2019 IOWA STATE UNIVERSITY LAND VALUE SURVEY: OVERVIEW

Wendong Zhang

Department of Economics, Center for Agricultural and Rural Development, and
Iowa State University Extension and Outreach
Iowa State University
478C Heady Hall, 518 Farmhouse Lane
Ames, Iowa
Email: wdzhang@iastate.edu
Phone: 515-294-2536

Abstract: Since 1950, the Iowa State University Land Value Survey has been the only data source that provides a county-level land value estimate for each of the 99 counties in Iowa. The 2019 Iowa State University Land Value Survey reported a 2.3 percent increase to $7,432 per acre in average Iowa farmland values from November 2018 to November 2019. This modest rise, which barely exceeds inflation, is the second increase in Iowa farmland values over the past six years, but still represents a 15 percent decline from the 2013 peak in nominal land values, or a 23 percent drop in inflation-adjusted values. This recent rise is largely attributable to lower interest rates, limited land supply, strong yields, and to some extent the trade aid payments to farmers. On the other hand, the magnitude of this increase only slightly outpaced inflation, and we are still faced with low commodity prices and trade uncertainty. All crop reporting districts reported an increase in land values except for the Northeast district which saw a decline of 2.9 percent. In general, the results from the 2019 Iowa State University Land Value Survey echo results from other surveys, which all showed relatively stable farmland market trends.

Key Words: Land Values, Iowa, Land Ownership, Interest Rate, Farm Income, Ag Credit, Commodity Prices, Expert Opinion Survey, Agricultural Trade

JEL Codes: Q15, Q13, Q14, Q18

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History and Purpose of the ISU Land Value Survey

The survey was initiated in 1941 and is sponsored annually by Iowa State University. Only the state average and the district averages are based directly on ISU survey data. County estimates are derived using a procedure that combines ISU survey results with data from the U.S. Census of Agriculture. Since 2014, the survey has been conducted by the Center for Agricultural and Rural Development in the Department of Economics at Iowa State University and Iowa State University Extension and Outreach.

The survey is intended to provide information on general land value trends, geographical land price relationships, and factors influencing the Iowa land market. The survey is not intended to provide a direct estimate for any particular piece of property.

The survey is an expert opinion survey based on reports by licensed real estate brokers, farm managers, appraisers, agricultural lenders, county assessors, and selected individuals considered to be knowledgeable of land market conditions. Respondents were asked to report for more than one county if they were knowledgeable about the land markets. The 2019 ISU Land Value Survey is based on 679 usable county-level land value estimates provided by 553 agricultural professionals.

Of the 553 respondents, 61 percent completed the survey online. Online responses allow participants to provide estimates for up to 15 counties. A web portal has been developed to facilitate the visualization and analysis of Iowa farmland values by pooling data from ISU, USDA, Chicago Fed, and the Realtor Land Institute, as well as by making use of charts over time and interactive county maps. The portal can be accessed at https://www.card.iastate.edu/farmland.

Participants in the survey are asked to estimate the value of high-, medium-, and low-quality land in their county. Comparative sales and other factors are taken into account by the respondents in making these value estimates. This survey is the only data source that provides an annual land value estimate at the county level for each of the 99 counties in Iowa. In addition, this survey provides estimates of high-, medium-, and low-quality land at the crop reporting district and state level.

Analysis by State

The 2019 state average for all quality of land was estimated to be $7,432 per acre as of November 1, 2019.

The state value increased $168 per acre from November 2018.

The state value increased 2.3 percent from November 2018.

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Analysis by Crop Reporting District

The highest average land values were reported in Northwest Iowa, $9,352 per acre.

The lowest average land values were reported in South Central Iowa, $4,487 per acre.

Land values across crop reporting districts saw an increase in general, with only the Northeast district reporting a decline in land values. The largest percentage increases were in the East Central and Central districts, 5.9 percent and 5.5 percent, respectively. The South Central and Southeast districts also reported an increase higher than 3 percent. In contrast, the Northeast district reported a 2.9 percent loss due to mainly financial stress in the dairy sector.

All quality land in Northeast Iowa reported a loss, but low-quality land saw a greater loss than that did higher quality land. High-quality land in the Northwest district is the only other district that saw declines in land values.

Analysis by Counties

The highest value was estimated for Scott County, $10,837 per acre.

The lowest value was in Decatur County, $3,586 per acre.

Eighty-two of 99 counties in Iowa reported a rise in land value, while the remaining 17 counties saw a decline.

The largest percentage increase, 5.4 percent, was reported in both Boone and Story Counties. The largest dollar decrease was reported in Clay County, $151 per acre, while Story County saw the largest dollar increase, $455 per acre. The highest percentage decrease, 2.2 percent, was reported in Clay and Allamakee Counties.

Analysis by Quality of Land

Low-quality land statewide averaged $4,759 per acre, a 3.3 percent, or $150 per acre, increase. Low-quality land in the Central, East Central, and West Central districts all saw increases of 5 percent or more, but low-quality land in the Northeast district saw a 5.0 percent decline.

Medium-quality land averaged $6,938 per acre, an increase of 2.0 percent or $133 per acre.

High-quality land averaged $9,078 per acre, an increase of 2.4 percent or $215 per acre.

Major Factors Influencing the Farmland Market

Most survey respondents listed positive and/or negative factors influencing the land market. Of all respondents, 75 percent listed at least one positive factor, and 77 percent listed at least one negative factor. In most cases, respondents listed multiple factors.

There were three positive factors listed by over 10 percent of respondents who provided at least one positive factor. The most frequently mentioned factor was favorable interest rates, mentioned by 23 percent of respondents. Limited land supply and strong yields were the second- and third-most frequently mentioned positive factors, mentioned by 18 and 11 percent of respondents, respectively. Other frequently mentioned positive factors included strong demand, especially by farmers (seven percent), government payments such as the trade aid payments (six percent), and investor demand (five percent).

There were also three negative factors listed by more than 10 percent of respondents who identified at least one negative factor. The most frequently mentioned negative factor affecting land values was lower commodity prices, mentioned by 32 percent of respondents. Weather and tariffs on agricultural commodities such as U.S. soybeans were the second- and third-most frequently mentioned negative factor, mentioned by 12 percent of respondents. Cash/credit availability, higher input costs, and an uncertain agricultural future were each mentioned by three to seven percent of respondents.

Number of Sales Compared to Previous Year

Twenty-five percent of respondents reported lower sales in 2019 relative to 2018. On the other end of the spectrum, just 27 percent reported more sales, and 48 percent reported the same level of sales in 2019 relative to 2018.

The West Central district has the lowest percentage of respondents who reported lower sales, 19 percent, while the Southwest, North Central, and Central districts have the highest percentage of respondents who reported lower sales, with more than 30 percent each.

Land Sales by Buyer Category

The 2019 survey asked respondents what percent of the land was sold to five categories of buyers: existing local farmers, existing relocating farmers, new farmers, investors, or other.

The majority of farmland sales, 72 percent, were to existing farmers, of which existing local farmers capture 70 percent of land sales. Only two percent of sales were to existing relocating farmers. Investors represented 21 percent of land sales. New farmers represented five percent of sales, and other purchasers were two percent of sales.

Sales to existing local farmers by crop reporting district ranged from 80 percent in the Northwest district to 49 percent in the South Central district.

Sales to investors were highest in the South Central district (30 percent). The Northwest district reported the lowest investor activity (15 percent).

Land Sales by Seller Category

The 2019 survey asked respondents what percent of land was bought from five categories of sellers: active farmers, retired farmers, estate sales, investors, or other.

The majority of farmland sales, 52 percent, were from estate sales, followed by retired farmers at 24 percent. Active farmers account for 16 percent of sales, while investors accounted for seven percent.

Estate sales by crop reporting district ranged from 65 percent in the Northwest district to 35 percent in the South Central district.

Sales by investors were highest in the South Central district (17 percent). The West Central district reported the lowest investor sale activity (five percent).

Respondents by Occupation and by Mode of Survey

The 2019 survey asked the main occupation of the respondent: farm managers, appraisers, agricultural lenders, brokers/realtors, government, farmers/landowners, and other. This year's survey also asked about the number of years' experience of respondents and number of counties they offer services in.

In total, 553 agricultural professional completed the survey, providing 679 county land value estimates. Of these 553 respondents, agricultural lenders represented the largest group, accounting for 37 percent of all respondents. Realtors/brokers, farm managers, and appraisers were the next three largest groups, representing 16, 12, and 7 percent of respondents, respectively.

Of all respondents, the percentage of agricultural lenders ranged from 23 percent in the South Central district to 44 percent in the the Northeast and West Central districts.

Agricultural professionals on average have 26 years of experience in their current profession and offer professional services to an average of eight counties. While government officials typically only serve three counties at most, farm managers, appraisers, ag lenders, and

realtors/brokers offer services to 10, 15, 4, and 13 counties, respectively.

The survey was completed online by 61 percent of the 553 respondents. Eighty-two percent of the respondents only provided land value estimates for their primary county. Eleven and three percent of the 553 respondents provided estimates for two and three counties, respectively.

Farmland Value and Cash Crop Price Predictions by Respondents

This year's survey asked respondents to predict land values and cash crop prices one and five years from now, as well as the prevailing interest rates for a 20-year farmland mortgage and a one-year operating loan.

Respondents had mixed views regarding the strength of the farmland market one year from now, but in general expect higher land values five years from now. Forty-three percent of respondents forecasted an increase in their local land market in one year, while 26 percent expected a lower land value, and 31 percent forecasted no change. Looking five years ahead, a vast majority of the respondents (78 percent) expect a higher land value than current levels, with only 11 percent forecasting a decline.

Respondents expect a slow-but-steady improvement in both the corn and soybean cash crop markets. In particular, the predicted state average cash corn prices for November 2020 and 2024 (five years from now) are $3.76/bu and $4.19/bu, respectively. The statewide average soybean price predictions are $8.91/bu in one year and $9.82/bu five years from now.

Respondents reported typical interest rates for 20-year farmland mortgages and one-year operating loans are 4.87 percent and 5.66 percent, respectively.

Land Quality and Corn Suitability Rating 2

To gauge how each respondent defined high-, medium-, and low-quality land for their county, we asked for estimated average CSR2 (Corn Suitability Rating 2) for high-, medium-, and low-quality land. We also asked for estimates of the percent of land area for each land quality class.

Results show that agricultural professionals have adapted to CSR2. Approximately 91 percent of participants provided at least one CSR2 estimate for the corresponding land quality classes. The estimated average CSR2 statewide for high-, medium-, and low-quality land is 83, 69, and 54 points respectively. The estimated percent of land area for high-, medium-, and low-quality land is 36, 40, and 24 percent, respectively.

