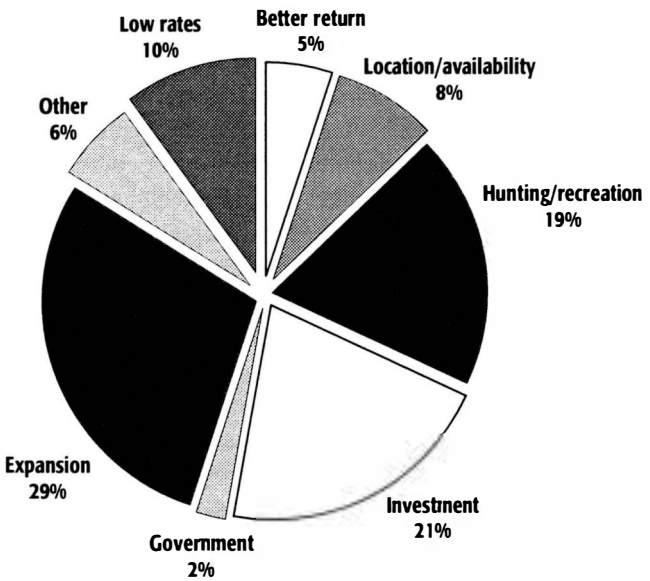
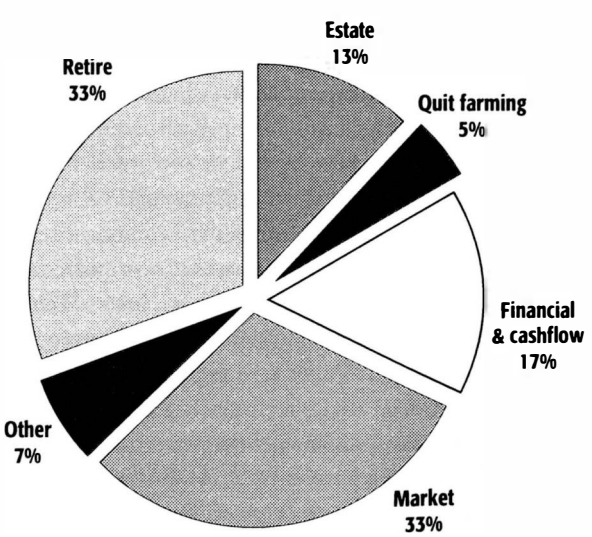


Figure 6. Reasons for Selling Farmland



land were provided on a per-acre basis and, if possible, on a per AUM (Animal Unit Month)[4] basis. Respondents were also asked to report cash rental rates for high-productivity and low-productivity land by different land uses in their locality. Cash rental rates by land use by region are summarized in Table 3 and Figure 7. The same information is summarized by region and county cluster in Table 4.

Cash rental rates differ greatly by region and by land use. For nonirrigated land uses, cash rental rates per acre are highest in the southeast and east-central regions and lowest in northwest and southwest South Dakota. In every region, cash rental rates are highest for cropland and lowest for rangeland and pasture (Table 3 and Figure 7).

From 2003 to 2004, statewide cash rental rates per acre increased an average $3.60 for cropland, $1.40 for hay land and $1.10 for rangeland. The average percentage increase in cash rental rates was about 7% for cropland and rangeland and 4.5% for hay land. Average cash rental rates increased for all land uses in all regions of South Dakota, except for hay land in the northwest region. In general, the strongest increases for cropland and hay land were reported in the south-central and eastern regions of South Dakota, while the strongest increases for pasture/rangeland were in the eastern and north-central regions.

In general, cash rental rate increases were greatest in the same regions where the strongest land value increases were reported.

2004 cash rental rates: cropland, hay land, and irrigated land

Average cash rental rates in 2004 for nonirrigated cropland vary from $21.40 to $23.10 per acre in the western regions to $64.50 in the northeast and $83.70 in the southeast regions (Fig 7 and Table 3). Average cash rental rates are highest ($100.20 and $99.30 per acre, respectively) in the Minnehaha-Moody and CLTU clusters (Table 4).

This is the first year that average cash rental rates for cropland exceeded $100 per acre in any county cluster.

This is the second year that average cash rental rates exceeded $100 per acre for high-productivity nonirrigated cropland in both the southeast and east-central regions. However average cash rental rates for high-productivity cropland have been above $100 per acre for several years in the CLTU and Minnehaha-Moody clusters and currently exceed $100 per acre in several other clusters in the eastern regions of South Dakota.

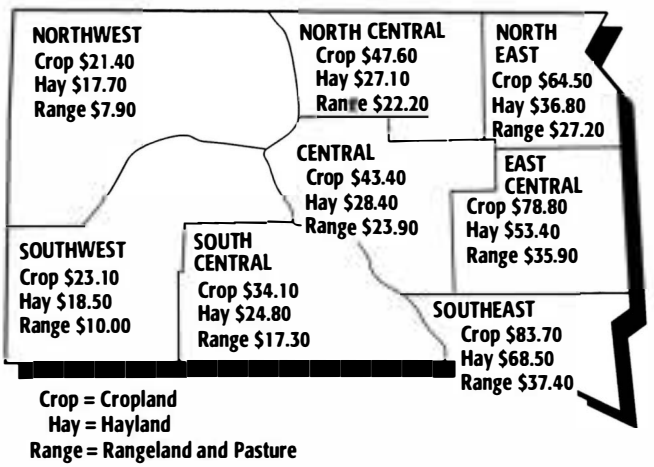
Within each region and county cluster, cash rental rate averages for low-productivity cropland are considerably lower than those reported for high-productivity cropland. For example, reported average cash rent for nonirrigated cropland in the southeast region is $60.60 per acre for low-productivity cropland and $109.40 for high-productivity cropland. In the northwest region, the average cash rent for low-productivity cropland is $15.10 per acre while cash rental rates for high-productivity cropland average $28.00 (Table 4).

Hay land cash rental rates in 2004 vary from an average of $17.70 to $18.50 per acre in western South Dakota and from $27.10 to $28.40 in the north-central and central regions, respectively. However, in the three regions of eastern South Dakota, hay land cash rental rates vary from an average of $36.80 in the northeast to $68.30 per acre in the southeast (Table 3 and Fig 7).

In eastern South Dakota, average cash rental rates for hay land vary from $81.90 per acre in the CLTU cluster to $29.80 per acre in the Grant-Roberts cluster and $30.70 in the Clark-Day-Marshall cluster. For several counties in each eastern region, average cash rental rates for hay land are between $40 and $51 per acre, while average rental rates for hayland are an average of $67.10 to $68.20 per acre in the Minnehaha-Moody and Bon Homme-Hutchinson-Yankton clusters (Table 4).

Within each region and county cluster there are considerable differences in average cash rental rates of low-productivity and high-productivity hay land. For example, the average rental rates for high- and low-productivity hay land in the CLTU county cluster are $102.20 and $61.70 per

Figure 7. Average cash rental rate of South Dakota nonirrigated cropland, hayland, and rangeland, by region, 2004, dollars per acre.



Source: 2004 South Dakota Farm Real Estate Market Survey, SDSU.

