



AgEcon SEARCH
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search
<http://ageconsearch.umn.edu>
aesearch@umn.edu

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

South Dakota

Agricultural Land Market Trends 1991–2010

The 2010 SDSU South Dakota Farm Real Estate Survey

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

South Dakota

Agricultural Land Market Trends 1991–2010

The 2010 SDSU South Dakota Farm Real Estate Survey

Dr. Larry Janssen, Dr. Burton Pflueger, and Mr. Emmanuel Opoku¹

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

CONTENTS

Summary	1
Introduction	3
Changing economic conditions in South Dakota	4
South dakota agricultural land values, 2010.....	5
Procedures to estimate and report land values	5
All-agricultural land value estimates, 2010.....	6
Land values and value changes by type of land and region.	8
Cropland values	8
Hayland values	9
Pasture and rangeland values	9
Irrigated land values	9
Variation in land values by land productivity and county clusters	10
Major reasons for purchase and sale of farmland	14
Cash rental rates of South Dakota’s agricultural land	15
2010 Cash rental rates – non-irrigated cropland.....	16
Cash rental rates – hayland and irrigated land	20
2010 Cash rental rates – rangeland and pasture	20
Publications on agricultural land rental arrangements in South Dakota	21
Rates of return to South Dakota agricultural land.	21
Longer-term perspective on farmland market changes, 1991–2010.....	21
Respondents’ assessment of factors influencing farmland markets in South Dakota	24
Agricultural land market expectations: past and prospective	25
List of references	26
Appendix i. Survey methods and response characteristics	27
Appendix ii. Historical data on agricultural land values and cash rental rates	
by land use by region, South Dakota, 1991–2010	29

FIGURES

1. Non-irrigated agricultural land use patterns in South Dakota, statewide and regional	5
2. Average value of South Dakota agricultural land, Feb. 1, 2010, and 2009, and percent change from one year ago	6
3. Average value of South Dakota cropland and hayland, by region, February 2010, dollars per acre	8
4. Average value of South Dakota rangeland and tame pasture, by region, February 2010, dollars per acre	8
5. Reasons for buying farmland	14
6. Reasons for selling farmland	14
7. Average cash rental rate of South Dakota non-irrigated cropland, hay land, and rangeland, by region, 2010, dollars per acre	16
8a. Gross rent-to-value ratio by land use, 1992–2010	22
8b. Net rate of return by land use, 1992–2010	22
9. Annual percentage change in all ag land values in four time periods, 1991–2010	24
10. Positive factors in the South Dakota farm real estate market	24
11. Negative factors in the South Dakota farm real estate market	24

TABLES

1. Average reported value and annual percentage change in value of South Dakota's agricultural land by type of land by region, 2006–2010	7
2. Average reported value per acre of agricultural land by South Dakota region, county clusters, type of land, and land productivity, 2006–2010	11
3. Reported cash rental rates of South Dakota agricultural land by type of land by region, 2006–2010.	17
4. Reported cash rental rates of South Dakota agricultural land by region and county clusters, 2006–2010 rates.	18
5. Estimated rates of return to South Dakota agricultural land by type of land and by region, 1991–2010	22

APPENDIX TABLES

1. Selected characteristics of responses, 2010.	28
2. Average reported value and annual percentage change in value of South Dakota agricultural land by type of land by region, 1991–2010	29
3. Reported cash rental rates of South Dakota agricultural land by type of land by region, 1991–2010	32

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 2010 SDSU South Dakota Farm Real Estate Market Survey, the 20th 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. Martin Beutler and Dr. Gerald Warmann, Economics Extension Specialists; and Mr. Eric Ollila, Agricultural Communications Department, SDSU.

Mr. Emmanuel Opoku, co-author, also conducted many daily tasks during the survey period and drafted updated tables and charts for this report. 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.

General funding for this project is from the SDSU Agricultural Experiment Station project H-207: Economic analysis of agricultural land conservation, land use, and land market changes in South Dakota.

Finally, we wish to thank all of the respondents who participated in the 2010 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.

The electronic version of this report is available at:
<http://agbiopubs.sdstate.edu/articles/C276.pdf>

South Dakota State University, South Dakota counties and U.S. Department of Agriculture cooperating. South Dakota State University is an Affirmative Action/Equal Opportunity Employer and offers all benefits, services, education and employment opportunities without regard for race, color, creed, religion, national origin, ancestry, citizenship, age, gender, sexual orientation, disability, or Vietnam Era Veteran status.
C276. 550 copies printed at a cost of \$2.?? each. June 2010.

SUMMARY

The 2010 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:

- **During the past two years, farmland market values in South Dakota have continued to increase, but at a slower pace than in the prior eight years. The most recent annual (2009 to 2010) increase of 5.2% for all-agricultural land values in South Dakota was the slowest rate of increase since 1996.**

From 2001 to 2008, agricultural land values in South Dakota increased more than 10% each year, including more than 20% in two years (2004 to 2005 and 2007 to 2008) during this period. From 1991 to 2000, annual increases in South Dakota agricultural land values varied from 4 to 10%.

- **Cropland values increased at a higher rate than per-acre value increases for other agricultural land uses. There were considerable regional differences in land value changes.**

Cropland values increased statewide by 6.8%, compared to increases of 4.6% for hayland and 1.9% for rangeland. The strongest increases in land values (above 10% for each land use) occurred in the north-central region. Land value changes were also positive for each land use in the southeast and northwest region. In all other regions, land value changes were mixed, with some combination of increases, stable values, and decreases in per-acre values.

- **From 2009 to 2010, statewide average cash rental rates per acre increased for cropland and hayland and declined slightly for rangeland.**

Statewide average cash rental rates increased \$2.75 per acre for cropland and \$1.35 per acre

for hayland, but declined an average \$1.20 per acre for rangeland. In general, cash rental rate increases for cropland and rangeland were strongest in the three eastern regions and in the north-central region, while declines or minimal changes occurred in the other central and western regions. Cash rental rates for hayland decreased in the east-central and south-central regions, held steady in the western regions, and increased in the remaining regions.

- **Current average rates of cash return on agricultural land in South Dakota are lower in 2010 than in any of the past 20 years.**

For 2010 the average ratio of gross cash rent to current land value for all agricultural land was 4.0%, for nonirrigated cropland was 4.4%, and for rangeland was 3.6%. 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) Federal farm program provisions of the 1996 and 2002 farm bills, especially the level of crop subsidies and removal of planting restrictions.
- (3) General economic conditions of low inflation rates in most years.

From 1991 to 2010, farmland values increased more rapidly than the rate of general price inflation in all regions of South Dakota. Also, continued increases in cash rental rates provide 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 by 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 and southeast regions and lowest in the western regions of South Dakota.

The average value of non-irrigated agricultural land (as of Feb. 2010) in South Dakota is \$1,179 per acre. Non-irrigated agricultural land varies from \$2,712 per acre in the east-central to \$329 per acre in the northwest region. Average non-irrigated cropland values vary from \$3,291 per acre in the east-central to \$1,644 per acre in the central region and \$474 per acre in the northwest region.

Average rangeland values vary from \$1,536 per acre in the east-central to \$296 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 2010 is nearly \$4,300 and the average cash rental rate for cropland is \$163.20 per acre. Cropland values exceed \$3,400 and cash rental rates exceed \$135 per acre in two other eastern county clusters: Clay-Lincoln-Turner-Union and Brookings-Lake-McCook. These are the highest average land values and cash rental rates reported during the past 20 years of the SDSU Farm Real Estate Market Survey.

At the regional level, average cash rental rates per acre for cropland in 2010 vary from \$133.20 in the east-central region to \$24.30 in the northwest

region. Average rangeland and pasture rental rates vary from slightly above \$50 per acre in the east-central and southeast region to \$10.45 per acre in the northwest and \$11 per acre in the southwest region.

• **Farm expansion and investment potential continue as the major reasons for purchasing farmland, while retirement from farming, settling estates, and realizing gains from high sale prices are the major reasons for selling farmland.**

Low interest rates and favorable financing, investment potential for farmland, relatively high commodity prices, good crop yields, and continued farm profits were the major positive factors. Continued investor interest in farmland, federal farm programs and crop insurance, and shift of funds from the stock market were also listed. The prospects of lower commodity prices and lower returns, economic recession, rising input costs, tighter credit, and heightened uncertainty and volatility in the economy were the main negative factors.

• **Compared to the booming market psychology of recent years, respondents were cautiously optimistic about current and prospective land market conditions.**

Few respondents to the 2009 survey forecast increasing land values from 2009 to 2010, and nearly half forecast land value declines, which was a major reversal from positive forecasts made in prior years. However, the anticipated sharp declines in land values did not materialize, and land values increased or held steady in most areas of South Dakota. For next year, a majority of respondents, 52% to 58%, depending on land use, expect no change in land values in the next 12 months, while 26% to 31% expect increasing land values, and only 15% to 18% of respondents forecast declining land values.

South Dakota Agricultural Land Market Trends 1991–2010

Dr. Larry Janssen, Dr. Burton Pflueger, and Mr. Emmanuel Opoku¹

The *2010 SDSU Farm Real Estate Market Survey* is the 20th 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 2010 estimates are based on reports from 238 responses² to the 2010 SDSU survey. Responses are from agricultural lenders, Farm Service Agency officials, rural appraisers, assessors, realtors, professional farm managers, and Extension agricultural educators. All are familiar with farmland market trends in their localities.

Copies of the SDSU survey were mailed in February and March 2010. The surveys requested information on cash rental rates and agricultural land values as of February 2010. 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 2009. Regional information on land values and cash rents by land use (crop, hay, range, pasture, and irrigated crop/hay)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.

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. Opoku is a research assistant in the Dept. of Economics.

² Responses are the number of survey schedules completed for one or two counties. A growing number of respondents completed separate 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. Because most irrigated land in South Dakota is used for crop or hay production, we report the value and rental rates of irrigated land used for these purposes. These major land uses comprise nearly 98% of privately owned land in farms in South Dakota (Janssen 1999).

CHANGING ECONOMIC CONDITIONS IN SOUTH DAKOTA

Most renters, buyers, and sellers of farmland continue to be local area residents, although there has been greater outside interest in recent years. Land market trends are influenced by changing conditions in the general and agricultural economies and are strongly influenced by land market participants' expectations of future trends and the availability of debt or equity financing. Some key economic conditions in South Dakota are reviewed in this section.