In addition, respondents ranked high-, medium-, and low-quality land based on relative conditions in their region. For example, the average CSR2 for high-quality land in the South Central district is 72, which is only slightly larger than the CSR2 for low-quality land in the Northwest district (66).

Interpretation of the 2019 Survey Results

The 2019 ISU Land Value Survey shows a 2.3 percent increase in average Iowa farmland values from November 2018 to November 2019. The average statewide value of an acre of farmland is now estimated at $7,432. This modest increase, which barely exceeds the pace of inflation, is the second rise over the past six years, but still represents a 15 percent decrease from the 2013 peak in nominal land values, or a 23 percent drop in inflation-adjusted values.

The recent increase is largely attributable to lower interest rates, limited land supply, strong yields, and to some extent the trade aid payments. At the same time, the magnitude of this rise is still very modest and represents an overall stable land market as opposed to one in rapid rebound. Many respondents still cited low commodity prices, weather, and trade uncertainty as negative factors influencing the land market. Two-thirds of the respondents reported no change or less sales compared to a year ago. In general, the survey respondents have an optimistic view regarding the strength of the future land market both one and five years from now.

The 2019 ISU Land Value Survey revealed an overall positive, yet mixed, land value pattern across crop reporting districts, counties, and land quality classes. Local land supply and demand, as well as the local fluctuations in farm income, largely explain the variations across the state. All crop reporting districts, except for the Northeast district, reported an increase in land values: the largest percentage increase was in the East Central district, 5.9 percent, while the Northeast district reported a 2.9 percent loss, mainly due to financial stress in the dairy sector. Eighty-two of 99 counties in Iowa reported a rise in land value, while the remaining 17 counties saw a decline. The largest percentage increase, 5.4 percent, was reported in both Boone and Story Counties, while the highest percentage decrease (2.2 percent) was reported in Clay and Allamakee Counties.

In general, the results from the 2019 ISU Land Value Survey echo results from other surveys, which all showed relatively stable farmland market trends with recent signs of growth. In November 2019, the Federal Reserve Bank of Chicago reported a two percent increase in Iowa‘s “good” farmland values from July 1, 2019 to October 1, 2019. In September, the Realtors Land Institute reported a 0.8 percent hike in Iowa cropland values from March 2019 to September 2019, which constitutes an overall 0.2 percent decline from September 2017 to September 2018. In contrast, U.S. Department of Agriculture June Area Survey reported a 1.1 percent decline in Iowa‘s agricultural real estate values (land and building) from June 2018 to June 2019.

The 2019 ISU Land Value Survey shows that the majority of farmland sales, 72 percent, were to existing farmers. Investors represented 21 percent of land sales. Estate sales were still the main source of sales, followed by sales by retired farmers.

The farmland value estimates from the ISU Survey are average estimates for all farmland in a county, which includes cropland as well as pasture, CRP, and timberland. Specifically, we asked respondents to estimate “farmland value for average-sized farms in your county as of November 1, 2019.”

An opinion survey is just that. It represents the collective opinion of the survey respondents. Most of the respondents will use actual sales to formulate their opinions but each person can choose to weigh or discount particular sales as they deem necessary. The ISU Land Value Survey is an opinion survey, as are the surveys conducted by Federal Reserve Bank, USDA, and the Realtor Land Institute. It is important to consider the survey respondents, the questions asked, the time period covered, and other factors relating to a particular survey. As a result, it is important to note that when comparing results across surveys for Iowa and neighboring states, it is better to compare percentage change over time as opposed to dollar amount per acre.

The ISU Land Value Survey is intended to provide information on general land value trends and factors influencing the Iowa land market. It is not intended to provide a direct estimate for any particular piece of property. We recommend interested buyers or sellers hire an appraiser to conduct formal appraisal of particular parcel, go to county assessor websites, or examine recent auction results for comparable parcels in their region.

Outlook for Land Values in 2020 and Beyond

The Iowa farmland market saw its second, albeit modest, increase in the past six years. The estimated $7,432 per acre statewide average for all qualities of land in Iowa represents a 2.3 percent increase in nominal land values from November 2018. If we examine the inflation-adjusted land values, this would represent a negligible $16/acre increase from a year ago. This increase is likely a result of lower interest rates, limited land supply, strong yields, and to some extent the trade aid payments. Although this recent rise is very modest in magnitude, and does not constitute a sharp rebound, the farmland market in Iowa and across the Midwest is holding up remarkably well amid low commodity prices and trade uncertainty.

According to USDA Economic Research Service's farm income forecast, U.S. net farm income is forecast to increase $8.5 billion (10.2 percent) from 2018 levels to $92.5 billion in 2019, and in inflation-adjusted terms, it is forecast to rise 8.2 percent. In nominal terms, the $7,432 per acre value in 2019 represents a 15 percent loss off the peak land value of $8,716 in 2013. After adjusting for inflation with the Consumer Price Index (CPI), this still represents a 23 percent loss off the 2013 peak. In other words, this recent hike barely exceeded the pace of inflation, and the inflation-adjusted farmland values have seen more erosion since 2014.

Put simply, land value is the net present value of all discounted future income flows. With certain assumptions imposed, one could think of land value being net income divided by interest (discount) rate. To understand the changes in land value over time and across space, it is useful to examine how net income and interest rates will change over the next few years. Improving commodity prices, rising farm income, and lower interest rates tend to exert upward pressures on land values.

From this perspective, this recent modest increase and overall stabilization of the farmland market is consistent with reports on rising farm income as well as several other underlying supply and demand factors. First, the farmland market has always been a thin market with few farmland sales, but in the past five years the farmland market has been extremely tight—for six consecutive years, more respondents to the ISU Land Value Survey reported less sales in their county compared to the previous year. In this year's survey, only 25 percent of the respondents reported more sales activity, while 27 percent and 48 percent reported less or similar sales activities, respectively. The limited farmland supply helped buoy market prices in many areas across the state. Second, the Federal Reserve recently implemented three interest rate cuts this year and many respondents to the 2019 survey reported lower rates for 20-year farmland mortgage and operating loans compared to estimates a year ago. Lower interest rates kept the increase in interest expenses at modest levels and supported farm profitability. Third, the 2017 Iowa Farmland Ownership and Tenure Survey shows that 82 percent of all farmland in Iowa is fully paid for and 29 percent is owned primarily for family or sentimental reasons. This explains in part the limited land sales offered by existing landowners and the strong demand noted as one of the positive factors in the 2019 ISU Land Value Survey. Fourth, despite the weather problems throughout the 2019 growing season, the Iowa corn and soybean yields remain strong. In November 2019, USDA forecasted corn yields of 192 bushels per acre and soybean yields of 53 bushels per acre for Iowa. Relative to eastern Corn Belt states such as Ohio and Indiana, Iowa crop yields are still decent. Finally, the 2019 ISU Cost of Production estimates reveal that estimated average cost for corn and soybean production in Iowa dipped further to $3.46/bu and $9.04/bu, respectively, revealing a slight profit at least for corn.

Across the nine crop reporting districts and 99 counties, land value patterns were localized and mixed, driven by changes in local land supply and demand. While land values could be thought of as net income divided by interest rates, net income tends to be localized while interest rates are more universal. All crop reporting districts except for the Northeast district reported an increase in land values, and 82 of 99 counties in Iowa reported a rise in land value. The financial stress in the dairy sector is taking a toll on the land market in the Northeast district, while relatively strong crop yields over the past few years and strong demand for transitional grounds and recreational tracts are behind the greater surge in land values across central Iowa. The 2019 ISU Land Value Survey shows that 70 percent of farmland sales were to existing local farmers, and they typically only look for land sales near their farm, or at least in the same county. Due to the limited land supply, this suggests

that local conditions of the land market, especially the competitiveness of the land market in part due to livestock producer's demand, explain the variations in land value patterns across districts, counties, and land quality classes.

Across the Corn Belt and Great Plains, the land market saw mixed signals, yet remained relatively stable in general. Many neighboring states also experienced stable trends and some also saw recent increases in land values recently. The Illinois Society of Professional Farm Managers and Rural Appraisers and University of Illinois reported in March 2019 that Illinois land values have been stable for excellent quality land and higher for lower-quality land from January 2018 to January 2019. The March 2019 Nebraska report indicated the average market value of farmland declined by three percent compared to one year earlier. The February 2019 Minnesota report showed statewide average farmland sales prices increased by 4.5 percent from 2017 to 2018. The land value survey conducted by Purdue University reported in August 2019 a 5.3 percent and 0.9 percent decline for Indiana's statewide top- and medium-quality farmland values from June 2018 to June 2019; however, their report also showed no change to modest increases for low-quality land and transitional land for urban development. The quarterly AgLetter report by the Chicago Federal Reserve Bank issued in November 2019 indicated a one percent decline in Illinois for the period of October 1, 2018 to October 1, 2019, no change in Iowa and Indiana, and a two percent decrease in Wisconsin. Importantly, it also reported an overall one percent growth over the last quarter for the seventh district and two-to-three-percent increase for Indiana and Iowa land values. The quarterly Ag Credit survey conducted by the Kansas City Federal Reserve Bank, published in November 2019, revealed that the values of all types of farmland (non-irrigated cropland, irrigated cropland, and ranchland) across the tenth district remained similar to values a year ago.

The stabilization in the land market offered our respondents optimism and confidence in the future farmland market, especially in the medium term, despite growing farm financial stress. Forty-three percent of respondents forecasted an increase in their local land market in one year, while 26 percent expected a lower land value, and 31 percent forecasted no change. Looking five years ahead, a vast majority of the respondents (78 percent) expect a higher land value than current levels, with only 11 percent forecasting a decline. This is consistent with their corn and soybean price forecast, which is a slow-but-steady improvement in both the corn and soybean cash crop markets. The Ag Economy Barometer led by Purdue University, a nationwide monthly agricultural producer survey, showed the highest farmer ag economy sentiment index reading of 2019 and a more optimistic view regarding farmland markets. The share of respondents expecting land values to fall dropped from 30 percent this May to merely 11 percent, and 57 percent of farmers expecting farmland values to move higher over the next five years. This in part reflects the confidence among producers—57 percent expect the trade dispute with China to be resolved soon.

