2022 Iowa State University Farmland Value Survey

Ag Decision Maker
extension.iastate.edu/agdm

File C2-70

The Iowa State University Land Value 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 Iowa State University survey data. County estimates are derived using a procedure that combines Iowa State University survey results with data from the US 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.

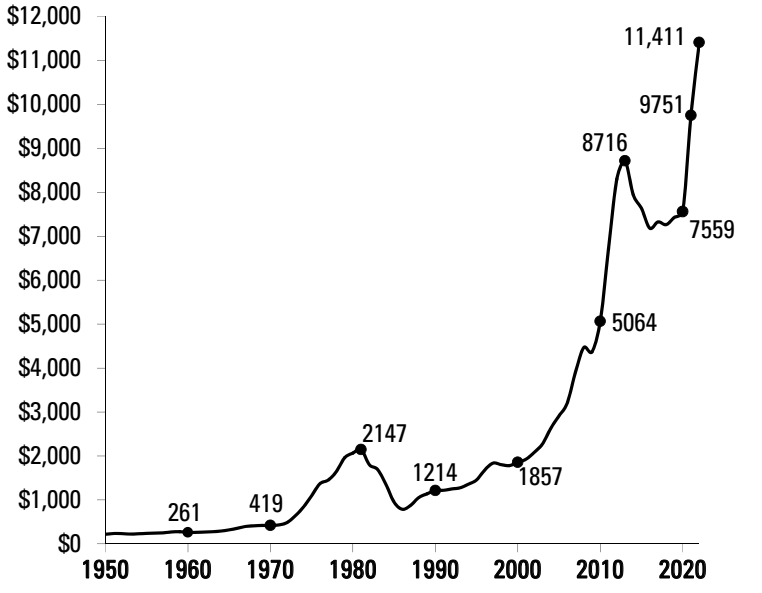
The survey is an expert opinion survey based on reports by licensed real estate brokers, farm managers, appraisers, agricultural lenders, county assessors, and selected individuals considered to be knowledgeable of land market conditions. Respondents were asked to report for more than one county if they were knowledgeable about the land markets. The 2022 Iowa State University Land Value Survey is based on 668 usable county-level land value estimates provided by 443 agricultural professionals.

Of the 443 respondents, 71% completed the survey online. Online responses allow participants to provide estimates for up to 16 counties. The CARD Farmland portal, www.card.iastate.edu/farmland/, facilitates the visualization and analysis of Iowa farmland values, pooling data from Iowa State University, the United States Department of Agriculture, Federal Reserve Bank of Chicago, and the REALTORS® Land Institute Iowa Chapter, as well as making use of charts over time and interactive county maps.

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.

The 2022 state average for all quality of land was estimated to be $11,411 per acre as of November 1, 2022 (Figure 1). This is an increase of $1,660 per acre from Nov. 1, 2021, and a 17% increase (Table 1).