[4] Animal Unit Month (AUM) is defined as the amount of forage required to maintain a mature cow with calf for 30 days. An AUM is a somewhat "generic" value and should be about equal across regions. Therefore, private cash lease rates quoted on a per-AUM basis should be roughly equivalent in different geographic areas of the state unless there are major differences in forage availability, forage quality, and demand for leased land.

Table 3. Reported cash rental rates of South Dakota agricultural land by type of land by region, 2001-2004.

Type of land	*South-east*	*East-Central*	*North-east*	*North-Central*	*Central*	*South-Central*	*South-west*	*North-west*	*State*
	dollars per acre								
Nonirrigated cropland									
Average 2004 rate	83.70	78.80	64.50	47.60	43.40	34.10	23.10	21.40	57.30
High productivity	109.40	108.70	96.20	66.10	57.50	46.90	28.40	28.00	
Low productivity	60.60	56.00	42.10	31.50	31.30	23.50	18.20	15.10	
Average 2003 rate	78.80	74.70	59.50	44.90	40.60	29.20	22.00	21.00	53.70
Average 2002 rate	76.50	69.80	57.50	42.20	35.95	29.40	22.60	20.40	51.10
Average 2001 rate	72.95	64.60	52.20	37.80	35.30	27.20	20.10	17.50	47.35
Hayland									
Average 2004 rate	68.50	53.40	36.80	27.10	28.40	24.80	18.50	17.70	32.70
High productivity	86.00	70.50	49.50	36.60	35.30	33.00	22.20	23.90	
Low productivity	49.30	37.50	24.50	20.90	19.60	17.10	13.60	12.20	
Average 2003 rate	67.20	49.40	34.60	26.20	27.50	19.80	17.80	19.80	31.30
Average 2002 rate	63.70	49.20	31.00	23.40	21.10	20.40	15.50	17.50	28.70
Average 2001 rate	61.20	47.60	28.90	21.00	23.30	18.10	15.90	14.70	27.25
Pasture/rangeland									
Average 2004 rate	37.40	35.90	27.20	22.20	23.90	17.30	10.00	7.90	16.40
High productivity	47.50	48.00	37.40	29.70	30.80	23.60	12.50	11.20	
Low productivity	26.50	25.90	18.10	14.90	17.00	11.70	6.90	4.90	
Average 2003 rate	35.20	32.40	25.30	20.30	23.00	16.40	8.60	7.70	15.30
Average 2002 rate	33.70	32.00	23.70	18.70	19.70	15.60	8.90	7.20	14.50
Average 2001 rate	30.90	30.40	21.00	17.50	20.80	12.90	8.60	6.60	13.50
	dollars per Animal Unit Month								
Average 2004 rate	21.30	**	**	21.10	24.00	23.60	21.90	19.80	
High productivity	25.80	**	**	25.30	28.50	18.70	25.30	24.50	
Low productivity	16.40	**	**	15.50	17.50	29.70	18.40	15.80	
Average 2003 rate	20.30	**	**	20.40	20.40	21.50	19.90	19.30	
Average 2002 rate	20.70	18.00	17.70	16.30	16.30	21.20	19.10	17.60	
Average 2001 rate	20.00	21.00	18.60	16.80	17.40	19.80	17.80	15.75	

Type of land	*South-east*	*East-Central*	*North-east*	*North-Central*	*Central/ S.Central*	*Western*	*State*
	dollars per acre						
Irrigated land							
Average 2004 rate	118.80	103.80	97.50	75.00	73.20	56.90	83.70
High productivity	143.20	130.00	126.00	88.60	85.60	69.10	
Low productivity	94.00	77.50	75.50	61.40	58.10	42.20	
Average 2003 rate	119.20	98.00	72.60	75.50	**	58.20	76.60
Average 2002 rate	124.00	98.60	77.40	71.40	52.50	50.20	75.70
Average 2001 rate	106.00	84.40	77.00	65.00	67.10	48.00	72.80

** Insufficient number of reports to make regional estimates

Source: South Dakota Farm real Estate Market Surveys, SDSU, 2004 and earlier year reports

Table 4. Reported cash rental rates of South Dakota agricultural land by region and county clusters, 2004, 2003, and 2002 rates.

	Southeast				East-Central			
Agricultural land type and productivity	*All*	*Clay Lincoln Turner Union*	*Bon Homme Hutchinson Yankton*	*Charles Mix Douglas*	*All*	*Minnehaha Moody*	*Brookings Lake McCook*	*Sanborn Davison Hanson Kingsbury Miner*
	dollars per acre				dollars per acre			
Nonirrigated cropland								
Average 2004 rate	83.70	99.30	77.50	58.10	78.80	100.20	80.60	62.50
High productivity	109.40	124.90	108.20	73.10	108.70	133.50	112.80	88.60
Low productivity	60.60	72.90	54.10	43.80	56.00	70.50	54.40	46.60
Average 2003 rate	78.80	95.70	72.10	58.60	74.70	95.00	78.10	63.90
Average 2002 rate	76.50	91.90	69.90	50.20	69.80	88.00	73.90	55.20
Hayland								
Average 2004 rate	68.50	81.90	68.20	40.70	53.40	67.10	51.10	46.80
High productivity	87.30	102.20	85.70	52.10	70.50	83.70	67.10	64.60
Low productivity	47.70	61.70	46.90	27.90	37.50	46.20	37.10	32.70
Average 2003 rate	67.20	81.60	62.80	39.60	49.40	63.30	51.40	42.50
Average 2002 rate	63.70	78.20	58.00	38.10	49.20	73.90	45.00	39.30
Pasture/rangeland								
Average 2004 rate	37.40	44.70	33.20	30.00	35.90	38.80	35.40	34.80
High productivity	47.50	55.00	43.70	38.60	48.00	50.00	48.60	46.80
Low productivity	26.50	31.90	22.90	21.90	25.90	28.60	25.70	24.60
Average 2003 rate	35.20	42.20	32.00	29.10	32.40	38.00	33.30	30.20
Average 2002 rate	33.70	40.90	31.10	25.80	32.00	33.75	34.00	29.90

Irrigated cropland rental rates per acre and rangeland rental rates per AUM are not reported in this table, due to insufficient number of reports in most county clusters

Source: South Dakota Farm Real Estate Market Surveys, SDSU, 2004 and 2003

acre, respectively. In many regions, the lower cash rental rates are reported for native hay land, while the higher rates are quoted for alfalfa or other tame hay land.

Cash rental rates for irrigated land vary from an average of $56.90 in western South Dakota to $103.80 in the east-central region and $118.80 in the southeast region (Table 3).

2004 cash rental rates: rangeland and pasture

Nearly three-eighths of the South Dakota 26.2 million acres of rangeland and pasture acres are leased to farmers and ranchers. Several million acres of rangeland in western and central South Dakota are controlled by federal, state, or tribal agencies and are leased to ranchers using cash leases or grazing permits. A majority of leased rangeland and almost all leased pasture are cash rented from private landlords (Cole et.al, 1992; South Dakota Census of Agriculture, 1997).

Respondents reported 2004 cash rental rates per acre and per AUM on privately owned rangeland and pasture-land in their locality.

Average cash rental rates per acre reflect regional differences in productivity and carrying capacity of pasture and rangeland tracts. Average cash rental rates vary from $7.90 to $10.00 per acre in western South Dakota to $35.90 in the east-central region and $37.40 in the southeast. Typical cash rental rates for low-productivity and high-productivity rangeland vary from $4.90 to $11.20 per acre in the northwest and from $25.90 to $48.00 in the southeast region (Fig 7 and Table 3).