This recent reprieve in land values was still very modest in magnitude, barely exceeded the pace of inflation, and thus should not be lauded as a solid rebound of the farmland market. This is particularly important when farm financial stress and farm bankruptcy are still on the rise. In fact, 580 farm bankruptcies were reported nationwide in 2019, which, although low, represents the highest since 2011. Federal Reserve Bank of Kansas City's November 2019 Ag Credit Survey revealed that the rate of farm loan repayments continued to decline and the strain on farm finances in the tenth district has led to steady deterioration of agricultural credit conditions. In particular, following a sharp drop in cattle prices during the summer and reduced revenues for some producers, the loan repayment rates weakened considerably for cow/calf and feeding operations relative to last year. At the same time, there has been considerable built up financial stress in the dairy sector, and Wisconsin has lost nearly one-quarter of its dairy farms over the past five years—milk prices consistently stayed at levels below the average break-even level. This is reflected in the 2019 survey with the Northeast district, which is home to half of Iowa's cows, being the only district that reported a loss in land values. Data from Iowa Farm Business Association also shows that the share of Iowa farms with strong liquidity declined from 45.8 percent in 2014 to one-third in 2018, while the share of sample farms with a current ratio of 1.3 or lower increased from 31.3 percent to 43.8 percent.

In other words, although we are unlikely to see a replay of the 1980s farm crisis marked by the sudden, precipitous collapse of the U.S. agricultural land market and mounting delinquent farm loans and foreclosures, there is growing signs of farm financial stress as well as stress on the family and mental health. This recent hike in land values indicated the stability of the market and continue to provide ongoing support for the agricultural sector. With substantial uncertainties in crop production, agricultural trade and commodity price fluctuations, the farm sector is still not fully recovered and this recent rise in land values unfortunately does not indicate a rebound in the U.S. or Midwest farm economy.

Farmland sale activities tend to be correlated with changes in land values—with the current farm downturn, landowners tend to continue to hold land parcels and postpone sales, which results in a continuation of less farmland sales. With the continued decline in farm income and profitability, some existing landowners may reconsider retirement and sell their land eventually. The heightening farm financial stress is already putting pressure on some vulnerable producers to liquidate some of their assets. To the extent that this will lead to more land parcels on the market, which is not much given the currently tight market, there could be additional downward pressure on the farmland market. Many agricultural professionals have noticed an uptick in the number of land auctions across the state this year. According to the 2017 Iowa Farmland Ownership and Tenure Survey, half of Iowa's farmland has been held by the same owner for more than 20 years. As a result, a large influx of farmland supply is not likely, but this potential rise in farmland sale activity and continued decline in farmland values might present opportunities for beginning farmers and ranchers to enter the market.

Farmland has historically been a fairly robust investment that generates relatively stable returns, especially when compared with other investments such as stocks. Since 1941, the nominal and inflation-adjusted Iowa farmland values have averaged a 6.4 percent and 2.6 percent increase per year, respectively. Farmland values have increased 72 percent of years, decreased 27 percent of years, and remained unchanged for three years between 1910 and 2019. While 29 percent of farmland in Iowa is primarily owned for family or sentimental reasons, the strong robust returns for farmland have and will continue to attract interested farmers and investors to invest in the farmland market.

There are several unique uncertainties worth watching over the next year or two. First, it remains unclear whether and how quickly the Federal Reserve will continue to cut interest rates. Lower interest rates tend to reduce interest expenses for producers, incentivize more farmland investment, and support farm income and land values. Second, it is still highly uncertain how the trade negotiations and disputes with China will turn out, and a key milestone is whether both countries carry out the threats to further escalate the trade disruption on December 15. Over time, China has grown to become an indispensable trading partner for U.S. agriculture, and the details of the trade deals, or the lack thereof, will have significant impacts on farm income and land values. It is also worth noting that it takes time for the land market to fully capitalize the income shocks resulting from the trade disruptions. Finally, it is critical to watch for whether the improved farm income and land market lead to landowners' growing interest in selling land, or more stressed sales from financially stressed producers.

This recent modest increase in the Iowa farmland market is a result of lower interest rates, strong demand, and limited land supply. This increase is still modest, but indicates the stability of the farmland market. The interest rate changes and progress in trade talks will have significant implications on commodity prices, farm incomes, and farmland values. That said, Iowa's farmland market looks to remain stable in the year ahead.

Table 1. Recent Changes in Iowa Farmland Values, 1972–2019

	Value Per Acre	Dollar Change	% Change		Value Per Acre	Dollar Change	% Change
1972	482	52	12.1	1996	1682	227	15.6
1973	635	153	31.7	1997	1837	155	9.2
1974	834	199	31.3	1998	1801	-36	-2.0
1975	1095	261	31.3	1999	1781	-20	-1.1
1976	1368	273	24.9	2000	1857	76	4.3
1977	1450	82	6.0	2001	1926	69	3.7
1978	1646	196	13.5	2002	2083	157	8.2
1979	1958	312	19.0	2003	2275	192	9.2
1980	2066	108	5.5	2004	2629	354	15.6
1981	2147	81	3.9	2005	2914	285	10.8
1982	1801	-346	-16.1	2006	3204	290	10.0
1983	1691	-110	- 6.1	2007	3908	704	22.0
1984	1357	-334	-19.8	2008	4468	560	14.3
1985	948	-409	-30.1	2009	4371	-97	-2.2
1986	787	-161	-17.0	2010	5064	693	15.9
1987	875	88	11.2	2011	6708	1644	32.5
1988	1054	179	20.5	2012	8296	1588	23.7
1989	1139	85	8.1	2013	8716	420	5.1
1990	1214	75	6.6	2014	7943	-773	-8.9
1991	1219	5	.4	2015	7633	-310	-3.9
1992	1249	30	2.5	2016	7183	-450	-5.9
1993	1275	26	2.1	2017	7326	143	2.0
1994	1356	81	6.4	2018	7264	-61	-0.8
1995	1455	99	7.3	2019	7432	168	2.3

Table 2. Iowa Farmland Values and Percentage Change by District and Land Quality as of November 2019

District	Average Value	% Change	High Quality	% Change	Medium Quality	% Change	Low Quality	% Change
Northwest	$9,352	0.4%	$10,757	-0.1%	$8,633	1.0%	$6,099	1.3%
North Central	$7,912	1.6%	$8,858	1.8%	$7,248	0.5%	$5,325	3.2%
Northeast	$7,325	-2.9%	$9,050	-1.6%	$6,833	-4.0%	$4,803	-5.0%
West Central	$7,564	2.0%	$9,017	2.1%	$7,076	2.0%	$4,950	4.9%
Central	$8,336	5.5%	$9,749	4.7%	$7,649	4.2%	$5,467	10.9%
East Central	$8,475	5.9%	$10,421	6.7%	$7,823	5.0%	$5,279	7.5%
Southwest	$6,166	1.7%	$7,768	0.4%	$5,841	3.0%	$3,844	1.4%
South Central	$4,487	3.6%	$6,416	6.0%	$4,371	3.0%	$2,955	0.1%
Southeast	$6,868	3.8%	$9,341	3.1%	$6,616	4.1%	$3,790	3.7%
STATE (avg)	**$7,432**	**2.3%**	**$9,078**	**2.4%**	**$6,938**	**2.0%**	**$4,759**	**3.3%**

Table 3. Iowa Farmland Values by Crop Reporting District and Quality of Land, 2008–2019

Year	State Avg	Northwest	North Central	Northeast	West Central	Central	East Central	Southwest	South Central	Southeast
					All Quality					
2008	4468	5395	4950	4590	4823	5280	4743	3626	2573	3913
2009	4371	5364	4827	4464	4652	5026	4796	3559	2537	3832
2010	5064	6356	5746	5022	5466	5901	5447	4325	2690	4296
2011	6708	8338	7356	6602	7419	7781	7110	5905	3407	5705
2012	8296	11404	9560	8523	9216	9365	8420	7015	4308	6172
2013	8716	10960	9818	9161	9449	9877	9327	7531	4791	6994
2014	7943	9615	8536	8151	8424	9087	9008	6513	4475	7215
2015	7633	9685	7962	7861	8061	8505	8506	6372	4397	6892
2016	7183	9243	7562	7313	7358	7841	7917	6060	4241	6716
2017	7326	9388	7802	7543	7377	8097	8218	6058	4172	6864
2018	7264	9311	7789	7543	7413	7899	8004	6060	4329	6619
2019	7432	9352	7912	7325	7564	8336	8475	6166	4487	6868
					High Quality					
2008	5381	6150	5514	5415	5752	6076	5674	4642	3586	5346
2009	5321	6129	5371	5349	5552	5939	5738	4539	3710	5306
2010	6109	7283	6397	6076	6585	7026	6152	5335	3892	5862
2011	8198	9649	8601	7994	8889	9332	8675	7418	5109	7721
2012	10181	12890	10765	10708	11128	11139	10201	8818	6437	8879
2013	10828	12824	11159	11423	11591	11803	11631	9591	7150	9785
2014	9854	11201	9630	10083	10275	10780	11034	8482	6663	10150
2015	9364	11229	8976	9575	9684	10087	10289	8031	6445	9536
2016	8758	10650	8442	8892	8874	9299	9502	7527	5980	9265
2017	8933	10829	8730	9151	8881	9568	9900	7571	5908	9471
2018	8863	10767	8699	9198	8834	9313	9768	7738	6055	9063
2019	9078	10757	8858	9050	9017	9749	10421	7768	6416	9341
					Medium Quality					
2008	4195	5023	4568	4339	4537	4919	4405	3425	2527	3721
2009	4076	4977	4450	4193	4371	4615	4465	3386	2443	3535
2010	4758	5883	5300	4664	5111	5386	5445	4140	2596	4053
2011	6256	7708	6713	6290	6981	7029	6510	5553	3353	5468
2012	7773	11011	8691	7815	8619	8466	8128	6732	4219	5685
2013	8047	9918	8824	8573	8725	8930	8567	7137	4715	6605
2014	7359	8698	7874	7591	7827	8327	8388	6108	4318	6715
2015	7127	8834	7352	7460	7581	7758	7934	6038	4282	6525
2016	6705	8468	6992	6994	6870	7186	7396	5683	4128	6283
2017	6849	8555	7218	7236	6824	7426	7674	5756	4079	6548
2018	6805	8548	7214	7116	6935	7341	7452	5671	4244	6353
2019	6938	8633	7248	6833	7076	7649	7823	5841	4371	6616
					Low Quality					
2008	2967	3580	3408	3296	3187	3469	3214	2298	1757	2271
2009	2884	3490	3281	3177	3134	3203	3240	2286	1685	2281
2010	3357	4161	3976	3517	3542	3724	3840	2868	1794	2620
2011	4257	5196	4900	4352	4766	4848	4671	3824	1984	3335
2012	5119	7162	6303	5288	5877	5718	5013	4484	2562	3226
2013	5298	6845	6421	5670	5926	5918	5449	4592	2843	3651
2014	4878	6091	5428	5256	5173	5582	5479	3860	2808	3891
2015	4834	6252	5372	5242	5082	5292	5366	4070	2750	3797
2016	4665	6019	5164	4847	4577	5158	5153	4189	2892	3783
2017	4689	6216	5265	4965	4684	4993	5305	3935	2824	3768
2018	4609	6018	5161	5056	4720	4932	4911	3790	2953	3656
2019	4759	6099	5325	4803	4950	5467	5279	3844	2955	3790