The South Dakota agricultural economy

Rapid increases in the value of crop production in 2007 and 2008 were matched by similar rates of increase in purchased input costs, growth in net farm income, and value added by the South Dakota farm sector. For example, the value of crop production increased from \$1.71 billion in 2006 to \$3.93 billion in 2007 and \$5.63 billion in 2008—with most of the increases occurring from increased value of feed grains, oil crops, and wheat production. The value of livestock, dairy, and poultry production did not change very much in the same period, increasing from \$2.57 billion in 2006 to \$2.67 billion in 2008. Purchased input costs increased from \$3.09 billion in 2006 to \$4 billion in 2007 and \$4.58 billion in 2008 with more than half of the increase due to rising fertilizer, chemical, seed, and fuel expenses (USDA-ERS 2010). The net impact of government payments on farm income was much lower in 2007 and 2008 compared to its net impact from 2000 to 2006.

The initial impact of rapid escalation in crop production values and increased production costs were major boosts in net value added and net farm income. Net value added from South Dakota's farm sector increased from \$1.55 billion in 2006 to \$2.80 billion in 2007 and to \$4.13 billion in 2008 (USDA-ERS 2010). Net farm income (which equals net value added minus payments to hired labor, landlords, and interest payments to lenders) increased from \$0.75 billion in 2006 to \$1.84 billion in 2007 to \$3.06 billion in 2008 (USDA-ERS 2010). During the past decade, net value added and net farm income in 2008 was the highest recorded, while 2007 was fairly similar to the 2003–2005 period.

Compared to 2008, crop production value in 2009 declined by 4% and cash receipts for cattle, hogs, and sheep declined by 11%. Input costs probably increased. Farm earnings, both gross and net earnings, declined from the peak levels recorded in 2008 (South Dakota Ag Statistics Service 2010)

Based on the 4th quarter, 2009, Agricultural Credit Conditions survey of the Minneapolis Federal Reserve Bank, adequate credit remained available for most farm customers, but farm loan demand was flat and collateral requirements were increased. Nearly half of farm lenders reported declines in farm income for 2009, while one-fifth reported increased farm income. Wet conditions, which affected the ability to harvest corn in South Dakota, and declining livestock incomes were also creating concerns for some lenders.

This recent history of the South Dakota agricultural economy has likely influenced the opinions and actions of buyers and sellers in the South Dakota farm real estate market. All of the factors leading to major gains in crop revenue and net farm income helped sustain the boom in farmland values through 2008, while subsequent declines in farm economic conditions may partly explain the slowdown in land value increases during the past two years.

Financial turmoil in the stock market and in the national credit markets in the latter months of 2008 and the first six months of 2009 was also a contributing factor—but the extent of its impact on the farm real estate market is much debated. The national credit crisis had major impacts on availability of commercial loans, home mortgage loans, and consumer credit in many regions of the United States and was a major causal factor of the U.S. economic recession. However, the negative impacts on agricultural credit in South Dakota appear to be minimal.

South Dakota Employment and Personal Income

South Dakota has been affected by the national economic recession, but the impacts have been less severe than in most other states. Since the beginning of the economic recession (December 2007), South Dakota has experienced increased unemployment rates and a modest amount of job losses. Comparisons of non-farm employment and unemployment

in February 2008, 2009, and 2010 (when the farmland surveys were conducted) reveal employment losses of 2.5% (nearly 10,000 fewer workers) over the 2-year period and increased unemployment rate from 2.7% to 4.8%. However, South Dakota's unemployment rate was the third lowest among the 50 states and much lower than the U.S. unemployment rate, which increased from 4.8% in Feb. 2008, to 8.2% in Feb. 2009, and to 9.7% in Feb. 2010 (U.S. Dept. of Labor, Bureau of Labor Statistics). Economic forecasts for the remainder of 2010 were projecting modest job growth and slight reduction in unemployment rates.

Personal income in South Dakota increased throughout 2007 and into the third quarter of 2008, but declined by 3.5% through the third quarter of 2009, before achieving a fourth quarter 2009 gain of 2.2%—the nation's highest rate of gain. Most of the swings in South Dakota personal income in 2008 and 2009 were due to income changes in the farm sector, as nonfarm income changes were much lower (U.S. Dept. of Commerce, Bureau of Economic Analysis)

The questions many wondered about were how deep the national recession was going to be and what would be the extent of negative impacts in South Dakota. Most South Dakotans were aware that the Federal Reserve, along with the U.S. Congress and the president, were using extraordinary tools to avoid an even deeper recession. At this point, there are some gains in employment and personal income in South Dakota contributed in part by the economic strength of the state's agricultural sector.

SOUTH DAKOTA AGRICULTURAL LAND VALUES, 2010

Procedures to estimate and report land values

Respondents to the 2010 South Dakota Farm Real Estate Market Survey estimated the per-acre value of non-irrigated cropland, hayland, 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 cor-

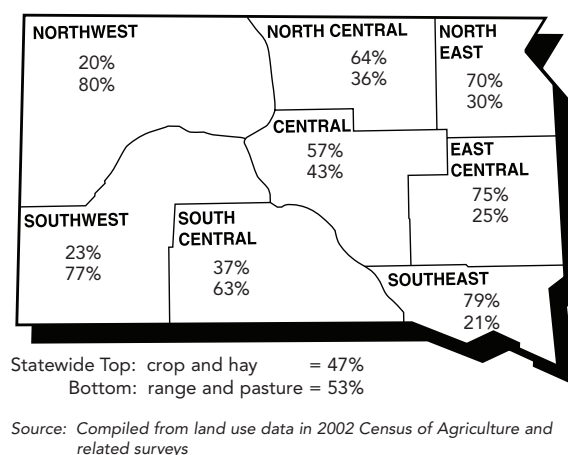
respond with USDA Agricultural Statistics Districts. In western South Dakota, farmland values and cash rental rates are reported for the northwest and southwest regions. Land values and cash rental rates are reported only for privately owned land and should not be considered as estimated values for tribal or federal lands.

Irrigated land is only 1% of farmland acres in South Dakota. Responses for irrigated land values and rental rates are regrouped into six regions: western, central, north-central, northeast, east-central, and southeast. The western region has reports from the northwest, southwest, and south-central regions.

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 both 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 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

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



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 hayland or cropland (fig. 1).

Statewide, an estimated 47% of private farmland acres are cropland or hayland, and 53% is rangeland or tame pasture (fig. 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, 2010

As of February 2010, the average value of all-agricultural land in South Dakota was \$1,179 per acre, a 5.2% increase in value from one year earlier (fig. 2 and table 1). Agricultural land values increased in the northwest region and in all five regions east of the Missouri River in South Dakota, remained nearly steady in the southwest, and declined in the south central region.

The statewide change of 5.2% is the slowest rate of increase since 1996, when land values increased

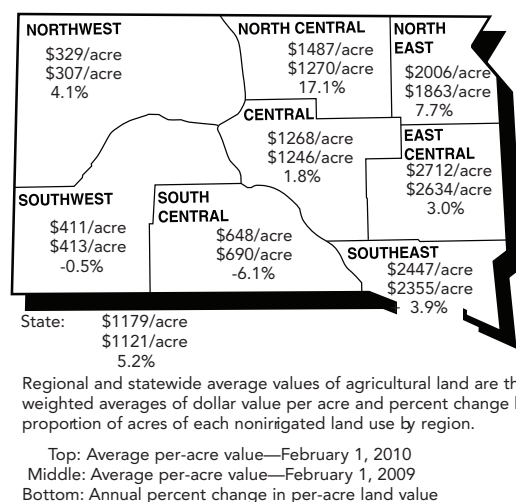
4.4% from one year earlier. From 2001 to 2008, annual increases in all-agricultural land values varied from 9.1% in 2001 to 22.5% in 2008. In 2009, all-land values increased by 7.7%. Overall, agricultural land values in South Dakota have more than doubled since 2004 and have increased 5-fold since 1992 (appendix table 2).

The all-land average values are highest in the eastern regions; per-acre values there range from \$2,712 in the east-central region to \$2,447 in the southeast region to \$2,006 in the northeast region. This is the first year that all-land values averaged more than \$2,000 per acre in all three eastern regions. Per-acre increases from 2009 to 2010 varied from \$78 per acre in the east-central to \$143 per acre in the northeast region (table 1). These three eastern regions contain the most productive land in South Dakota. Cropland and hayland are the dominant agricultural land uses in eastern South Dakota, varying from 70% of farmland acres in the northeast to 79% in the southeast (fig. 1).

Average per-acre agricultural land values in the north-central and central regions are much higher than corresponding land values in western and south-central South Dakota and considerably lower than average land values in the eastern regions. Average land values were \$1,487 per acre in the north-central region and \$1,268 per acre in the central region (table 1). Average land values are usually higher in the north-central region due to the greater proportion of cropland and hayland. Also, the north-central was the only region where reported land values increased more than 10% from 2009 to 2010.

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 \$648 in the south-central region to \$329 per acre in the northwest region. The per-acre change in land values varied from a decline of \$42 in the south-central region to an increase of \$22 per acre in the northwest region (table 1). Rangeland and pasture are the dominant agricultural land uses.

Fig 2. Average value of South Dakota agricultural land, February 1, 2009 and 2010, and percent change from one year ago.



Source: 2010 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, 2006-2010.

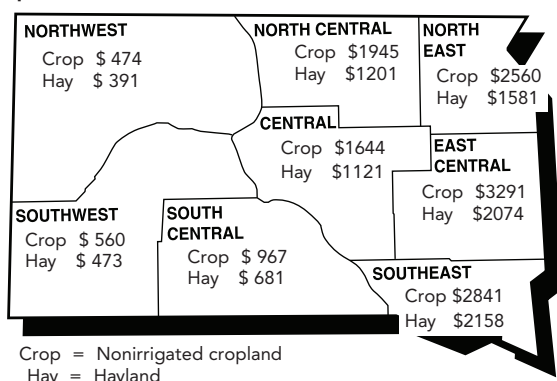
Type of Land	South-east	East-Central	North-east	North-Central	Central	South-Central	South-west	North-west	STATE
dollars per acre									
All Agricultural Land (nonirrigated)									
Average value, 2010	2447	2712	2006	1487	1268	648	411	329	1179
Average value, 2009	2355	2634	1863	1270	1246	690	413	307	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
Annual % change 10/09	3.9%	3.0%	7.7%	17.1%	1.8%	-6.1%	-0.5%	7.2%	5.2%
Nonirrigated Cropland									
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	137
Average value, 2006	1817	1914	1448	1088	986	612	387	342	1211
Annual % change 10/09	3.6%	4.3%	11.1%	16.3%	4.2%	-4.0%	-6.0%	10.7%	6.8%
Rangeland (native)									
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
Annual % change 10/09	6.4%	5.3%	-4.9%	15.9%	-3.7%	-9.8%	2.0%	6.9%	1.9%
Pasture (tame, improved)									
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
Annual % change 10/09	7.4%	-9.6%	-14.2%	19.8%	1.8%	13.8%	0.0%	1.9%	-0.4%
Hayland									
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	107
Average value, 2007	1659	1637	1028	750	815	525	356	327	875
Average value, 2006	1383	1371	831	640	758	499	346	300	758
Annual % change 10/09	2.9%	-2.0%	14.0%	24.9%	1.1%	-5.4%	-3.1%	4.8%	4.6%
Type of Land	South-east	East-Central	North-east	North-Central	Central	Western	STATE		
dollars per acre									
Irrigated land									
Average value, 2010	3611	3632	3142	2986	2468	1533	2578		
High Productivity	4600	4489	4092	3109	2985	1833			
Low Productivity	3044	2979	2373	2275	2046	1217			
Average value, 2009	3373	3429	3085	2083	2095	1162	2240		
Average value, 2008	3020	3070.9	2681	1607	2156	925	1970		
Average value, 2007	2547	2649	2100	1531	1578	951	1699		
Average value, 2006	2354	2305	1610	1329	1422	871	1518		
Annual % change 10/09	7.1%	5.9%	1.8%	43.4%	17.8%	31.9%	15.1%		