In counties east of the Missouri River, average cash rental rates for rangeland and pasture vary from a high of $44.70 per acre in the CLTU cluster to about $30 in the Charles-Mix and Codington-Hamlin-Deuel clusters to a low of $15.40 in the Campbell-Potter-Walworth cluster.

Rangeland rates per AUM in 2004 are fairly uniform across South Dakota, averaging between $19.80 per AUM in the northwest region to $24.00 in the central region. Rental rates per AUM have been steadily increasing for the past 4 years in most regions of South Dakota.

Table 4. (continued)

Agricultural land type and productivity	Northeast: All	Northeast: Codington Deuel Hamlin	Northeast: Grant Roberts	Northeast: Clark Day Marshall	North-Central: All	North-Central: Brown Spink	North-Central: Edmund Faulk McPherson	North-Central: Campbell Potter Walworth
	dollars per acre				dollars per acre			
Nonirrigated cropland								
Average 2004 rate	64.50	70.80	68.70	54.40	47.60	56.90	38.90	39.10
High productivity	96.20	107.10	103.60	78.60	66.10	81.40	55.00	49.00
Low productivity	42.10	47.70	45.00	33.50	31.50	38.10	25.00	25.60
Average 2003 rate	59.50	62.30	60.00	51.90	44.90	52.20	49.80	37.40
Average 2002 rate	57.50	60.40	58.60	52.60	42.20	53.90	32.40	31.70
Hayland								
Average 2004 rate	36.80	43.30	29.80	30.70	27.10	31.10	26.10	20.30
High productivity	49.50	56.60	39.00	41.40	36.60	43.10	34.30	26.20
Low productivity	24.50	29.80	21.00	20.60	20.90	25.00	18.00	16.00
Average 2003 rate	34.60	41.60	34.40	25.10	26.20	30.10	22.80	21.80
Average 2002 rate	31.00	35.20	32.10	21.00	23.40	26.70	20.70	20.90
Pasture/rangeland								
Average 2004 rate	27.20	29.80	26.90	24.20	22.20	25.60	22.70	15.40
High productivity	37.40	42.30	35.40	32.90	29.70	35.00	29.00	20.40
Low productivity	18.10	21.40	16.40	15.20	14.90	17.60	14.60	10.30
Average 2003 rate	25.30	27.90	24.10	23.20	20.30	22.50	19.90	15.70
Average 2002 rate	23.70	26.60	20.60	23.30	18.70	21.50	18.10	15.20

Agricultural land type and productivity	Central: All	Central: Aurora Beadle Jerauld	Central: Buffalo Brule Hand Hyde	Central: Hughes Sully	South-Central: All	South-west: All	North-west: All
	dollars per acre				dollars per acre		
Nonirrigated cropland							
Average 2004 rate	43.40	47.10	38.20	44.80	34.10	25.10	21.40
High productivity	57.50	65.50	50.20	55.20	46.90	28.40	28.00
Low productivity	31.30	34.50	25.60	34.50	23.50	18.20	15.10
Average 2003 rate	40.60	46.50	36.30	37.00	29.20	22.00	21.00
Average 2002 rate	35.95	40.90	33.50	32.00	29.40	22.60	20.40
Hayland							
Average 2004 rate	28.40	31.90	28.40	23.60	24.80	18.50	17.70
High productivity	35.30	39.60	35.60	28.80	33.00	22.20	23.90
Low productivity	19.60	22.90	18.10	17.50	17.10	13.60	12.20
Average 2003 rate	27.50	30.60	28.50	20.10	19.80	17.80	19.80
Average 2002 rate	21.10	22.50	22.80	*	20.40	15.50	17.50
Pasture/rangeland							
Average 2004 rate	23.90	28.60	22.00	19.10	17.30	9.90	7.90
High productivity	30.80	36.80	29.80	22.50	23.60	12.50	11.20
Low productivity	17.00	19.80	14.90	15.70	11.70	6.90	4.90
Average 2003 rate	23.00	27.60	23.00	15.90	16.40	8.60	7.70
Average 2002 rate	19.70	23.90	20.30	13.20	15.60	8.90	7.20

Longer-term perspective on farmland value and cash rental rate changes, 1991-2004

Longer-term historical data from annual SDSU surveys of agricultural land values and cash rental rates in South Dakota for 1991–2004 are in Appendix Tables 2 and 3 of this report. Based on 14 years of trends in land values and cash rental rates by agricultural land use across regions and county clusters, a few key observations are offered.

First, regional and county cluster rankings in per-acre land values are very stable for most land uses, reflecting fundamental differences in soil productivity and long-term weather patterns and relatively slow shifts in the economic structure of most South Dakota counties.

The greatest changes in land values are generally occurring near growing urban centers, in localities where commercial (fee) hunting has greatly increased, and in areas shifting from wheat and small grains to corn and soybeans.

Second, land values across counties and regions tend to move together over time but not at exactly the same time or at the same pace.

The typical pattern is 3 to 4 years of rapid increases in land values followed by one or two years of consolidation (or even declines) before the next surge in land values. The timing of the growth and consolidation phases is not identical across all regions and counties. Thus, a longer-term perspective on land value changes is warranted.

Third, increases in agricultural land values from 1991 to 2004 are generally supported by increases in cash rental rates during the same period. However, the percentage growth rate in cash rental rates has been slower than the growth rate in land values, especially since 2001. This result has led to declines in gross rent to value ratios and current cash returns to farmland.

Considerable insight about the impacts of federal policies on land values can be gained by examining annual rates of land value increases for three time periods, 1991–1996, 1996–2001, and 2001–2004.

The 1996–2001 period reflects the impacts of the 1996 farm bill and the subsequent increases in federal farm program spending. However, there were no major changes in farm mortgage interest rates from the earlier period.

The 2001–2004 period should reflect the impacts of major reductions in mortgage interest rates and continued farm programs. As shown in Figure 8, farmland values in all regions of South Dakota increased much faster in the 2001–2004 period than in the earlier time periods.

The more rapid increases in cash rental rates and land values from 1996 to 2004 were directly related to crop price or government payment benefits that became quickly capitalized into land rents and values. More recent increases in land values from 2001 to present were strongly related to sharp declines in the costs of borrowing money and the many investors (including farmers) who shifted some funds into real estate from stocks and bonds.

Since 2001, cash rental rates have increased more rapidly than in the previous 10 years but at a much slower rate than land values.

For example, average annual increase in statewide cash rental rates from 2001 to 2004 was 6.6%, compared to a 12.2% average rate of increase in cropland values. During the 1996–2001 period, cropland cash rental rates and cropland values increased at similar annual percentage rates (5.8% vs. 6.6%).

