

Land sales by buyer category

Respondents were asked what percent of the land was sold to the following four categories of buyers.

- Existing farmers represented 70 percent of the sales.
- Investors represented 25 percent.
- New farmers represented 3 percent.
- Other purchasers represented 2 percent.

Sales to existing farmers by crop reporting districts ranged from 78 percent in West Central to 62 percent in South Central.

Sales to investors were highest in South Central (30 percent). West Central reported the lowest investor activity (17 percent).

Interpretation of survey results

The 2010 land value survey shows a substantial increase in the value of Iowa farmland. This increase follows a 2.2 percent decrease in land values last year. The rate of increase in Iowa farmland values has caused concern that farmland might be the next speculative bubble.

The Iowa State University survey matches results in other land value surveys. The Federal Reserve Board estimated a 17 percent increase in Iowa land values from October to October. This estimate was based on a survey of lenders in Iowa. The Iowa Chapter of the Realtors Land Institute estimated a 5.7 percent increase in Iowa land values for the six months from March to September, 2010.

It is always important to remember the time period covered when evaluating survey results. This has been especially true over the past few years. Corn and soybean prices have varied considerably since 2006. For example, monthly prices for corn averaged 37 percent higher July to November this year compared to average monthly prices from January through June. Soybean prices are 21 percent higher over the same time period.

Costs of production have changed dramatically over the past few years and even the past few months. The estimated costs for producing an acre of corn and soybeans have risen over 40 percent since 2006. The estimated costs are up 16 percent since 2008 but they are down 7 percent since 2009.

The volatility in prices and costs leads to tremendous uncertainty and volatility in the land market. This is reflected in the Iowa State survey. Land values were up

Table 1. Recent changes in Iowa farmland values.

Year	Value per acre	Dollar change	Percentage change
1980	2066	108	5.5
1981	2147	82	3.9
1982	1801	-346	-16.1
1983	1691	-110	-6.1
1984	1357	-334	-19.8
1985	948	-409	-30.2
1986	787	-161	-17.0
1987	875	88	11.2
1988	1054	179	20.4
1989	1139	85	8.1
1990	1214	75	6.6
1991	1219	5	0.4
1992	1249	30	2.5
1993	1275	26	2.1
1994	1356	81	6.4
1995	1455	99	7.3
1996	1682	227	15.6
1997	1837	155	9.2
1998	1801	-36	-1.9
1999	1781	-20	-1.1
2000	1857	76	4.3
2001	1926	69	3.7
2002	2083	157	8.2
2003	2275	192	9.2
2004	2629	354	15.1
2005	2914	285	10.8
2006	3204	290	10.0
2007	3908	704	22.0
2008	4468	560	14.3
2009	4371	-97	-2.2
2010	5064	693	15.9

22 percent in 2007, down 2.2 percent in 2009 and up 15.9 percent in 2010. Since 2004 Iowa land values are up 93 percent.

In addition to the volatility in prices and costs there has been a substantial shift in the fundamental supply and demand situation for farmland. The positive factors influencing the market mentioned by the survey respondents and the level of sales reported reflect the changes in supply and demand. In 2009 over 60 percent of the respondents indicated there were fewer sales in 2009 compared to 2008. This was the largest drop in sales reported in the Iowa State survey. In 2010, almost three-fourths of the respondents said sales were either the same or less than 2009. This shows throughout the state the slump in sales is either continuing or in some cases worsening.

The supply and demand aspect of the land market can be characterized as few sellers and many willing buyers. A fundamental reason for this change in supply and demand is the lack of alternative investments. An analysis comparing the returns to Iowa farmland and the Standard and Poors index shows that farmland continues to be a more attractive investment. People who own land are not interested in selling and people who don't own land are trying to buy for basically the same reason. Where else are you going to put your money?

Another change in demand for land is the increase in the size of farms. As farm size increases the amount of rented land increases. The 2007 Census of Agriculture showed that 31 percent of the farmers operate 61 percent of the land. These 31 percent of farms rent over one-half their land. Renting more land increases the farmer's risk. One way to reduce this risk is to own more of the land being farmed.

The demand for land is also being fueled by the very low interest rates. The Chicago Federal Reserve Board reports that real estate interest rates in the 7th District are the lowest since the first quarter of 2004 and the second lowest since 1974. This data set only goes back to 1974. The average real estate interest rate for the first half of 2010 is the lowest yearly rate recorded.

The Iowa State survey does not directly address the question of a speculative bubble in the land market. But, it does offer some insights and possible answers to the question. As noted, the gross income to land has increased substantially over the past few years. Analysis has shown land values are more correlated with gross income than net farm income.