Source: 2010 and earlier South Dakota Farm Real Estate Market Surveys
Statewide average land values are based on 2002 land use weights

LAND VALUES AND VALUE CHANGES BY TYPE OF LAND AND REGION

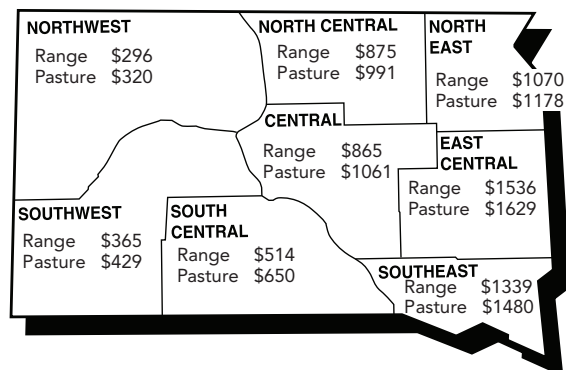
In each region, per-acre values are highest for irrigated land, followed by nonirrigated cropland, hayland, tame pasture, and native rangeland. For each nonirrigated land use, per-acre land values are highest in the three eastern regions and lowest in the northwest, southwest, and south-central regions (figs. 3 and 4; table 1).

Fig 3. Average value of South Dakota cropland, and hayland, by region, February 2010, dollars per acre.



Source: 2010 South Dakota Farm Real Estate Market Survey, SDSU.

Fig 4. Average value of South Dakota rangeland and tame pasture, by region, February 2010, dollars per acre.



Source: 2010 South Dakota Farm Real Estate Market Survey, SDSU.

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 Feb. 2010) is \$2,030 per acre, a 6.8% increase from 2009 (table 1). This is the first year that statewide average non-irrigated cropland values exceed \$2,000 per acre! Also, it is the slowest rate of annual increase since 2000, when per-acre cropland values increased only 6.2%. Statewide per-acre cropland values have more than doubled since 2004 and have quintupled since 1992 (appendix table 2).

Cropland values increased in the northwest region and in all five regions east of the Missouri River in South Dakota. Percentage rates of increase from 2009 to 2010 vary from 3.6% to 4.3% in the southeast, east-central, and central regions to more than 10% in the northwest, north-central, and northeast region. Cropland values declined an estimated 4.0% in the south-central and 6.0% in the southwest regions.

This is the second consecutive year that average cropland values exceed \$3,000 per acre in any South Dakota region. The east-central region has the highest cropland value of \$3,291 per acre, followed by cropland values of \$2,841 in the southeast region and \$2,560 in the northeast region. The per-acre increase in cropland values varied from \$100 in the southeast region to \$255 in the northeast region (fig. 3; table 1; and appendix table 2).

These 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, wheat and some other small grains in most counties of the north-central and central regions.

Average cropland values of \$1,945 per acre in the north-central region are higher than the average of \$1,644 per acre in the central region. From 2009 to 2010, cropland values increased more rapidly in the north-central region than in all other South Dakota regions.

Cropland values are considerably lower in the three regions west of the Missouri River. As of February

2010, per-acre cropland values averaged \$967 in the south-central region, \$560 in the south-central region, and \$474 in the northwest region.

These three regions 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. In most years since 2000, cropland values have been increasing at a much slower rate in the three regions west of the Missouri River compared to the more cropland intensive regions east of the Missouri River.

Hayland values

South Dakota hayland values averaged \$1,195 per acre as of February 2010, a 4.6% increase from one year earlier (table 1). The strongest annual increases, above 10%, were reported in the northeast and north-central regions. Changes of less than 5% were reported in the other six regions, with slight to modest declines reported in three regions and slight to modest increases reported in the other three regions. Statewide, hayland values have more than doubled since 2004 and quintupled from 1992 (appendix table 2).

Average hayland values are highest in the southeast and east-central regions, with per-acre values of \$2,158 and \$2,074, respectively. Hayland values are considerably lower in the other regions east of the Missouri River, varying from \$1,581 per acre in the northeast region to \$1,202 in the north-central region and \$1,121 in the central region.

Substantially lower values of hayland are found in all regions west of the Missouri River, varying from \$681 per acre in the south-central region, to \$473 in the southwest region, to \$391 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 2010, the value of South Dakota native rangeland averaged \$540 per acre, while the average value of tame pasture was \$854 per acre (table 1). Native rangeland is concentrated in the western and central regions of South Dakota, while tame pasture is concentrated in the central and eastern regions.

The statewide average rangeland and tame pasture values changed less than 2% during the past year (Feb. 2009 to Feb. 2010). This is among the lowest annual average rate of change in the past 20 years. It is also the second consecutive year since 2001 that South Dakota rangeland and tame pasture values have increased less than 10% annually. Statewide, per-acre values of rangeland and tame pasture have more than doubled since 2003 and nearly quadrupled in per-acre value from 1995 (appendix table 2)

Average rangeland values are highest in the east-central and southeast regions (\$1,536 and \$1,339 per acre, respectively) and lowest in the southwest and northwest region (average value of \$365 and \$296 per acre, respectively). In other regions, average rangeland values vary from \$514 per acre in the south-central region to \$1,070 per acre in the northeast region (fig. 4 and table 1).

In most regions, average values of tame pasture varied from 6 to 17% higher than the average value of rangeland. However, due to differences in regional concentration, the statewide average value of tame pasture was 58% higher than the average value of rangeland. Three-fourths of rangeland acres are located in counties west of the Missouri River, compared to less than half of tame (improved) pasture acres.

In the cropland-intensive regions of eastern South Dakota and in the north-central region, the average per-acre value of nonirrigated cropland varies from 2.1 to 2.4 times the average value of native rangeland. In the more rangeland-intensive central and western regions, the average per-acre value of cropland varies from 1.53 to 1.9 times the average value of rangeland. Tame pasture land values per acre are in between the rangeland and hayland values in all regions.

Irrigated land values

Irrigated land value reports are consolidated into six regions (table 1). Very few irrigated land reports were received from respondents in the three regions west of the Missouri River, which made it necessary to combine reports from these regions. Irrigated land in the western regions is predominantly gravity-irrigated hay and cropland in counties adjacent to the Black Hills and some center-pivot-irrigated land

in south-central counties. In all other regions the value of irrigated land was reported for center-pivot irrigation systems, excluding the value of the center pivot.

We continue to caution readers that irrigated land value data are less reliable than data on land values reported for other agricultural land uses. Irrigated land is not common (less than 1% of total acres) in most regions, and there are few sales of irrigated land tracts. Consequently, only 29% of all respondents were familiar with and able to provide information on irrigated land values.

Irrigated land values increased in all regions with slight to moderate increases in the three eastern regions to major increases in all other regions. State-wide average irrigated land values are \$2,578 per acre, a 15.1% increase from one year earlier. Irrigated land values vary from an average of \$3,632 and \$3,611 per acre, respectively, in the east-central and southeast regions to \$1,533 per acre in the western region (table 1).

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 2010 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: south-east, east-central, northeast, north-central, and central. Land values are not reported for county clusters in regions west of the Missouri River because there are too few reports. This survey is not designed to reflect the substantially higher land values in or near the Black Hills.

Substantial variation in per-acre land value occurs by degree of land productivity for each land use in each region. For example, 2010 cropland values in the

east-central region vary from an average of \$2,452 per acre for low-productivity cropland to \$4,097 per acre for high-productivity cropland. At the other extreme, the average value of low productivity cropland in the northwest region is \$372, compared to \$576 per acre for high-productivity cropland. Across regions, average values of low-productivity cropland were 49% to 65% of the average values of high-productivity cropland.

Rangeland values in the east-central region vary from an average of \$1,186 per acre for low-productivity rangeland to \$1,841 per acre for high-productivity rangeland. In the northwest region, at the other extreme, the average value of low-productivity rangeland is \$242 per acre, compared to \$397 per acre for high-productivity rangeland. Across all regions, the average value of low-productivity rangeland varies from 61% to 66% of high-productivity rangeland (table 2).

In 2010, average nonirrigated cropland values were nearly \$4,300 per acre in the Minnehaha-Moody county cluster, above \$3,400 per acre in two county clusters (Clay-Lincoln-Turner-Union [CLTU] and Brookings-Lake-McCook), and just above \$3,000 per acre in the Codington-Hamlin-Deuel cluster. Cropland values were between \$2,200 and \$2,600 per acre in five other county clusters in the north-central and three eastern regions (table 2). As recently as 2006, average cropland values exceeded \$2,200 per acre in only two county clusters, compared to nine county clusters in 2010.

In 2010, average cropland values in the east-central and southeast regions varied from \$4,298 per acre in the Minnehaha-Moody county cluster to \$1,994 per acre in the Charles Mix-Douglas county cluster. Similar patterns, but much lower values, also occur for rangeland and pasture in these two eastern regions. For example, rangeland values varied from an average of \$1,925 per acre in the Minnehaha-Moody county cluster to \$1,154 per acre in the Charles Mix-Douglas county cluster.

In the northeast region, average values of cropland in 2010 varied from \$2,234 in the Clark-Day-Marshall county cluster to \$3,007 per acre in the Codington-Deuel-Hamlin cluster. Similar land-value patterns by county cluster were also evident for rangeland, with

Table 2. Average reported value per acre of agricultural land by South Dakota region, county clusters, type of land, and land productivity, February, 2006 - 2010.