Table 4. Level of Sales Activity, 2019 (Percent)

	More	Less	Same
Northwest	24	24	52
North Central	32	19	49
Northeast	20	19	62
West Central	19	32	49
Central	30	31	39
East Central	21	41	38
Southwest	31	13	56
South Central	25	27	47
Southeast	24	41	35
STATE	**25**	**27**	**48**

Table 5. Iowa Land Purchases by Buyer Type, 2019 (Percent)

	Existing Local Farmers	Existing Relocating Farmers	New Farmers	Investors	Other
Northwest	80	1	3	15	1
North Central	71	2	3	23	1
Northeast	72	1	8	17	2
West Central	73	4	5	17	1
Central	65	5	5	22	3
East Central	70	1	3	24	2
Southwest	66	2	4	27	1
South Central	49	5	10	30	6
Southeast	72	2	6	17	3
STATE	**70**	**2**	**5**	**21**	**2**

Table 6. Iowa Land Purchases by Seller Type, 2019 (Percent)

	Active Farmers	Retired Farmers	Estate Sales	Investors	Other
Northwest	10	17	65	7	1
North Central	12	20	60	6	2
Northeast	15	31	45	6	3
West Central	11	24	57	6	2
Central	12	19	62	5	2
East Central	13	23	56	6	2
Southwest	12	25	49	10	4
South Central	20	25	35	17	3
Southeast	16	26	50	6	2
STATE	**16**	**24**	**52**	**7**	**1**

Table 7. Survey Respondents and Responses by Mode, 2019

(Some respondents report on more than one county)

	Paper	Online	Responses	Paper	Online	Respondents
	(Percent)			(Percent)		
Northwest	45	55	88	45	55	76
North Central	32	68	95	32	68	77
Northeast	37	63	89	39	61	71
West Central	51	49	69	52	48	54
Central	40	60	77	38	62	61
East Central	35	65	74	34	66	58
Southwest	34	66	56	39	61	41
South Central	33	67	60	38	62	52
Southeast	48	52	65	51	49	57
STATE	**39**	**61**	**673**	**41**	**59**	**547**

Table 8. Survey Respondents by Occupation, 2018 (Percent)

	Farm manager	Appraiser	Ag lender	Broker/ Realtor	Farmer/ Landowner	Government	Other
Northwest	20	4	39	18	4	12	3
North Central	12	8	42	14	9	10	5
Northeast	10	6	44	11	14	7	8
West Central	11	6	44	11	2	13	13
Central	15	11	31	13	8	13	8
East Central	16	9	34	16	7	5	14
Southwest	10	7	29	17	17	12	7
South Central	8	8	23	31	10	19	4
Southeast	7	9	39	11	5	16	11
STATE	**12**	**7**	**37**	**16**	**8**	**12**	**8**

Table 9. Experience and Service Area by District and Respondent Occupation, 2018

Crop reporting district	Years of experience	Number of counties served	Occupation	Years of experience	Number of counties served
Northwest	27	6	Farm manager	23	10
North Central	29	9	Appraiser	28	15
Northeast	25	10	Ag lender	24	4
West Central	26	9	Brokers/Realtor	26	13
Central	28	10	Farmer/Landowner	40	5
East Central	24	6	Government	20	3
Southwest	29	5	Other	34	11
South Central	20	8			
Southeast	22	6			
STATE	**26**	**8**	**STATE**	**26**	**8**

Table 10. Predicted Percent Change in Local Land Value One from Now

	decrease 5 percent or more	decrease 3-5 percent	decrease less than 3 percent	no change	increase 5 percent or less	increase 5-10 percent	increase more than 10 percent
Northwest	9	7	13	36	23	12	0
North Central	1	16	17	28	29	9	0
Northeast	5	8	13	30	30	6	8
West Central	2	5	7	28	44	12	2
Central	5	2	11	32	40	9	2
East Central	4	6	12	37	31	8	2
Southwest	16	8	5	27	19	22	3
South Central	14	2	16	33	20	8	6
Southeast	3	17	3	30	40	7	0
STATE	**6**	**8**	**12**	**31**	**30**	**10**	**3**

Table 11. Predicted Percent Change in Local Land Value Five Years from Now

	decrease 5 percent or more	decrease less than 5 percent	no change	increase 5 percent or less	increase 5-10 percent	increase 10-15 percent	increase 15-20 percent	increase more than 20 percent
				(Percent)				
Northwest	7	4	10	16	34	10	12	6
North Central	9	4	10	16	21	19	12	9
Northeast	5	7	16	5	28	18	7	14
West Central	5	11	0	5	26	24	18	11
Central	2	7	7	4	30	21	16	14
East Central	10	6	8	10	31	23	4	6
Southwest	3	0	14	11	22	24	14	14
South Central	9	4	20	9	15	17	22	4
Southeast	7	0	13	7	33	30	3	7
STATE	**6**	**5**	**11**	**10**	**27**	**20**	**12**	**9**

Table 12. Iowa Cash Crop Price Predictions for November 2018 and 2023

	Cash Corn Prices		Cash Soybean Prices	
	One Year Later	Five Years Later	One Year Later	Five Years Later
Northwest	$3.79	$4.25	$8.84	$9.79
North Central	$3.75	$4.18	$8.87	$9.65
Northeast	$3.77	$4.08	$8.85	$9.59
West Central	$3.76	$4.16	$8.91	$9.69
Central	$3.76	$4.23	$9.02	$10.11
East Central	$3.84	$4.19	$9.11	$9.92
Southwest	$3.75	$4.34	$8.78	$9.97
South Central	$3.64	$4.08	$8.77	$9.78
Southeast	$3.81	$4.29	$9.11	$10.16
STATE	**$3.76**	**$4.19**	**$8.91**	**$9.82**

Table 13. Estimated Average CSR2 and Percent of Land Area by Land Quality, 2019

	Reported Average CSR2			Reported Percent of Land Area		
	High Quality	Medium Quality	Low Quality	High Quality	Medium Quality	Low Quality
Northwest	89	79	66	44	38	18
North Central	86	74	61	40	40	20
Northeast	82	68	52	34	41	25
West Central	81	68	53	33	44	23
Central	85	74	60	46	37	17
East Central	86	71	54	39	37	24
Southwest	79	64	49	27	47	26
South Central	72	54	38	22	42	36
Southeast	81	65	46	30	43	27
STATE	**83**	**69**	**54**	**36**	**40**	**24**

Table 14. Estimated Average Mortgage and Operating Loan Rate (Percent)

	Interest Rates	
	20-Year Farmland Mortgage	1-Year Operating Loan
Northwest	4.86	5.84
North Central	4.86	5.74
Northeast	4.82	5.45
West Central	4.84	5.65
Central	4.76	5.62
East Central	4.85	5.61
Southwest	4.91	5.68
South Central	4.89	5.65
Southeast	5.11	5.72
STATE	**4.87**	**5.66**

Comparative Iowa Land Values
2018-2019

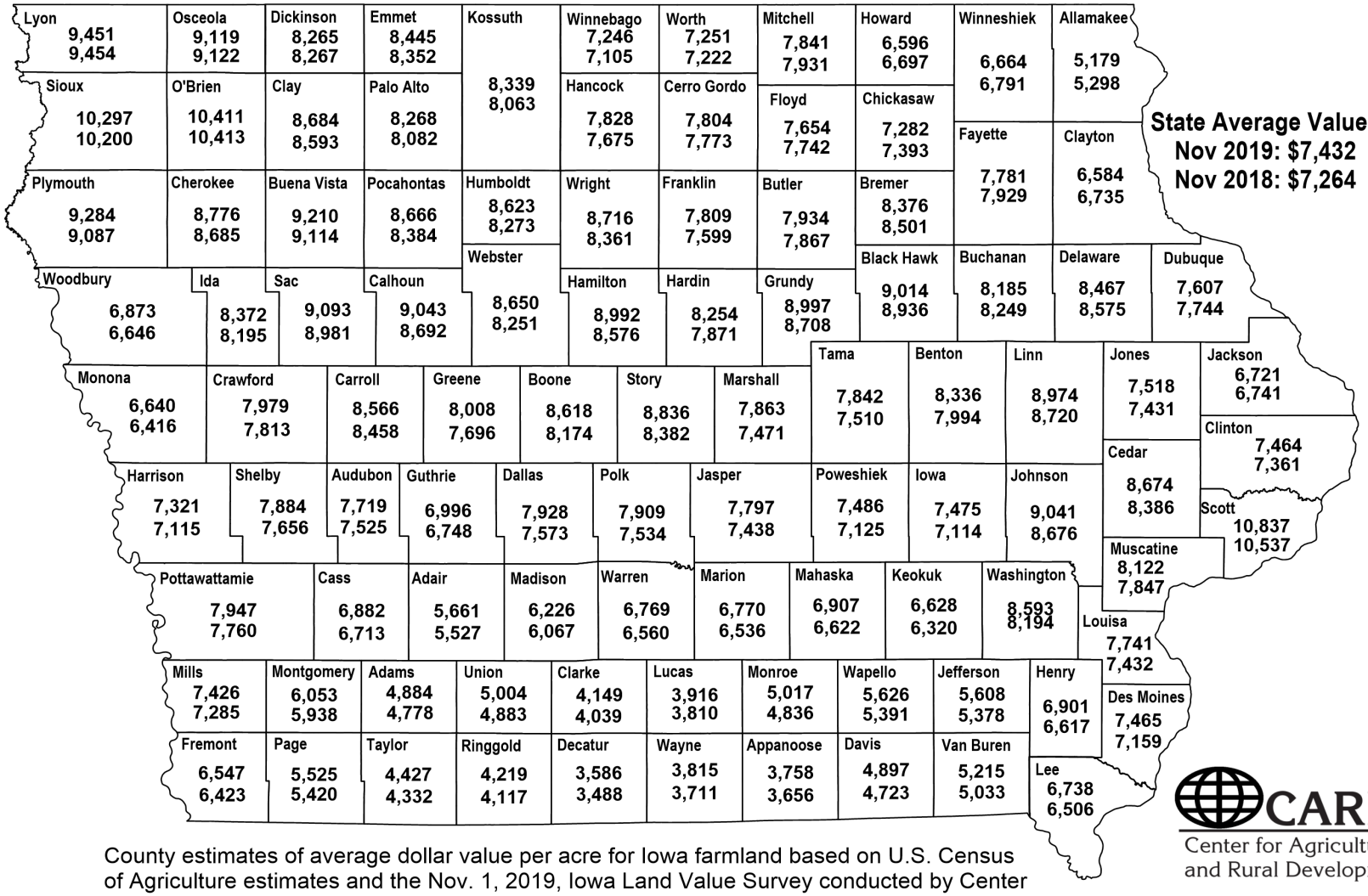
By Crop Reporting District:

District Name	2019 $/acre	2018 $/acre	2018-2019 $ change	2018-2019 % change
Northwest	$ 9,352	$ 9,311	$41	0.44%
North Central	$ 7,912	$ 7,789	$123	1.58%
Northeast	$ 7,325	$ 7,543	-$218	-2.90%
West Central	$ 7,564	$ 7,413	$151	2.04%
Central	$ 8,336	$ 7,899	$437	5.53%
East Central	$ 8,475	$ 8,004	$471	5.88%
Southwest	$ 6,166	$ 6,060	$105	1.74%
South Central	$ 4,487	$ 4,329	$158	3.64%
Southeast	$ 6,868	$ 6,619	$249	3.77%
State Average	**$ 7,432**	**$ 7,264**	**$168**	**2.31%**

By County:

County Name	2019 $/acre	2018 $/acre	2018-2019 $ change	2018-2019 % change
Adair	$ 5,661	$ 5,527	$134	2.43%
Adams	$ 4,884	$ 4,778	$106	2.22%
Allamakee	$ 5,179	$ 5,298	-$119	-2.25%
Appanoose	$ 3,758	$ 3,656	$102	2.79%
Audubon	$ 7,719	$ 7,525	$194	2.58%
Benton	$ 8,336	$ 7,994	$342	4.28%
Black Hawk	$ 9,014	$ 8,936	$78	0.87%
Boone	$ 8,618	$ 8,174	$444	5.44%
Bremer	$ 8,376	$ 8,501	-$125	-1.47%
Buchanan	$ 8,185	$ 8,249	-$64	-0.78%
Buena Vista	$ 9,210	$ 9,114	$96	1.05%
Butler	$ 7,934	$ 7,867	$67	0.85%
Calhoun	$ 9,043	$ 8,692	$351	4.04%
Carroll	$ 8,566	$ 8,458	$108	1.28%
Cass	$ 6,882	$ 6,713	$169	2.52%
Cedar	$ 8,674	$ 8,386	$288	3.43%
Cerro Gordo	$ 7,804	$ 7,773	$31	0.40%
Cherokee	$ 8,776	$ 8,685	$91	1.05%
Chickasaw	$ 7,282	$ 7,393	-$111	-1.50%
Clarke	$ 4,149	$ 4,039	$110	2.73%
Clay	$ 8,684	$ 8,593	$92	1.06%
Clayton	$ 6,584	$ 6,735	-$151	-2.25%
Clinton	$ 7,464	$ 7,361	$104	1.41%
Crawford	$ 7,979	$ 7,813	$166	2.12%
Dallas	$ 7,928	$ 7,573	$356	4.70%
Davis	$ 4,897	$ 4,723	$174	3.68%
Decatur	$ 3,586	$ 3,488	$97	2.79%
Delaware	$ 8,467	$ 8,575	-$108	-1.26%
Des Moines	$ 7,465	$ 7,159	$306	4.28%
Dickinson	$ 8,265	$ 8,267	-$2	-0.03%
Dubuque	$ 7,607	$ 7,744	-$137	-1.77%
Emmet	$ 8,445	$ 8,352	$93	1.12%
Fayette	$ 7,781	$ 7,929	-$147	-1.86%
Floyd	$ 7,654	$ 7,742	-$88	-1.13%
Franklin	$ 7,809	$ 7,599	$210	2.76%
Fremont	$ 6,547	$ 6,423	$124	1.94%
Greene	$ 8,008	$ 7,696	$312	4.05%
Grundy	$ 8,997	$ 8,708	$288	3.31%
Guthrie	$ 6,996	$ 6,748	$248	3.67%
Hamilton	$ 8,992	$ 8,576	$416	4.86%
Hancock	$ 7,828	$ 7,675	$153	1.99%
Hardin	$ 8,254	$ 7,871	$383	4.86%
Harrison	$ 7,321	$ 7,115	$206	2.90%
Henry	$ 6,901	$ 6,617	$283	4.28%
Howard	$ 6,596	$ 6,697	-$101	-1.51%
Humboldt	$ 8,623	$ 8,273	$349	4.22%
Ida	$ 8,372	$ 8,195	$177	2.16%
Iowa	$ 7,475	$ 7,114	$361	5.08%
Jackson	$ 6,721	$ 6,741	-$20	-0.29%
Jasper	$ 7,797	$ 7,438	$359	4.83%
Jefferson	$ 5,608	$ 5,378	$230	4.29%
Johnson	$ 9,041	$ 8,676	$365	4.21%
Jones	$ 7,518	$ 7,431	$87	1.17%
Keokuk	$ 6,628	$ 6,320	$308	4.87%
Kossuth	$ 8,339	$ 8,063	$276	3.43%
Lee	$ 6,738	$ 6,506	$233	3.58%
Linn	$ 8,974	$ 8,720	$254	2.92%
Louisa	$ 7,741	$ 7,432	$309	4.15%
Lucas	$ 3,916	$ 3,810	$106	2.79%
Lyon	$ 9,451	$ 9,454	-$3	-0.03%
Madison	$ 6,226	$ 6,067	$159	2.63%
Mahaska	$ 6,907	$ 6,622	$285	4.30%
Marion	$ 6,770	$ 6,536	$234	3.57%
Marshall	$ 7,863	$ 7,471	$392	5.24%
Mills	$ 7,426	$ 7,285	$141	1.94%
Mitchell	$ 7,841	$ 7,931	-$90	-1.13%
Monona	$ 6,640	$ 6,416	$224	3.49%
Monroe	$ 5,017	$ 4,836	$180	3.72%
Montgomery	$ 6,053	$ 5,938	$115	1.94%
Muscatine	$ 8,122	$ 7,847	$276	3.51%
O'Brien	$ 10,411	$ 10,413	-$3	-0.03%
Osceola	$ 9,119	$ 9,122	-$2	-0.03%
Page	$ 5,525	$ 5,420	$105	1.94%
Palo Alto	$ 8,268	$ 8,082	$185	2.29%
Plymouth	$ 9,284	$ 9,087	$197	2.17%
Pocahontas	$ 8,666	$ 8,384	$283	3.37%
Polk	$ 7,909	$ 7,534	$374	4.97%
Pottawattamie	$ 7,947	$ 7,760	$187	2.41%
Poweshiek	$ 7,486	$ 7,125	$361	5.06%
Ringgold	$ 4,219	$ 4,117	$102	2.48%
Sac	$ 9,093	$ 8,981	$112	1.25%
Scott	$ 10,837	$ 10,537	$300	2.85%
Shelby	$ 7,884	$ 7,656	$227	2.97%
Sioux	$ 10,297	$ 10,200	$97	0.95%
Story	$ 8,836	$ 8,382	$455	5.43%
Tama	$ 7,842	$ 7,510	$332	4.42%
Taylor	$ 4,427	$ 4,332	$95	2.19%
Union	$ 5,004	$ 4,883	$121	2.48%
Van Buren	$ 5,215	$ 5,033	$182	3.63%
Wapello	$ 5,626	$ 5,391	$235	4.35%
Warren	$ 6,769	$ 6,560	$209	3.19%
Washington	$ 8,593	$ 8,194	$399	4.87%
Wayne	$ 3,815	$ 3,711	$104	2.79%
Webster	$ 8,650	$ 8,251	$399	4.83%
Winnebago	$ 7,246	$ 7,105	$141	1.98%
Winneshiek	$ 6,664	$ 6,791	-$127	-1.87%
Woodbury	$ 6,873	$ 6,646	$227	3.41%
Worth	$ 7,251	$ 7,222	$29	0.40%
Wright	$ 8,716	$ 8,361	$355	4.25%

2019 and 2018 Iowa Average Land Values, by County



County estimates of average dollar value per acre for Iowa farmland based on U.S. Census of Agriculture estimates and the Nov. 1, 2019, Iowa Land Value Survey conducted by Center for Agricultural and Rural Development, Iowa State University and Iowa State University Extension and Outreach. The top figure is the estimated Nov. 1, 2019, value; the bottom figure is the estimated Nov. 1, 2018, value.

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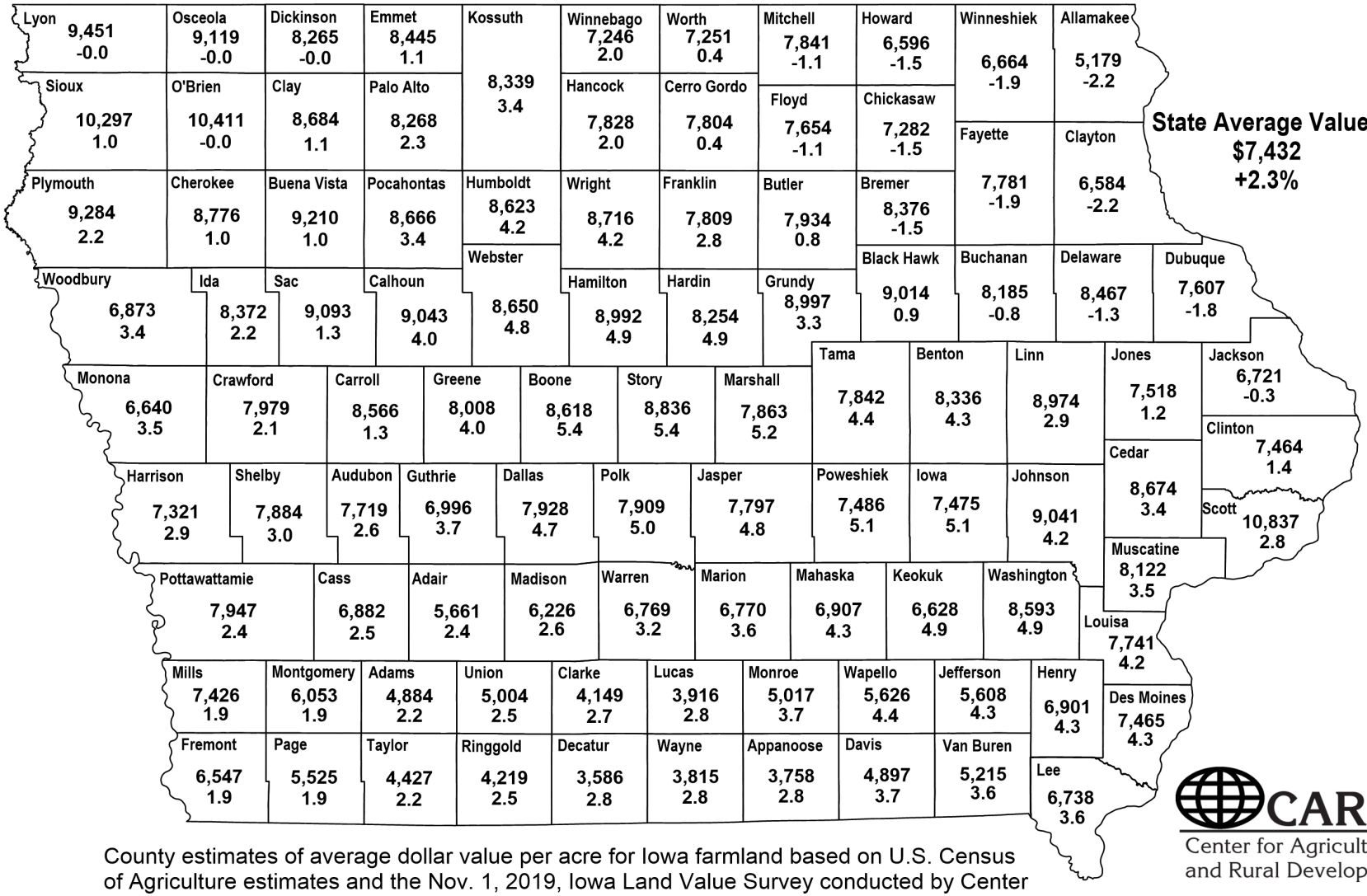
Percentage Change in Iowa Land Values 2018 to 2019