Figure 1. Average value per acre of Iowa farmland



Source: Iowa State University Land Value Survey

Revised December 2022

IOWA STATE UNIVERSITY
Extension and Outreach

Table 1. Changes in Iowa farmland values, 1981-2022

Year	Value per acre	Dollar change	Percentage change
1981	$2,147	$81	3.9%
1982	$1,801	-$346	-16.1%
1983	$1,691	-$110	-6.1%
1984	$1,357	-$334	-19.8%
1985	$948	-$409	-30.1%
1986	$787	-$161	-17.0%
1987	$875	$88	11.2%
1988	$1,054	$179	20.5%
1989	$1,139	$85	8.1%
1990	$1,214	$75	6.6%
1991	$1,219	$5	0.4%
1992	$1,249	$30	2.5%
1993	$1,275	$26	2.1%
1994	$1,356	$81	6.4%
1995	$1,455	$99	7.3%
1996	$1,682	$227	15.6%
1997	$1,837	$155	9.2%
1998	$1,801	-$36	-2.0%
1999	$1,781	-$20	-1.1%
2000	$1,857	$76	4.3%
2001	$1,926	$69	3.7%
2002	$2,083	$157	8.2%
2003	$2,275	$192	9.2%
2004	$2,629	$354	15.6%
2005	$2,914	$285	10.8%
2006	$3,204	$290	10.0%
2007	$3,908	$704	22.0%
2008	$4,468	$560	14.3%
2009	$4,371	-$97	-2.2%
2010	$5,064	$693	15.9%
2011	$6,708	$1,644	32.5%
2012	$8,296	$1,588	23.7%
2013	$8,716	$420	5.1%
2014	$7,943	-$773	-8.9%
2015	$7,633	-$310	-3.9%
2016	$7,183	-$450	-5.9%
2017	$7,326	$143	2.0%
2018	$7,264	-$62	-0.8%
2019	$7,432	$168	2.3%
2020	$7,559	$127	1.7%
2021	$9,751	$2,192	29.0%
2022	$11,411	$1,660	17.0%

Major Factors Influencing the Farmland Market

Most survey respondents listed positive and negative factors influencing the land market. Of all respondents, 98% listed at least one positive factor, and 90% listed at least one negative factor. In most cases, respondents listed multiple factors.

There were three positive factors listed by over 10% of respondents who provided at least one positive factor. The most frequently mentioned factor was higher commodity prices, mentioned by 22.1% of respondents. Limited land supply and low interest rates through the summer of 2022 were the second- and third-most frequently mentioned positive factors, mentioned by 18.5% and 10.3% of respondents, respectively. Other frequently mentioned positive factors included cash on hand and high credit availability (9.1%), strong yields (7.2%), good farm economy (4.6%), strong land demand including from investors (4.1%), inflation (2.9%), and stock market/global economic concerns (2.6%).

There were also two negative factors listed by more than 10% of respondents who identified at least one negative factor. The most frequently mentioned negative factor affecting land values was interest rate hikes, mentioned by 34.5% of respondents. Concerns about higher input costs and stock market volatility and economic uncertainty were the second- and third-most frequently mentioned negative factors, mentioned by 14% and 8.1% of respondents, respectively. Weather uncertainty and uncertainty related to COVID-19 were each mentioned by roughly 6% of respondents.

Number of Sales Compared to Previous Year

Fifty-three percent of respondents reported more sales in 2022 relative to 2021, which ties for the 3rd highest rate since we began recording this information in 1986. On the other end of the spectrum, 16% reported fewer sales, and 31% reported the same level of sales in 2022 relative to 2021.

Land Sales by Buyer Category

The 2022 survey asked respondents what percent of the land was sold to six categories of buyers: existing local farmers, existing relocating farmers, new farmers, local investors, non-local investors, or other.

The majority of farmland sales, 68%, were to existing farmers, of which existing local farmers captured 66% of land sales. Only 2% of sales were to existing relocating farmers. New farmers represented 4% of sales. Investors represented 27% of land sales, with 14% going to local investors and 13% to non-local. Other purchasers were 1% of sales.

Land Sales by Seller Category

The 2022 survey asked respondents what percent of land was bought from six categories of sellers: active farmers, retired farmers, estate sales, local investors, non-local investors, or other.

The majority of farmland sales, 57%, were from estate sales, followed by retired farmers at 21%. Active farmers accounted for 8% of sales, while local and non-local investors each accounted for 6%.

Estate sales by crop reporting district ranged from 67% in the Northwest district to 41% in the South Central district.

Sales by investors were highest in the South Central district (25%), with local investors representing 10% of sales and non-locals 15%. The West Central district reported the lowest investor sale activity (7%), with local investors representing 4% of sales and non-locals, 3%.

Respondents by Occupation and by Mode of Survey

The 2022 survey asked the main occupation of the respondent: farm manager, appraiser, agricultural lender, broker/realtor, government, farmer/landowner, 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, 443 agricultural professionals completed the survey, providing 668 county land value estimates. Of these 443, agricultural lenders represented the largest group, accounting for 35.7% of all respondents. Brokers/realtors and farm managers were the next largest groups, representing 14.9% and 13.5% of respondents, respectively.