Agricultural Land	Southeast				East Central			
		Clay Lincoln Turner	Bon Homme Hutchinson	Charles Mix		Min- nehaha Moody	Brookings Lake	Sanborn Davison Hanson Kingsbury
Type and Productivity	All	Union	Yankton	Douglas	All		McCook	Miner
dollars per acre								
Nonirrigated Cropland								
Average 2010	2841	3577	2547	1994	3291	4298	3419	2536
High Productivity	3771	4680	3551	2356	4097	5485	4197	3125
Low Productivity	2149	2664	1936	1575	2452	2992	2555	1844
Average 2009	2741	3337	2651	1807	3155	4064	3099	2295
Average 2008	2510	3246	2304	1656	2894	3778	2823	2250
Average 2007	1999	2527	1881	1253	2242	2892	2288	1874
Average 2006	1817	2266	1603	1219	1914	2595	2019	1434
Rangeland (native)								
Average 2010	1339	1454	1314	1154	1536	1925	1467	1402
High Productivity	1677	1820	1643	1454	1841	2321	1778	1659
Low Productivity	1032	1114	1021	885	1186	1507	1113	1090
Average 2009	1258	1325	1244	1184	1458	1903	1379	1204
Average 2008	1239	1384	1231	1091	1539	1790	1602	1351
Average 2007	1073	1264	1032	870	1293	1547	1292	1204
Average 2006	925	1047	881	791	1055	1432	1041	973
Pastureland (tame, improved)								
Average 2010	1480	1592	1464	1275	1628	2171	1664	1444
High Productivity	1866	1962	1893	1617	1946	2614	2046	1658
Low Productivity	1141	1208	1133	1017	1233	1707	1248	1088
Average 2009	1378	1513	1289	1253	1803	2531	1590	1489
Average 2008	1365	1625	1362	1055	1675	2105	1756	1368
Average 2007	1167	1389	1085	927	1461	1703	1440	1403
Average 2006	1085	1242	986	933	1166	1453	1134	1063
Hayland								
Average 2010	2158	2665	2002	1479	2074	3064	2067	1609
High Productivity	2744	3378	2641	1721	2544	3918	2465	1980
Low Productivity	1595	1926	1480	1179	1551	2336	1535	1193
Average 2009	2098	2377	2111	1569	2116	2952	1977	1382
Average 2008	1871	2353	1770	1409	2127	2826	1987	1694
Average 2007	1659	2084	1669	1000	1637	2265	1685	1328
Average 2006	1383	1700	1312	932	1371	2250	1315	1037

Source: South Dakota Farm Real Estate Market Survey, SDSU, 2010 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 2010	2560	3007	2536	2234	1945	2573	1435	1541
High Productivity	3600	4127	3493	3250	2623	3613	1882	1883
Low Productivity	1772	2198	1756	1458	1362	1758	1054	1085
Average 2009	2305	2608	2294	2024	1673	2350	1187	998
Average 2008	2076	2274	2107	1822	1532	2318	1168	957
Average 2007	1762	1856	1866	1558	1187	1691	951	814
Average 2006	1448	1541	1557	1298	1088	1498	818	775
Rangeland (native)								
Average 2010	1070	1242	1107	929	875	1143	744	662
High Productivity	1287	1456	1300	1158	1068	1455	881	757
Low Productivity	846	994	854	734	663	805	631	504
Average 2009	1125	1230	1063	1045	755	976	702	478
Average 2008	1100	1202	1143	937	714	932	686	519
Average 2007	889	937	912	808	634	798	611	400
Average 2006	751	763	771	728	548	704	489	422
Pastureland (tame, improved)								
Average 2010	1178	1332	1210	1017	991	1400	757	680
High Productivity	1465	1623	1450	1322	1176	1673	911	776
Low Productivity	948	1102	966	793	728	980	619	490
Average 2009	1373	1479	1425	1215	827	1055	735	581
Average 2008	1304	1362	1260	1224	795	1004	810	617
Average 2007	987	1027	1000	908	698	910	694	408
Average 2006	843	834	860	847	598	760	537	437
Hayland								
Average 2010	1581	2005	1330	1346	1202	1733	900	762
High Productivity	2061	2618	1580	1804	1508	2248	1063	931
Low Productivity	1175	1495	1046	976	827	1086	716	562
Average 2009	1387	1600	1192	1282	962	1295	744	643
Average 2008	1347	1414	1558	1077	939	1077	753	640
Average 2007	1028	1084	1013	964	749	1020	663	474
Average 2006	831	924	844	736	640	814	591	477

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 2010	1644	1709	1624	1599	967	560	474
High Productivity	2081	2176	2015	2050	1219	688	576
Low Productivity	1257	1424	1163	1186	633	428	372
Average 2009	1577	1768	1379	1440	1007	597	428
Average 2008	1450	1601	1315	1300	904	502	399
Average 2007	1086	1110	1139	977	702	426	368
Average 2006	986	1068	994	858	612	387	342
Rangeland (native)							
Average 2010	865	1067	839	631	514	365	296
High Productivity	1063	1313	1021	785	649	452	397
Low Productivity	669	767	679	521	425	305	242
Average 2009	898	1030	797	788	570	358	277
Average 2008	836	998	774	636	544	339	271
Average 2007	708	780	821	459	448	295	265
Average 2006	599	677	611	450	397	255	234
Pastureland (tame, improved)							
Average 2010	1061	1167	1126	811	650	473	320
High Productivity	1263	1387	1347	962	795	543	396
Low Productivity	821	867	880	680	537	378	261
Average 2009	1042	1190	845	**	571	429	314
Average 2008	943	1060	858	810	571	384	307
Average 2007	760	854	854	481	524	303	297
Average 2006	711	771	728	531	425	283	282
Hayland							
Average 2010	1121	1313	1156	723	681	455	391
High Productivity	1395	1607	1467	918	874	564	464
Low Productivity	868	980	889	683	550	392	309
Average 2009	1109	1244	1022	833	720	489	373
Average 2008	1050	1264	949	775	649	450	334
Average 2007	815	931	876	560	526	356	327
Average 2006	758	812	767	558	498	346	300

per-acre rangeland values averaging two-fifths of cropland values.

Across the three eastern regions, average hayland values were highest in the Minnehaha-Moody cluster at \$3,064 per acre, followed by \$2,665 per acre in the CLTU county cluster. Hayland values were slightly above \$2,000 per acre in three other clusters (Bon Homme-Hutchinson-Yankton, Brookings-Lake-McCook, and Codington-Hamlin-Deuel). Across the remaining county clusters, hayland values varied from an average of \$1,609 to \$1,330 per acre.

In the north-central region, average land values in Brown and Spink counties are much higher than those found in other counties, especially for cropland. Most cropland in Brown and Spink counties is located in the James River valley and is more productive than other land in this region. For example, non-irrigated cropland values averaged \$2,573 per acre in the Brown-Spink county cluster, compared to only \$1,435 per acre in the Edmund-Faulk-McPherson county cluster. For comparison purposes, rangeland values averaged \$1,143 per acre in the Brown-Spink cluster and only \$662 per acre in the Campbell-Potter-Walworth cluster.

In the central region, average per-acre land values for each land use were highest in the Aurora-Beadle-Jerauld cluster and lowest in the Hughes-Sully county cluster. Rangeland values were distinctly different between each county cluster. Cropland, hayland, and pasture land values in the Buffalo-Brule-Hand-Hyde cluster were only slightly lower than corresponding values in the Aurora-Beadle-Jerauld county cluster. Within the central region, land values varied from an average of \$631 per acre for rangeland in the Hughes-Sully county cluster to \$1,709 per acre for cropland in the Aurora-Beadle-Jerauld county cluster.

Crop, hay, and rangeland values increased in 13 of the 15 county clusters located east of the Missouri River. The strongest percentage increases in per-acre land values were usually found in county clusters of the north-central and northeast regions. Pasture values held steady or increased in nine clusters and declined in six county clusters.

For regions west of the Missouri River, average land values for each land use are highest in the south-central region and lowest in the northwest region. During the past year, land values increased for each land use in the northwest region, but declined or held steady for most land uses in the south-central and southwest regions. Average land values vary from \$296 per acre for rangeland in the northwest region to \$967 per acre for cropland in the south-central region.

MAJOR REASONS FOR PURCHASE AND SALE OF FARMLAND

During each of the 20 years of the SDSU Farm Real Estate Market Survey, respondents have been asked to provide major reasons for buying and selling farmland in their localities. Nearly 92% of respondents provided one or two reasons in each category.

Farm expansion (37%) was the most common reason given for purchasing farmland (fig. 5). Twenty-three percent cited investment-related purposes as a major reason. Investment purposes varied from purchasing farmland and speculating on higher increases in land values to seeking better long-term returns than those available in the stock market. The next five reasons for purchase of farmland (each listed by 3% to 9% of total responses) are location, farming pursuits, hunting/recreation, favorable commodity prices and farm profits, and low mortgage interest rates.

Fig 5. Reasons for buying farmland

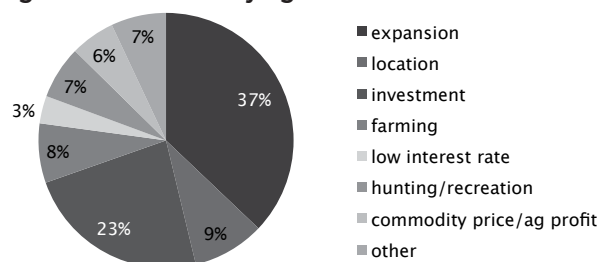
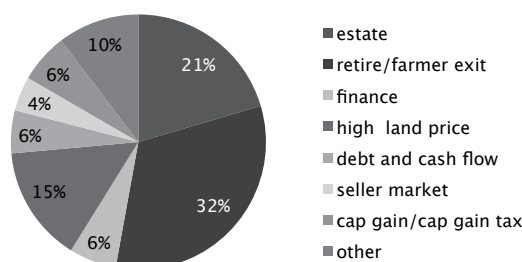


Fig 6. Reasons for selling farmland



Farm expansion continues to be the most commonly cited reason for purchasing farmland, but the proportion of responses has declined from 48% of responses in 1994 to 31% in 2008 to 37% in 2010.

Retirement, estate settlement, and high land prices were the most common reasons for selling farmland (fig. 6). Retirement or farmer exit was listed by 32% of responses. Twenty percent of responses listed estate settlement as the major reason for selling, and another 15% stated that farmland was sold to capitalize on current high land prices. Closely related reasons, listed by another 10% of responses, were increased demand for farmland (seller's market) and currently low capital gains taxes.

Another 10% of responses cited financial pressures and seller's need to reduce debt and generate greater cash flow as major reasons for selling farmland. The incidence of financial pressure as a primary motivation for selling has increased from 4 to 7% of responses in the past five years to 10% in the current (2010) survey.