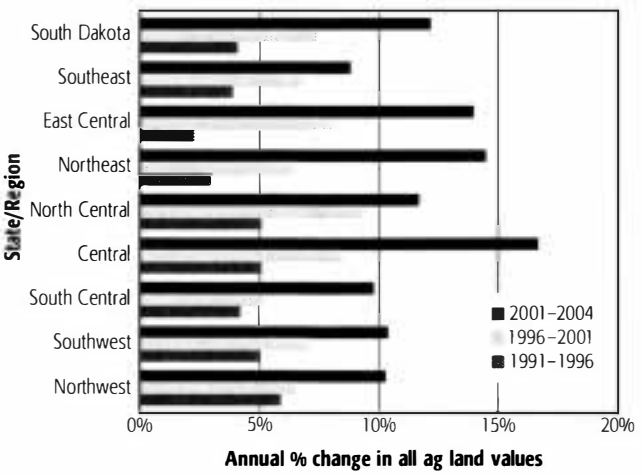
The earlier time period (1996–2001) reflects the major impacts of farm program benefits on both cash rental rates and land values, while the latter time period shows the much greater positive impact of reduced interest rates on land values compared to the impact on cash rental rates. During this latter period, the real estate market (including farmland) has been entering a speculative boom fueled by low interest rates and low rates of general price inflation.

Finally, longer-term trends (1991–2004) in agricultural land values show increases above the rate of price inflation in all regions.

The statewide average annual rate of increase for all agricultural land was 6.8% during this period, with regional variation from 6.0% in the south-central region to 8.0% in the north-central region. Trends in land value changes by land use followed similar patterns with annual percentage changes in cropland values lower than corresponding changes in rangeland values (6.6% vs. 7.1% from 1991–2004.

Additional information and numerous charts on longer-term trends in South Dakota agricultural land values and cash rental rates, statewide and regional, can be obtained in a recent electronic publication, *Historical and Recent Trends in South Dakota's Agricultural Land Market*, which can be accessed at http://agbiopubs.sdstate.edu/articles/EC918.pdf (Hamda et al. 2003)

Figure 8. Annual percentage change in all ag land values, 1991–1996, 1996–2001, and 2001–2004.



Rates of return to South Dakota agricultural land

During the past several years, current rates of return to agricultural land have generally declined along with decreasing interest rates.

In 2004, current rates of return are lower for each agricultural land use than rates of return in any of the previous 13 years (1991–2003). Also, average rates of return to agricultural land in all regions were lower in 2004 or in 2003 than in any other year from 1991 to 2002.

Average rates of return to cropland have been higher than those reported for hay land, pasture, and rangeland in each of the past 14 years the survey has been conducted.

For each survey period, two approaches (gross rates of return and net rates of return) have been used to obtain information on current rates of return to agricultural land.

First, gross rent to value ratios (gross cash rent as a percent of land value) were calculated from respondents' reported cash rental rates and estimated value of leased land. This is a measure of the **gross rate of return** obtained by landlords **before** deduction of property taxes and other landlord expenses. For most respondents, the estimated gross rate of return in 2004 varies from 4.5% to 9.1% for cropland, 4.3% to 10.0% for hay land, and 3.3% to 8.3% for rangeland.[5]

The statewide average gross rate of return (rent to value ratio) is 6.6% for nonirrigated cropland, 6.5% for hay land, and 5.2% for rangeland. Regional average rent to value ratios vary from 5.2% in the northwest region to 6.8% in the northeast. Across all regions and all agricultural land uses, the 2004 average rent to value ratios were 1.2 to 1.4 percentage points lower than the average calculated over the 1991–2003 period. Also, the average rent to value ratio for each land use was lower in 2004 than in any of the previous 13 years (Table 5). This trend of lower current rates of return to farmland is related to the trend of lower interest rates in the past few years.

Next, respondents were asked to estimate the current net rate of return (percent) that landowners in their locality could expect, given current land values. Appraisers refer to the current annual net rate of return as the market-derived capitalization rate, which is widely used in the income approach to farmland appraisal. The **net rate of return** is a return to agricultural land ownership **after** deducting property taxes, real estate maintenance, and other ownership expenses.[6]

[5] The range of reported rates of return and calculated rent to value ratios is shown for the middle 90% of responses for each land use. This represents the practical range of reported rates of return and rent to value ratios.

[6] The market-derived income capitalization rate used by appraisers is equal to net returns to land divided by its current market value. One widely used method of estimating net return to agricultural land is subtracting property taxes, land maintenance expense, and other land ownership expenses from the gross cash rental rate for the same land. In each SDSU farmland market survey, respondents are requested to estimate this net rate of return by land use for agricultural land in their localities.

Table 5. Estimated rates of return to South Dakota agricultural land by type of land and by region, 1991 - 2004.

	Average						Average					
	2004	*2003*	*2002*	*2001*	*2000*	*1991-03*	*2004*	*2003*	*2002*	*2001*	*2000*	*1991-03*
Type of land-statewide	**GROSS rate of return (%)[a]**						**NET rate of return (%)[b,c]**					
All agricultural land	5.8	6.2	6.5	6.7	6.9	7.1	4.3	4.5	4.5	4.8	5.1	5.2
Nonirrigated cropland	6.6	7.1	7.4	7.6	7.8	7.8	4.9	5.0	5.2	5.4	5.5	5.8
Rangeland and pasture	5.2	5.4	5.7	6.1	6.3	6.5	3.9	4.1	3.9	4.3	4.9	4.7
Hayland	6.5	7.1	7.2	7.3	7.5	7.7	4.4	4.8	4.7	5.1	4.9	5.3
Region[d]	**GROSS rate of return (%)**						**NET rate of return (%)**					
Southeast	6.2	6.7	7.1	7.2	7.1	7.3	4.9	4.6	5	5.4	5.2	5.6
East-Central	5.6	6.7	6.7	6.9	7.3	7.4	4.7	4.6	5	5.5	5.5	5.4
Northeast	6.8	7.4	7.6	7.6	7.8	8.0	4.8	5.5	5.5	5.6	5.5	6.0
North-Central	6.2	6.5	7.0	6.5	7.4	7.6	4.6	4.9	5.6	6.1	6.5	6.0
Central	6.0	6.2	6.6	7.5	7.4	7.5	4.4	4.1	4.7	4.6	4.5	5.1
South-Central	6.2	6.0	6.3	6.6	6.4	6.7	4.2	5.1	4.2	4.6	4.9	5.1
Southwest	5.4	5.6	5.7	6.7	6.2	6.5	4.0	4.2	3.4	4.0	3.6	4.2
Northwest	5.2	5.6	5.9	6.1	6.7	6.8	3.7	3.9	3.9	4.0	5.6	4.9

[a]GROSS rate of return (percent) is calculated by dividing the average gross cash rental rate by reported value of rental land

[b]NET rate return is the reporter's estimate of the percentage rate of return to ownership given current land values. Appraisers often refer to this measure as the market capitalization rate

[c]State level GROSS and NET rate of return estimates are calculated by weighting regional estimates by proportion of acres of each land use by region

[d]Regional level GROSS and NET rate of return estimates are calculated by weighting the rate of return estimates for each land use by proportion of the region agricultural acres in each land use

Source: 2004 South Dakota Farm Real Estate Survey, SDSU

Average net rates of return for 2004 varied from 4.9% for nonirrigated cropland to 3.9% for rangeland and pasture. This is the first time during the past 14 years that average net rates of return were below 5.0% for all agricultural land uses and in all regions of South Dakota.

Most respondents reported net rates of return ranging from 1.5% to 8.0% for each agricultural land use. The statewide average estimated net rate of return on all agricultural land is 4.3%, which is lower than the previous 13-year average net rate of return of 5.2% (Table 5).