County estimates of average dollar value per acre for Iowa farmland based on U.S. Census of Agriculture estimates and the Nov. 1, 2019, Iowa Land Value Survey conducted by Center for Agricultural and Rural Development, Iowa State University and Iowa State University Extension and Outreach. The top figure is the estimated Nov. 1, 2019, value; the bottom figure is the percentage of change from the estimated Nov. 1, 2018, value.

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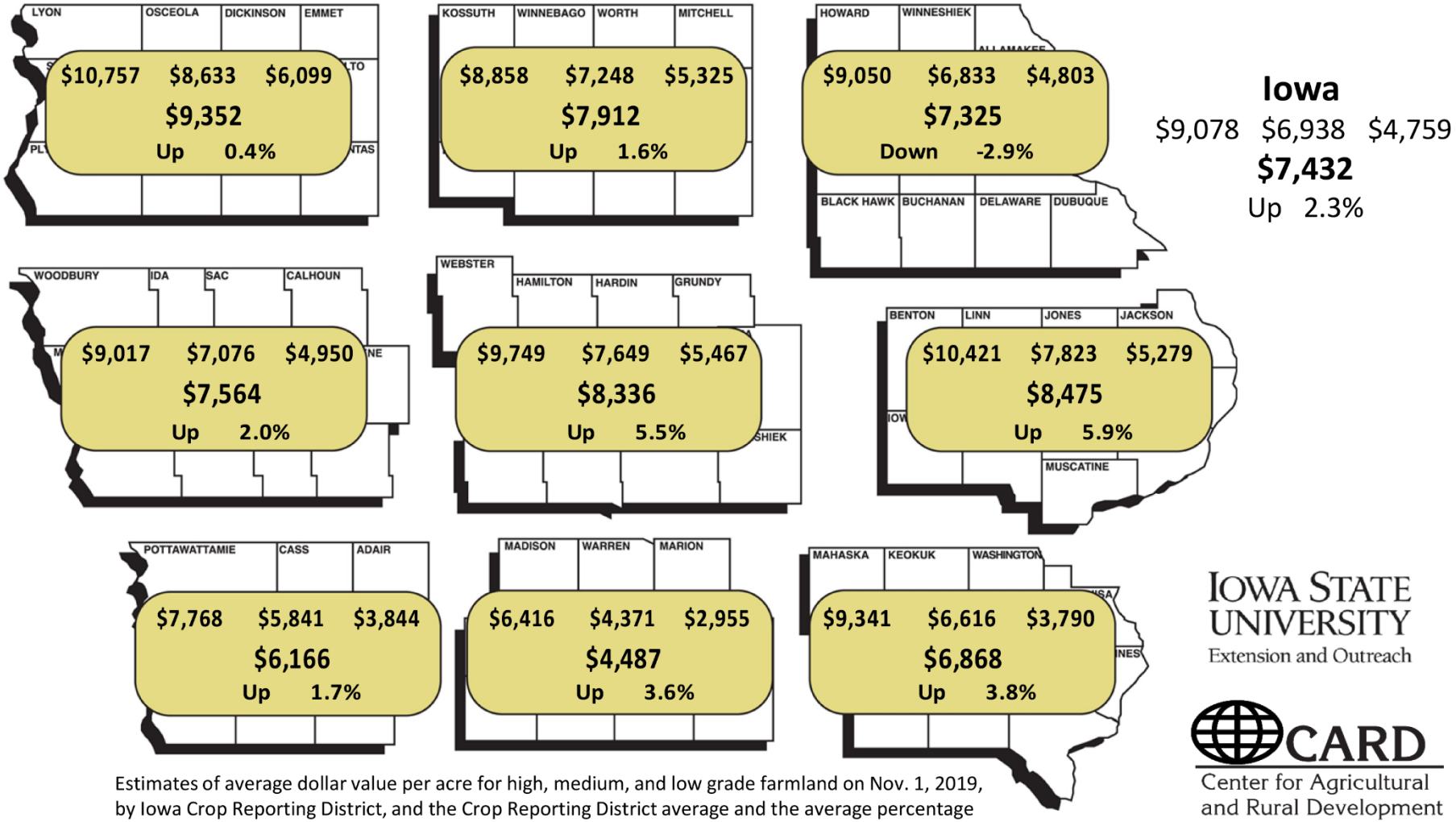
2019 Iowa Land Values by Crop Reporting District



Estimates of average dollar value per acre for high, medium, and low grade farmland on Nov. 1, 2019, by Iowa Crop Reporting District, and the Crop Reporting District average and the average percentage change from Nov. 1, 2018. The estimates are based on a survey conducted by Iowa State University, Center for Agricultural and Rural Development and Iowa State University Extension and Outreach.

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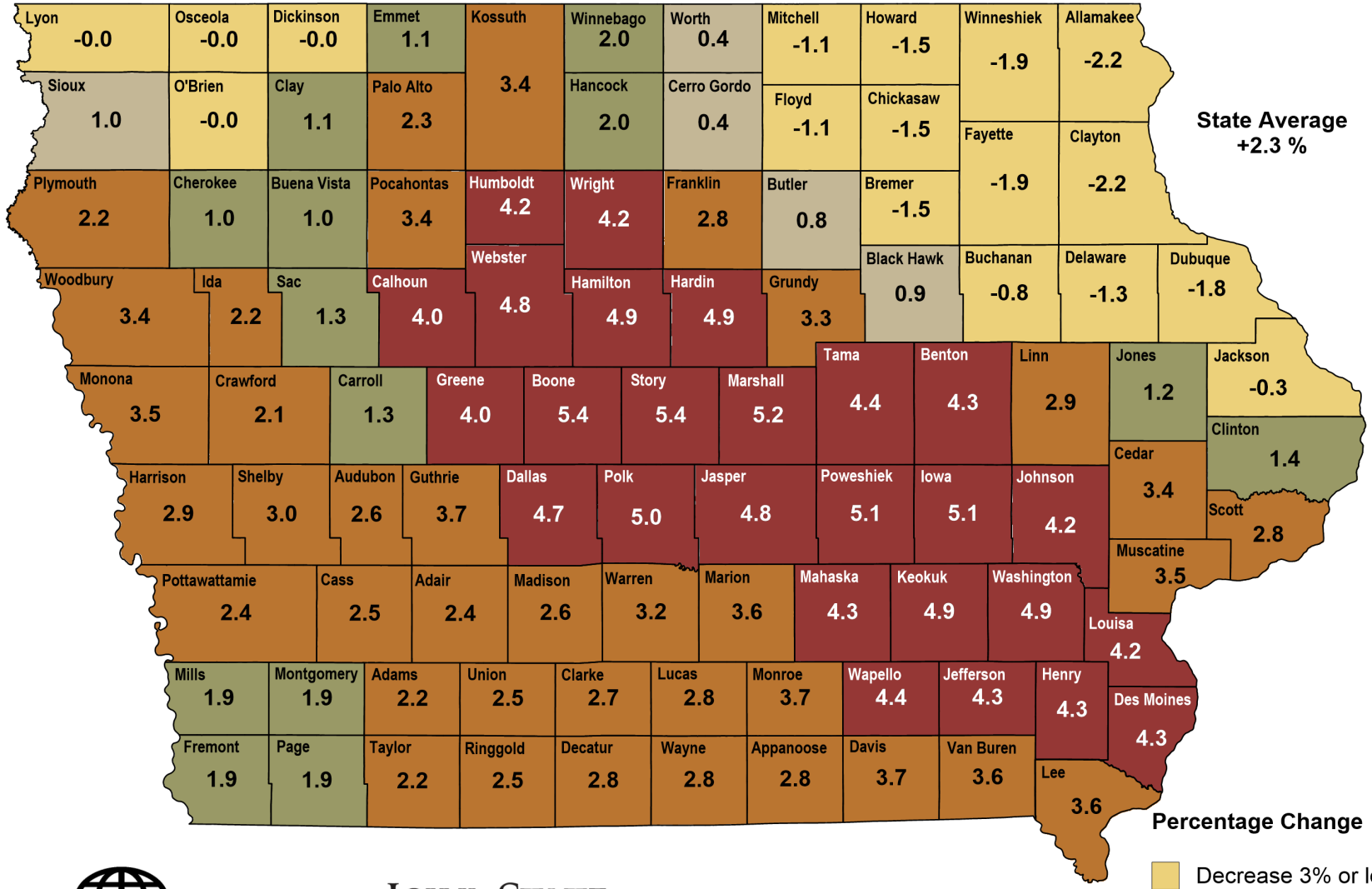
Percentage Change in Iowa Land Values 2018 to 2019



