

South Dakota

Agricultural Land Market Trends 1991–2013

The 2013 SDSU South Dakota Farm Real Estate Survey

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South Dakota State University
Agricultural Experiment Station
U.S. Department of Agriculture



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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. The 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 2013 SDSU South Dakota Farm Real Estate Market Survey, the 23rd 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. Gerald Warmann, Professor of Economics, Dr. Kuo-Liang (Matt) Chang, Assistant Professor of Economics, and Michelle Cartney, University Relations Department, SDSU.

We also wish to thank Penny Stover for developing and maintaining the mailing lists and for assistance with various survey and publication related tasks. Penny Stover is a secretary in the Economics Department. Also, thanks to Mr. Bronc McMurtry, Economics undergraduate assistant and co-author, for conducting many daily tasks related to the survey, drafting updated charts and tables, and writing draft copies for some sections of this report.

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Finally, we wish to thank all of the respondents who participated in the 2013 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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<http://igrow.org>

SUMMARY

The 2013 SDSU Farm Real Estate Market Survey report contains information on current agricultural land values and cash rental rates by land use in different regions of South Dakota, with comparisons to values from earlier years. Key findings are highlighted below.

• **Agricultural land values continue to boom for all land uses and regions of South Dakota. The most recent two years of annual increases for all agricultural land values, 33.6% from 2012 to 2013 and 26.8% from 2011 to 2012, are the highest annual rates of increase in the past 23 years of this survey.**

From 2000 to 2011, statewide annual increases in all-agricultural land values varied from 5.1% to 22.5%, with two years of annual increases exceeding 20%. Overall, agricultural land values in South Dakota have more than doubled since 2009 and have increased six-fold from 2001. From 1991 to 2001, annual increases in all-agricultural land values varied from 4% to 9%.

• **Cropland values increased at a higher rate than per acre value increases for other agricultural land uses.**

Cropland values increased, statewide, by 37.8% compared to increases of 30.0% for hay land, 26.6% for pasture, and 23.3% for rangeland. Per-acre land value increases were reported in all regions for all land uses. Cropland values increased more than 20% in all regions, while pasture, rangeland, and hay land values increased more than 20% in six of eight regions of South Dakota.

• **Cash rental rates also increased more during each of the past two years than in any other period in the past 23 years. Since 2011, cash rental rates for cropland and hay land increased more than 15% per year statewide and in most regions.**

Statewide, from 2012 to 2013, average cash rental rates per-acre increased \$22.80 for cropland, \$13.45 for hay land, and \$4.05 for rangeland. Cash rental rates increased in all regions for all land uses, with considerable regional variation in the amount and percentage change.

• **Current average rates of cash return on agricultural land in South Dakota are lower in 2013 than in any of the past 22 years.**

For 2013 the average ratio of gross cash rent to current land value for all agricultural land was 3.3%, for non-irrigated cropland was 3.5%, and for rangeland was 3.0%. During the 1990s, the same ratios were 7.4% for all agricultural land, 8.0% for cropland, and 6.8% for rangeland.

• **The longer-term trends in land values, cash rental rates, and cash rates of return are closely related to key economic factors. These factors include:**

(1) Sharp declines in farm mortgage interest rates from early 2001 to late 2004 and continued relatively low mortgage interest rates.

(2) Substantial increase in use of crop insurance for yield or revenue protection along with other federal farm program provisions.

(3) Technology change in agriculture that expanded the geographic range of corn and soybean production, along with rapid development of ethanol production in South Dakota.

(4) General economic conditions of low inflation rates in most years.

From 1991 to 2013, agricultural land values increased more rapidly than the rate of general price inflation in all regions of South Dakota. Also, continued increases in cash rental rates provided underlying support for increases in land values. These basic economic factors, along with relatively low mortgage interest rates, attract interest in farmland purchases by investors and farmers expanding their operations.

• **Agricultural land values and average cash rental rates differ greatly by region and land use.**

In each region per-acre values and cash rental rates are highest for irrigated land, followed in descending order by nonirrigated cropland, hayland, tame pasture, and native rangeland. For each land use, per-acre land values and

cash rental rates are highest in the east-central or southeast region and lowest in the western regions of South Dakota.

The average value of non-irrigated agricultural land (as of Feb. 2013) in South Dakota is \$2,328 per acre. Non-irrigated agricultural land varies from \$5,504 per acre in the east-central to \$536 per acre in the northwest region. Average non-irrigated cropland values vary from \$6,828 per acre in the east-central to \$3,580 per acre in the central region and \$792 per acre in the northwest region.

Average rangeland values vary from \$2,765 per acre in the east-central to \$523 per acre in the northwest. Within each region, differences in land productivity and land use account for substantial differences in per-acre values.

The highest cropland values and cash rental rates continue to occur in the Minnehaha-Moody county cluster where the average value of cropland in 2013 is \$8,347 per-acre and average cash rental rate for cropland is \$249 per-acre. Cropland values exceed \$7,200 and cash rental rates average \$232 per-acre in the Clay-Lincoln-Turner-Union county cluster. These are the highest average land values and cash rental rates reported during the past 23 years of the SDSU Farm Real Estate Market Survey.

At the regional level, average cash rental rates per-acre for cropland in 2013 vary from \$214.75 in the east central region to about \$37 in the western regions. Average rangeland and pasture rental rates vary from \$67.70 per-acre in the east central region to \$14.35 per-acre in the southwest region.

• Farm expansion and investment potential, along with strong profits and high commodity prices, continue to be cited as the major reasons for purchasing farmland. The major reasons for selling farmland are realizing gains from high sale prices, retirement from farming, and settling estates.

High farm commodity prices, low mortgage interest rates, high farm profits and crop insurance protection were the major positive factors in the farmland market. Drought conditions, high input costs, and considerable uncertainty about future conditions, both agricultural and economic factors, were the three major negative factors.

• The booming market psychology has been very strong in the past three years. Most respondents remain optimistic about farmland market conditions for the coming year, but also express growing concerns about projected commodity price declines and general uncertainty about future conditions affecting land markets.

Most respondents, 81% to 87% depending on land use, providing forecasts expect land values to increase in the next 12 months and most of the remainder projected no change in land values.

South Dakota Agricultural Land Market Trends 1991–2013

Dr. Larry Janssen, Dr. Burton Pflueger, and Mr. Bronc McMurtry¹

The *2013 SDSU Farm Real Estate Market Survey* is the 23rd annual survey of agricultural land values and cash rental rates by land use and quality 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, buyers, and others for detailed information on South Dakota farmland markets.

The 2013 estimates are based on reports from 215 responses² to the 2013 SDSU survey. Responses are from agricultural lenders, Farm Service Agency officials, rural appraisers, assessors, realtors, professional farm managers, and Extension field specialists. All are familiar with farmland market trends in their localities.

Copies of the SDSU survey were mailed in February and March 2013. The surveys requested information

on cash rental rates and agricultural land values as of February 2013. Response characteristics and estimation procedures are discussed in Appendix I.

Results are presented in a format similar to farmland market reports published by Janssen and Pflueger from 1991 through 2012. Regional information on land values and cash rents by land use (crop, hay, range, and pasture)³ is emphasized in each of these SDSU reports. Current-year findings are compared to those of earlier years. This report contains an overview and may or may not reflect actual land values or cash rental rates unique to specific localities or properties. Readers should use this report as a general reference and rely on local sources for more specific details.

Most renters, buyers, and sellers of farmland continue to be local area residents, although there is greater outside interest in recent years. Land market trends are influenced by changing conditions in agriculture and in the general economy and

¹ Janssen and Pflueger are professors of economics, South Dakota State University. Janssen has teaching and research responsibilities in farmland markets and appraisal, economic development, and research methodology. Pflueger is an Extension farm financial management specialist and also teaches an undergraduate course on agricultural cooperatives. Mr. McMurtry is an undergraduate research assistant for this project.

² Responses are the number of survey schedules completed for one or two counties. A growing number of respondents completed separate survey schedules for different counties. Each completed survey schedule was treated as a survey response. More details are provided in Appendix I.

³ 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 rangeland. 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 hayland in this report. Cropland is agricultural land typically used for crop production other than hay production. Irrigated crop / hay land values and cash rental rates are also reported in selected regions. These major land uses comprise nearly 98% of privately owned land in farms in South Dakota (Janssen, 1999).

strongly influenced by land market participants' expectations of future trends and availability of debt or equity financing.

The agricultural commodity price boom is the major economic factor influencing South Dakota farmland market conditions in recent years. From June or July 2010, cash prices of corn, wheat and soybeans have doubled and beef stocker prices have increased beyond previous (historical) highs. Of course, input costs (especially fossil fuel dependent items) are also increasing, but considerable profit enhancement opportunities are available. Secondly, farm mortgage interest rates remain low – generally less than 5.5% for fixed term loan and 5.0% for variable rate loans- although credit standards have probably tightened (Minneapolis Federal Reserve – Agricultural Credit Conditions Survey, 3rd Qtr, 2012)

Drought conditions in much of South Dakota in 2012 and early 2013 have increased forage prices and influenced cash rents for hay land, pasture, and rangeland. Reduced U.S. corn and soybean production from widespread drought conditions across the Cornbelt also led to upward pressure on crop prices. Widespread producer use of crop revenue or yield insurance reduces downside risk and has a positive impact on cropland cash rental rates for cropland (USDA-NASS, 2013).

South Dakota's economy has continued to recover from the national recession with unemployment rates declining from 5.2% in January 2010 to 4.3% in January 2013. Personal income continues to increase at rates faster than the U.S. average. Gains in employment and personal income in South Dakota are linked to the economic strength of the agricultural sector. Further information about the South Dakota general economy can be obtained from the U.S. Dept. of Commerce – Bureau of Economic Analysis and U.S. Dept. of Labor – Bureau of Labor Statistics.

SOUTH DAKOTA AGRICULTURAL LAND VALUES, 2013

Procedures to estimate and report land values

Respondents to the *2013 South Dakota Farm Real Estate Market Survey* estimated the per-acre value of

non-irrigated cropland, hay land, rangeland, tame pastureland, and irrigated land in their county 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. Land values and cash rental rates are reported only for privately owned land and should not be considered as estimated values for tribal lands or federal lands.

Irrigated land is only one percent of farmland acres in South Dakota. Responses for irrigated land values and rental rates are only reported in regions where sufficient reports are available. Irrigation land values and cash rents from the south-central, southwest, and northwest regions are reported as the “western” region.

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. In this report, land use acreage weights for each region and statewide were developed from data reported in the 2002 Census of Agriculture and related sources (Appendix I). These land-use acreage weights have considerable

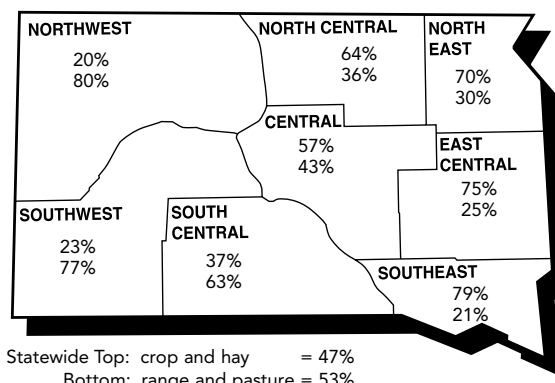


Figure 1. Nonirrigated agricultural land use patterns in South Dakota, statewide and regional.

Source: Compiled from land use data in 2002 Census of Agriculture and related surveys

impact on regional and statewide estimates of all nonirrigated 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. More than 80% of farmland acreage in each region is cropland or rangeland and most of the remainder is tame pasture or hay. Native rangeland is the dominant land use in western South Dakota, while most agricultural land in eastern South Dakota is non-irrigated cropland or hay (figure 1).

Statewide, an estimated 47% of privately owned farmland acres are cropland or hay land and 53% is rangeland or tame pasture (figure 1). In summary, statewide cropland values are greatly influenced by values estimated in the north-central and three eastern regions, while statewide rangeland values are heavily influenced by values reported in the three regions west of the Missouri River.

All-agricultural land value estimates, 2013

Agricultural land values are booming in most regions of South Dakota for all land uses. Depending on land use, the statewide estimated annual percentage change from Feb. 2012 to 2013 varied from 23.3% to 37.8%! Cropland values increased more than 20% in all eight regions of South Dakota, while rangeland, pasture, and hay land values increased more than 20% in five or six regions (table 1).

As of February 2013, the average value of all-agricultural land in South Dakota was \$2,328 per acre, a 33.6% increase in value from one year earlier (figure 2 and table 1). Five regions had higher percentage rates of increase than the statewide average – east-central, northeast, north central, south-central and northwest. Per acre all-agricultural land values increased in the other three regions from 18.7% in the central region to 31.5% in the southwest region.

The statewide change of 33.6% is the highest annual rate of increase in the past 23 years! From 2001 to 2012, annual all-agricultural land value increases varied from 5.1% to 26.8%, with four years of annual increases exceeding 20%. Overall, agricul-

tural land values in South Dakota have more than doubled since 2009 and have increased more than six-fold from 2001 (appendix table 2).