Farmers are the primary purchasers of farm land. The survey reports 70 percent of the sales were to existing farmers. Existing farmers purchase land for different reasons than someone who views the land strictly as an investment. Farmers buy land to own it. The land becomes a part of their retirement plan and their legacy. As such, whether or not the values increase or decrease will not prompt the farmer to sell. The most important factor is the level of debt they have against the land. If income falls and the farmer can no longer service their debt they may be forced to sell.

Currently we are not seeing a substantial increase in the amount of debt being used to finance land purchases. The USDA forecasts national farm real estate debt will

increase 3 percent in 2010 relative to 2009. Since 2006 the USDA estimates show a 10 percent increase in real estate debt. Real estate debt as a portion of total debt or in relation to the value of total assets has remained essentially unchanged since 2006.

For many years the U.S. farm programs provided support for farm income. However, the U.S. energy policies are now having a significant impact on farm income. Space doesn't permit a detailed discussion of all the ramifications of the energy policies but suffice it to say that the policies have substantially increased the prices for both corn and soybeans. The policies have also put us in the unusual situation where what happens to the price of oil can have a significant impact on the price of corn.

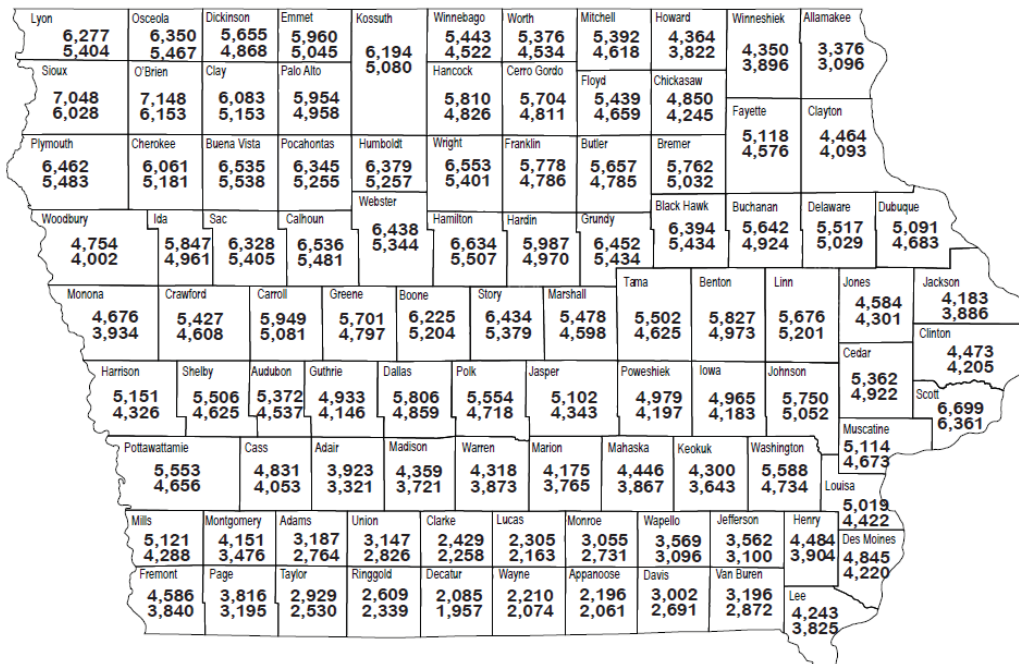
Land values should remain strong for the next several months at least. Beyond that there is a fair degree of uncertainty with respect to whether or not land values can maintain their current levels. There are several key components to watch. One is the amount of debt incurred with land acquisition. A second area to watch is government policies, especially policies related to energy. A third area is what happens to input costs. Land is the residual claimant to any excess profits in agriculture. As such, if there is money to be made after increases in other costs, land values will increase. The performance of the overall economy, especially with respect to income will be an important factor. Government monetary policies as they relate to inflation and interest rates will also be important factors to watch. The performance of the US economy and economies throughout the world will impact commodity prices which impact land values. Finally, weather related problems both here and in the world will have an influence on land values.

The 2010 survey shows a substantial increase in land values. But, the rate of increase is half the yearly increases in 1973, 1974 and 1975. Land values increased over 30 percent a year during those years. We need to watch the land values and be prudent but I do not think we need to be overly pessimistic there will be a crash in values. In 2009 land values dropped slightly. This shows there is still discipline in the market. There may be a speculative bubble that impacts land as an investment but for now land still remains a good investment. Weather is a random factor but the fundamental supply and demand factors for land appear strong for at least the short run.

Table 2. Average value per acre of Iowa farmland listed by crop reporting districts and grades of land.