Of all respondents, the percentage of agricultural lenders ranged from 17% in the Central district to more than 40% in the Northwest, Northeast, and Southeast districts.

Our respondents, on average, have 27 years of experience in their current profession and offer professional services to an average of seven counties. While government officials typically only serve one county, realtors/brokers, appraisers, farm managers, and agricultural lenders offer services to 16, 11, 9, and 4 counties, respectively.

The survey was completed online by 71% of the 443 respondents. Seventy-six percent of the respondents only provided land value estimates for their primary county and 14% and 5% of the 443 respondents provided estimates for two and three counties, respectively. Three percent of the respondents provided estimates for five or more counties.

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 optimistic views regarding the strength of the farmland market one and five years from now, and generally expect stable or even higher land values. Forty-eight percent of respondents forecasted an increase in their local land market in one year, while 28% expected a lower land value and 24% forecasted no change. While the most popular response was for the one-year land price forecast to be the same as the current situation, the 2nd most popular answer was an increase of 5-10%. Looking five years ahead, 24% of respondents forecasted a decline, slightly smaller than the 28% forecasting a decline 12 months from now. However, over 60% of respondents still expect a further increase in land values, with an increase of 10%–20% selected by most respondents.

This year's survey added a question to better gauge the respondents' views of current farmland values by asking to rate the current farmland values in their primary county as way too low, too low, just right, too high, or way too high. Fifty-nine percent and

12% of respondents think the current land values are too high or way too high, respectively, while only 5% of respondents think the current land values are too low. Twenty-four percent of respondents think the land values are just right.

Respondents expect stable corn and soybean cash crop markets. In particular, the predicted state average cash corn prices for November 2023 and 2027 (five years from now) are $6.09/bu. and $5.90/bu., respectively. The statewide average soybean price predictions are $13.12/bu. in one year and $12.84/bu. five years from now.

Respondents reported typical interest rates for 20-year farmland mortgages and one-year operating loans are 6.65% and 6.98%, respectively. These are significantly higher than one-year-ago levels due to the multiple interest rate hikes by the Federal Reserve to combat inflation.

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.

Approximately 90% 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, 70, and 56 points respectively. The estimated percent of land area for high-, medium-, and low-quality land is 37%, 39%, and 24%, 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 (68).

Interpretation of the 2022 Survey Results

The 2022 Iowa State University Land Value Survey reported a 17.0% increase to $11,411 per acre in average Iowa farmland values from November 2021 to November 2022. This surge continues the trend from last year, and the $11,411 per acre nominal land values is the highest-ever since the 1940s. The 2022 nominal land value is 31% higher than the 2013 peak in nominal land values, and the inflation-adjusted value, $9,088 per acre in 2015 dollars, saw a 9% increase and is also the highest on record.

The continuing growth in value is supported by high commodity prices, limited land supply, low interest rates through the summer of 2022, readily available cash and credit, stronger-than-expected crop yields, a good farm economy, and strong demand, including from investors. At the same time, respondents are increasingly concerned about

Table 2. Estimated average CSR2 and percent of land area by land quality, 2022

	Reported Average CSR2			Reported Percent of Land Area		
	High Quality	Medium Quality	Low Quality	High Quality	Medium Quality	Low Quality
Northwest	90	80	68	48	35	17
North Central	85	75	61	37	41	22
Northeast	77	64	51	37	38	25
West Central	81	70	58	39	39	22
Central	87	76	61	41	38	21
East Central	84	72	56	33	40	27
Southwest	81	66	53	28	46	26
South Central	72	56	41	22	42	36
Southeast	82	66	48	32	38	30
STATE	**83**	**70**	**56**	**37**	**39**	**24**

higher interest rates and input costs, stock market and economic uncertainty, along with weather and COVID concerns. In general, survey respondents are still optimistic about the strength of the future land market with nearly half of respondents forecasting a continued increase in Iowa land values.