The all-land average values are highest in the east-central and southeast regions with per-acre values of \$5,504 and \$4,954, respectively (table 1 and figure 2). This is the first year that all-land values are close to or above \$5,000 per acre in any region! In the other regions east of the Missouri River, per-acre values of all-agricultural land varied from \$3,684 in the northeast to \$2,678 in the central region. Per-acre increases in these five regions varied from \$421 in the central, \$940 in the southeast, and \$1,614 in the east-central region. The dollar increase in land values from 2012 to 2013 in each region exceeds the total per-acre land value reported in 2002 in the same regions!

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 varies from \$1,294 in the south-central region to \$536 in the northwest region, respectively. The per-acre change in land values varied from \$145 in the southwest region to \$377 in the south-central region (table 1).

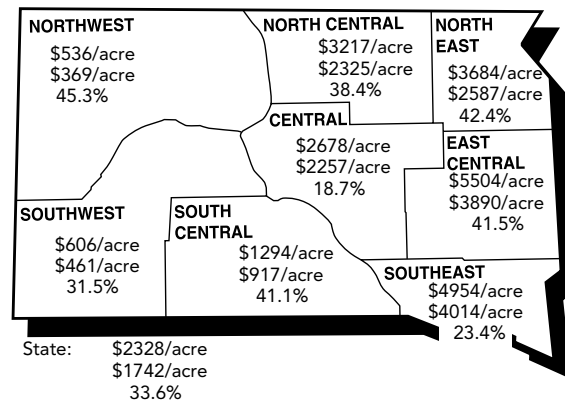


Figure 2. Average value of South Dakota agricultural land, February, 2012 and 2013, and percent change from one year ago.

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 used by region.

Top: Average per-acre value—February 1, 2013
 Middle: Average per-acre value—February 1, 2012
 Bottom: Annual percent change in per-acre land value

Source: 2013 South Dakota Farm Real Estate Market Survey, SDSU.

Table 1. Average reported value and annual percentage change in value of South Dakota agricultural land by type of land by region, February 2008-2013.

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, 2013	4954	5504	3684	3217	2678	1294	606	536	2328
Average value, 2012	4014	3890	2587	2325	2257	917	461	369	1742
Average value, 2011	2900	3332	2274	1720	1450	781	459	342	1374
Average value, 2010	2447	2712	2006	1487	1268	648	411	329	1179
Average value, 2009	2355	2634	1863	1270	1246	690	413	307	1121
Average value, 2008	2168	2473	1714	1179	1152	642	378	295	1041
Annual % change 13/12	23.4%	41.5%	42.4%	38.4%	18.7%	41.1%	31.5%	45.3%	33.6%
Nonirrigated Cropland									
Average value, 2013	5903	6828	4843	4562	3580	1994	900	792	4249
Average value, 2012	4817	4734	3369	3026	2946	1348	677	496	3084
Average value, 2011	3402	4024	2918	2301	1866	1115	625	483	2389
Average value, 2010	2841	3291	2560	1945	1644	967	560	474	2030
Average value, 2009	2741	3155	2305	1673	1577	1007	596	428	1900
Average value, 2008	2510	2894	2076	1532	1450	904	502	399	1733
Annual % change 13/12	22.5%	44.2%	43.8%	50.8%	21.5%	47.9%	32.9%	59.7%	37.8%
Rangeland (native)									
Average value, 2013	2308	2765	1759	1473	1636	994	529	444	909
Average value, 2012	1930	2108	1345	1387	1493	724	401	341	737
Average value, 2011	1589	1779	1217	950	1011	634	409	309	611
Average value, 2010	1339	1536	1070	875	865	514	365	296	540
Average value, 2009	1258	1458	1125	755	898	570	358	277	530
Average value, 2008	1239	1539	1100	714	836	544	339	271	508
Annual % change 13/12	19.6%	31.2%	30.8%	6.2%	9.6%	37.3%	31.9%	30.2%	23.3%
Pasture (tame, improved)									
Average value, 2013	2721	3176	2074	1778	2222	1129	571	523	1542
Average value, 2012	2275	2371	1678	1550	1772	844	431	373	1218
Average value, 2011	1726	2082	1494	1161	1179	762	465	344	1011
Average value, 2010	1480	1629	1178	991	1061	650	429	320	854
Average value, 2009	1378	1802	1373	827	1042	571	429	314	857
Average value, 2008	1365	1675	1304	795	943	571	384	307	809
Annual % change 13/12	19.6%	34.0%	23.6%	14.7%	25.4%	33.8%	32.5%	40.2%	26.6%
Hayland									
Average value, 2013	4196	4003	2639	2223	2552	1453	678	610	2285
Average value, 2012	3337	3008	1638	1905	2143	1039	559	407	1758
Average value, 2011	2401	2742	1590	1301	1300	854	552	400	1377
Average value, 2010	2158	2074	1581	1202	1121	681	473	391	1195
Average value, 2009	2098	2116	1387	962	1109	720	488	373	1142
Average value, 2008	1871	2127	1347	939	1050	649	450	334	1079
Annual % change 13/12	25.7%	33.1%	61.1%	16.7%	19.1%	39.8%	21.3%	49.9%	30.0%
Type of Land	South east	East-Central	North east	North-Central	Central	Western			
dollars per acre									
Irrigated land									
Average value, 2013	7514	7589	6200	6753	4469	1875			
High Productivity	9195	9944	7833	8600	5815	2360			
Low Productivity	5823	5444	4722	4835	3538	1485			
Average value, 2012	6341	4239	4140	4372	**	1483			
Average value, 2011	4212	3952	**	2895	2711	**			
Average value, 2010	3611	3632	3142	2986	2468	1533			
Average value, 2009	3373	3429	3085	2083	2095	1162			
Average value, 2008	3020	3070.9	2681	1607	2156	925			
Annual % change 13/12	18.5%	79.0%	49.8%	54.5%	**	26.4%			

** Insufficient number of reports to make regional estimates

Source: 2013 and earlier South Dakota Farm Real Estate Market Surveys
Statewide average land values are based on 2002 land use weights

The southeast and east-central regions contain the most productive land in South Dakota, with 75% or more of farmland acres used as cropland or hay land. In the other regions east of the Missouri River, the proportion of cropland and hay land varies from 57% in the central region to 70% in the northeast region. Rangeland and pasture are the dominant agricultural land uses in all regions west of the Missouri River.

LAND VALUES AND VALUE CHANGES BY TYPE OF LAND AND REGION

In each region, per-acre values are highest for irrigated land, followed by nonirrigated cropland, hayland, tame pasture, and native rangeland. For each nonirrigated land use, per-acre land values are highest in the three eastern regions and lowest in the three regions west of the Missouri River - northwest, southwest, and south-central regions (figures 3 and 4; table 1). These regional differences in land values by land use have largely 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 non-irrigated cropland (as of February 2013) is \$4,249 per acre, a 37.8% increase from 2012 (table 1). This represents the largest annual percent rate of increase in the past 23 years and is the first time that statewide average non-irrigated cropland values exceed \$4,000 per-acre!

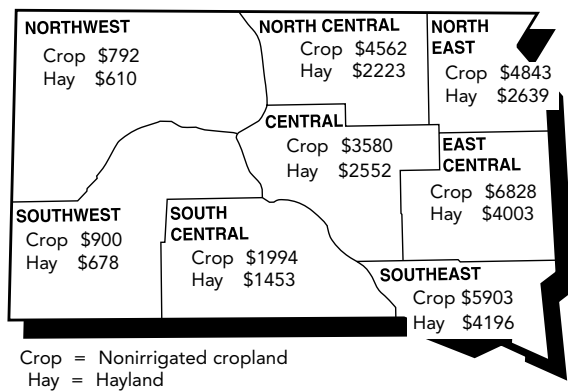


Figure 3. Average value of South Dakota cropland, and hayland, by region, February 2013, dollars per acre.

Source: 2013 South Dakota Farm Real Estate Market Survey, SDSU.

Statewide cropland values per-acre have more than doubled since 2010 and have increased more than seven-fold since 2000. At the beginning of the 21st century, cropland values (in 2000) were less than \$1000 per-acre in all regions of South Dakota (appendix table 2)!

Cropland values increased more than 40% in the east-central, northeast, north-central, south-central, and northwest regions. Cropland values increased nearly 22% in the southeast and central regions to 32.9% in the southwest region (table 1 and fig. 2)

Regional cropland values tend to cluster in three groups. The highest cropland values are found in the east-central and southeast regions with average values of \$6,828 and \$5,903 per-acre, respectively. The second cropland value cluster consists of the northeast, north-central, and central regions with average cropland values varying from \$4,843 to \$3,580 per-acre. Cropland values are considerably lower in the third cluster which contains the three regions west of the Missouri River. As of February 2013, per-acre cropland values averaged \$1,994 in the south-central region, \$900 in the southwest and \$792 in the northwest region (table 1 and fig. 3).

Cropland values from 2012 to 2013 increased more than \$1000 per-acre in the north-central and three eastern regions. On a per-acre basis, cropland values increased by nearly \$640 in the central and south-central regions compared to increases of \$296 in the northwest and \$223 in the southwest region (table 1). Overall, the annual increases in cropland values were higher during the past two years com-

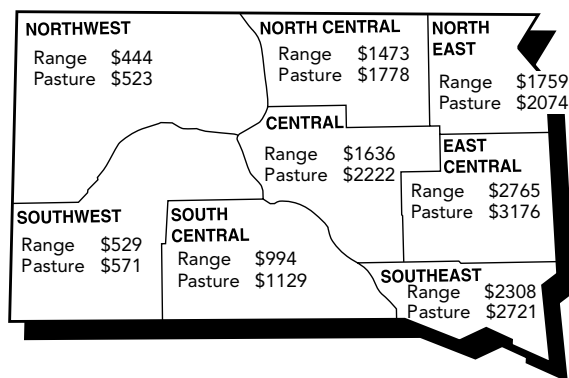


Figure 4. Average value of South Dakota rangeland and tame pasture, by region, February 2013, dollars per acre.

Source: 2013 South Dakota Farm Real Estate Market Survey, SDSU.

pared to any other two year period from 1991 to present.

Regional differences in cropland values reflect differences in cropland intensity and crop mix. The three eastern regions contain 45% of South Dakota's cropland, while the north-central and central regions contain 33% of South Dakota's cropland acres. Corn and soybeans are the major crops in most counties in the eastern regions compared to corn, soybeans, sunflowers, and wheat in most counties of the north-central and central regions. The three regions west of the Missouri River contain 22% of the state's cropland acres. Wheat, corn, and grain sorghum are important crops in the south-central region, while wheat is the dominant crop in the two western regions.

Hay land values

South Dakota hay land values averaged \$2,285 per acre as of February 2013, a 30% increase from one year earlier (table 1). The strongest annual percentage increases, above the statewide average, were reported in the east-central, northeast, south-central, and northwest regions. Changes between 16% and 26% were reported in the other four regions of South Dakota. Statewide, hay land values have doubled since 2009 and increased 5.6 times since 2001 (appendix table 2).

Average hay land values also cluster into three regional groups. The highest average values are in the southeast and east-central regions, with per-acre values of \$4,196 and \$4,003, respectively. Hay land values are considerably lower in the other regions east of the Missouri River, varying from \$2,639 in the northeast to \$2,223 per-acre in the north-central region.

Substantially lower values of hay land are found in all regions west of the Missouri River, varying from \$1,453 in the south-central, to \$678 in the southwest, and \$610 per-acre in the northwest region (figure 3 and table 1). 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 2013, the value of South Dakota native rangeland averaged \$909 per-acre, while the average value of tame pasture was \$1,542 per-acre (table

1). The major difference in statewide values is due to changing proportions of rangeland and tame pasture across the state. Native rangeland is heavily concentrated in the western and central regions of South Dakota, while tame pasture is not concentrated in any particular region.

During the past year (Feb. 2012 to Feb. 2013), the statewide average rangeland values per-acre increased 23.3%, compared to a 26.6% increase in the value of tame pasture. Rangeland and pasture values have increased more than 10% annually for nine of the past 12 years! Both tame pasture and rangeland values per acre have doubled since 2007 and increased nearly five-fold since 2001 (appendix table 2)

Rangeland and pasture values also cluster into three regional groups. Average rangeland values are highest in the east-central and southeast regions (\$2,765 and \$2,308 per-acre, respectively). Rangeland values in the next regional cluster (northeast, north-central and central) are considerably lower and relatively close to each other with per-acre values varying from \$1,759 in the northeast to \$1,473 per acre in the north-central region. The lowest rangeland values per-acre occur west of the Missouri River varying from \$994 in the south-central, \$529 in the southwest, and \$444 in the northwest region (figure 4 and table 1).

Tame pasture values followed a similar regional pattern as rangeland values. In most regions, average values of tame pasture varied from 8% to 21% higher than the average value of rangeland. However, due to differences in regional concentration, the statewide average value of tame pasture was 70% higher than the statewide average value of rangeland. Three-fourths of rangeland acres are located west of the Missouri River, compared to less than half of tame pasture acres.