In most areas of South Dakota, farmers and ranchers expanding their operation are still the principal buyers of agricultural land. However, their dominance in the local area land market continues to be challenged by investors, both local and non-local, interested in purchasing agricultural land for various reasons, including leasing land to local farmers, leasing/developing land for hunting and other recreation opportunities, and other motives. The implication is that farm ownership expansion comes at a higher price than before.

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 (57%)

of farmland leases 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 (fig. 7 and table 3).

From 2009 to 2010, statewide average cash rental rates increased \$2.75 per acre for cropland and \$1.35 per acre for hayland, but decreased an average of \$1.20 per acre for pasture and rangeland. The statewide average percentage change in cash rental rates was +3.2% for cropland, +2.7% for hay land, and -6.0% for pasture and rangeland. This change in annual cash rental rates was much lower compared to the changes reported in the previous two survey periods of 2007–2008 and 2008–2009.

Cash rental rates for cropland continued to increase in the three eastern regions and in the north-central and central regions, with the strongest increases of 9.5% and +\$9.40 per acre occurring in the northeast region. Cash rental rates for hayland showed a similar regional pattern, except for declines reported in the east-central region. All other regions showed minimal increases or declines in average cash rental rates.

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.

Rangeland cash rental rates increased an average of \$0.65 to \$3.80 per acre in the north-central and three eastern regions, had minimal change in the northwest region, and had declines from \$1.60 to \$5.30 per acre reported in the central, south-central, and southwest regions.

Overall, strong increases in cash rental rates and land values occurred for all land uses in the north-east region and for cropland and hayland in the north-central region. Declines in cash rental rates and land values occurred for all land uses in the south-central region. In all other regions, the changes in land values and cash rental rates were mixed or relatively modest.

2010 cash rental rates – nonirrigated cropland

Average cash rental rates in 2010 for nonirrigated cropland vary from \$24.30 to \$26.60 per acre in the western regions to \$133.20 per acre in the east-central region (fig. 7 and table 3). This is the first time that average cash rental rates for cropland exceed \$100 per acre in all three eastern regions.

Average cash rental rates for cropland are highest at \$163.20 per acre in the Minnehaha-Moody county cluster. The next two highest cash rental rates average \$147 per acre for cropland in the Clay-Lincoln-Turner-Union (CLTU) county cluster and \$137.30 per acre for cropland in the Brookings-Lake-McCook county cluster (table 4). Cash rental rates for high-productivity cropland in these same three

county clusters vary from \$222 to \$186 per acre.

Average cash rental rates vary from \$106 to \$117 per acre across four other county clusters in eastern South Dakota. Average cash rental rates for high-productivity cropland in these same county clusters vary from \$149 to \$179 per acre. These four county clusters include Grant-Roberts and Codington-Deuel-Hamlin county clusters in the northeast region, the five western counties in the east-central region, and Bon Homme-Hutchinson-Yankton in the southeast region.

Two adjacent county clusters, Brown-Spink in north-central region and Clark-Day-Marshall in the northeast region, had similar cash rental rates for cropland, averaging \$97.70 and \$94.60 per acre, respectively.

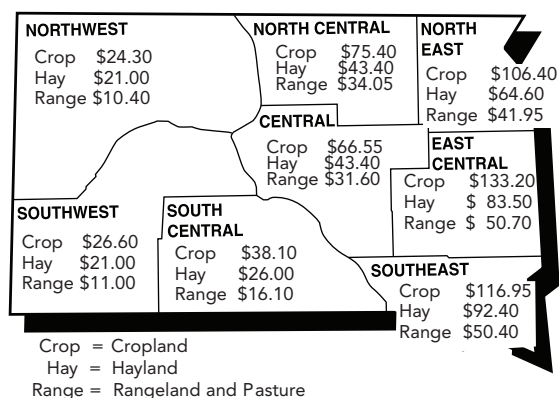
Average cash rental rates in the remaining six county clusters of the central, north-central, and south-east regions vary from \$56.60 in Campbell-Potter-Walworth to \$81.55 per acre in Charles Mix-Douglas. Within these same county clusters, average cash rental rates for high-productivity cropland varied from about \$81 to \$115 per acre (table 4).

Average cash rental rates for high-, average-, and low-productivity cropland are much lower in all regions west of the Missouri River.

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 \$88.95 per acre for low-productivity cropland and \$182.80 per acre for high-productivity cropland. In the northwest region, the average cash rent for low-productivity cropland is \$19.30 per acre, while cash rental rates for high-productivity cropland average \$30.30 per acre (tables 3 and 4).

Cropland cash rental rates from 2009 to 2010 increased in the north-central and three eastern regions, were stable in the central and northwest regions, and decreased in the south-central and southwest regions. The average dollar amount of change in cropland cash rental rates varied from +\$9.40 per acre in the northeast region to -\$4.50

Fig 7. Average cash rental rate of South Dakota non-irrigated cropland, hayland, and rangeland, by region, 2010, dollars per acre.



Source: 2010 South Dakota Farm Real Estate Market Survey, SDSU.

Table 3. Reported cash rental rates of South Dakota agricultural land by type of land by region, 2006-2010.

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 2010 rate	116.95	133.20	106.40	75.40	66.55	38.10	26.60	24.30	86.65
High Productivity	167.40	182.80	161.40	110.35	102.80	58.35	35.60	30.30	
Low Productivity	80.45	88.85	69.90	49.80	42.50	23.60	19.10	19.30	
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
Average 2007 rate	92.30	91.65	77.85	56.75	48.95	32.65	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
Hayland									
Average 2010 rate	92.40	83.50	64.60	43.40	43.30	26.00	21.00	18.60	51.50
High Productivity	126.90	107.20	91.00	59.60	63.00	34.70	27.80	23.70	
Low Productivity	63.30	57.40	43.90	28.40	28.00	17.10	14.00	14.35	
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
Average 2007 rate	74.00	67.55	45.10	34.25	31.35	25.70	18.80	18.40	41.35
Average 2006 rate	72.90	60.50	40.20	30.20	34.60	27.30	19.55	18.15	39.80
Pasture/Rangeland									
Average 2010 rate	50.40	50.70	41.95	34.05	31.60	16.10	11.00	10.45	18.60
High Productivity	68.00	67.95	54.30	45.35	44.30	24.75	14.25	13.70	
Low Productivity	33.20	35.65	29.00	24.85	21.05	10.60	8.21	6.95	
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
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
dollars per Animal Unit Month									
Average 2010 rate	29.70	***	***	***	28.00	26.25	27.40	23.20	
High Productivity	37.70	***	***	***	36.00	35.50	32.50	27.10	
Low Productivity	22.20	***	***	***	21.90	18.60	20.60	17.75	
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	
Average 2006 rate	25.15	26.00	25.25	23.10	24.45	24.45	24.15	20.85	
dollars per acre									
Irrigated land									
Average 2010 rate	171.20	141.90	127.10	121.90	131.70	90.70	125.70		
High Productivity	216.40	177.30	163.30	146.90	167.00	104.30			
Low Productivity	135.25	114.60	96.70	100.60	97.90	70.70			
Average 2009 rate	178.15	158.50	143.10	108.65	120.15	67.50	118.5		
Average 2008 rate	154.75	139.80	134.00	87.85	113.00	62.50	106.05		
Average 2007 rate	131.65	113.80	98.70	89.65	89.60	65.30	93.50		
Average 2006 rate	121.20	109.50	96.25	84.75	84.40	60.00	87.25		

*** Insufficient number of reports to make regional estimates

Source: South Dakota Farm Real Estate Market Surveys, SDSU, 2010 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 by region and county clusters, 2006 - 2010 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 2010 rate	116.95	147.00	106.20	81.55	133.20	163.20	137.30	106.50
High Productivity	167.40	211.40	151.80	115.60	182.80	222.40	186.40	149.40
Low Productivity	80.45	99.80	74.70	55.00	88.85	117.00	87.90	68.50
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
Average 2007 rate	92.30	110.30	88.70	64.20	91.65	118.60	96.00	75.05
Average 2006 rate	89.25	106.15	82.85	59.65	82.60	109.30	85.75	67.00
Hayland								
Average 2010 rate	92.40	115.00	92.10	53.25	83.50	115.40	85.85	62.60
High Productivity	126.90	160.00	125.40	71.25	107.20	146.90	111.70	79.60
Low Productivity	63.30	80.70	60.80	36.90	57.40	82.70	58.70	41.50
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
Average 2007 rate	74.00	88.50	77.90	46.25	67.55	94.15	75.90	52.00
Average 2006 rate	72.90	85.50	72.55	47.45	60.50	94.15	57.95	48.05
Pasture/Rangeland								
Average 2010 rate	50.40	59.50	47.45	37.65	50.70	54.25	53.70	45.90
High Productivity	68.00	80.00	64.25	50.75	67.95	70.70	72.80	61.55
Low Productivity	33.20	39.00	31.70	24.20	35.65	38.55	37.30	32.60
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
Average 2007 rate	44.00	48.00	43.00	39.30	42.80	48.40	43.00	40.10
Average 2006 rate	42.10	47.70	38.40	36.55	40.00	51.50	41.60	35.65
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, 2010 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 2010 rate	106.40	115.30	117.50	94.60	75.40	97.70	63.95	56.80
High Productivity	161.40	169.50	179.40	147.50	110.35	142.50	95.50	81.10
Low Productivity	69.90	79.50	76.25	59.70	49.80	65.70	41.00	37.50
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
Average 2007 rate	77.85	84.20	80.00	67.70	56.75	76.30	48.05	39.25
Average 2006 rate	70.50	77.00	73.55	63.05	53.85	68.85	46.60	40.35
Hayland								
Average 2010 rate	64.60	77.25	61.70	55.90	43.40	55.00	35.90	35.45
High Productivity	91.00	112.00	81.70	77.60	59.60	75.50	51.10	45.90
Low Productivity	43.90	53.00	45.00	36.85	28.40	35.80	24.20	22.70
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
Average 2007 rate	45.10	51.30	45.00	38.25	34.25	44.55	33.00	22.20
Average 2006 rate	40.20	50.70	33.00	31.45	30.20	34.20	30.75	24.70
Pasture/Rangeland								
Average 2010 rate	41.95	47.75	38.60	39.10	34.05	41.95	33.05	23.40
High Productivity	54.30	63.00	47.85	50.55	45.35	54.00	45.70	31.45
Low Productivity	29.00	32.70	29.30	26.10	24.85	29.40	24.00	19.05
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
Average 2007 rate	34.95	40.35	31.45	29.70	28.50	33.70	29.65	18.15
Average 2006 rate	31.35	36.80	29.45	27.75	25.90	31.60	27.25	16.90

Table 4. (continued)