The 2022 Iowa State University Land Value Survey revealed an overall consistent surging land value pattern across crop reporting districts, counties, and land quality classes. Land values across all nine crop reporting districts saw an increase in land values. The largest percentage increases were in the Northwest and Southwest districts, 22.3% and 22.2%, respectively. The South Central and Southeast districts, which saw the smallest percentage changes, also reported increases at or slightly above 10%. Across land quality classes, medium-quality land saw the greatest increase, 17.7%, while high- and low-quality land experienced 16.8% and 15.2% increases, respectively. All 99 counties reported the highest nominal land values since 1950; and, for 66 counties, the inflation-adjusted values are also record-high–even higher than the previous peak in 2013. The largest percentage increase, 21.6%, was reported in Mills, Fremont, Page, and Montgomery Counties. Appanoose, Decatur, Lucas, and Wayne Counties reported the lowest percentage increase, 10%.

In general, the results from the 2022 Iowa State University Land Value Survey are similar to the results from other surveys, which all continued the surging farmland market trends due to higher commodity prices and limited land supply. In November 2021, the Federal Reserve Bank of Chicago reported a 22% increase in Iowa‘s “good” farmland values from October 2021 to October 2022. In September, the REALTORS® Land Institute reported an overall 16.9% increase in Iowa cropland values from September 2021 to September 2022. The US Department of Agriculture June Area Survey reported a 21.4% rise in Iowa‘s agricultural real estate values (land and building) from June 2021 to June 2022.

Fifty-three percent of respondents reported more sales in 2022 relative to 2021, which ties the 3rd highest rate since we began recording this information in 1986. On the other end of the spectrum, just 16% reported fewer sales, and 31% reported the same level of sales in 2022 relative to 2021. Despite half of respondents reporting more sales activities, limited land supply is the second-highest factor selected.

The majority of farmland sales, 68%, were to existing farmers, of which existing local farmers capture 66% of land sales. Only 2% of sales were to existing relocating farmers. Investors represented 27% of land sales, roughly split between local and non-local investors. New farmers represented 4% of sales, and other purchasers were 1% of sales.

The farmland value estimates from the Iowa State 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, 2022.”

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 Iowa State Land Value Survey is an opinion survey, as are the surveys conducted by Federal Reserve Bank, USDA, and the REALTORS® 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 Iowa State 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 a formal appraisal of a particular parcel, go to county assessor websites, or examine recent auction results for comparable parcels in their region.

Outlook for Land Values in 2023 and Beyond

Many of the factors behind the large surge in 2021 values continue to support the 2022 increase—interest rates remained low through the first half of the year, commodity prices held at very high levels as weather and geopolitical uncertainty created crop production concerns, crop yields once again were a positive surprise despite the weather challenges throughout the growing season, cash and credit availability has remained ample and allowed farmers to stay aggressive in the land market, and stronger demand from investors nudged by inflation concerns and lack of alternative investment options.

According to USDA Economic Research Service's December 2022 farm income forecast, www.ers.usda.gov/topics/farm-economy/farm-sector-income-finances/highlights-from-the-farm-income-forecast/, US net farm income is forecast to increase $19.5 billion (13.8%) from 2021 levels to $160.5 billion in 2022 (in inflation-adjusted terms, an 7.2% rise). US net farm income is at its highest inflation-adjusted level since 1973 and the net cash farm income in 2022 would be at its highest inflation-adjusted level since 1929(when USDA started computing inflation-adjusted values). The increase continues to be driven by the strong commodity prices and cash receipts from farming. In particular, both crop receipts and animal or animal product receipts are expected to increase by 19% and 31%, respectively. Even though the direct government payments continue to fall, the 2022 direct government payments are still forecasted at $16.5 billion, reflecting the reduction in COVID-related assistance in 2022. Farm production expenses are rising as well, but the growth in expenses has still not caught up to the growth in revenues.