In the cropland-intensive regions of eastern South Dakota and in the north-central region, the ratio of cropland to rangeland average per-acre value varies from 2.5 to 3.1, compared to a cropland to rangeland value ratio of 1.7 to 2.0 in the rangeland intensive regions west of the Missouri River.

During the past 2 – 3 years, the ratio of average cropland value relative to average rangeland value

has increased in all regions of South Dakota, especially in the eastern regions of the state. For example, from 2001 to 2010 the average ratio of cropland to rangeland value was generally between 1.8 to 2.2 in the three eastern regions, compared to ratios of 2.25 to 2.75 in 2012 and 2013. A similar pattern of increasing ratio of cropland to rangeland value was also occurring in other regions, reflecting the premium on returns to cropland in the past few years. Statewide, the average ratio of cropland to rangeland value varied between 3.0 to 3.5 each year from 2001 to 2008 compared to 4.2 in 2012 and 4.7 in 2013!

Irrigated land values

Irrigated land values for 2013 are estimated for six regions, including a combined western region (table 1). 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 31% of all respondents were familiar with and able to provide information on irrigated land values.

Average irrigated land values exceed \$7,500 per-acre in the southeast and east-central region, compared to about \$6,750 per-acre in the north-central and \$6,200 per-acre in the northeast region. Irrigated land values are much lower in the central region averaging \$4,469 per-acre and in western South Dakota where the average value is \$1,875 per-acre. In the eastern and north-central region, the value for irrigated land was reported for center pivot irrigation systems, excluding the value of the center pivot.

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 2013 per-acre values of average productivity, high-productivity, and low-productivity land by agricultural land use by region and by county clusters within several regions (table 2).

A county cluster is a group of counties within the same region that have 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 regions. Land values (and cash rental rates) are not reported for county clusters in the south-central, southwest and northwest regions because there are too few reports. This survey is not designed to reflect the substantially higher land values in or near the Black Hills.

This is the second annual report with no land value and cash rental rate estimates provided for the Campbell-Potter-Walworth county cluster in the north-central region. Also, no estimates are available for selected land uses in a few other county clusters. The main reasons are too few reports from county clusters in these locations.

Substantial variation in per-acre land value occurs by degree of land productivity for each land use in each region. For example, 2013 cropland values in the east-central region vary from an average of \$4,916 per acre for low-productivity cropland to \$9,149 per acre for high-productivity cropland. At the other extreme, the average value of low productivity cropland in the northwest region is \$583 compared to \$1,145 per-acre for high-productivity cropland. Across all regions, average values of low-productivity cropland were 46% to 60% of the average values of high-productivity cropland (table 2)

Rangeland values in the east-central region varied from an average of \$1,999 per-acre for low-productivity rangeland to \$3,732 per-acre for high productivity rangeland. In the northwest region, at the other extreme, the average value of low-productivity rangeland is \$328 per-acre, compared to \$608 per-acre for high-productivity rangeland. Across most regions, the average value of low-productivity rangeland varies from 52% to 62% of high-productivity rangeland (table 2).

From 2012 to 2013, per-acre values increased for all land uses in all eight regions. Cropland, hay land and pasture values per-acre increased in all county clusters, while rangeland values increased in 12 of 13 county clusters.

In 2013, average nonirrigated cropland values were \$8,347 per-acre in the Minnehaha-Moody county cluster compared to \$7,248 per-acre in the Clay-

Table 2. Average reported value per acre of agricultural land by South Dakota region, county clusters, type of land, and land productivity, February 2008 - 2013.

Agricultural Land Type and Productivity	Southeast				East Central			
	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								
Nonirrigated Cropland								
Average 2013	5903	7248	4794	3893	6828	8347	6666	5204
High Productivity	7463	9227	5868	5107	9149	11388	8830	6841
Low Productivity	4453	5429	3704	2879	4916	5920	4776	3878
Average 2012	4817	5844	4068	3254	4734	6116	4717	3621
Average 2011	3402	4567	3106	2487	4024	5197	3672	3007
Average 2010	2841	3577	2547	1994	3291	4298	3419	2536
Average 2009	2741	3337	2651	1807	3155	4064	3099	2295
Average 2008	2510	3246	2304	1656	2894	3778	2823	2250
Rangeland (native)								
Average 2013	2308	2713	2057	1950	2765	3093	2395	2748
High Productivity	2839	3350	2512	2408	3732	4057	3571	3526
Low Productivity	1742	2043	1652	1317	1999	2112	1676	2169
Average 2012	1930	2252	1765	1677	2108	2344	1950	2105
Average 2011	1589	1993	1458	1388	1779	2084	1651	1632
Average 2010	1339	1454	1314	1154	1536	1925	1467	1402
Average 2009	1258	1325	1244	1184	1458	1903	1379	1204
Average 2008	1239	1384	1231	1091	1539	1790	1602	1351
Pastureland (tame, improved)								
Average 2013	2721	2863	2748	2492	3176	3889	2559	2973
High Productivity	3257	3344	3336	3017	4186	4768	3829	3853
Low Productivity	2049	2116	2067	1933	2311	2668	1882	2347
Average 2012	2275	2489	2247	1835	2371	3027	2194	2265
Average 2011	1726	2108	1700	1427	2082	2610	1936	1833
Average 2010	1480	1592	1464	1275	1628	2171	1664	1444
Average 2009	1378	1513	1289	1253	1803	2531	1590	1489
Average 2008	1365	1625	1362	1055	1675	2105	1756	1368
Hayland								
Average 2013	4196	5343	3299	2829	4003	4935	3364	3380
High Productivity	5262	6653	4229	3536	5084	6313	4457	4110
Low Productivity	3055	3900	1039	1979	2947	3413	2607	2650
Average 2012	3337	4046	2888	2445	3008	4117	2680	2472
Average 2011	2401	3531	2125	1717	2742	3633	2561	2078
Average 2010	2158	2665	2002	1779	2074	3064	2067	1609
Average 2009	2098	2377	2111	1569	2116	2952	1977	1382
Average 2008	1871	2353	1770	1409	2127	2826	1987	1694

Source: *South Dakota Farm Real Estate Market Survey, SDSU, 2013* and earlier.

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.

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							
Nonirrigated Cropland								
Average 2013	4843	5217	5000	4250	4562	5846	3068	**
High Productivity	6933	7186	7071	6511	6572	8626	4409	**
Low Productivity	3216	3534	3286	2754	3044	3676	2279	**
Average 2012	3369	3793	3629	2867	3026	3479	2320	**
Average 2011	2918	3250	2721	2570	2301	2980	1467	1831
Average 2010	2560	3007	2536	2234	1945	2573	1435	1541
Average 2009	2305	2608	2294	2024	1673	2350	1187	998
Average 2008	2076	2274	2107	1822	1532	2318	1168	957
Rangeland (native)								
Average 2013	1759	1823	1761	1671	1473	1824	1079	**
High Productivity	2157	2319	2079	1993	2008	2456	1553	**
Low Productivity	1247	1307	1243	1168	1042	1234	832	**
Average 2012	1345	1356	1383	1168	1387	1575	1190	**
Average 2011	1217	1389	1136	1038	950	1116	815	792
Average 2010	1070	1242	1107	929	875	1143	744	662
Average 2009	1125	1230	1063	1045	755	976	702	478
Average 2008	1100	1202	1143	937	714	932	686	519
Pastureland (tame,improved)								
Average 2013	2074	1935	2175	2255	1700	2178	1371	**
High Productivity	2628	2525	2538	2882	2436	3011	1897	**
Low Productivity	1474	1360	1625	1553	1236	1463	979	**
Average 2012	1678	1777	1767	**	1550	1775	1297	**
Average 2011	1494	1673	1380	**	1161	1343	996	1009
Average 2010	1178	1332	1210	1017	991	1400	757	680
Average 2009	1373	1479	1425	1215	827	1055	735	581
Average 2008	1304	1362	1260	1224	795	1004	810	617
Hayland								
Average 2013	2639	2994	2600	2127	2223	2623	1632	**
High Productivity	3308	3706	3450	2564	2884	3432	2206	**
Low Productivity	1795	1994	1900	1391	1491	1873	935	**
Average 2012	1638	1883	1633	1456	1905	2311	1357	**
Average 2011	1590	1679	1725	1333	1301	1755	900	991
Average 2010	1581	2005	1330	1346	1202	1733	900	762
Average 2009	1387	1600	1192	1282	962	1295	744	643
Average 2008	1347	1414	1558	1077	939	1077	753	640

Table 2. (continued)

Agricultural Land Type and Productivity	Central				South Central	South West	North West
	All	Aurora Beadle Jerauld	Buffalo Brule Hand Hyde	Hughes Sully	All***	All***	All***
	dollars per acre						
Nonirrigated Cropland							
Average 2013	3580	3833	**	3519	1994	900	792
High Productivity	4773	5507	**	4388	2632	1182	1145
Low Productivity	2440	2654	**	2622	1339	691	583
Average 2012	2946	**	2742	**	1348	677	496
Average 2011	1866	2010	1744	1830	1115	625	483
Average 2010	1644	1709	1624	1599	967	560	474
Average 2009	1577	1768	1379	1440	1007	597	428
Average 2008	1450	1601	1315	1300	904	502	399
Rangeland (native)							
Average 2013	1636	2050	**	1128	994	529	444
High Productivity	2173	2750	**	1457	1394	654	608
Low Productivity	1192	1458	**	810	734	407	328
Average 2012	1493	**	1400	**	724	401	341
Average 2011	1011	1120	1100	822	634	409	309
Average 2010	865	1067	839	631	514	365	296
Average 2009	898	1030	797	788	570	358	277
Average 2008	836	998	774	636	544	339	271
Pastureland (tame, improved)							
Average 2013	2222	2975	**	1150	1129	571	523
High Productivity	2966	4107	**	1475	1531	751	678
Low Productivity	1683	2217	**	856	871	407	384
Average 2012	1772	**	1654	**	844	431	373
Average 2011	1179	1240	1311	**	762	465	344
Average 2010	1061	1167	1126	811	650	473	320
Average 2009	1042	1190	845	**	571	429	314
Average 2008	943	1060	858	810	571	384	307
Hayland							
Average 2013	2552	2975	**	2060	1453	678	610
High Productivity	3286	3998	**	2420	1852	833	833
Low Productivity	1822	2111	**	1480	1039	533	463
Average 2012	2142	**	1870	**	1039	559	407
Average 2011	1300	1470	1378	**	854	552	400
Average 2010	1121	1313	1156	723	681	455	391
Average 2009	1109	1244	1022	833	720	489	373
Average 2008	1050	1264	949	775	649	450	334

*** No county clusters are reported for the south-central, southwest, and northwest region.

Lincoln-Turner-Union (CLTU) county cluster and \$6,666 per-acre in the Brookings-Lake-McCook county cluster. Average cropland values in the remaining county clusters varied from \$3,068 per-acre in the Edmund-Faulk-McPherson cluster to \$5,846 per-acre in the Brown-Spink county cluster (table 2).

Similar patterns, but much lower values, also occur for rangeland and pasture across county clusters in the same regions. For example, rangeland values are highest in the Minnehaha-Moody cluster averaging \$3,093 per-acre. The lowest average rangeland values of \$1,079 and \$1,128 per-acre, respectively, were reported for the Edmund-Faulk-McPherson and Hughes-Sully county clusters.

Pastureland values are an average of 6% to 36% higher than rangeland values in the same county cluster. In several cases, respondents reported conversion of tillable pasture to cropland was occurring in their locality. This conversion pressure is likely raising the relative value of pasture land compared to rangeland.

Average hay land values are also highest in the CLTU cluster at \$5,343 per-acre and in the Minnehaha-Moody cluster at \$4,935 per-acre. For the other county clusters, average hay land values vary from \$1,632 to \$3,380 per acre (table 2)

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. Average land values vary from \$444 per-acre for

rangeland in the northwest region to \$1,994 per-acre for non-irrigated cropland in the south-central region (table 2). In all cases, average land values in these regions are lower than corresponding average land values in any region east of the Missouri River.

MAJOR REASONS FOR PURCHASE AND SALE OF FARMLAND

During the 23 years of the SDSU Farm Real Estate Market Survey, respondents have been asked to provide major reasons for buying and selling farmland in their local area. Nearly 92% of the 2013 respondents provided one to three major reasons for purchase or sale of farmland.

Farm expansion (39%) continues as the most common reason for purchasing farmland. Twenty-six percent mentioned the use of farm land as an investment for reasons to buy farmland. Recent high commodity prices and the profitability of the agriculture industry, at nineteen percent, was another important reason for purchasing farm land. Other reasons worth noting for purchase of farmland were low mortgage interest rates, location of farm tract, and other various reasons (figure 5).

Producer's response to the recent high profitability in production agriculture has been to expand operations. The action of expanding has been a key driver in farmland value and is one of the most commonly cited reasons for purchasing farmland.