Average net rates of return by region in 2004 varied from 3.7% in the northwest to 4.9% in the southeast. During the 1991-2003 period, average net rates of return by region varied from 4.9-6.0%, except for the considerably lower rate of return of 4.2% reported in the southwest region.

The projected difference between **gross** and **net** rates of return to agricultural land ownership in 2004 is 1.5 percentage points for all agricultural land and varies somewhat across regions and agricultural land uses (Table 5). Most of the difference between gross returns and net returns is caused by property tax levies.

The declines in gross cash rates of return and net rates of return in recent years reflect the fact that cash rental rates have been increasing at a slower rate than land values. Thus, farmland investors are in market conditions where an increasing proportion of total returns are from expectations of capital appreciation instead of current cash returns. Nonetheless, cash rental rates continued to increase throughout South Dakota, despite the prevalence of drought in much of the state.

Respondents' assessment of factors influencing farmland markets in South Dakota

Respondents were asked to list major positive and negative factors affecting the farm real estate market in their localities. These factors help explain changes in the amount of farmland for sale, sale prices, and rental rates. Eighty five percent of respondents listed one or two positive factors and 75% of respondents listed one or two negative factors.

As in 2003, low interest rates were cited as the principal positive factor in the farmland market (26% of responses). The lowest interest rates in more than 35 years reduce borrowing costs for land purchases and for operating expenses, including cash rental payments, and improve the financial feasibility of longer-term investments (Fig 9).

Recent strength in agricultural commodity markets was the second most listed positive factor affecting land values. The percentage of respondents listing government farm programs as a positive factor in the farmland market was the lowest since 2000 at 8%. Other positive factors listed included the strong demand for farmland and the high purchase prices and rental rates (Fig 9).

Farm real estate has been perceived to have a better return than many alternative investments (8% of positive responses), which has undoubtedly kept investor interest and hunting/ recreation interest as important positive factors (19% of positive responses). However, "outside" investor interests, including hunting/recreation, urban encroachment, and real estate speculators, were also the second most listed negative factor affecting the farmland market (21% of negative responses). Most negative comments related "outside" investor interests to the record high land prices and rental rates (11% of negative responses) and their ability to often outbid local farmers starting or expanding their farm business (Fig 10).

Drought (23% of responses) was cited as the principal negative factor influencing the South Dakota farmland market for the second year in a row.

High input costs and low returns to agricultural resources each made up another 10% of the negative responses. Despite the large percentage of responses indicating relatively high market prices, 8% of those listing a negative factor cited low agricultural prices as an influence on the market.

Increased property taxes, government programs, and general economic uncertainty were also listed as important negative factors (Fig 10). Interestingly, 7% of respondents indicated no negative factors were affecting land markets in their localities.

Figure 9. Postive factors in the farm real estate market.

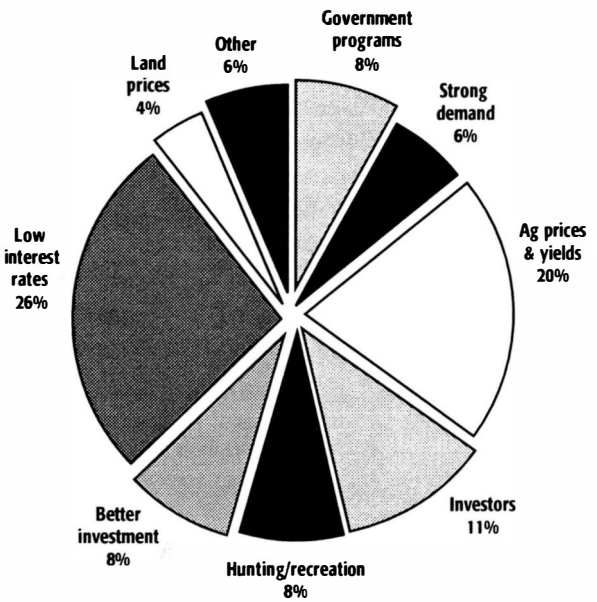
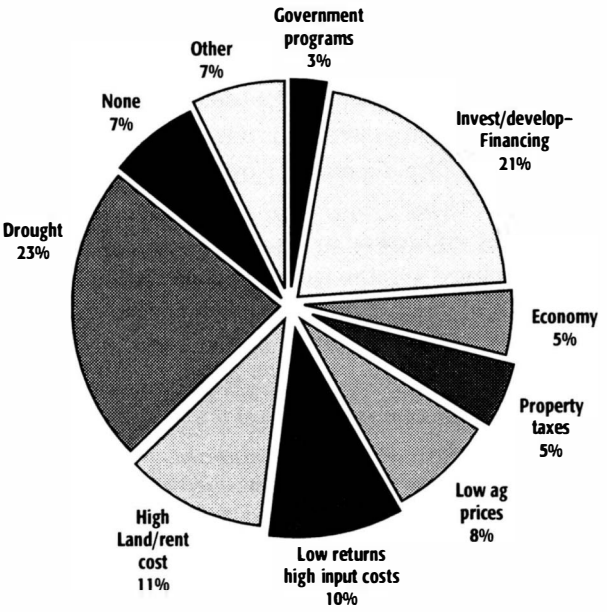


Figure 10. Negative factors in the farm real estate market.



Agricultural land market expectations: past and prospective

In each survey, respondents were asked to estimate the percentage change in land values during the previous year and to forecast percentage changes in land values for the following year. Two-thirds of respondents provided their perception of previous year land value changes, but only half provided forecasts for next year.

During the past year, respondents' estimated percentage increases in land values averaged from 12% to 13%, depending on land use. This was the highest annual rate of increase estimated by respondents during the past 14 years.

Most respondents (94%) reported increases in land values during the previous 12 months, and no one indicated farmland values had declined. Respondents' perception of percentage changes in land values were higher in the eastern regions than those from other regions of South Dakota.

Four-fifths of respondents providing forecasts expect land values to increase in the next 12 months, while others expect no change in land values.

The median forecast percentage increase is 5% for each land use compared to an average (mean) forecasted increase of 6.1% for pasture and hayland to 6.8% for cropland. Again, forecasted percentage changes were highest in the eastern regions of South Dakota.

In summary, respondents to the 2004 survey are very optimistic about prospective farm/ranch land market conditions.

Farmland values have increased much more than the rate of general price inflation in all regions and for all land uses. Cash rental rate increases provide underlying support for land value increases.

However, many respondents expressed concern in written comments that the land market is becoming "overheated" as land values in the past 3 years have increased much more rapidly than cash rental rates. Prospective buyers and investors, enamored with low interest rates and perceiving only modest returns from other investments, are investing more heavily in real estate, including farmland. In this speculative market situation, increases in inflation rates and interest rates along with farm commodity price reversals could take the "steam" out of continued upward pressures on land values.

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* Reference citations for annual SDSU farm real estate survey reports for 1991 through 2000 are not listed above, but can be found in the following reports. The annual reports for 1991 and 1992 were published as SDSU Economic Research Reports 91-3 and 92-1. The annual reports from 1993 to 1999 were published as SDSU Agricultural Experiment Station Circulars # 256, 257, 258, 259, 260, 262, 263, and 264. Janssen and Pflueger, usually in collaboration with an SDSU economics student, were co-authors of each annual report.