The inflation concerns that arose last year continued to strengthen through the first half of this year. At their peak, we experienced the highest inflation rate since the 1980s. During the fall, the Federal Reserve conducted a series of interest rate hikes to curb inflation. Recent inflation measures have shown some weakening of inflation, but additional interest rate hikes are expected by the markets. Previous research, www2.econ.iastate.edu/faculty/zhang/publications/working-papers/2020-Basha-Zhang-Hart-AFR-Interest-Rate-Land-Value.pdf, suggests that farmland values are very sensitive to interest rate changes. It is also worth noting that changes in the federal funds rate have long-lasting impacts on farmland values, as it takes at least a decade for the full effects of an interest rate change to be capitalized in farmland values. But within the current land market environment, the interest rate increases are fighting against other factors, such as high commodity prices and farm incomes, that continue to support higher values.

The continued dramatic increase in the Iowa farmland market is a result of low interest rates, high commodity prices, strong crop yields, and the presence of significant cash reserves and credit availability, both from the agricultural markets and government programs. The result is a duo of records for both nominal and inflation-adjusted land values for all 99 counties in Iowa. Future changes in inflation, interest rates, and commodity prices will shape the trajectory of farmland market movements. Under current circumstances, many agricultural professionals still anticipate a stable and modestly rising farmland market in the near future.

More details on the survey can be found on the CARD website, www.card.iastate.edu/farmland and historical data can be downloaded in the AgDM Decision Tool Historical Farmland Values Data, www.extension.iastate.edu/agdm/wholefarm/xls/c2-70landvalues.xlsx, or in AgDM File C2-72, Historical Farmland Values, www.extension.iastate.edu/agdm/wholefarm/pdf/c2-72.pdf.

Table 3. Average value per acre of Iowa farmland listed by crop reporting districts and quality of land

Year	State Average	North-west	North Central	Northeast	West Central	Central	East Central	South-west	South Central	Southeast
All farmland										
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
2020	7559	9536	7927	7525	7859	8485	8524	6112	4658	6935
2021	9751	12164	10664	9958	10461	10744	11051	7582	6035	8451
2022	11411	14878	12449	11627	12411	12582	12595	9264	6824	9276
High quality										
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
2020	9068	10780	8889	9182	9159	9800	10199	7484	6408	9299
2021	11834	13997	12064	12308	12289	12512	13503	9424	8194	11628
2022	13817	17121	14271	13806	14821	14720	15097	11419	9478	12829
Medium quality										
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
2020	7119	8993	7350	6980	7433	7883	7959	5843	4563	6639
2021	9071	11042	9641	9122	9700	9980	10179	7145	6094	8169
2022	10673	13710	11171	11122	11654	11527	11876	8769	6872	8677
Low quality										
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
2020	5078	6486	5297	5213	5492	5793	5599	4055	3262	4134
2021	6397	8088	6992	6717	7044	7136	7215	5155	4058	4734
2022	7369	9569	7849	8047	8161	7927	8441	6081	4379	5406

Figure 2. 2022 and 2021 Iowa land values by county

State Average Values
Nov 2022: $11,411
Nov 2021: $9,751

County estimates of averag dollar value per acre for Iowa farmland based on US Census of Agriculture estimates and the Nov. 1, 2022, Iowa Land Value Survey conducted by Cente for Agricultural and Rural Development, Iowa State University and Iowa State University Extension and Outreach. The top figure is the estimated Nov. 1, 2022, value; the bottom figure is the percentage of change from the estimated Nov. 1, 2021, value.