The high price of land has been the top reason (35% of responses) for selling farm land. Estate

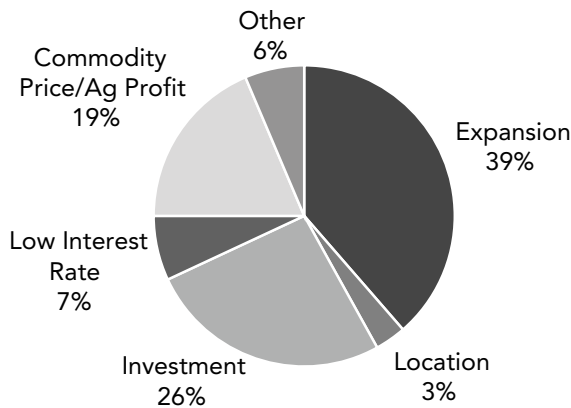


Figure 5. Reasons for buying farmland

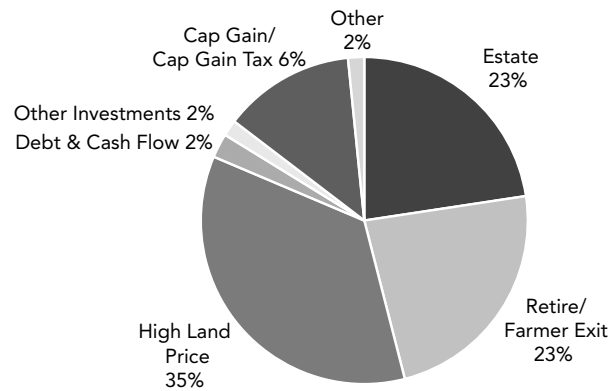


Figure 6. Reasons for selling farmland

sales and retire/farmer exit were other key responses, each with twenty-three percent of responses. Capital gains from increased land values and fears of future changes in capital gain taxes accounted for another thirteen percent of the responses (figure 6).

The pursuit of other investments, debt problems, and other various responses each accounted for two percent of responses (figure 6). This is the lowest percent of responses (2%) citing debt problems or financial pressure as a major reason for selling farmland. The incidence of financial pressure as a primary motivation for selling farmland has varied from 4% to 10% of responses in the previous seven years.

CASH RENTAL RATES OF SOUTH DAKOTA'S AGRICULTURAL LAND

Nearly two-fifths of South Dakota's agricultural land acres are in cash, share, or other lease arrangements (SD Census of Agriculture, 2007). The cash rental market provides important information on returns to agricultural land. Three-fourths of South Dakota's farmland renters are involved in one or more cash leases for agricultural land. The majority of farmland leases (57%) were fixed cash rate 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 non-irrigated cropland, irrigated land, and hayland in their locality. Cash rental rates for pasture / rangeland were provided on a per-acre basis and, if possible, on an Animal Unit Month (AUM) basis⁴ 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 figure 7 and table 3. 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 non-irrigated 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 (figure 7 and table 3).

The statewide change in cash rental rates from 2012 to 2013 for all land uses is the highest recorded in the 23 year history of the SDSU land market survey! Statewide average cash rental rates increased \$22.80 per-acre for cropland, \$13.45 per-acre for hay land, and \$4.05 per-acre for pasture and rangeland. The corresponding percentage change in statewide cash rental rates was 18.7% for cropland, 20.4% for hay land, and 17.9% for pasture and rangeland.

Cash rental rates also increased, often by substantial amounts, in all regions of South Dakota for cropland, hay land, pasture and rangeland. Cropland cash rental rates increased more than \$25 per-acre in each of the three eastern regions and nearly \$20 per-acre in the north-central region. In the other regions, cash rental rates for cropland increased from an average of \$12.05 per-acre in the south central to \$3.00 per-acre in the southwest region.

Cash rental rates for hay land increased more than \$10 per-acre in each of the three eastern regions, compared to increases varying from \$2.95 to \$8.75 per-acre across the central and western regions of South Dakota. The record \$44 per-acre increase in

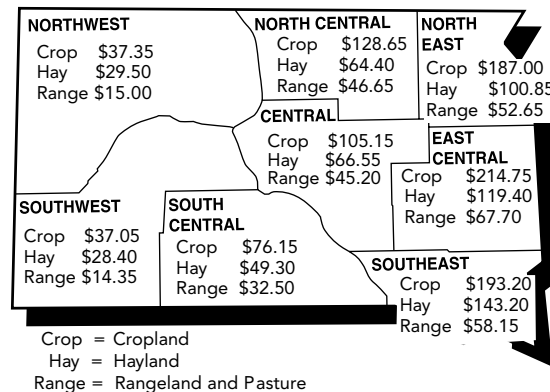


Figure 7. Average cash rental rate of South Dakota non-irrigated cropland, hayland, and rangeland, by region, February 2013, dollars per acre.

Source: 2013 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 somewhat of a 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, 2008-2013.

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 2013 rate	193.20	214.75	187.00	128.65	105.15	76.15	37.05	37.35	144.30
High Productivity	303.80	336.00	320.30	198.55	158.30	112.15	51.35	51.20	
Low Productivity	126.80	135.60	115.65	81.70	68.60	46.10	27.65	27.80	
Average 2012 rate	166.10	184.60	137.25	109.55	95.55	64.10	34.05	31.15	121.50
Average 2011 rate	131.60	152.70	119.40	89.20	69.80	53.05	30.80	28.70	98.90
Average 2010 rate	116.95	133.20	106.40	75.40	66.55	38.10	26.60	24.30	86.65
Average 2009 rate	114.50	128.85	97.00	72.50	66.50	42.60	27.50	24.25	83.90
Average 2008 rate	101.90	109.00	87.80	65.70	62.10	37.05	24.50	24.20	74.70
Hayland									
Average 2013 rate	143.20	119.40	100.85	64.40	66.55	49.30	28.40	29.50	79.30
High Productivity	203.40	163.95	147.45	90.00	90.45	69.10	36.50	38.00	
Low Productivity	91.60	82.75	58.45	43.65	41.30	32.10	21.00	20.80	
Average 2012 rate	123.00	105.35	56.30	61.15	57.80	42.65	25.45	23.10	65.85
Average 2011 rate	91.30	102.45	69.25	48.40	47.70	32.70	22.90	21.10	57.10
Average 2010 rate	92.40	83.50	64.60	43.40	43.30	26.00	21.00	18.60	51.50
Average 2009 rate	87.50	88.70	58.50	40.60	39.80	27.50	21.00	18.70	50.15
Average 2008 rate	81.70	80.90	50.80	42.60	38.40	28.00	17.75	20.00	47.40
Pasture/Rangeland									
Average 2013 rate	58.15	67.70	52.65	46.65	45.20	32.50	14.35	15.00	26.65
High Productivity	80.30	93.35	73.80	66.85	62.05	48.20	20.55	19.60	
Low Productivity	39.85	46.00	34.30	32.45	27.75	20.30	9.90	10.50	
Average 2012 rate	57.95	61.95	46.95	42.25	40.40	22.30	11.65	12.55	22.60
Average 2011 rate	52.50	57.65	45.65	38.35	31.25	23.30	10.95	11.35	20.70
Average 2010 rate	50.40	50.70	41.95	34.05	31.60	16.10	11.00	10.45	18.60
Average 2009 rate	46.60	49.60	39.60	33.40	33.20	21.40	13.30	10.40	19.80
Average 2008 rate	45.60	47.15	38.30	31.30	32.25	17.90	10.75	11.00	18.50
dollars per Animal Unit Month									
Average 2013 rate	43.00	**	**	**	39.30	41.10	32.90	31.40	
High Productivity	54.00	**	**	**	52.00	54.45	45.10	40.50	
Low Productivity	34.00	**	**	**	29.70	28.70	25.40	25.65	
Average 2012 rate	36.90	**	**	32.30	**	32.20	28.45	25.25	
Average 2011 rate	35.20	**	**	**	30.20	31.85	26.80	23.75	
Average 2010 rate	29.70	**	**	**	28.00	26.25	27.40	23.20	
Average 2009 rate	26.45	29.40	**	26.40	28.90	27.70	26.65	21.05	
Average 2008 rate	29.80	**	**	27.70	27.80	26.90	25.20	21.00	
Average 2007 rate	22.70	**	26.50	27.00	25.35	23.80	24.30	21.95	
Type of Land	South east	East-Central	North-east	North-Central	Central	Western			
dollars per acre									
Irrigated land									
Average 2013 rate	269.75	248.60	237.05	180.90	194.20	82.80			
High Productivity	390.00	368.60	402.95	268.95	284.60	110.55			
Low Productivity	193.50	169.05	158.25	132.65	146.90	60.55			
Average 2012 rate	229.00	177.85	**	180.90	**	91.25			
Average 2011 rate	197.30	160.60	**	138.30	144.40	**			
Average 2010 rate	171.20	141.90	127.10	121.90	131.70	90.70			
Average 2009 rate	178.15	158.50	143.10	108.65	120.15	67.50			
Average 2008 rate	154.75	139.80	134.00	87.85	113.00	62.50			

** Insufficient number of reports to make regional estimates

Source: South Dakota Farm Real Estate Market Surveys, SDSU, 2013 and earlier year reports.

Statewide average rental rates are based on 2002 regional land use weights

Table 4. Reported cash rental rates of South Dakota agricultural land use by region and county clusters, February, 2008 - 2013 rates.

	Southeast				East Central			
	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							
Nonirrigated Cropland								
Average 2013 rate	193.20	231.90	170.40	125.00	214.75	249.20	221.05	167.40
High Productivity	303.81	345.65	280.20	228.21	336.05	363.30	355.35	243.20
Low Productivity	126.80	150.90	115.00	80.00	135.65	163.60	137.30	92.40
Average 2012 rate	166.10	190.50	152.20	111.35	184.60	220.90	197.15	136.45
Average 2011 rate	131.60	170.85	122.50	90.30	152.70	180.05	153.90	119.70
Average 2010 rate	116.95	147.00	106.20	81.55	133.20	163.20	137.30	106.50
Average 2009 rate	114.50	138.90	109.10	75.90	128.85	155.10	135.60	95.70
Average 2008 rate	101.90	121.90	96.30	74.90	109.00	140.10	110.90	84.70
Hayland								
Average 2013 rate	143.20	191.90	134.00	80.00	119.40	173.50	85.4	87.40
High Productivity	203.40	255.25	208.35	120.35	163.95	242.00	116.65	116.65
Low Productivity	91.60	126.65	80.65	50.70	82.75	122.00	55.40	60.95
Average 2012 rate	123.00	144.60	121.85	66.25	105.35	149.70	99.25	78.65
Average 2011 rate	91.30	128.60	90.75	54.65	102.45	139.30	102.95	73.50
Average 2010 rate	92.40	115.00	92.10	53.25	83.50	115.40	85.85	62.60
Average 2009 rate	87.50	105.20	92.65	52.25	88.70	117.60	98.70	56.00
Average 2008 rate	81.70	99.60	82.80	53.70	80.90	117.40	81.80	58.90
Pasture/Rangeland								
Average 2013 rate	58.15	69.40	52.85	45.00	67.70	73.75	60.60	68.25
High Productivity	80.30	94.05	75.45	61.55	93.35	99.15	89.10	91.30
Low Productivity	39.85	47.30	36.95	30.00	46.00	48.75	39.30	49.55
Average 2012 rate	57.95	66.25	53.20	47.00	61.95	65.25	63.15	58.85
Average 2011 rate	52.50	61.90	47.05	45.70	57.65	60.80	60.20	52.10
Average 2010 rate	50.40	59.50	47.45	37.65	50.70	54.25	53.70	45.90
Average 2009 rate	46.60	53.20	43.20	41.00	49.60	57.50	50.00	44.20
Average 2008 rate	45.60	51.35	44.60	39.60	47.15	51.25	51.25	41.50

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, 2013 and earlier reports

	Northeast				North Central			
	All	Codington Deuel Hamlin	Grant Roberts	Clark Day Marshall	All	Brown Spink	Edmund Faulk McPherson	Campbell Potter Walworth
	dollars per acre							
Nonirrigated Cropland								
Average 2013 rate	187.00	202.05	190.00	164.80	128.65	150.60	109.35	**
High Productivity	320.30	350.00	309.30	286.95	198.55	243.20	159.35	**
Low Productivity	115.65	126.60	111.45	103.50	81.70	92.40	72.00	**
Average 2012 rate	137.25	161.65	142.15	114.00	109.55	122.60	92.25	**
Average 2011 rate	119.40	130.25	108.65	109.55	89.20	106.50	71.35	68.40
Average 2010 rate	106.40	115.30	117.50	94.60	75.40	97.70	63.95	56.80
Average 2009 rate	97.00	112.00	100.70	82.20	72.50	93.70	58.10	49.60
Average 2008 rate	87.80	95.80	87.85	78.95	65.70	86.60	57.60	47.65
Hayland								
Average 2013 rate	100.85	114.20	**	79.00	64.40	77.25	53.00	**
High Productivity	147.45	174.45	**	109.50	90.00	110.50	74.67	**
Low Productivity	58.45	63.40	**	53.00	43.65	50.25	37.00	**
Average 2012 rate	56.30	71.65	**	50.55	61.15	69.50	48.75	**
Average 2011 rate	69.25	84.05	**	57.75	48.40	54.10	43.80	43.25
Average 2010 rate	64.60	77.25	61.70	55.90	43.40	55.00	35.90	35.45
Average 2009 rate	58.50	72.20	**	46.40	40.60	49.20	37.00	31.40
Average 2008 rate	50.80	56.90	52.50	39.40	42.60	60.60	33.85	32.40