APPENDIX I: Survey methods and respondent characteristics

The primary purpose of the 2004 South Dakota Farm Real Estate Market Survey was to obtain regional and statewide information on (1) 2004 per-acre agricultural land values by land use and land productivity, and (2) 2004 cash rental rates by agricultural land use and land productivity. In addition, we obtained respondent assessments of positive and negative factors influencing their local farm real estate market and motivations for buyer/seller decisions.

Copies of this survey were mailed to potential respondents on February 17 with a follow-up mailing on March 10. Potential respondents were persons employed in one of the following occupations: (1) agricultural lenders (senior agricultural loan officers of commercial banks or Farm Credit Service), (2) loan officer or county directors of the USDA Farm Service Agency (FSA), (3) Cooperative Extension Service agricultural educators and area farm management specialists, and (4) licensed appraisers and assessors. Some appraisers were also realtors or professional farm managers, while some lenders were also appraisers.

The total response rate was 43% of 615 persons contacted. The usable survey response rate was 38.2%. The distribution of 235 respondents by location and reported occupation is shown in Appendix Table 1. Seventy eight percent of Farm Service Agency officials, 41% of Extension educators, 35% of assessors and licensed appraisers, and 32% of agricultural lenders contacted provided usable responses. Three-fifths of respondents are agricultural lenders or FSA officials.

Nearly one half (48%) of the respondents were from the three eastern regions of South Dakota, 34% were from the three regions of central South Dakota, and 18% were from western South Dakota. Most respondents were able to supply land value and cash rental rate information for nonirrigated cropland, rangeland, and hay land in their localities. However, only 39% of respondents provided data on irrigated land values, 33% provided data on irrigated land cash rental rates, and 23% provided data on rangeland AUM rental rates. The overall pattern of response rates and respondent location has not changed very much in recent years.

Regional average land values by land use are simple average (mean) values of usable responses. Statewide average land values by land use are weighted by the relative number of acres in each region in the same land use. all agricultural land values, regional and statewide, are weighted by the proportion of acres in each agricultural land use. Thus all agricultural land values in this report are weighted average values by region and land use. This weighted average approach is analogous to the cost (inventory) approach of estimating farmland values in rural land appraisal.

This approach has important implications in the derivation of statewide average land values and regional all-land values. For example, the two western regions of South Dakota with the lowest average land values have nearly 61% of the state's rangeland acres, 39% of all agricultural land

Appendix Table 1. Selected characteristics of respondents, 2004.

Number of respondents = 239

Respondents:

Reporting location	**N**	**%**
Southeast	48	20.4%
East-Central	33	14.0%
Northeast	32	13.6%
North-Central	32	13.6%
Central	27	11.5%
South-Central	21	8.9%
Southwest	14	6.0%
Northwest	28	11.9%
	235	100.0%

Primary occupation	**N**	**%**
Banker/loan officer	97	41.3%
Farm Service Agency	46	19.6%
Assessor	22	9.4%
Appraiser/realtor	45	19.1%
Extension educators	25	10.6%
	235	100.0%

Response rates:

Land values	**N**	**%**
Nonirrigated cropland	219	93.2%
Irrigated cropland	92	39.1%
Hayland	192	81.7%
Rangeland (native)	210	89.4%
Pastureland (tame)	159	67.7%

Cash Rental Rates	**N**	**%**
Nonirrigated cropland	216	91.9%
Irrigated cropland	78	33.2%
Hayland	181	77.0%
Rangeland (acre)	199	84.7%
Rangeland (AUM)	54	23.0%

Source: South Dakota Farm Real Estate Market Surveys, SDSU, 2004 and 2003

acres, and only 16% of cropland acres. Our approach increases the relative importance of western South Dakota land values in the final computations and results in lower statewide average land values.

The weighting factors used to develop statewide average land values were based on estimates of agricultural land use for privately owned nonirrigated farmland in South Dakota. It excludes agricultural land (mostly rangeland) leased from tribal or federal agencies, which is mostly located in the western and central regions of the state. Irrigated land is also excluded from regional and statewide all-land values. The land-use weighting factors were developed from county-level data in the 1997 South Dakota Census of Agriculture and other sources (Janssen, 1999).

Regional average rental rates by land use are simple average (mean) values of usable responses. Statewide average cash rental rates for each land use are weighted by (1) the relative number of acres in each land use, and (2) the proportion of farmland acres leased in each region.

APPENDIX II: Historical data, 1991–2004

Appendix Table 2. Average reported value and annual percentage change in value of South Dakota agricultural land by type of land by region, 1991-2004.

Type of land	*South-east*	*East-Central*	*North-east*	*North-Central*	*Central*	*South-Central*	*South-west*	*North-west*	*State*
					dollars per acre				
All agricultural land (nonirrigated)									
Average value, 2004	1139	1163	789	621	579	376	222	189	527
Average value, 2003	1009	907	649	543	510	309	199	174	450
Average value, 2002	923	876	567	494	413	313	201	147	410
Average value, 2001	884	784	526	445	364	284	165	141	373
Average value, 2000	788	675	499	400	343	286	166	128	343
Average value, 1999	735	645	459	374	335	272	164	119	325
Average value, 1998	766	612	457	350	337	280	153	115	319
Average value, 1997	660	591	437	320	293	241	137	108	290
Average value, 1996	636	522	419	291	288	217	124	112	273
Average value, 1995	627	475	424	277	257	222	129	100	262
Average value, 1994	567	497	393	293	255	191	112	94	250
Average value, 1993	548	498	399	254	233	199	111	90	241
Average value, 1992	519	474	368	259	223	186	104	89	231
Average value, 1991	526	466	362	227	225	177	97	84	223
Av annual % change 04/91	6.1%	7.3%	6.2%	8.0%	7.5%	6.0%	6.6%	6.4%	6.8%
Annual % change 04/03	12.9%	28.2%	21.6%	14.4%	13.5%	21.7%	11.6%	8.6%	17.1%
Nonirrigated cropland					*dollars per acre*				
Average value, 2004	1315	1346	973	822	705	541	318	294	886
Average value, 2003	1156	1040	793	716	631	443	290	281	744
Average value, 2002	1057	1019	691	665	524	445	311	244	687
Average value, 2001	1023	911	652	592	456	423	245	223	628
Average value, 2000	910	785	620	520	436	417	248	208	570
Average value, 1999	866	756	565	488	435	402	246	202	543
Average value, 1998	903	728	564	452	434	399	241	200	536
Average value, 1997	777	699	535	412	386	348	217	188	488
Average value, 1996	751	613	514	372	371	317	214	191	456
Average value, 1995	732	555	522	353	332	326	237	185	439
Average value, 1994	661	590	488	382	331	289	218	169	429
Average value, 1993	655	595	497	326	305	302	197	163	415
Average value, 1992	616	574	460	342	300	287	196	167	402
Average value, 1991	623	554	450	294	300	272	185	153	386
Av annual % change 04/91	5.9%	7.1%	6.1%	8.2%	6.8%	5.4%	4.3%	5.2%	6.6%
Annual % change 04/03	13.8%	29.4%	22.7%	14.8%	11.7%	22.1%	9.7%	4.6%	19.1%

Source: South Dakota Farm Real Estate Market Surveys, SDSU, 2004 and earlier.