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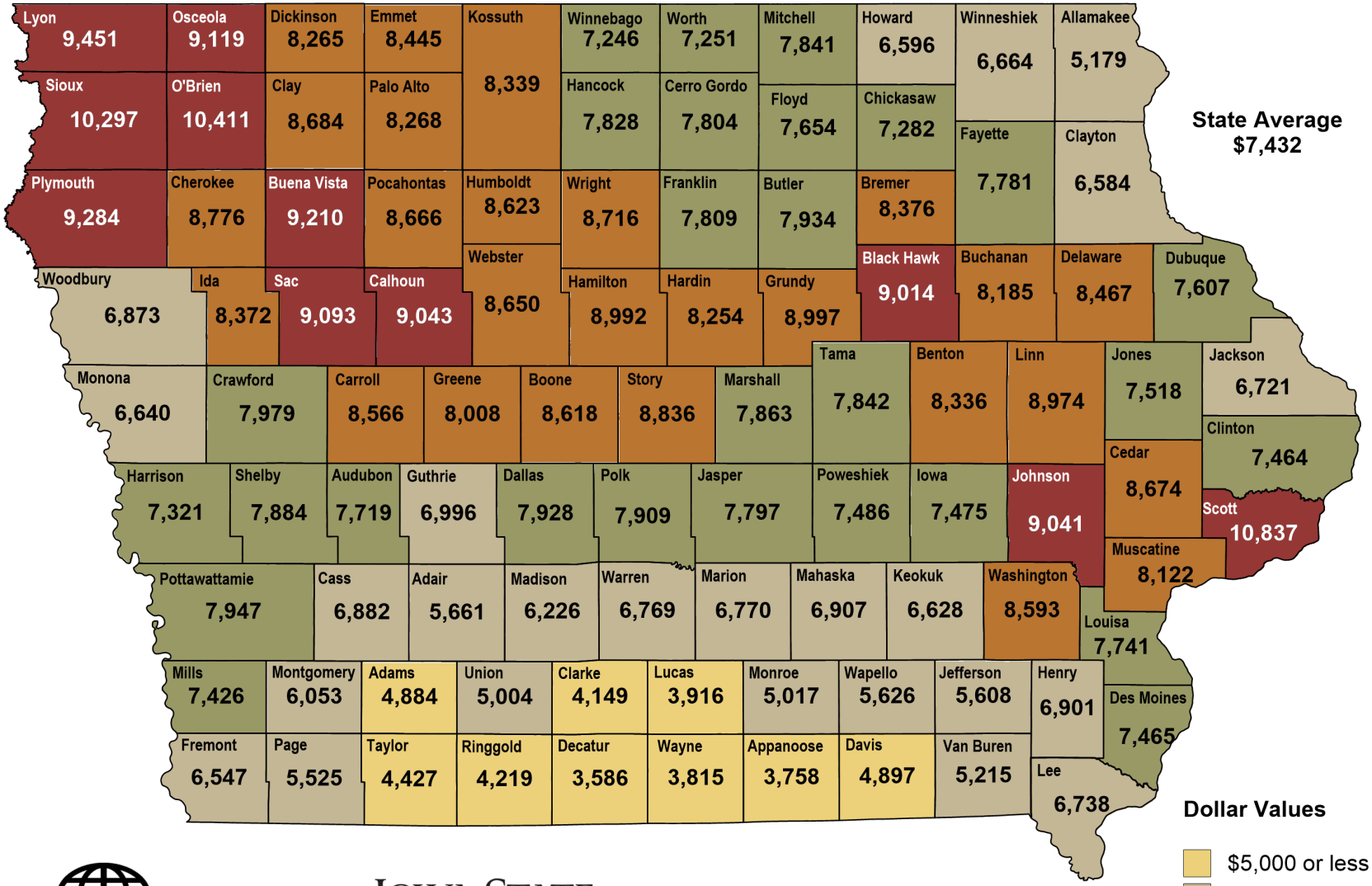
2019 Iowa Land Values



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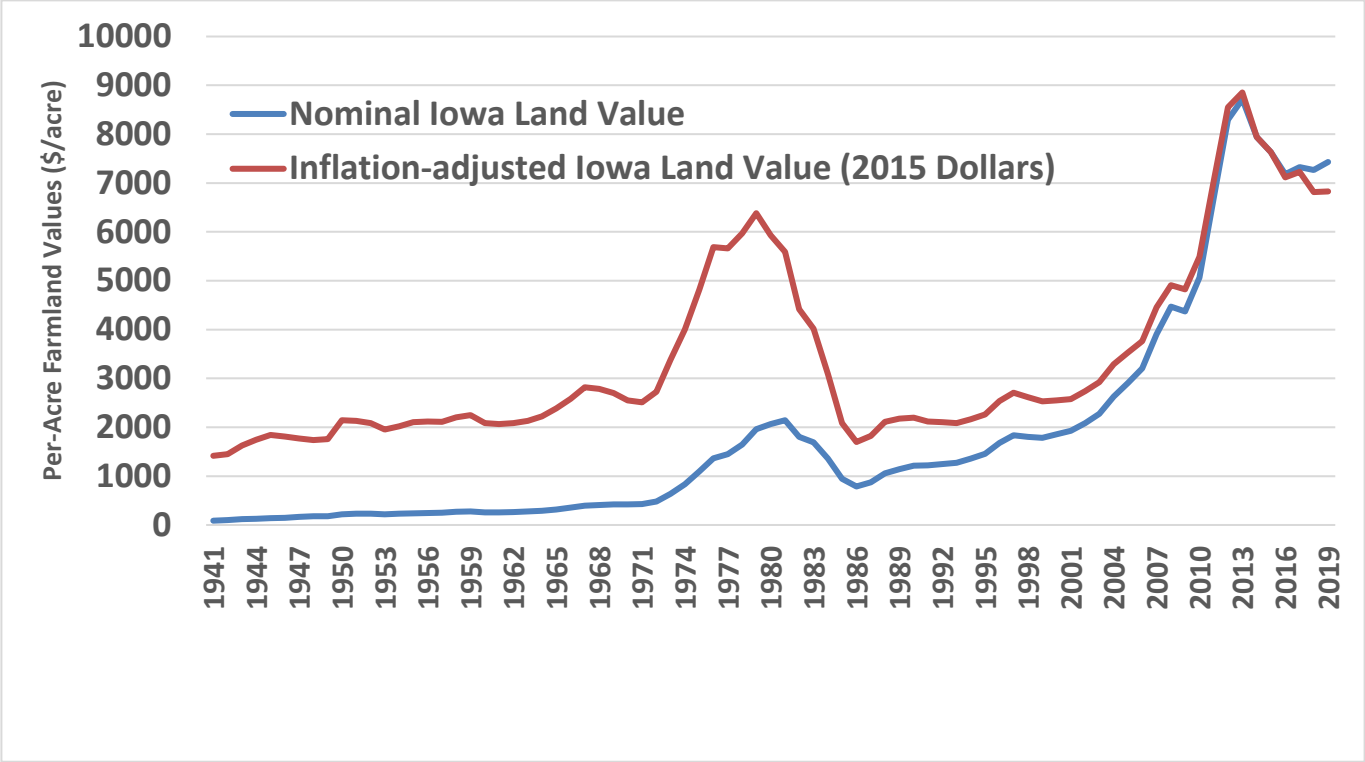
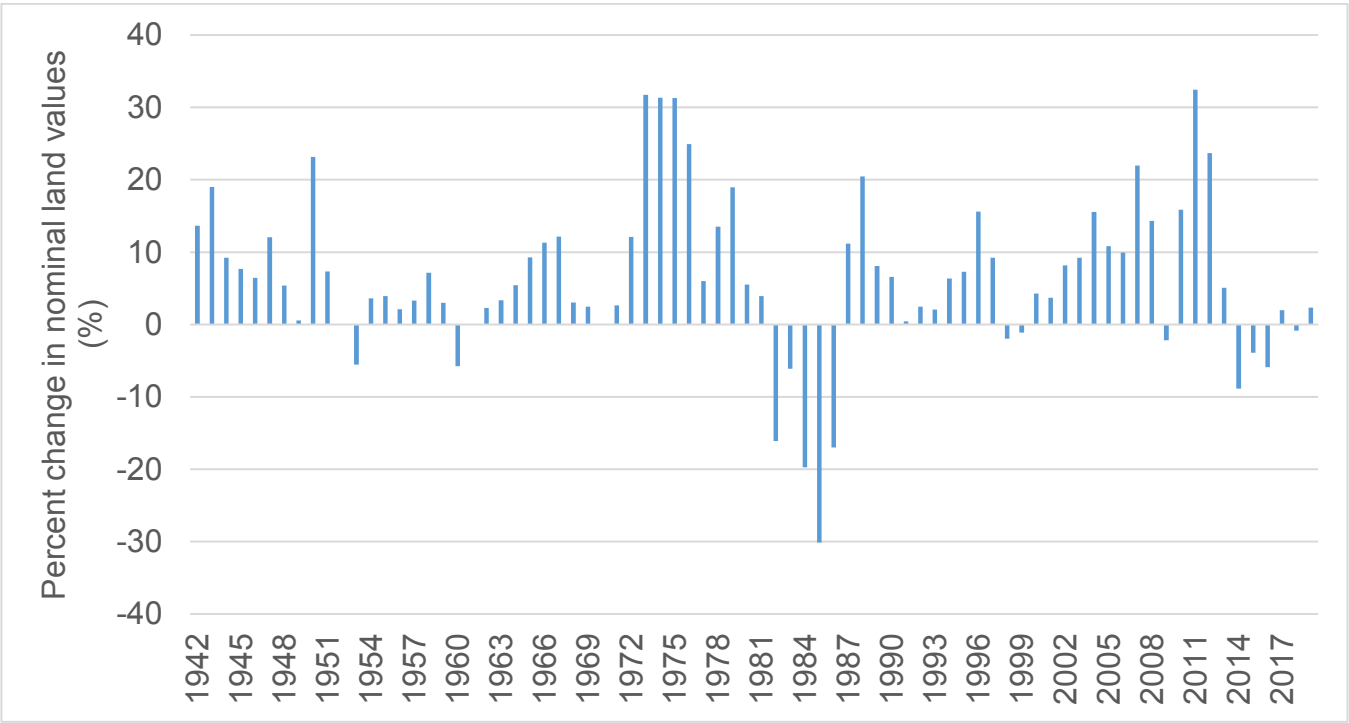
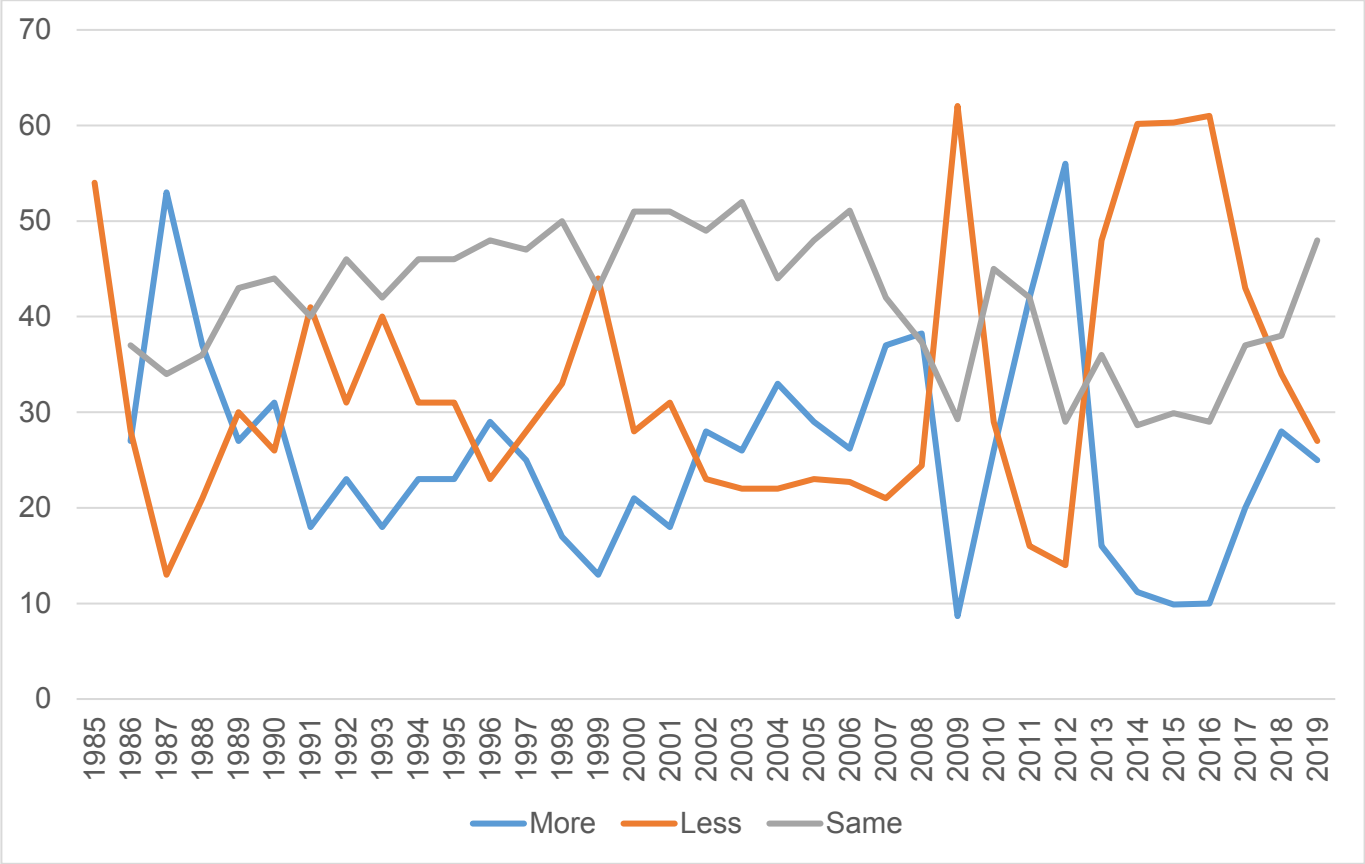
Iowa Nominal and Inflation-adjusted Average Value per Acre of Iowa Farmland, 1941–2019