Table 4. (continued)

Pasture/Rangeland								
Average 2013 rate	52.65	56.45	46.45	51.25	46.65	51.80	44.35	**
High Productivity	73.80	79.40	60.70	74.50	66.85	71.80	66.65	**
Low Productivity	34.30	36.35	30.70	33.75	32.45	35.45	32.75	**
Average 2012 rate	46.95	52.40	42.10	44.55	42.25	44.90	41.85	**
Average 2011 rate	45.65	51.15	36.50	44.65	38.35	42.65	38.10	31.00
Average 2010 rate	41.95	47.75	38.60	39.10	34.05	41.95	33.05	23.40
Average 2009 rate	39.60	45.15	37.90	34.60	33.40	39.25	34.30	22.60
Average 2008 rate	38.30	42.40	37.00	33.65	31.30	39.70	30.00	22.10
Central								
		Aurora	Buffalo					
		Beadle	Brule					
		Jerauld	Hand	Hughes	South	South	North	
	All		Hyde	Sully	Central	West	West	
					All **	All**	All**	
Nonirrigated Cropland								
Average 2013 rate	105.15	116.75	**	97.80	76.15	37.05	37.35	
High Productivity	158.30	196.65	**	128.15	112.15	51.35	51.20	
Low Productivity	68.55	75.42	**	68.15	46.10	27.65	27.80	
Average 2012 rate	95.55	106.10	91.55	**	64.10	34.05	31.15	
Average 2011 rate	69.80	81.90	68.35	61.40	53.05	30.80	28.70	
Average 2010 rate	66.55	74.30	65.90	60.35	38.10	26.60	24.30	
Average 2009 rate	66.50	74.10	60.20	57.50	42.60	27.50	24.25	
Average 2008 rate	62.10	68.20	59.60	54.40	37.05	24.50	24.20	
Hayland								
Average 2013 rate	66.55	72.50	**	**	49.30	28.40	29.50	
High Productivity	90.45	95.85	**	**	69.10	36.40	38.05	
Low Productivity	41.30	47.50	**	**	32.10	21.05	20.80	
Average 2012 rate	57.80	60.70	55.90	**	42.65	25.45	23.10	
Average 2011 rate	47.70	60.00	**	35.25	32.70	22.95	21.10	
Average 2010 rate	43.30	49.00	42.65	33.60	26.00	21.00	18.60	
Average 2009 rate	39.80	43.55	34.60	**	27.50	21.00	18.70	
Average 2008 rate	38.40	42.10	40.00	29.60	27.95	17.75	20.00	
Pasture/Rangeland								
Average 2013 rate	45.20	52.50	50.00	30.15	32.50	14.35	15.00	
High Productivity	62.05	70.40	68.55	43.75	48.15	20.55	19.60	
Low Productivity	27.75	32.10	28.55	20.50	20.35	9.90	10.50	
Average 2012 rate	40.40	48.90	40.90	**	22.30	11.65	12.55	
Average 2011 rate	31.20	45.00	29.90	21.40	23.30	10.90	11.35	
Average 2010 rate	31.60	38.85	30.40	23.85	16.15	11.00	10.45	
Average 2009 rate	33.20	37.90	29.70	25.00	21.40	13.30	10.40	
Average 2008 rate	32.25	38.60	31.50	21.50	17.90	10.75	11.00	

** insufficient number of reports to make estimates at the county cluster level No county clusters are reported for the south-central, southwest, and northwest regions.

the northeast region is partly explained by the unusual decline of \$13 per-acre in cash rent reported in 2012!

Rangeland cash rental rates increased an average of \$10.20 per-acre in the south-central region compared to increases of \$4.40 to \$5.75 per-acre in most regions east of the Missouri River and average increases of \$2.45 to \$2.70 per-acre in the western regions.

Overall, very strong increases in per-acre land values and cash rental rates occurred for each land use in most regions. However, the percent increase in cash rental rates was lower than the percent increase in land values in all regions for cropland and hay

land and for six of eight regions for pasture and rangeland. In most regions, per-acre land values increased more than 20% compared to cash rental rate increases that varied from 9% to 23%.

2013 cash rental rates – non-irrigated cropland

Average cash rental rates in 2013 for non-irrigated cropland varied from nearly \$37 per-acre in both western regions to \$128.65 in the north-central region, and \$214.75 per acre in the east-central region (figure 7 and table 3). For the first time, average cash rental rates for cropland exceed \$100 per-acre in all five regions east of the Missouri River and exceed \$200 per-acre in the east-central region.

Average cash rental rates for cropland are highest at \$249.20 per-acre in the Minnehaha-Moody county cluster. The next two highest cash rental rates average \$231.90 per-acre in the Clay-Lincoln-Turner-Union county cluster and \$221.05 per-acre in the Brookings-Lake-McCook county cluster (table 4). Cash rental rates per-acre for high-productivity cropland in these same three county clusters vary from \$345 to \$363.

Average cropland cash rental rates vary from \$165 to \$202 per-acre across five of the other six county clusters in eastern South Dakota, excluding the Charles Mix-Douglas county cluster. Within the same five clusters, average cash rental rates for high-productivity cropland vary from an average of \$243 to \$350 per-acre.

Cash rental rates are generally lower across county clusters in the north-central and central regions and for the Charles Mix-Douglas cluster in the southeast region. Average cash rental rates for cropland in these county clusters vary from \$97.80 per-acre in the Hughes-Sully county cluster to \$125 per-acre in the Charles Mix-Douglas cluster to \$150.60 per-acre in the Brown-Spink county cluster (table 4). Cash rental rates for high-productivity cropland vary from \$128 to \$250 across these same county clusters.

Average cash rental rates are much lower in all regions west of the Missouri River varying from \$76.15 in the south-central to about \$37 per-acre in the northwest and southwest regions. Average cash rental rates for high productivity cropland varied from \$112 per-acre in the south-central region to about \$51 per-acre in both western regions.

Within each region and county cluster, cash rental rate averages for low-productivity cropland are usually much lower than those reported for high-productivity cropland. For example, reported average cash rent for non-irrigated cropland in the east-central region is \$135.65 per acre for low-productivity cropland and \$336.05 per acre for high-productivity cropland. In the southwest region, the average cash rent for low-productivity cropland is \$27.65 per-acre compared to \$51.35 per-acre for high-productivity cropland (table 4).

2013 cash rental rates – hayland and irrigated land

Cash rental rates for hay land are highest in the three eastern regions, with average cash rents from \$100.85 per-acre in the northeast to \$143.20 per-acre in the southeast region. Cash rental rates were similar in the north-central and central region, with average per-acre rates of \$64.40 and \$66.55, respectively. West of the Missouri River, hay land cash rental rates in 2013 vary from an average of \$28.40 per-acre in the southwest to \$49.30 per-acre in the south-central region (figure 7 and table 3).

Two county clusters, CLTU and Minnehaha-Moody have average cash rental rates of \$191.90 and \$173.50 per-acre, respectively. Hay land cash rental rates in two other county clusters (Bon Homme-Hutchinson-Yankton and Codington-Deuel-Hamlin) also averaged above \$100 per-acre. Average cash rental rates between \$53 and \$87 per-acre are reported in the other county clusters (table 4).

Within each region and county cluster there are considerable differences in average cash rental rates for low-productivity and high-productivity hay land. For example, the average rental rates for low and high productivity hay land in the CLTU cluster are \$126.65 and \$255.25 per acre, respectively, compared to \$21.05 and \$36.40 per-acre in the southwest region. In many regions, lower cash rental rates are reported for native hayland, while the higher rates are quoted for alfalfa.

Cash rental rates for irrigated land were also highest in the eastern regions, varying from an average of \$237 in the northeast to \$269.75 in the southeast. Irrigated cropland cash rental rates were \$180.90 and \$194.20, respectively, in the north-central and central regions, compared to only \$82.80 in the western region (table 3).

2013 cash rental rates – rangeland and pasture

Nearly three-eighths of South Dakota's 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 (Janssen and Xu, 2003). Respondents were asked to report 2013 cash rental rates per acre and per AUM on privately owned rangeland and pastureland in their locality.

Average cash rental rates per acre reflect regional differences in productivity and carrying capacity of pasture and rangeland tracts. In some cases, cash rental rates are also affected by shortage of forage due to drought conditions in much of South Dakota since summer of 2012. Average cash rental rates vary from \$14.35 to \$15.00 per-acre in western South Dakota to \$67.70 per-acre in the east central region. Typical cash rental rates for low-productivity and high-productivity rangeland vary from \$9.90 to \$20.55 per acre in the southwest region and from \$46.00 to \$93.35 per acre in the east central region (figure 7 and table 3).

Across county clusters in the five regions east of the Missouri River, average cash rental rates for rangeland and pasture vary from \$73.75 in the Minnehaha-Moody country cluster to \$30.15 per-acre in the Hughes-Sully county clusters. Average cash rental rates per-acre in the remaining county clusters varied from \$44.35 and \$45.00 in the Edmund-Faulk-McPherson and Charles Mix-Douglas county clusters, respectively, to \$68.25 and \$69.40 per-acre in the Sanborn-Davison-Hanson-Kingsbury-Miner and Clay-Lincoln-Turner-Union country clusters (table 4).

Rangeland rates per AUM in 2013 vary from an average of \$31.40 and \$32.90 per AUM in the northwest and southwest regions to \$43.00 per AUM in the southeast region. These are the highest average AUM rates reported in the 23 year history of this survey. The number of responses for AUM rates is too low to provide estimates for three regions: east-central, northeast, and north-central.

Publications on agricultural land rental arrangements in South Dakota

There are several recent publications on agricultural land leasing available from South Dakota State University Extension Economics. These publications address issues for landlords and tenants and summarize some issues that should be considered when entering into lease agreements. Also available

through these publications are worksheets that can be used to assist in the determination of equitable lease rates. These Extension publications by Dr. Burton Pflueger are in the reference list and are a few of the resources available from the Economics Department at South Dakota State University.

RATES OF RETURN TO SOUTH DAKOTA'S AGRICULTURAL LAND

The gross rate of return (gross cash rent as a percent of land value) is used to estimate current rates of return to land. It is calculated from respondent's reported average cash rental rates and their estimated values 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. The 1991 to 2013 trend of gross rent to value ratio is depicted in figure 8.

In 2013, the statewide average gross rate of return (rent-to-value ratio) is 3.5% for non-irrigated cropland and hay land, 3.0% for rangeland, and 3.3% for all agricultural land. These annual average rates are the lowest gross annual cash rates of return to land calculated over the past 23 years! This is the fourth consecutive year that gross rates of return for all-agricultural land has been 4.0% or lower, compared to an average of 5.5% from 2000 – 2009 and 7.4% during the 1990's (table 5).

The practical range of gross rate of return is obtained for the middle 90% of the distribution of responses for each land use. For most respondents, the estimated cash rent-to-value ratio (gross rate of return) for 2013 varies from 2.3% to 5.6% for cropland, from 1.7% to 5.6% for hay land, and 1.6% to 4.4% for rangeland. The median rent-to-value ratio is 3.4% for cropland, 3.33% for hay land, and 2.7% for rangeland.

Respondents were also asked to estimate the current **net rate of return** (percent) that landowners in their locality could expect given current land values. Appraisers refer to this measure 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 landownership after deducting property taxes, real estate maintenance, and other ownership expenses from gross cash rent (or other gross rental income measures).

In recent years, respondent estimates of percent net rate of return have been very close to the calculated rent-to-value ratio reported in table 5.

LONGER-TERM PERSPECTIVE ON FARMLAND MARKET CHANGES, 1991–2013

Longer-term historical data from annual SDSU surveys of agricultural land values and cash rental rates in South Dakota from 1991 to 2013 are located in Appendix tables 2 and 3 of this report. Long-term trends in average annual cash rates of return are shown in figure 8. Regional and statewide comparisons of annual percent changes in all-agricultural land values in four time periods from 1991 to 2013 are shown in figure 9.

Based on 23 years of examining trends in agricultural land values, cash rental rates, and rates of return by land use and across regions, a few key observations are offered.

First, agricultural land values increased at a much faster rate from 2001 to 2013 compared to the earlier periods from 1991 to 2001. Statewide annual increases averaged 15.3% from 2001 to 2008 and 17.5% from 2008 to 2013. During these same time periods, average annual increases in all-land values were 10% or more in each region. In the earlier time periods, all-land value increases statewide were 4.7% and 7.4%, with most regional increases varying from 2% to 8% annually.