Appendix Table 2. (continued)

Type of land	*South-east*	*East-Central*	*North-east*	*North-Central*	*Central*	*South-Central*	*South-west*	*North-west*	*State*
Rangeland (native)				*dollars per acre*					
Average value, 2004	684	764	465	396	456	312	196	167	275
Average value, 2003	609	580	389	345	397	257	176	153	239
Average value, 2002	538	543	353	297	325	260	172	127	215
Average value, 2001	488	478	315	270	284	232	143	124	193
Average value, 2000	456	417	297	253	265	235	143	111	183
Average value, 1999	405	386	276	241	255	220	143	102	173
Average value, 1998	408	346	274	226	256	231	130	98	167
Average value, 1997	364	354	268	204	214	197	116	92	151
Average value, 1996	336	311	250	194	214	177	100	97	143
Average value, 1995	354	303	247	184	197	180	101	83	136
Average value, 1994	319	283	228	184	190	149	85	80	125
Average value, 1993	283	276	232	169	175	157	89	76	122
Average value, 1992	271	267	209	163	159	145	80	74	114
Average value, 1991	268	271	205	147	163	137	74	69	109
Av annual % change 04/91	7.5%	8.3%	6.5%	7.9%	8.2%	6.5%	7.8%	7.0%	7.4%
Annual % change 04/03	12.3%	31.7%	19.5%	14.8%	14.9%	21.4%	11.4%	9.2%	15.1%
Pasture (tame, improved)				*dollars per acre*					
Average value, 2004	754	818	517	424	518	337	217	198	505
Average value, 2003	683	710	448	389	493	294	191	163	452
Average value, 2002	639	607	391	327	345	287	193	156	389
Average value, 2001	564	522	342	301	332	258	176	153	350
Average value, 2000	516	481	334	289	303	268	167	144	329
Average value, 1999	453	437	314	266	290	240	161	125	301
Average value, 1998	461	406	297	264	302	272	161	120	299
Average value, 1997	416	373	299	236	265	222	138	114	271
Average value, 1996	379	358	279	231	258	188	127	115	256
Average value, 1995	385	346	262	218	214	214	117	102	237
Average value, 1994	371	335	251	200	224	194	109	93	227
Average value, 1993	326	333	249	194	194	193	104	98	216
Average value, 1992	328	306	257	194	190	176	100	88	210
Average value, 1991	315	325	252	170	199	163	92	94	206
Av annual % change 04/91	6.9%	7.4%	5.7%	7.3%	7.6%	5.7%	6.8%	5.9%	7.1%
Annual % change 04/03	10.4%	15.2%	15.4%	9.0%	5.1%	14.6%	13.6%	21.5%	11.7%
Annual % change 04/03	13.8%	29.4%	22.7%	14.8%	11.7%	22.1%	9.7%	4.6%	19.1%

Appendix Table 2. (continued)

Type of land	*South-east*	*East-Central*	*North-east*	*North-Central*	*Central*	*South-Central*	*South-west*	*North-west*	*State*
Hayland				*dollars per acre*					
Average value, 2004	1008	992	586	432	516	391	265	245	498
Average value, 2003	932	770	488	379	486	310	228	227	431
Average value, 2002	863	770	412	352	375	325	238	204	397
Average value, 2001	844	735	359	332	337	281	201	181	364
Average value, 2000	722	577	330	317	310	293	203	175	332
Average value, 1999	619	562	317	278	293	294	194	163	310
Average value, 1998	668	504	330	265	295	291	178	149	303
Average value, 1997	553	507	316	262	253	258	169	150	280
Average value, 1996	568	451	314	219	273	232	156	146	267
Average value, 1995	562	365	336	213	229	230	164	145	254
Average value, 1994	489	409	279	235	237	204	137	124	240
Average value, 1993	435	398	275	188	205	204	140	121	223
Average value, 1992	416	336	237	179	197	193	135	119	207
Average value, 1991	461	358	252	169	190	197	126	122	211
Av annual % change 04/91	6.2%	8.2%	6.7%	7.5%	8.0%	5.4%	5.9%	5.5%	6.8%
Annual % change 04/03	8.2%	28.8%	20.1%	14.0%	6.2%	26.1%	16.2%	7.9%	15.5%

Type of land	*South-east*	*East-Central*	*North-east*	*North-Central*	*Central/ S.Central*	*Western*	*State*
Irrigated land				*dollars per acre*			
Average value, 2004	1793	1678	1259	1210	865	782	1183
Average value, 2003	1629	1085	1034	1032	817	630	1014
Average value, 2002	1613	1228	935	690	639	568	916
Average value, 2001	1425	1069	863	687	630	576	856
Average value, 2000	1358	1036	802	619	593	575	816
Average value, 1999	1351	913	672	625	492	443	736
Average value, 1998	1245	950	686	676	549	508	752
Average value, 1997	1217	769	736	600	502	469	707
Average value, 1996	1083	714	662	504	460	453	642
Average value, 1995	1144	740	793	535	475	411	664
Average value, 1994	1043	790	683	568	520	433	655
Average value, 1993	979	765	583	547	506	491	640
Average value, 1992	985	844	641	450	470	451	622
Average value, 1991	942	665	563	433	460	419	580
Av annual % change 04/91	5.1%	7.4%	6.4%	8.2%	5.0%	4.9%	5.6%
Annual % change 04/03	10.1%	54.7%	21.8%	17.2%	5.9%	24.1%	16.7%

Appendix Table 3. Reported cash rental rates of South Dakota agricultural land by type of land by region, 1991-2004.