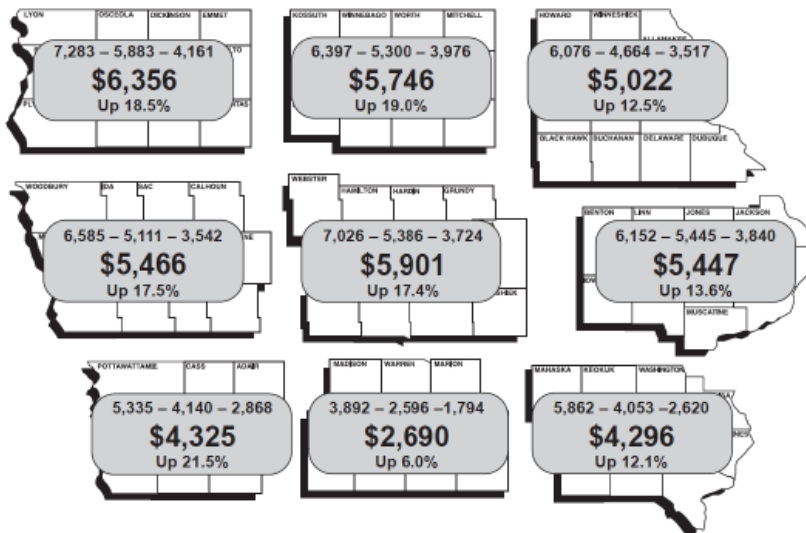
Year	State Avg	North-west	North Central	North-east	West Central	Central	East Central	South-west	South Central	South-east
All grades										
1999	1781	2059	2073	1807	1837	2128	2118	1346	981	1572
2000	1857	2198	2169	1868	1924	2195	2190	1412	992	1655
2001	1926	2240	2240	1950	1969	2246	2324	1511	1039	1705
2002	2083	2434	2367	2149	2101	2392	2547	1632	1211	1808
2003	2275	2683	2514	2347	2329	2652	2715	1774	1354	1979
2004	2629	3118	2913	2665	2728	3101	3054	2088	1547	2286
2005	2914	3393	3222	2963	3048	3415	3396	2350	1793	2483
2006	3204	3783	3478	3187	3410	3716	3725	2580	1927	2849
2007	3908	4699	4356	4055	4033	4529	4272	3209	2325	3463
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
High grade										
1999	2249	2401	2362	2275	2288	2589	2685	1773	1499	2271
2000	2324	2547	2462	2329	2375	2660	2743	1825	1509	2353
2001	2407	2588	2546	2439	2437	2685	2907	1947	1582	2447
2002	2576	2776	2676	2625	2583	2848	3105	2117	1931	2539
2003	2790	3040	2817	2857	2820	3121	3263	2285	2121	2783
2004	3193	3537	3265	3189	3264	3621	3659	2657	2358	3174
2005	3511	3813	3588	3522	3691	3935	4069	2925	2659	3385
2006	3835	4261	3834	3816	4072	4263	4443	3209	2663	3793
2007	4686	5313	4807	4859	4804	5261	5073	3989	3231	4625
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
Medium grade										
1999	1629	1876	1869	1665	1692	1892	1945	1241	949	1433
2000	1701	2001	1972	1728	1772	1956	1996	1320	955	1511
2001	1768	2057	2040	1800	1807	2013	2125	1410	1004	1571
2002	1924	2278	2142	2010	1930	2175	2358	1522	1152	1659
2003	2123	2507	2309	2221	2167	2438	2543	1659	1307	1834
2004	2457	2930	2669	2515	2564	2858	2863	1956	1492	2118
2005	2736	3199	2982	2834	2833	3165	3172	2217	1725	2347
2006	3011	3561	3223	2987	3213	3458	3501	2442	1866	2679
2007	3667	4385	4026	3777	3796	4194	4005	3047	2296	3270
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
Low grade										
1999	1045	1216	1314	1110	1040	1296	1188	798	582	790
2000	1117	1370	1387	1167	1126	1299	1288	862	597	875
2001	1170	1388	1423	1208	1202	1416	1404	918	623	871
2002	1322	1571	1568	1448	1332	1516	1628	996	760	997
2003	1463	1808	1682	1512	1500	1707	1811	1130	858	1063
2004	1713	2087	1976	1816	1746	2028	1998	1354	1029	1272
2005	1961	2382	2252	2032	1970	2353	2237	1614	1252	1438
2006	2195	2566	2500	2248	2293	2615	2505	1729	1383	1786
2007	2656	3210	3125	2853	2738	3004	2928	2175	1583	2131
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

Figure 2. 2010 Land values by county.



County estimates of average dollar value per acre for Iowa farmland based on U.S. Census of Agriculture estimates and a Nov. 1, 2010, survey of Iowa real estate brokers. The top figure is the estimated Nov. 1, 2010, value; the bottom figure is the estimated Nov. 1, 2009, value.

Figure 3. 2010 Land values by crop reporting district.



Estimates of average dollar value per acre for high, medium and low grade farmland on Nov. 1, 2010, by Iowa Crop Reporting District; and the Crop Reporting District average and the average percentage change from Nov. 1, 2009. The estimates are based on a survey conducted by Iowa State University Extension.

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