Second, considerable insight about impacts of federal policies on land values is gained by comparing annual rates of land increases for the four periods. The first period, 1991 to 1996, reflects the impacts of the 1990 farm bill, continued recovery of the farm sector from the farm financial crisis of the mid-1980s, and long-term farm mortgage interest rates averaging 8 to 10%. The second period, 1996 to 2001, reflects the impacts of the 1996 farm bill and subsequent increases in federal farm program spending. However, there were no major changes in farm mortgage interest rates from the earlier period.

The third period, 2001 to 2008, reflects the impacts of major reductions in farm mortgage interest rates, continued farm program support and planting flex-

ibility, growing use of crop revenue insurance, and relatively low rates of inflation. Federal policy shifts in favor of renewable fuels and the growing importance of ethanol production from corn has further increased commodity prices and indirectly contributed to increased cash rental rates and land values.

The most recent period, 2008 to 2013, reflects the impact of the major economic recession and its aftermath on the farm sector, interacting with the commodity price boom in the past few years. The commodity price boom along with low interest rates and perceived lack of alternative investment opportunities fueled the farmland price boom in the most recent two years, 2011 through 2013.

Third, cash rates of return (gross cash rent to land value ratio) to agricultural land were relatively stable from 1991 to 2000 and declined substantially from 2001 to 2013. These findings indicate that increased land values during the 1990's were supported by comparable rates of increase in cash rental rates. However, from 2001 to 2013, cash rental rates usually increased at a slower rate than land values. This finding illustrates the much greater impact of reduced interest rates on land values compared to its impacts on cash rental rates. During all 23 years of farmland market reporting, average rates of return to cropland exceeded average rates of return to rangeland (figure 8).

Fourth, cash rates of return to farmland are very low, currently less than 4%. For most years since 2001, farmland investors were in speculative market conditions where most of the total returns were from expectations of capital appreciation instead of current cash returns. This pattern of declining rates of cash return to land also occurs during the latter stages of land market price booms.

The national economic recession and financial turmoil in the second half of 2008 and through 2009 slowed the rate of increase in farmland values in 2009 and 2010 and likely altered farmland market psychology to greater emphasis on current income and cash flow. However, the subsequent boom in commodity prices has led to major increases in both cash rental rates and land values in 2011, 2012, and 2013.

Fifth, regional and county cluster rankings in per-

Table 5. Estimated rates of return to South Dakota agricultural land by type of land and by region, 1991 - 2013

Type of land-statewide ^b	2013	2012	2011	2010	Average 2000-2009	Average 1991-1999
	GROSS rate of return (%) ^a					
All agricultural land	3.3	3.8	3.9	4.0	5.5	7.4
Nonirrigated cropland	3.5	4.2	4.3	4.4	6.2	8.0
Rangeland & pasture	3.0	3.4	3.6	3.6	5.0	6.8
Hayland	3.5	3.7	4.1	4.3	6.0	8.0
Region^c	GROSS rate of return					
Southeast	3.2	3.4	3.7	4.2	5.8	7.4
East-Central	3.0	3.6	3.7	3.8	5.4	7.6
Northeast	3.6	4.0	3.9	4.2	6.0	8.1
North-Central	3.2	3.6	4.0	4.2	5.9	7.9
Central	2.8	2.9	3.7	3.9	5.5	7.7
South-Central	3.4	3.6	3.6	3.3	5.4	6.9
Southwest	3.2	3.4	3.8	3.3	5.0	6.7
Northwest	3.6	4.7	4.4	4.4	5.4	7.1

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

^b Statewide estimates are calculated by weighting the regional estimates for each land use by proportion of acres of each land use by region.

^c Regional level rate of return estimates are calculated by weighting the rate of return estimates for each land use by proportion of the regions agricultural acres in each use.

Source: South Dakota Farm Real Estate Survey, SDSU, 2013 and earlier reports.

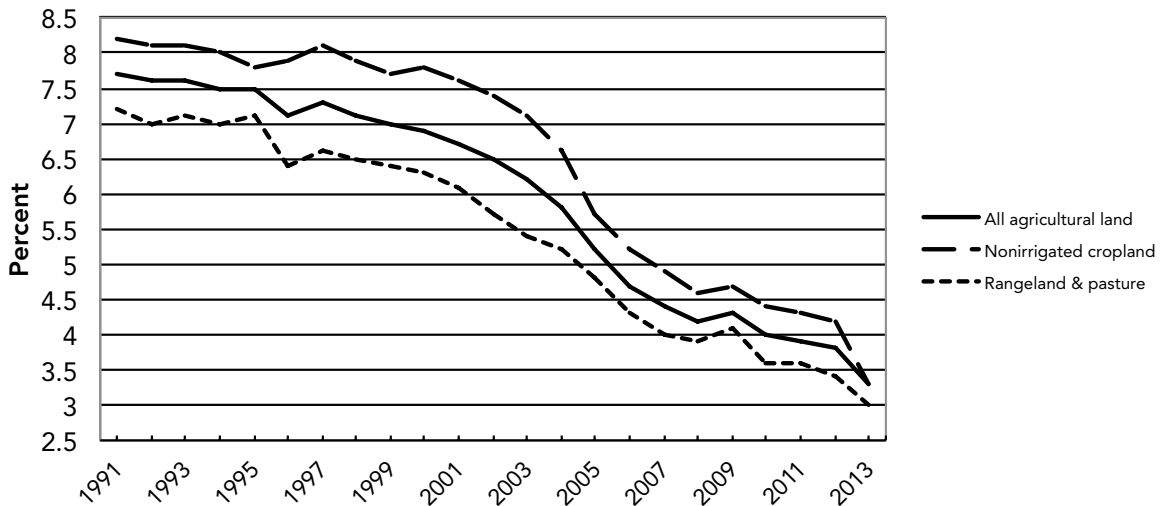


Figure 8. Gross rent-to-value ratio by land use, 1991-2013

Source: 2013 SDSU Farm Real Estate Market Survey and earlier publications.

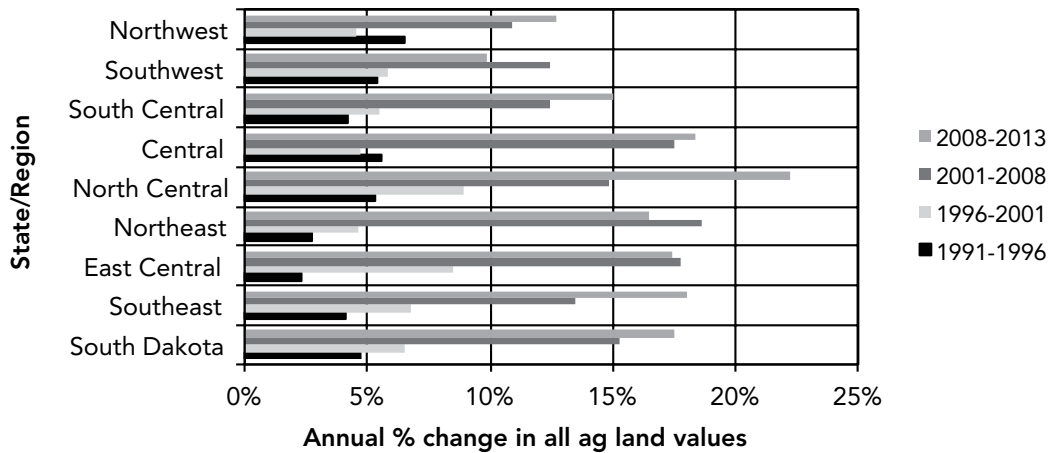


Figure 9. Annual percentage change in all ag land values in four time periods, 1991–2013

acre land values and cash rental rates are relatively 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 counties in South Dakota. Two county clusters in eastern South Dakota (Minnehaha-Moody and Clay-Lincoln-Turner-Union) consistently have the highest average per-acre land values and cash rental rates for each land use.

Sixth, during the 23 year period, cropland and hay land values have generally increased more rapidly than rangeland and pasture values, especially in the more cropland-intensive regions east of the Missouri River. Both land values and cash rents per-acre have increased more rapidly in the five regions east of the Missouri River, compared to the three regions west of the Missouri River. Furthermore, the ratio of cropland value to rangeland value has increased in each region, especially during the crop price boom period of the past three years, 2010 to 2013.

Crop production technology changes favoring corn and soybeans along with growth of ethanol production are some of the factors contributing to crop / hay land values increasing more rapidly than rangeland and pasture values.

Finally, longer-term trends in agricultural land values show increases above the rate of price inflation in all regions. From 1991 to 2013, the average annual rate of general price inflation has been less than 3%. The statewide average annual rate of increase for all-agricultural land was 11.3% during this period, with regional variation from 8.7% to 12.8%

(appendix table 2).

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 markets in their localities. These factors help explain changes in the amount of farmland for sale, sale prices, and rental rates. Eighty-four percent of survey respondents listed one to three positive reasons, but only sixty-nine percent listed one to three negative reasons.

High commodity prices, at 39%, were the top response for positive factors affecting farmland values. Twenty-seven percent cited low market interest rates as a key positive factor. Increased crop yields/farm profitability, government programs/crop insurance, and low rates of returns from other investments were also important positive factors in the real estate market (fig. 10).

The drought or other weather conditions consists of twenty-eight percent of responses on negative factors affecting farmland markets. Respondents also cited Uncertainty in the future of farm programs and the economy was another major negative (17% of responses). High input costs accounted for ten percent of the negative responses. The fear of commodity price decline and the possibility of a farmland bubble were other major negative factors cited. Eight percent of respondents, however, indicated

there are no negative factors in the farm real estate market (fig. 11)

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 forthcoming year. Nearly 89% of respondents provided their perception of previous year cropland value changes, compared to 75% for rangeland and 68% for hay land. Nearly three-fourths of respondents projected cropland value changes for next year, compared to 63% estimating changes in rangeland values and 57% estimating changes in hay land values.

During the past year, respondents' estimated percentage increases in land values averaged 22% for cropland, 18% for hay land, and 17% for rangeland. The median rate of increase was 20% for cropland and 15% for hay, range, or pasture. There were no reports of declining land values, and relatively few reports of no change in land values. Overall, nearly 96% of rangeland reports and 98% of cropland, hay, and pasture reports indicated land value increases in the past year.

Overall, respondents perception of annual land value changes during the past year, 2012 to 2013, were higher than reported in any prior SDSU annual land market survey from 1991 to present. For most survey reports, including 2013, respondent perception of percentage change in land values, on

average, was lower than the actual percent changes calculated from the survey data.

Most respondents, 81% to 87% depending on land use, providing forecasts expect land values to increase in the next 12 months and most of the remainder projected no change in land values. A few respondents forecast a decline in land values during the next 12 months. The median forecast in per-acre values for cropland was 7.5% compared to 5% for hay, pasture, and rangeland. Average (mean) forecast percentages were one to two percentage points higher, depending on land use.

In summary, respondents to the 2013 survey remain optimistic about farmland market conditions for the following year. This optimism reflects the impact of very high agricultural commodity prices on farm profits and on cash rental rates which are capitalized into increasing land values. There are growing concerns about impacts of projected commodity price declines and uncertainly concerning future federal policies for deficit reduction, taxation, credit/finance, agriculture, and renewable energy.