Table 4. (continued)				South	South Central	North West	West
		Aurora Beadle Jerauld	Central Buffalo Brule Hand Hyde	Hughes Sully			
	All				All	All	All
dollars per acre							
Nonirrigated Cropland							
Average 2010 rate	66.55	74.30	65.90	60.35	38.10	26.60	24.30
High Productivity	102.80	120.00	105.90	84.50	58.40	35.60	30.30
Low Productivity	42.50	47.70	41.80	38.80	23.60	19.10	19.30
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
Average 2007 rate	48.95	58.00	45.40	43.75	32.65	23.35	21.80
Average 2006 rate	46.35	53.40	42.10	42.40	34.00	24.70	21.45
Hayland							
Average 2010 rate	43.30	49.00	42.65	33.60	26.00	21.00	18.60
High Productivity	63.00	74.70	57.60	48.60	34.70	27.70	23.70
Low Productivity	28.00	31.00	29.00	20.35	17.10	15.20	14.35
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
Average 2007 rate	31.35	38.70	30.95	21.00	25.70	18.80	18.40
Average 2006 rate	34.60	37.90	31.95	**	27.30	19.55	18.15
Pasture/Rangeland							
Average 2010 rate	31.60	38.85	30.40	23.85	16.15	11.00	10.45
High Productivity	44.30	52.30	41.75	36.40	24.75	14.25	13.70
Low Productivity	21.05	25.65	20.65	15.70	10.60	8.21	6.95
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
Average 2007 rate	26.85	33.20	27.10	19.45	16.90	11.60	9.95
Average 2006 rate	26.30	30.10	25.80	20.20	19.60	10.70	9.25

** insufficient number of reports to make estimates at the regional level

per acre in the south-central region. Cash rents for cropland increased between \$8 and \$17 per acre in several county clusters of eastern South Dakota.

Cash rental rates – hayland and irrigated land

East of the Missouri River, cash rental rates for hayland vary from an average of nearly \$43 per acre, respectively, in the central and north-central regions to \$92.40 per acre in the southeast region (fig. 7 and table 3). West of the Missouri River, hayland cash rental rates in 2010 vary from an average of \$18.60 per acre in the northwest to \$26.00 per acre in the south-central region.

Two county clusters, Minnehaha-Moody and CLTU, have average cash rental rates close to \$115 per acre. Three other county clusters in eastern South Dakota have average hayland cash rental rates between \$92 and \$77 per acre: Bon Homme-Hutchinson-Yankton, Brookings-Lake-McCook, and Clark-Day-Marshall. Six additional county clusters in the eastern regions and James River Valley have cash rental rates between \$63 and \$49 per acre. The other four county clusters in the north-central and central regions have average cash rental rates between \$43 and \$33 per acre (table 4)

Statewide, cash rental rates for hayland increased an average of \$1.35 per acre. Slight to moderate declines occurred in the south-central and east-central regions, while cash rental rates were stable in the western regions. In the other four regions, increases varied from +\$2.80 per acre in the north-central region to \$6.10 per acre in the northeast region. The amount of change in cash rental rates were more varied at the county-cluster level.

Within each region and county cluster there are considerable differences in average cash rental rates for high-productivity and low-productivity hayland. For example, the average rental rates for high- and low-productivity hayland in the CLTU cluster are \$160 and \$80.70 per acre, respectively, compared to \$23.70 and \$14.35 per acre in the northwest region. In many regions, the lower cash rental rates are reported for native hayland, while the higher rates are quoted for alfalfa or other tame hayland.

Cash rental rates for irrigated land vary from an

average of \$90.70 per acre in western South Dakota to \$131.70 per acre in the central region to \$171.20 per acre in the southeast region (table 3). Reported cash rental rates increased in the western and central regions and decreased in the eastern regions.

2010 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 2010 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. Average cash rental rates vary from \$10.45 to \$11.00 per acre in western South Dakota to just above \$50 per acre in the southeast and east-central regions. Typical cash rental rates for low-productivity and high-productivity rangeland vary from \$6.95 to \$13.70 per acre in the northwest region and from \$33.20 to \$68 per acre in the southeast region (fig. 7 and table 3).

In counties east of the Missouri River, average cash rental rates for rangeland and pasture vary from a high of \$59.50 per acre in the CLTU cluster to a low of \$23.40 per acre in the Campbell-Potter-Walworth county cluster (table 4).

Rangeland rates per AUM in 2010 vary from an average of \$23.20 per AUM in the northwest region to \$29.70 per AUM in the southeast region. 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

Several recent publications on agricultural land leasing are 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. Additional publications and related decision aid resources are available at <http://econ.sdstate.edu>.

RATES OF RETURN TO SOUTH DAKOTA'S AGRICULTURAL LAND

Two approaches (gross rates of return and net rates of return) are used in each annual survey to obtain information on current rates of return to agricultural land. The 1991 to 2010 trend of gross rent-to-value ratio by land use and net rate of return by land use is depicted in figures 8a and 8b, respectively.

First, gross rent-to-value ratios (gross cash rent as a percent of land value) are calculated from respondents' reported cash rental rates and 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. In 2010, the statewide average gross rate of return (rent-to-value ratio) is 4.4% for nonirrigated cropland, 4.3% for hayland, 3.6% for rangeland, and 4.0% for all-agricultural land. These annual average rates are the lowest gross cash rates of return calculated over the past 20 years! This is also the fifth consecutive year that gross rates of return have been lower than 5% for all-agricultural land, compared to averages of 7.4% during the 1990s and 6.1% from 2000 to 2005 (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 2010 varies from 2.85% to 6.25% for cropland, from 2.6% to 5.33% for hayland, and from 2.2% to 6.25% for rangeland. The median rent-to-value ratio is 4.25% for cropland, 4.1% for hayland, and 3.5% for rangeland.

Next, respondents were asked to estimate the current net rate of return (percent) that landowners in their locality could expect given current land values. Appraisers refer to the current annual net rate of return as the market-derived capitalization rate, which is widely used in the income approach to farmland appraisal. The net rate of return is a return to agricultural land ownership after deducting property taxes, real estate maintenance, and other ownership expenses⁵.

Average net rates of return for 2010 varied from 3.9% for non-irrigated cropland to 3.6% for hayland and 2.7% for rangeland, and averaged 3.2% for all-agricultural land. This is the fifth consecutive year that average net rates of return were below 4.0% for all-agricultural land, compared to an average of 5.4% during the 1990s and 4.4% from 2000 to 2005.

The practical range of net rates of return to land for 2010 reported by respondents varies from 2.0% to 7.0% for cropland, from 1.0% to 6.5% for hayland, and 1.0% to 5.0% for rangeland. The median net rate of return was 3.5% for cropland and 3.0% for hayland and rangeland.

LONGER-TERM PERSPECTIVE ON FARMLAND MARKET CHANGES, 1991–2010

Longer-term historical data from annual SDSU surveys of agricultural land values and cash rental rates in South Dakota from 1991 to 2010 are located in appendix tables 2 and 3 of this report. Long-term trends in average annual cash rates of return are

⁵ The market-derived income capitalization rate used by appraisers is equal to net returns to land divided by its current market value. One widely used method of estimating net return to agricultural land is subtracting property taxes, land maintenance expense, and other land ownership expenses from the gross cash rental rate for the same land. In each SDSU Farmland Market Survey, respondents were requested to estimate this net rate of return by land use for agricultural land in their locality.

Fig 8a. Gross rent-to-value ratio by land use, 1992–2010

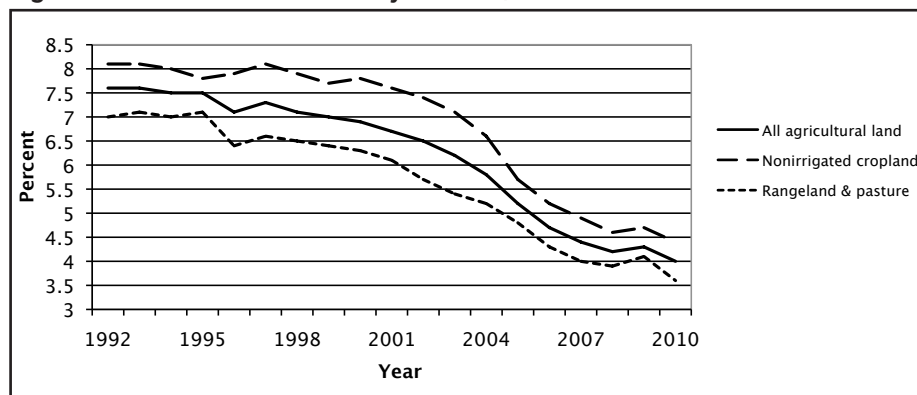
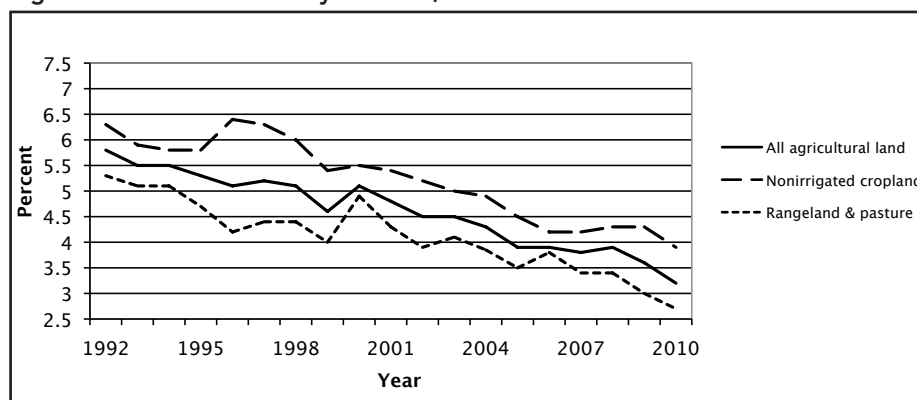


Fig 8b. Net rate of return by land use, 1992–2010



Source: 2010 SDSU Farm Real Estate Market Survey and earlier publications.