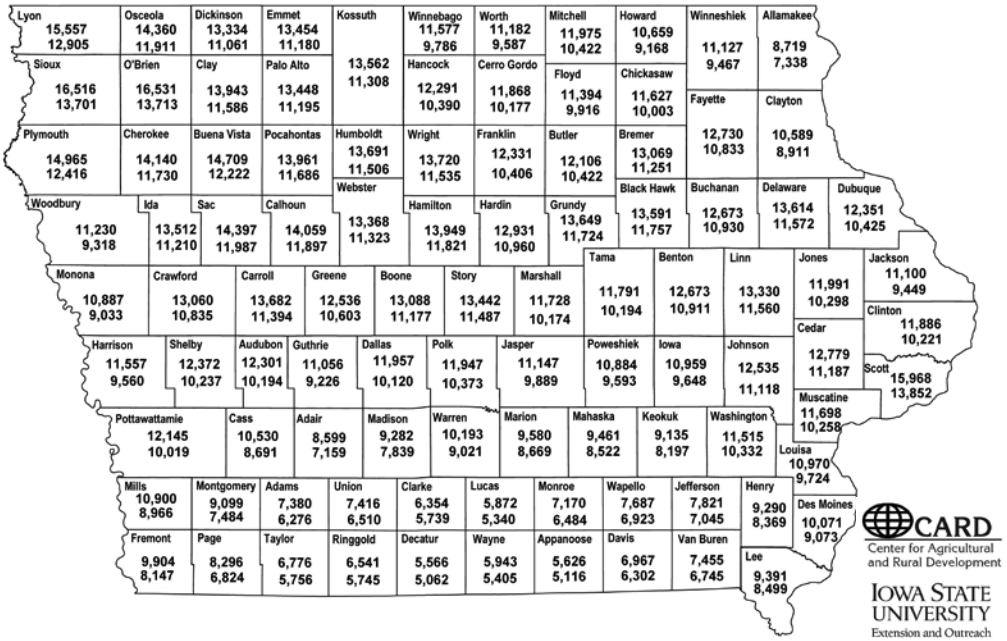
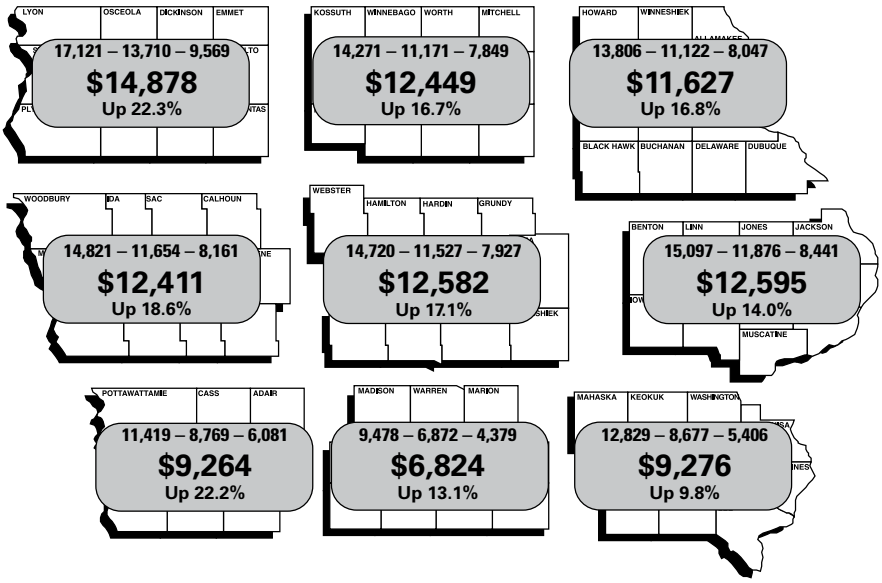


Figure 3. 2022 Iowa land values by crop reporting district



Estimates of average dollar value per acre for high, medium, and low grade farmland (top row) on Nov. 1, 2022, by Iowa Crop Reporting District; the Crop Reporting District average (middle row); and the average percentage change from Nov. 1, 2021 (bottom row). 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.

By Wendong Zhang, assistant professor, Dyson School of Applied Economics and Management, Cornell University, former associate professor of economics and extension economist, Iowa State University, wdzhang@iastate.edu

www.extension.iastate.edu/agdm
www.card.iastate.edu/farmland