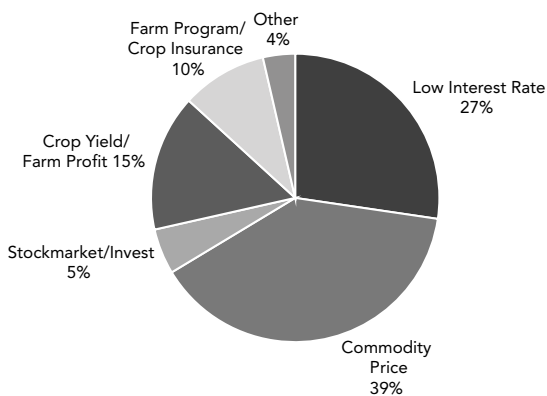


Figure 10. Positive factors in the farm real estate market

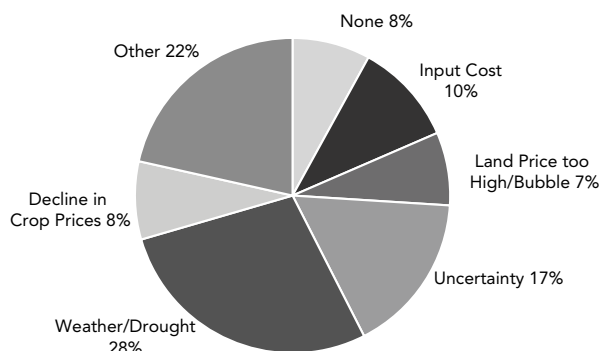


Figure 11. Negative factors in the farm real estate market

LIST OF REFERENCES *

- Federal Reserve Bank of Minneapolis. 2012. Agricultural Credit Conditions reports. <http://www.minneapolisfed.org/>.
- Janssen, Larry. 1999. Agricultural land values in South Dakota: a comparison of two surveys. SDSU Econ Research Report 99-1.
- Janssen, Larry and Xuan Xu. 2003. Farmland leasing in South Dakota. Ag Expt. Station Bulletin 739. South Dakota State University, Brookings, SD.
- Janssen, Larry and Burton Pflueger. 2012. South Dakota agricultural land market trends, 1991 – 2012. SDSU Ag Expt. Station Circular 03-3007-2012. Brookings, SD. <http://igrow.org/up/resources/03-3007-2012.pdf>.
- . 2011. South Dakota agricultural land market trends, 1991 – 2011. SDSU Ag. Expt. Station Circular 278. Brookings, SD. http://pubstorage.sdstate.edu/AgBio_Publications/articles/C278.pdf
- . 2010. South Dakota agricultural land market trends, 1991 – 2010, SDSU Ag. Expt. Station Circular 276. Brookings, SD. http://pubstorage.sdstate.edu/AgBio_Publications/articles/C276.pdf
- Pflueger, Burton. South Dakota Agricultural Rental Agreements: What is a Fair Lease Arrangement? Extension Extra 5061. South Dakota State University, 2007. http://pubstorage.sdstate.edu/AgBio_Publications/articles/ExEx5061.pdf
- . Crop cash lease agreements. Extension Extra 5063. South Dakota State University, 2007. http://pubstorage.sdstate.edu/AgBio_Publications/articles/ExEx5063.pdf
- . Cash farm lease (short version). Extension Extra 5064. South Dakota State University, 2007. http://pubstorage.sdstate.edu/AgBio_Publications/articles/ExEx5064.pdf
- . Crop Share Lease Agreements, Extension Extra 5065. South Dakota State University, 2007. http://pubstorage.sdstate.edu/AgBio_Publications/articles/ExEx5065.pdf
- . Crop Share Farm Lease (Short Version) Extension Extra 5066. South Dakota State University, 2007. http://pubstorage.sdstate.edu/AgBio_Publications/articles/ExEx5066.pdf
- . Flexible-Cash Lease Agreements. Extension Extra 5067. South Dakota State University, 2007. http://pubstorage.sdstate.edu/AgBio_Publications/articles/ExEx5067.pdf
- . Flexible-cash farm lease (short version). Extension Extra 5068. South Dakota State University, 2007. <http://agbiopubs.sdstate.edu/articles/ExEx5068.pdf>. http://pubstorage.sdstate.edu/AgBio_Publications/articles/ExEx5067.pdf
- . Pasture lease agreements. Extension Extra 5071. South Dakota State University, 2007. http://pubstorage.sdstate.edu/AgBio_Publications/articles/ExEx5071.pdf
- . Pasture lease (short version). Extension Extra 5072. South Dakota State University, 2007. http://pubstorage.sdstate.edu/AgBio_Publications/articles/ExEx5072.pdf
- . Agricultural and Grazing Leases of South Dakota School and Public Lands. Extension Extra 5077. South Dakota State University, 2009. http://pubstorage.sdstate.edu/AgBio_Publications/articles/ExEx5077.pdf
- . South Dakota's Rental Agreements: What is a Legal Lease. Extension Extra 5078. South Dakota State University, 2010. http://pubstorage.sdstate.edu/AgBio_Publications/articles/ExEx5078.pdf
- U.S. Dept. of Agriculture. 2007 Census of Agriculture, South Dakota. v. 41.
- U.S. Dept. of Agriculture. 2002 Census of Agriculture, South Dakota. v. 41.
- U.S. Dept. of Agriculture. National Agricultural Statistics Service. "Crop Production Summary for 2012". Jan. 2013.
- U.S. Dept. of Commerce. 2013. Bureau of Economic Analysis. Various reports.
- U.S. Dept. of Labor. 2013. Bureau of Labor Statistics. Various reports.

** Reference citations for annual SDSU farm real estate survey reports for 1991 through 2009 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 2009 were published as SDSU Agricultural Experiment Station Circulars # 256, 257, 258, 259, 260, 262, 263, 264, 266, 267, 268 269, 270, 271, 272, 273 and 275. Dr. Janssen and Dr. Pflueger, often in collaboration with an SDSU Economics student, were the co-authors of each annual report.

APPENDIX I: SURVEY METHODS AND RESPONDENT CHARACTERISTICS

The primary purpose of the 2013 South Dakota Farm Real Estate Market Survey was to obtain regional and statewide information on 2013 per-acre agricultural land values and cash rental rates by land use and land productivity. In addition, we obtained respondents' 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 615 potential respondents on February 14, with a follow-up mailing on March 12. 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 officers or county directors of the USDA Farm Service Agency (FSA), 3) Cooperative Extension Service agricultural field specialists 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.

Respondents were asked to report land values and cash rental rate information for non-irrigated cropland, hay land, rangeland, improved pasture, and irrigated land in their locality. Nearly one-third of respondents reported land market information for at least two counties. The number of responses exceeded the number of respondents as some persons (primarily appraisers and lenders) completed multiple survey schedules providing different land value and cash rental data for different counties in their trade territory. Overall, a total of 180 respondents provided 215 useable responses.

The distribution of 215 responses is summarized by location and reported occupation in appendix table 1. Fifty-six percent of responses are from the three eastern regions of South Dakota, 20% were from the central and north-central region, and 24% were from the south-central and western regions. The relatively low number of responses from the central, south-central and western regions remains a major concern in providing land value and rental rate estimates for these regions.

Sixty-four percent of responses are from agricultural

lenders or FSA officials, and 26% of responses are from appraisers. The remaining responses are from Extension field agents and assessors. Over the past several years, the proportion of responses from agricultural lenders and appraisers has increased relative to other respondent categories.

Most responses (96%) provided land value and cash rental rate information for non-irrigated cropland in their locality. Nearly 83% of responses provided land value information for rangeland, compared to 73% of responses providing hay land values. Slightly lower percentages of responses provided cash rental rates for rangeland (80% of responses) and hay land (67% of responses). Thirty one percent of responses reported irrigated land values and cash rental rates, while only 21% reported cash rental rates per AUM on rangeland.

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 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 are based on estimates of agricultural land use for privately owned non-irrigated agricultural land 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 2002 South Dakota Census of Agriculture and other sources.

Regional average rental rates by land use are simple average (mean) values of useable responses. State-wide 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 based on 2002 Census of Agriculture data.

Appendix Table 1. Selected characteristics of responses, 2013.
Number of responses = 215

Responses:

Reporting location	N	%
Southeast	42	19.5%
East-Central	46	21.4%
Northeast	33	15.3%
North-Central	25	11.6%
Central	18	8.4%
South-Central	14	6.5%
Southwest	21	9.8%
Northwest	16	7.4%
	215	100.0%

Primary Occupation	N	%
Banker/loan officer	92	42.8%
Farm Service Agency	46	21.4%
Assessor	15	7.0%
Appraiser/realtor	56	26.0%
Extension educators	6	2.8%
	215	100.0%

Response rates:

Land values	N	%
Nonirrigated cropland	208	96.7%
Irrigated cropland	67	31.2%
Hayland	157	73.0%
Rangeland (native)	178	82.8%
Pastureland (tame)	138	64.2%

Cash Rental Rates	N	%
Nonirrigated cropland	206	95.8%
Irrigated cropland	67	31.2%
Hayland	145	67.4%
Rangeland (acre)	171	79.5%
Rangeland (AUM)	46	21.4%

Source: 2013 South Dakota Farm Real Estate Market Survey

Appendix II. Historical data on agricultural land values and cash rental rates by land use by region, South Dakota, 1991–2013

Appendix Table 2. Average reported value and annual percentage change in value of South Dakota agricultural land by type of land by region, February, 1991-2013.

Type of Land	South east	East Central	North- east	North- Central	Central	South- Central	South west	North west	STATE
All Agricultural Land (nonirrigated)	dollars per acre								
Average value, 2013	4954	5504	3684	3217	2678	1294	606	536	2328
Average value, 2012	4014	3890	2587	2325	2257	917	461	369	1742
Average value, 2011	2900	3332	2274	1720	1450	781	459	342	1374
Average value, 2010	2447	2712	2006	1487	1268	648	411	329	1179
Average value, 2009	2355	2634	1863	1270	1246	690	413	307	1121
Average value, 2008	2168	2473	1714	1179	1152	642	378	295	1041
Average value, 2007	1768	1946	1422	945	899	521	322	285	850
Average value, 2006	1583	1643	1174	849	803	462	286	256	743
Average value, 2005	1372	1427	1029	736	711	414	275	211	650
Average Value, 2004	1147	1162	779	629	594	377	223	192	541
Average value, 2003	1017	903	641	549	522	309	200	177	461
Average value, 2002	930	875	560	501	424	313	202	150	421
Average value, 2001	893	785	519	450	373	284	167	143	384
Average value, 2000	794	673	492	404	352	286	167	131	352
Average value, 1999	740	644	452	378	345	273	166	122	331
Average value, 1998	772	610	452	353	346	280	155	117	328
Average value, 1997	665	591	432	323	302	241	139	111	298
Average value, 1996	643	522	414	294	296	217	126	115	280
Average value, 1995	633	473	419	279	264	222	130	103	268
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 13/91	10.7%	11.9%	11.1%	12.8%	11.9%	9.5%	8.7%	8.8%	11.3%
Annual % change 13/12	23.4%	41.5%	42.4%	38.4%	18.7%	41.1%	31.5%	45.3%	33.6%
Nonirrigated Cropland	dollars per acre								
Average value, 2013	5903	6828	4843	4562	3580	1994	900	792	4249
Average value, 2012	4817	4734	3369	3026	2946	1348	677	496	3084
Average value, 2011	3402	4024	2918	2301	1866	1115	625	483	2389
Average value, 2010	2841	3291	2560	1945	1644	967	560	474	2030
Average value, 2009	2741	3155	2305	1673	1577	1007	596	428	1900
Average value, 2008	2510	2894	2076	1532	1450	904	502	399	1733
Average value, 2007	1999	2244	1762	1187	1086	702	426	367	1375
Average value, 2006	1817	1914	1448	1088	986	612	387	342	1211
Average Value, 2005	1556	1659	1255	967	871	568	383	316	1064
Average Value, 2004	1315	1346	973	822	705	541	318	294	882
Average value, 2003	1156	1040	793	716	631	443	290	281	743
Average value, 2002	1057	1019	691	665	524	445	311	244	684
Average value, 2001	1023	911	652	592	456	423	245	223	626
Average value, 2000	910	785	620	520	436	417	248	208	567
Average value, 1999	866	756	565	488	435	402	246	202	534
Average value, 1998	903	728	564	452	434	399	241	200	534
Average value, 1997	777	699	535	412	386	348	217	188	486
Average value, 1996	751	613	514	372	371	317	214	191	455
Average value, 1995	732	555	522	353	332	326	237	185	437
Average value, 1994	661	590	488	382	331	289	218	169	426
Average value, 1993	655	595	497	326	305	302	197	163	412
Average value, 1992	616	574	460	342	300	287	196	167	400
Average value, 1991	623	554	450	294	300	272	185	153	384
Av annual % change 13/91	10.8%	12.1%	11.4%	13.3%	11.9%	9.5%	7.5%	7.8%	11.5%
Annual % change 13/12	22.5%	44.2%	43.8%	50.8%	21.5%	47.9%	32.9%	59.7%	37.8%

Source: *South Dakota Farm Real Estate Market Surveys, SDSU, 2013* and earlier.
Statewide values by land use are based on 2002 regional land use weights