Type of land	*South-east*	*East-Central*	*North-east*	*North-Central*	*Central*	*South-Central*	*South-west*	*North-west*	*State*
	dollars per acre								
Nonirrigated cropland									
Average 2004 rate	83.70	78.80	64.50	47.60	43.40	34.10	23.10	21.40	57.30
High productivity	109.40	108.70	96.20	66.10	57.50	46.90	28.40	28.00	
Low productivity	60.60	56.00	42.10	31.50	31.30	23.50	18.20	15.10	
Average 2003 rate	78.80	74.70	59.50	44.90	40.60	29.20	22.00	21.00	53.70
Average 2002 rate	76.50	69.80	57.50	42.20	35.95	29.40	22.60	20.40	51.10
Average 2001 rate	72.95	64.60	52.20	37.80	35.30	27.20	20.10	17.50	47.35
Average 2000 rate	67.50	56.40	49.30	36.20	31.90	30.00	18.70	18.70	44.00
Average 1999 rate	63.20	56.00	46.20	36.00	33.20	27.00	19.50	16.90	42.55
Average 1998 rate	65.20	55.00	45.30	34.70	30.90	25.90	19.00	17.90	42.00
Average 1997 rate	57.40	49.20	44.70	32.70	29.30	23.60	19.10	19.30	39.00
Average 1996 rate	54.70	45.30	41.50	28.70	26.30	21.60	17.00	16.00	35.75
Average 1995 rate	52.50	42.10	40.40	27.60	25.10	21.00	17.60	15.90	34.30
Average 1994 rate	51.90	45.10	40.30	29.80	25.00	22.10	17.60	14.90	35.10
Average 1993 rate	51.80	47.10	40.30	26.60	24.20	22.80	16.60	14.60	34.70
Average 1992 rate	48.00	45.70	39.70	25.50	22.70	21.40	17.70	15.10	33.30
Average 1991 rate	49.30	43.20	38.50	24.50	23.20	22.20	15.90	13.50	32.60
Hayland									
Average 2004 rate	68.50	53.40	36.80	27.10	28.40	24.80	18.50	17.70	32.70
High productivity	86.00	70.50	49.50	36.60	35.30	33.00	22.20	23.90	
Low productivity	49.30	37.50	24.50	20.90	19.60	17.10	13.60	12.20	
Average 2003 rate	67.20	49.40	34.60	26.20	27.50	19.80	17.80	19.80	31.30
Average 2002 rate	63.70	49.20	31.00	23.40	21.10	20.40	15.50	17.50	28.70
Average 2001 rate	61.20	47.60	28.90	21.00	23.30	18.10	15.90	14.70	27.25
Average 2000 rate	57.80	40.10	28.80	20.30	21.10	19.40	15.10	14.30	25.70
Average 1999 rate	48.50	40.10	22.80	20.40	20.60	19.60	14.80	15.40	24.20
Average 1998 rate	51.40	40.50	24.60	19.40	20.90	18.90	14.20	13.60	24.50
Average 1997 rate	46.10	36.80	28.20	18.70	19.90	16.70	14.90	14.60	23.35
Average 1996 rate	41.50	32.30	26.00	17.00	18.60	15.20	12.60	11.20	20.75
Average 1995 rate	43.80	28.20	25.30	16.70	16.10	14.90	11.10	11.10	19.90
Average 1994 rate	39.50	31.40	23.60	17.00	17.80	15.50	11.90	11.30	20.05
Average 1993 rate	35.60	32.10	22.00	14.70	16.40	16.00	11.30	9.50	18.70
Average 1992 rate	33.30	25.90	20.00	14.20	15.60	15.60	11.40	12.10	17.80
Average 1991 rate	38.50	30.90	22.30	14.20	15.70	14.80	12.10	10.40	18.80

Source: South Dakota Farm Real Estate Market Surveys, SDSU, 2004 and earlier.

Appendix Table 3. (continued)

Type of land	*South-east*	*East-Central*	*North-east*	*North-Central*	*Central*	*South-Central*	*South-west*	*North-west*
Pasture/rangeland				*dollars per acre*				
Average 2004 rate	37.40	35.90	27.20	22.20	23.90	17.30	10.00	7.90
High productivity	47.50	48.00	37.40	29.70	30.80	23.60	12.50	11.20
Low productivity	26.50	25.90	18.10	14.90	17.00	11.70	6.90	4.90
Average 2003 rate	35.20	32.40	25.30	20.30	23.00	16.40	8.60	7.70
Average 2002 rate	33.70	32.00	23.70	18.70	19.70	15.60	8.90	7.20
Average 2001 rate	30.90	30.40	21.00	17.50	20.80	12.90	8.60	6.60
Average 2000 rate	31.00	26.80	20.60	17.40	18.50	15.40	8.00	6.80
Average 1999 rate	26.80	24.80	19.70	16.60	17.80	14.70	7.70	6.20
Average 1998 rate	28.10	24.40	19.40	16.40	17.50	14.90	7.30	6.70
Average 1997 rate	25.70	23.60	19.50	15.20	16.80	13.00	6.60	6.80
Average 1996 rate	21.20	22.10	18.80	14.70	16.30	12.00	5.60	6.10
Average 1995 rate	21.90	21.60	18.60	14.90	14.80	11.20	6.10	6.30
Average 1994 rate	20.30	20.90	18.60	13.40	16.30	11.20	5.40	5.60
Average 1993 rate	20.30	20.10	17.00	12.70	15.20	10.10	5.60	5.10
Average 1992 rate	18.00	19.60	16.50	12.00	13.50	9.50	5.30	4.90
Average 1991 rate	19.20	18.60	16.30	12.50	13.80	9.90	5.30	4.40
				dollars per Animal Unit Month				
Average 2004 rate	21.30	**	**	21.10	24.00	23.60	21.90	19.80
High Productivity	25.80	**	**	25.30	28.50	18.70	25.30	24.50
Low Productivity	16.40	**	**	15.50	17.50	29.70	18.40	15.80
Average 2003 rate	20.30	**	**	20.40	20.40	21.50	19.90	19.30
Average 2002 rate	20.70	18.00	17.70	16.30	16.30	21.20	19.10	17.60
Average 2001 rate	20.00	21.00	18.60	16.80	17.40	19.80	17.80	15.75
Average 2000 rate	18.70	17.90	19.80	15.50	17.40	19.20	16.20	16.70
Average 1999 rate	18.50	15.80	18.80	15.40	16.30	18.50	16.50	16.40
Average 1998 rate	16.00	19.00	17.70	15.00	19.80	19.10	16.10	16.30
Average 1997 rate	17.60	18.00	16.20	13.40	17.00	17.30	15.90	16.10
Average 1996 rate	17.50	16.70	15.60	14.70	16.30	16.60	16.40	16.20
Average 1995 rate	17.30	16.70	13.60	15.00	16.10	16.80	16.40	15.50
Average 1994 rate	15.40	15.00	15.60	14.80	16.50	17.00	15.60	16.50
Average 1993 rate	15.60	13.90	14.25	13.25	14.90	16.40	15.40	14.50
Average 1992 rate	15.40	14.50	12.50	13.10	15.50	15.90	14.00	15.00
Average 1991 rate	13.70	15.90	15.50	12.80	14.80	15.20	14.30	13.00

** Insufficient number of reports to make regional estimates

Appendix Table 3. (continued)

Type of land	*South-east*	*East-Central*	*North-east*	*North-Central*	*Central/ S.Central*	*Western*	*State*
Irrigated land				*dollars per acre*			
Average 2004 rate	118.80	103.80	97.50	75.00	73.20	56.90	83.70
High productivity	143.20	130.00	126.00	88.60	85.60	69.10	
Low productivity	94.00	77.50	75.50	61.40	58.10	42.20	
Average 2003 rate	119.20	98.00	72.60	75.50	***	58.20	76.60
Average 2002 rate	124.00	98.60	77.40	71.40	52.50	50.20	75.70
verage 2001 rate	106.00	84.40	77.00	65.00	67.10	48.00	72.80
Average 2000 rate	104.80	84.00	75.00	61.80	55.60	46.60	68.80
Average 1999 rate	100.00	63.80	69.50	63.80	45.20	40.00	61.80
Average 1998 rate	99.30	76.10	63.80	70.00	44.30	39.00	62.20
Average 1997 rate	100.20	72.20	63.00	59.30	46.40	42.00	62.20
Average 1996 rate	85.40	61.90	68.70	46.40	43.90	33.80	54.30
Average 1995 rate	89.50	68.00	76.70	65.40	45.80	44.00	61.60
Average 1994 rate	91.90	71.70	66.00	53.80	48.50	***	61.00
Average 1993 rate	87.20	68.60	60.00	57.80	53.40	44.00	60.80
Average 1992 rate	65.20	70.00	69.20	58.50	49.80	47.50	56.60
Average 1991 rate	82.70	69.00	59.00	***	***	37.50	***

*** Insufficient number of reports