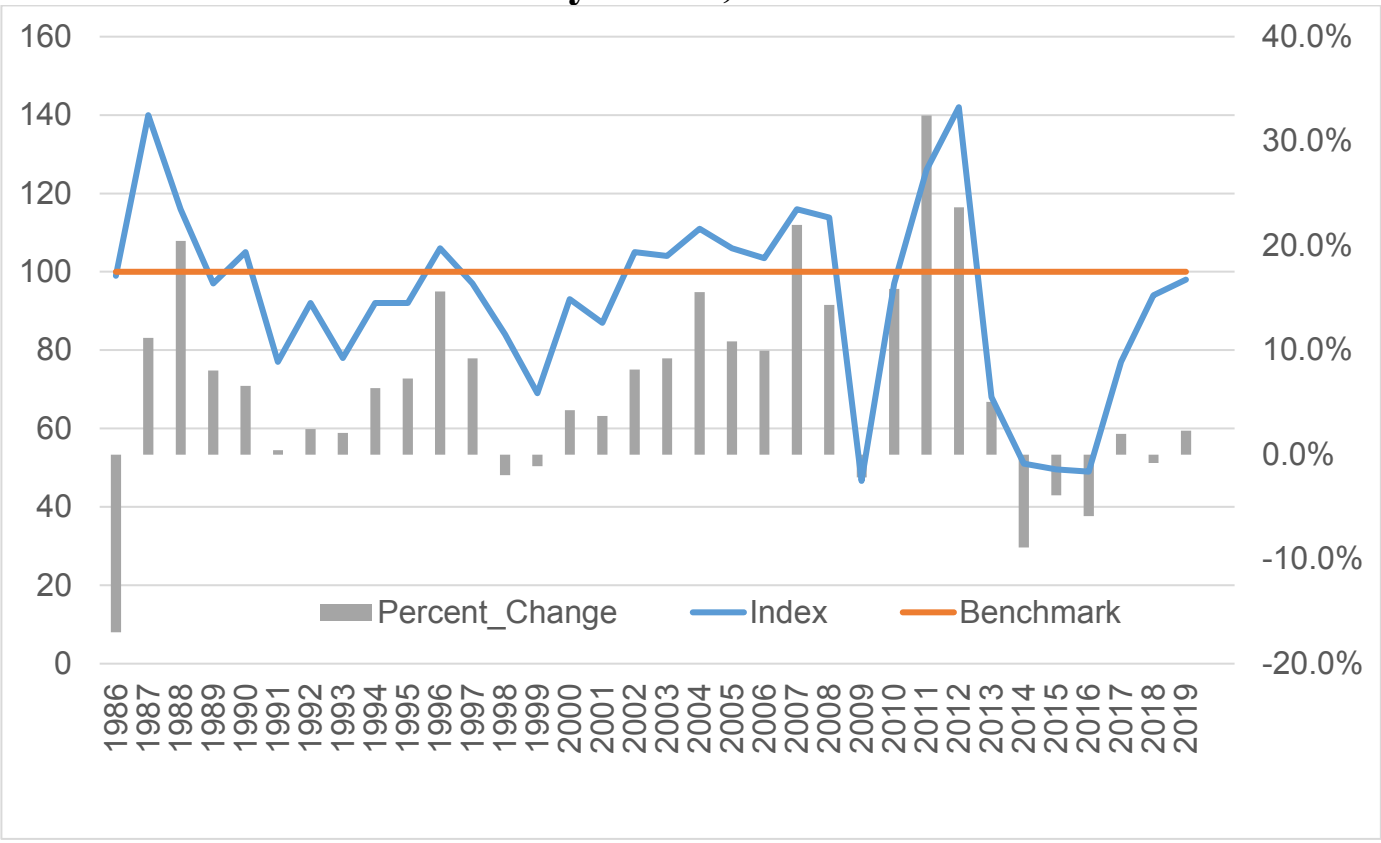
Annual Percentage Change in Nominal Iowa Farmland Values, 1942–2019



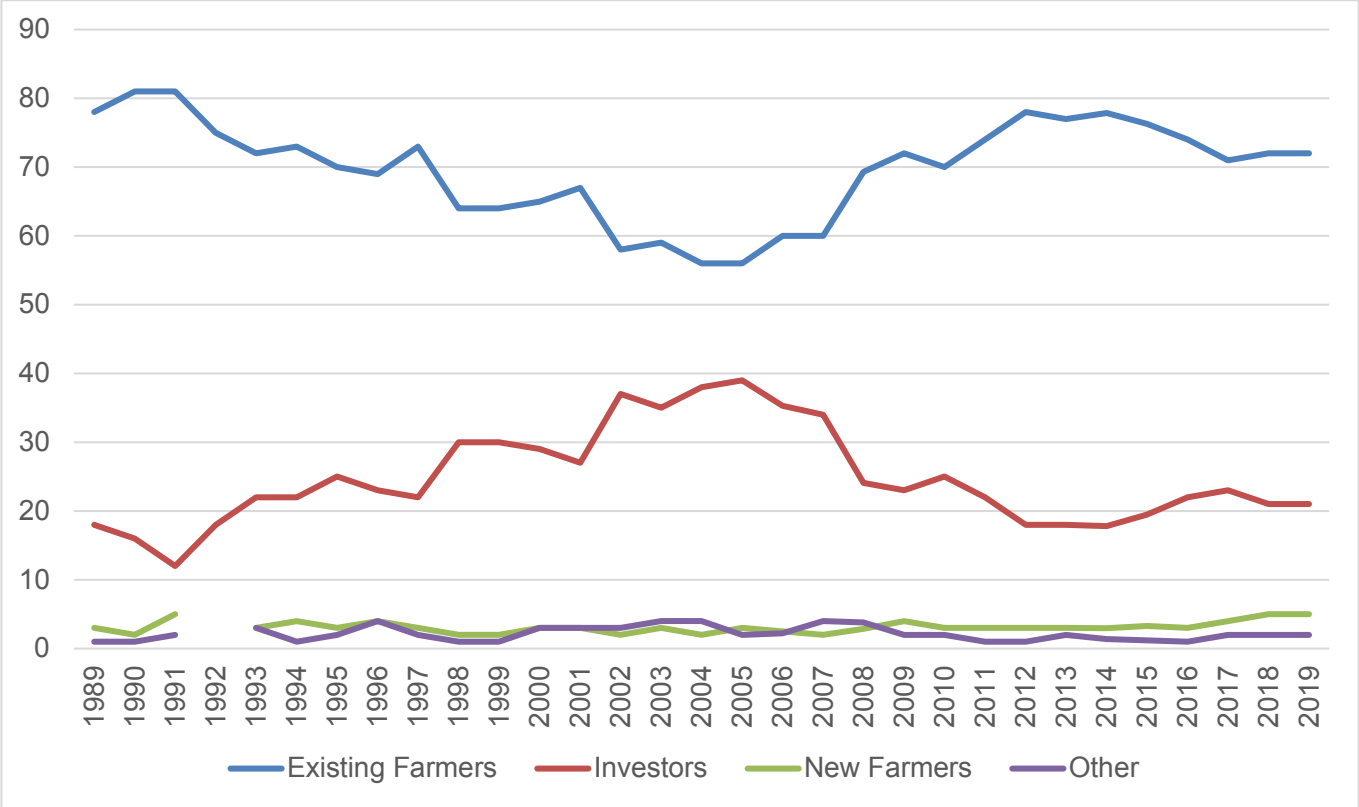
Iowa Farmland Sale Activity, 1985–2019



Iowa Farmland Sale Activity Index, 1986–2019



Buyers of Iowa Farmland, 1989–2019



Positive and Negative Factors of the Iowa Farmland Market, November 2018–November 2019