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, 2013	2308	2765	1759	1473	1636	994	529	444	909
Average value, 2012	1930	2108	1345	1387	1493	724	401	341	737
Average value, 2011	1589	1779	1217	950	1011	634	409	309	611
Average value, 2010	1339	1536	1070	875	865	514	365	296	540
Average value, 2009	1258	1458	1125	755	898	570	358	277	530
Average value, 2008	1239	1539	1100	714	836	544	339	271	508
Average value, 2007	1073	1293	889	634	708	448	295	265	448
Average value, 2006	925	1055	751	548	599	397	255	234	386
Average value, 2005	781	844	667	458	552	346	241	185	332
Average value, 2004	684	764	465	396	456	312	196	167	283
Average value, 2003	609	580	389	345	397	257	176	153	246
Average value, 2002	538	543	353	297	325	260	172	127	221
Average value, 2001	488	478	315	270	284	232	143	124	198
Average value, 2000	456	417	297	253	265	235	143	111	187
Average value, 1999	405	386	276	241	255	220	143	102	177
Average value, 1998	408	346	274	226	256	231	130	98	172
Average value, 1997	364	354	268	204	214	197	116	92	155
Average value, 1996	336	311	250	194	214	177	100	97	147
Average value, 1995	354	303	247	184	197	180	101	83	140
Average value, 1994	319	283	228	184	190	149	85	80	128
Average value, 1993	283	276	232	169	175	157	89	76	125
Average value, 1992	271	267	209	163	159	145	80	74	117
Average value, 1991	268	271	205	147	163	137	74	69	112
Av annual % change 13/91	10.3%	11.1%	10.3%	11.0%	11.1%	9.4%	9.4%	8.8%	10.0%
Annual % change 13/12	19.6%	31.2%	30.8%	6.2%	9.6%	37.3%	31.9%	30.2%	23.3%
Pasture (tame, improved)	dollars per acre								
Average value, 2013	2721	3176	2074	1778	2222	1129	571	523	1542
Average value, 2012	2275	2371	1678	1550	1772	844	431	373	1218
Average value, 2011	1726	2082	1494	1161	1179	762	465	344	1011
Average value, 2010	1480	1629	1178	991	1061	650	429	320	854
Average value, 2009	1378	1802	1373	827	1042	571	429	314	857
Average value, 2008	1365	1675	1304	795	943	571	384	307	809
Average value, 2007	1167	1461	987	698	760	524	303	297	684
Average value, 2006	1085	1166	843	598	711	425	283	282	596
Average Value, 2005	937	1018	730	465	610	397	291	227	519
Average Value, 2004	754	818	517	424	518	337	217	198	420
Average value, 2003	683	710	448	389	493	294	191	163	372
Average value, 2002	639	607	391	327	345	287	193	156	327
Average value, 2001	564	522	342	301	332	258	176	153	297
Average value, 2000	516	481	334	289	303	268	167	144	279
Average value, 1999	453	437	314	266	290	240	161	125	256
Average value, 1998	461	406	297	264	302	272	161	120	254
Average value, 1997	416	373	299	236	265	222	138	114	230
Average value, 1996	379	358	279	231	258	188	127	115	217
Average value, 1995	385	346	262	218	214	214	117	102	206
Average value, 1994	371	335	251	200	224	194	109	93	196
Average value, 1993	326	333	249	194	194	193	104	98	188
Average value, 1992	328	306	257	194	190	176	100	88	182
Average value, 1991	315	325	252	170	199	163	92	94	179
Av annual % change 13/91	10.3%	10.9%	10.1%	11.3%	11.6%	9.2%	8.7%	8.1%	10.3%
Annual % change 13/12	19.6%	34.0%	23.6%	14.7%	25.4%	33.8%	32.5%	40.2%	26.6%

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, 2013	4196	4003	2639	2223	2552	1453	678	610	2285
Average value, 2012	3337	3008	1638	1905	2143	1039	559	407	1758
Average value, 2011	2401	2742	1590	1301	1300	854	552	400	1377
Average value, 2010	2158	2074	1581	1202	1121	681	473	391	1195
Average value, 2009	2098	2116	1387	962	1109	720	488	373	1142
Average value, 2008	1871	2127	1347	939	1050	649	450	334	1079
Average value, 2007	1659	1637	1028	750	815	525	356	327	875
Average value, 2006	1383	1371	831	640	758	499	346	300	758
Average value, 2005	1312	1203	780	515	612	451	324	270	675
Average value, 2004	1008	992	586	432	516	391	265	245	549
Average value, 2003	932	770	488	379	486	310	228	227	474
Average value, 2002	863	770	412	352	375	325	238	204	439
Average value, 2001	844	735	359	332	337	281	201	181	406
Average value, 2000	722	577	330	317	310	293	203	175	365
Average value, 1999	619	562	317	278	293	294	194	163	340
Average value, 1998	668	504	330	265	295	291	178	149	335
Average value, 1997	553	507	316	262	253	258	169	150	307
Average value, 1996	568	451	314	219	273	232	156	146	293
Average value, 1995	562	365	336	213	229	230	164	145	279
Average value, 1994	489	409	279	235	237	204	137	124	263
Average value, 1993	435	398	275	188	205	204	140	121	244
Average value, 1992	416	336	237	179	197	193	135	119	226
Average value, 1991	461	358	252	169	190	197	126	122	233
Av annual % change 13/91	10.6%	11.6%	11.3%	12.4%	12.5%	9.5%	7.9%	7.6%	10.9%
Annual % change 13/12	25.7%	33.1%	61.1%	16.7%	19.1%	39.8%	21.3%	49.9%	30.0%

Appendix Table 3. Reported cash rental rates of South Dakota agricultural land by type of land by region, 1991-2013.

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 2013 rate	193.20	214.75	187.00	128.65	105.15	76.15	37.05	37.35	144.30
Average 2012 rate	166.10	184.60	137.25	109.55	95.55	64.10	34.05	31.15	121.50
Average 2011 rate	131.60	152.70	119.40	89.20	69.80	53.05	30.80	28.70	98.90
Average 2010 rate	116.95	133.20	106.40	75.40	66.55	38.10	26.60	24.30	86.65
Average 2009 rate	114.50	129.00	97.00	72.60	66.50	42.60	27.50	24.25	83.90
Average 2008 rate	101.90	109.00	87.80	65.70	62.10	37.05	24.50	24.20	74.70
Average 2007 rate	92.30	91.65	77.85	56.75	48.95	32.70	23.35	21.80	64.80
Average 2006 rate	89.25	82.60	70.50	53.85	46.35	34.00	24.70	21.45	60.95
Average 2005 rate	87.20	82.60	65.70	49.40	45.80	31.50	24.90	22.90	58.90
Average 2004 rate	83.70	78.80	64.50	47.60	43.40	34.10	23.10	21.40	56.80
Average 2003 rate	78.80	74.70	59.50	44.90	40.60	29.20	22.00	21.00	53.25
Average 2002 rate	76.50	69.80	57.50	42.20	35.95	29.40	22.60	20.40	50.65
Average 2001 rate	72.95	64.60	52.20	37.80	35.30	27.20	20.10	17.50	47.00
Average 2000 rate	67.50	56.40	49.30	36.20	31.90	30.00	18.70	18.70	43.70
Average 1999 rate	63.20	56.00	46.20	36.00	33.20	27.00	19.50	16.90	42.30
Average 1998 rate	65.20	55.00	45.30	34.70	30.90	25.90	19.00	17.90	41.75
Average 1997 rate	57.40	49.20	44.70	32.70	29.30	23.60	19.10	19.30	38.70
Average 1996 rate	54.70	45.30	41.50	28.70	26.30	21.60	17.00	16.00	35.50
Average 1995 rate	52.50	42.10	40.40	27.60	25.10	21.00	17.60	15.90	34.05
Average 1994 rate	51.90	45.10	40.30	29.80	25.00	22.10	17.60	14.90	34.85
Average 1993 rate	51.80	47.10	40.30	26.60	24.20	22.80	16.60	14.60	34.40
Average 1992 rate	48.00	45.70	39.70	25.50	22.70	21.40	17.70	15.10	33.00
Average 1991 rate	49.30	43.20	38.50	24.50	23.20	22.20	15.90	13.50	32.40
Hayland									
Average 2013 rate	143.20	119.40	100.85	64.40	66.55	49.30	28.40	29.50	79.30
Average 2012 rate	123.00	105.35	56.30	61.15	57.80	42.65	25.45	23.10	65.85
Average 2011 rate	91.30	102.45	69.25	48.40	47.70	32.70	22.95	21.10	57.10
Average 2010 rate	92.40	83.50	64.60	43.40	43.30	26.00	21.00	18.60	51.50
Average 2009 rate	87.50	88.70	58.50	40.60	39.80	27.50	21.00	18.70	50.15
Average 2008 rate	81.70	80.90	58.50	42.60	38.40	28.00	17.75	20.00	47.40
Average 2007 rate	74.00	67.55	47.40	34.25	31.35	25.70	18.80	18.40	41.60
Average 2006 rate	72.90	60.50	40.20	30.20	34.60	27.30	19.55	18.15	39.80
Average 2005 rate	71.60	56.40	38.70	28.90	29.80	22.20	17.60	18.80	37.20
Average 2004 rate	68.50	53.40	36.80	27.10	28.40	24.80	18.50	17.70	36.05
Average 2003 rate	67.20	49.40	34.60	26.20	27.50	19.80	17.80	19.80	34.15
Average 2002 rate	63.70	49.20	31.00	23.40	21.10	20.40	15.50	17.50	31.70
Average 2001 rate	61.20	47.60	28.90	21.00	23.30	18.10	15.90	14.70	30.20
Average 2000 rate	57.80	40.10	28.80	20.30	21.10	19.40	15.10	14.30	28.45
Average 1999 rate	48.50	40.10	22.80	20.40	20.60	19.60	14.80	15.40	26.40
Average 1998 rate	51.40	40.50	24.60	19.40	20.90	18.90	14.20	13.60	27.10
Average 1997 rate	46.10	36.80	28.20	18.70	19.90	16.70	14.90	14.60	25.40
Average 1996 rate	41.50	32.30	26.00	17.00	18.60	15.20	12.60	11.20	22.70
Average 1995 rate	43.80	28.20	25.30	16.70	16.10	14.90	11.10	11.10	21.90
Average 1994 rate	39.50	31.40	23.60	17.00	17.80	15.50	11.90	11.30	21.90
Average 1993 rate	35.60	32.10	22.00	14.70	16.40	16.00	11.30	9.50	20.60
Average 1992 rate	33.30	25.90	20.00	14.20	15.60	15.60	11.40	12.10	19.20
Average 1991 rate	38.50	30.90	22.30	14.20	15.70	14.80	12.10	10.40	20.70

Source: *South Dakota Farm Real Estate Market Surveys, SDSU, 2013 and earlier year reports.*
 Statewide rental rates based on 2002 land use weights

Appendix Table 3. (continued)

Type of Land	South east	East Central	North east	North- Central	Central	South- Central	South west	North west	State
	dollars per acre								
Pasture/Rangeland									
Average 2013 rate	58.15	67.70	52.65	46.65	45.20	32.50	14.35	15.00	26.65
Average 2012 rate	57.95	61.95	46.95	42.25	40.40	22.30	11.65	12.55	22.60
Average 2011 rate	52.50	57.65	45.65	38.35	31.20	23.30	10.90	11.35	20.70
Average 2010 rate	50.40	50.70	41.95	34.05	31.60	16.10	11.00	10.45	18.60
Average 2009 rate	45.60	49.60	39.60	33.40	33.20	21.40	14.30	10.40	19.80
Average 2008 rate	45.60	47.15	38.30	31.30	32.25	17.90	10.75	11.00	18.50
Average 2007 rate	44.00	42.80	34.95	28.50	26.85	16.90	11.60	9.95	17.10
Average 2006 rate	42.10	40.00	31.35	25.90	26.30	19.60	10.70	9.25	16.50
Average 2005 rate	40.55	36.05	29.80	24.60	24.95	14.85	10.70	9.75	15.60
Average 2004 rate	37.40	35.90	27.20	22.20	23.90	17.30	10.00	7.90	14.60
Average 2003 rate	35.20	32.40	25.30	20.30	23.00	16.40	8.60	7.70	13.65
Average 2002 rate	33.70	32.00	23.70	18.70	19.70	15.60	8.90	7.20	12.90
Average 2001 rate	30.90	30.40	21.00	17.50	20.80	12.90	8.60	6.60	11.95
Average 2000 rate	31.00	26.80	20.60	17.40	18.50	15.40	8.00	6.80	11.95
Average 1999 rate	26.80	24.80	19.70	16.60	17.80	14.70	7.70	6.20	11.20
Average 1998 rate	28.10	24.40	19.40	16.40	17.50	14.90	7.30	6.70	11.30
Average 1997 rate	25.70	23.60	19.50	15.20	16.80	13.00	6.60	6.80	10.70
Average 1996 rate	21.20	22.10	18.80	14.70	16.30	12.00	5.60	6.10	9.80
Average 1995 rate	21.90	21.60	18.60	14.90	14.80	11.20	6.10	6.30	9.75
Average 1994 rate	20.30	20.90	18.60	13.40	16.30	11.20	5.40	5.60	9.25
Average 1993 rate	20.30	20.10	17.00	12.70	15.20	10.10	5.60	5.10	8.70
Average 1992 rate	18.00	19.60	16.50	12.00	13.50	9.50	5.30	4.90	8.20
Average 1991 rate	19.20	18.60	16.30	12.50	13.80	9.90	5.30	4.40	8.10
	dollars per Animal Unit Month								
Average 2013 rate	43.00	**	**	**	39.30	41.10	32.90	31.40	
Average 2012 rate	36.90	**	**	32.30	**	32.20	28.45	25.25	
Average 2011 rate	35.20	20.00	30.00	26.25	30.20	31.85	26.80	23.75	
Average 2010 rate	29.70	**	**	**	28.00	26.25	27.40	23.20	
Average 2009 rate	26.45	29.40	**	26.40	28.90	27.70	26.65	21.05	
Average 2008 rate	29.80	**	**	27.70	27.80	26.90	25.20	21.00	
Average 2007 rate	22.70	**	26.50	27.00	25.40	23.80	24.30	21.90	
Average 2006 rate	25.15	26.00	25.25	23.10	24.45	24.45	24.15	20.85	
Average 2005 rate	21.45	21.10	23.75	22.40	20.60	23.20	22.30	19.45	
Average 2004 rate	21.30	**	**	21.10	24.00	23.60	21.90	19.80	
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

Source: South Dakota Farm Real Estate Market Surveys, SDSU, 2013 and earlier year reports.