Table 5. Estimated rates of return to South Dakota agricultural land by type of land and by region, 1991 - 2010

	2010	2009	2008	2007	2006	Average 2000-2005	Average 1991-1999	2010	2009	2008	2007	2006	Average 2000-2005	Average 1991-1999
Type of land-statewide^c	GROSS rate of return (%)^a							NET rate of return (%)^b						
All agricultural land	4.0	4.3	4.2	4.4	4.7	6.1	7.4	3.2	3.6	3.9	3.8	3.9	4.4	5.4
Nonirrigated cropland	4.4	4.7	4.6	4.9	5.2	6.9	8.0	3.9	4.3	4.3	4.2	4.2	5.0	6.1
Rangeland & pasture	3.6	4.1	3.9	4.0	4.3	5.4	6.8	2.7	3.0	3.4	3.4	3.8	3.9	4.8
Hayland	4.3	4.5	4.4	4.8	5.2	6.8	8.0	3.6	3.8	4.2	3.9	4.0	4.6	5.6
Region^d	GROSS rate of return (%)							NET rate of return (%)						
Southeast	4.2	4.1	4.2	4.7	5.0	6.5	7.4	3.7	3.8	4.4	4.4	4.1	4.9	5.9
East-Central	3.8	4.0	3.7	3.8	4.4	6.2	7.6	3.3	3.8	3.8	3.8	4.1	4.9	5.5
Northeast	4.2	4.2	4.2	4.6	4.9	6.9	8.1	3.7	4.2	4.2	3.8	3.9	5.1	6.2
North-Central	4.2	4.6	4.5	4.9	5.2	6.4	7.9	3.8	4.2	4.2	4.4	4.4	5.1	6.1
Central	3.9	3.9	4.0	4.2	4.6	6.2	7.7	3.4	4.0	5.3	4.2	4.1	4.4	5.3
South-Central	3.3	4.2	3.8	4.5	5.1	6.0	6.9	3.1	3.5	4.3	3.8	4.0	4.4	5.2
Southwest	3.3	4.1	3.5	4.3	4.2	5.6	6.7	2.4	2.6	3.2	3.0	3.1	3.8	4.4
Northwest	4.4	4.3	5.1	4.4	4.7	5.7	7.1	3.0	3.4	3.4	3.4	4.0	3.8	5.1

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

^bNET rate return is the reporter's estimate of the percentage rate of cash return to ownership given current land values. Appraisers often refer to this measure as the market capitalization rate.

^cState level GROSS and NET rate of return estimates are calculated by weighting regional estimates by proportion of acres of each land use by region.

^dRegional level GROSS and NET rate of return estimates are calculated by weighting the rate of return estimates for each land use by proportion of the region agricultural acres in each land use.

Source: South Dakota Farm Real Estate Survey, SDSU, 2010 and earlier reports.

shown in figures 8a and 8b. Regional and statewide comparisons of annual percentage changes in all-agricultural land values in four time periods from 1991 to 2010 are shown in figure 9.

Based on 20 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 more rapidly from 2001 to 2008 than in the other time periods (fig. 9). From 2001 to 2008, average annual increases in land values were 11% or more in all regions of the state, with statewide increases averaging 15.3%. In the other three time periods, statewide average annual increases in land values were between 5.6% and 6.5%, 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 flexibility, and relatively low rates of inflation until 2007. Federal policy shifting 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 2010, reflects the impact of the major economic recession and its aftermath on the farm sector. At this time, the national (and global) economic recession has had much more negative impacts on other sectors of the U.S. economy.

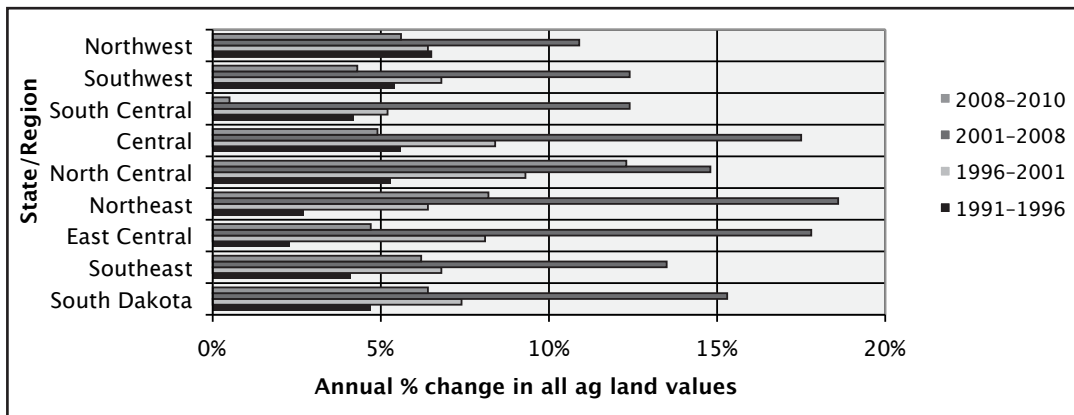
Third, cash rates of return (gross cash rent-to-land value ratio) to agricultural land were relatively stable from 1991 to 2000 and declined substantially from 2001 to 2010; these findings indicate that increased land values during the 1990s were supported by comparable increases in cash rental rates. However, from 2001 to 2010, 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 impact on cash rental rates. During all 20 years, average rates of return to cropland exceeded average rates of return to rangeland (figures 8a and 8b).

Fourth, cash rates of return to farmland are very low. From 2001 to 2008, 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 has slowed the rate of increase in farmland values and has likely altered farmland market psychology to a greater emphasis on current income and cash flow. However, the recession has not resulted in widespread declines in land values.

Fifth, regional and county-cluster rankings in per-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. However, 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. The greatest changes in land values are generally occurring near growing urban centers and in cropland-intensive areas shifting from wheat and small grains to soybeans and corn.

Sixth, land values across counties and regions tend to move together over time, but not at exactly the same time or at the same pace. A typical pattern is three to four years of rapid increases in land values, followed by one or two years of consolidation (or even declines), before the next surge in land values. The timing of the growth and consolidation phases

Fig 9. Annual percentage change in all ag land values, 1991–2010



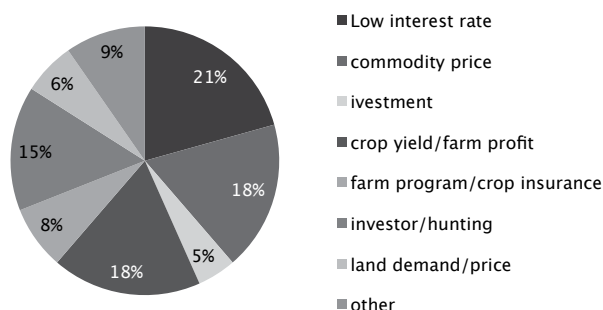
is not identical across all regions and counties. Thus, a longer-term perspective on land value changes is warranted.

Finally, longer-term trends in agricultural land values show increases above the rate of price inflation in all regions. From 1991 to 2010, 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 9.2% during this period, with regional variation from 7.1% to 10.4% (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 market in their localities. These factors help explain changes in the amount of farmland for sale, sale prices, and rental rates. Nearly 84% of respondents listed one to three positive reasons, while 78% also listed one to three negative reasons.

Fig 10. Positive factors in the South Dakota farm real estate market

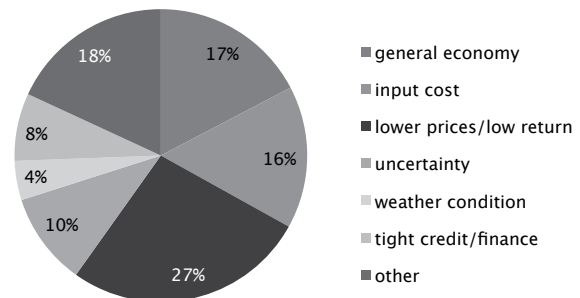


This year, no specific item dominated in the list of positive factors. Low interest rates, high commodity prices, crop yields and farm profits, and investor-related factors (including hunting and recreation), were the four major positive factors listed, accounting for about 74% of responses (fig. 10).

Low mortgage interest rates were cited by 21% of respondents as a positive factor influencing farm real estate market conditions. This reason was also listed as a principal positive factor from 2002 to 2007. High commodity prices, excellent crop yields, and strong farm profits combined for another 18% of positive responses. Land demand and price, stock market volatility, government farm programs, and crop insurance were each listed by another 5% to 8% of responses (fig. 10).

Low commodity prices coupled with low returns, a relatively poor general economic situation, higher input costs, and continued economic uncertainty were the four most common negative factors and were 70% of the negative responses (fig. 11). Low commodity prices coupled with low returns ac-

Fig 11. Negative factors in the South Dakota farm real estate market



counted for 27% of responses and were the dominant negative factors influencing farmland markets in South Dakota. Weather and wet conditions and tight credit and financial pressure were also listed as important negative factors influencing farmland markets.

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 87% of respondents provided their perception of previous year cropland value changes, compared to 76% for rangeland and 67% for hayland. Four-fifths of respondents projected cropland value changes for next year, compared to 69% estimating changes in rangeland values and 63% estimating changes in hayland values.

During the past year, respondents' estimated percentage increases in land values averaged 3.5% for cropland, 2.8% for hayland, and 1.8% for rangeland. The median increase was 2% for cropland and zero for hayland and rangeland, compared to median increases of 10% or more reported each year from 2005 to 2008.

For cropland, 10% of respondents reported declining land values during the past 12 months, 37% reported no change, and 52% reported increasing cropland values. For other agricultural land uses, 10% to 15% of respondents reported declining land values in the past 12 months, 44% to 48% reported no change, and 40% to 46% reported increasing land values.

Respondents' perception of land value changes in this past year was somewhat more negative than reported in the 2009 survey and was much different (more negative) than perceptions reported in the four previous surveys. From 2005 to 2008, median increases of 10% or more in per acre value were reported for each land use in each year!

A majority of respondents, 52% to 58% depending on land use, providing forecasts expect no change in land values in the next 12 months, while 26% to 31% expect land values to increase in the next 12 months. The remaining respondents, 15% to 18%, forecast decline in land values over the next 12 months. The median forecast in per-acre values was zero for all land uses, while the mean (average) forecast in per acre values varied from 0.7% for cropland to -0.2% for pasture. These forecasts were a little more optimistic than the 2009 survey results. However, this is the second consecutive year that most respondents forecast no change or declining land values. From 2000 to 2008, most survey respondents had forecast increasing land values and very few had forecast declining land values.

In summary, respondents to the 2010 survey are cautiously optimistic about farmland market conditions for the following year, primarily due to uncertain or negative impacts of the general economic recession on the farm sector. Prospects of continued rising input expenses, weaker demand for many agricultural commodities, and growing concerns about impacts of future federal policies for taxation, credit/finance, and energy restrains their optimism. However, many respondents continue to indicate the farm sector is reasonably well positioned, from a financial perspective, to withstand many of the negative impacts of the economic recession.

LIST OF REFERENCES **

- Federal Reserve Bank of Minneapolis. 2009. Agricultural Credit Conditions reports. http://www.minneapolisfed.org/publications_papers/.
- 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. 2007. South Dakota farmland market trends, 1991–2007. SDSU Ag. Expt. Station Circular 272. Brookings, SD. <http://agbiopubs.sdstate.edu/articles/C272.pdf>
- . 2008. South Dakota agricultural land market trends, 1991–2008. SDSU Ag. Expt. Station Circular 273. Brookings, SD. <http://agbiopubs.sdstate.edu/articles/C273.pdf>
- . 2009. South Dakota agricultural land market trends, 1991–2009, SDSU Ag. Expt. Station Circular 275. Brookings SD. <http://agbiopubs.sdstate.edu/articles/C275.pdf>
- Pflueger, Burton. South Dakota Agricultural Rental Agreements: What is a Fair Lease Arrangement? Extension Extra 5061. South Dakota State University, 2007. <http://agbiopubs.sdstate.edu/articles/ExEx5061.pdf>
- . Crop cash lease agreements. Extension Extra 5063. South Dakota State University, 2007. <http://agbiopubs.sdstate.edu/articles/ExEx5063.pdf>.
- . Cash farm lease (short version). Extension Extra 5064. South Dakota State University, 2007. <http://agbiopubs.sdstate.edu/articles/ExEx5064.pdf>.
- . Crop Share Lease Agreements, Extension Extra 5065. South Dakota State University, 2007. <http://agbiopubs.sdstate.edu/articles/ExEx5065.pdf>.
- . Crop Share Farm Lease (Short Version) Extension Extra 5066. South Dakota State University, 2007. <http://agbiopubs.sdstate.edu/articles/ExEx5066.pdf>.
- . Flexible-Cash Lease Agreements. Extension Extra 5067. South Dakota State University, 2007. <http://agbiopubs.sdstate.edu/articles/ExEx5067.pdf>.
- . Flexible-cash farm lease (short version). Extension Extra 5068. South Dakota State University, 2007. <http://agbiopubs.sdstate.edu/articles/ExEx5068.pdf>.
- . Pasture lease agreements. Extension Extra 5071. South Dakota State University, 2007. <http://agbiopubs.sdstate.edu/articles/ExEx5071.pdf>.
- . Pasture lease (short version). Extension Extra 5072. South Dakota State University, 2007. <http://agbiopubs.sdstate.edu/articles/ExEx5072.pdf>.
- . Agricultural and Grazing Leases of South Dakota School and Public Lands. Extension Extra 5077. South Dakota State University, 2009. <http://agbiopubs.sdstate.edu/articles/ExEx5077.pdf>.
- . South Dakota's Rental Agreements: What is a Fair Lease. Extension Extra 5078. South Dakota State University, 2010. <http://agbiopubs.sdstate.edu/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. 2010. Economic Research Service. Dataset on agriculture value added, 2000 - 2008 - South Dakota. <http://www.ers.usda.gov/Data/FarmIncome/finfidmuXLS.htm>
- U.S. Dept. of Agriculture. 2010. National Ag Statistics Service – South Dakota. various news releases.
- U.S. Dept. of Commerce. 2010. Bureau of Economic Analysis. Dataset on agriculture value added - South Dakota.
- U.S. Dept. of Labor. Bureau of Labor Statistics. 2010. Economy at a Glance, South Dakota. <http://data.bls.gov/cgi-bin/print.pl/eag/eag.sd.htm>

** Reference citations for annual SDSU farm real estate survey reports for 1991 through 2006 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 2006 were published as SDSU Agricultural Experiment Station Circulars # 256, 257, 258, 259, 260, 262, 263, 264, 266, 267, 268 269, 270, and 271. 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 2010 South Dakota Farm Real Estate Market Survey was to obtain regional and statewide information on 1) 2010 per-acre agricultural land values by land use and land productivity and 2) 2010 cash rental rates by agricultural 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 640 potential respondents on February 17, with a follow-up mailing on March 17. 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 educators and area farm management specialists, and 4) licensed appraisers and assessors. Some appraisers were also realtors or professional farm managers, while some lenders were also appraisers.

Respondents were provided the alternatives of completing a mail survey or a Web-based survey containing the same set of questions. Ninety percent of respondents chose to complete the mail survey and the remaining 10% completed the Web-based survey. In each case, respondents were asked to report land values and cash rental rate information for non-irrigated cropland, hayland, rangeland, improved pasture, and irrigated land in their locality. One-third of respondents provided information for two or more counties, while two-thirds reported information for one county.

The distribution of 238 responses is summarized by location and reported occupation in appendix

table 1. Fifty-seven percent of responses are from the three eastern regions of South Dakota, 23% were from the central and north-central region, and the remaining 20% were from the south-central and western regions. The relatively low number of responses from the south-central and western regions is becoming a major concern in providing land value and rental rate estimates for these regions.

Sixty-two percent of responses are from agricultural lenders or FSA officials, and 23% of responses are from appraisers. The remaining responses are from Extension educators and assessors.

The number of responses exceeded the number of respondents as a growing number of respondents (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 190 respondents provided 238 useable responses.

Most respondents were able to supply land value and cash rental rate information for non-irrigated cropland and rangeland in their locality. Nearly three-fourths of respondents supplied information on hayland values and cash rental rates. Nearly 30% of respondents reported irrigated land values and cash rental rates. Only 17% provided 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 farmland in South Dakota. It excludes agricultural land (mostly rangeland) leased from tribal or federal agencies, which is mostly located in the western and central regions of the state. Irrigated land is also

excluded from regional and statewide all-land values. The land-use weighting factors were developed from county-level data in the 2002 South Dakota Census of Agriculture and other sources.

Regional average rental rates by land use are simple average (mean) values of useable responses. Statewide average cash rental rates for each land use are weighted by 1) the relative number of acres in each land use and 2) the proportion of farmland acres leased in each region based on 2002 Census of Agriculture data.

Appendix Table 1. Selected characteristics of responses, 2010.

Number of responses = 238

Responses:

<i>Reporting location</i>	N	%	<i>Primary Occupation</i>	N	%
Southeast	45	18.9%	Banker/loan officer	106	45.1%
East-Central	47	19.7%	Farm Service Agency	40	17.0%
Northeast	43	18.1%	Assessor	15	6.4%
North-Central	29	12.2%	Appraiser/realtor	54	23.0%
Central	27	11.3%	Extension educators	20	8.5%
South-Central	11	4.6%		235	100.0%
Southwest	16	6.7%			
Northwest	20	8.4%			
	238	100.0%			

Response rates:

<i>Land values</i>	N	%	<i>Cash Rental Rates</i>	N	%
Nonirrigated cropland	233	97.9%	Nonirrigated cropland	225	94.5%
Irrigated cropland	70	29.4%	Irrigated cropland	66	27.7%
Hayland	179	75.2%	Hayland	171	71.8%
Rangeland (native)	210	88.2%	Rangeland (acre)	200	84.0%
Pastureland (tame)	156	65.5%	Rangeland (AUM)	42	17.6%

Source: 2010 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, 1991–2010

Appendix Table 2. Average reported value and annual percentage change in value of South Dakota agricultural land by type of land by region, 1991-2010.

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, 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 10/91	8.4%	9.7%	9.4%	10.4%	9.5%	7.1%	7.9%	7.4%	9.2%
Annual % change 10/09	3.9%	3.0%	7.7%	17.1%	1.8%	-6.1%	-0.5%	7.2%	5.2%
Nonirrigated Cropland									
	dollars per acre								
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 10/91	8.3%	9.8%	9.6%	10.5%	9.4%	6.9%	6.0%	6.1%	9.2%
Annual % change 10/09	3.6%	4.3%	11.1%	16.3%	4.2%	-4.0%	-6.0%	10.7%	6.8%

Source: South Dakota Farm Real Estate Market Surveys, SDSU, 2010 and earlier.

Appendix Table 2. (continued)

Type of Land	South-east	East-Central	North-east	North-Central	Central	South-Central	South-west	North-west	STATE
Rangeland (native)	dollars per acre								
Average value, 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 10/91	8.8%	9.6%	9.1%	9.8%	9.2%	7.2%	8.8%	8.0%	8.6%
Annual % change 10/09	6.4%	5.3%	-4.9%	15.9%	-3.7%	-9.8%	2.0%	6.9%	1.9%
Pasture (tame, improved)	dollars per acre								
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 10/91	8.5%	8.9%	8.5%	9.7%	9.2%	7.6%	8.4%	6.7%	8.6%
Annual % change 10/09	7.4%	-9.6%	-14.2%	19.8%	1.8%	13.8%	0.0%	1.9%	-0.4%

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, 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 10/91	8.5%	9.7%	10.1%	10.9%	9.8%	6.7%	7.2%	6.3%	9.0%
Annual % change 10/09	2.9%	-2.0%	14.0%	24.9%	1.1%	-5.4%	-3.1%	4.8%	4.6%

Appendix Table 3. Reported cash rental rates of South Dakota agricultural land by type of land by region, 1991-2010.

Type of Land	South-east	East Central	North-east	North-Central	Central	South-Central	South-west	North-west	State
Nonirrigated Cropland	dollars per acre								
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	82.6	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 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, 2010 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
Pasture/Rangeland	dollars per acre								
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	11.9
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 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, 2010 and earlier year reports.

Type of Land	South-east	East-Central	North-east	North-Central	Central	Western	State
Irrigated land	dollars per acre						
Average 2009 rate	178.15	158.50	143.10	108.65	120.15	67.50	118.55
Average 2008 rate	154.75	139.80	134.00	87.85	113.00	62.50	106.05
Average 2007 rate	131.65	113.80	98.70	89.65	89.60	65.30	93.50
Average 2006 rate	121.20	109.50	96.25	84.75	84.40	60.00	87.25
Average 2005 rate	118.30	109.30	84.45	80.95	77.95	57.90	83.50
Average 2004 rate	118.80	103.80	97.50	75.00	73.20	56.90	83.85
Average 2003 rate	119.20	98.00	72.60	75.50	***	58.20	80.00
Average 2002 rate	124.00	98.60	77.40	71.40	52.50	50.20	76.90
Average 2001 rate	106.00	84.40	77.00	65.00	67.10	48.00	72.65
Average 2000 rate	104.80	84.00	75.00	61.80	55.60	46.60	69.40
Average 1999 rate	100.00	63.80	69.50	63.80	45.20	40.00	62.45
Average 1998 rate	99.30	76.10	63.80	70.00	44.30	39.00	62.50
Average 1997 rate	100.20	72.20	63.00	59.30	46.40	42.00	63.00
Average 1996 rate	85.40	61.90	68.70	46.40	43.90	33.80	54.85
Average 1995 rate	89.50	68.00	76.70	65.40	45.80	44.00	61.60
Average 1994 rate	91.90	71.70	66.00	53.80	48.50	***	61.30
Average 1993 rate	87.20	68.60	60.00	57.80	53.40	44.00	60.90
Average 1992 rate	65.20	70.00	69.20	58.50	49.80	47.50	56.70
Average 1991 rate	82.70	69.00	59.00	***	***	37.50	***

*** Insufficient number of reports

Source: South Dakota Farm Real Estate Market Surveys, SDSU, 2009 and earlier year reports.

