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# Michigan State University Department of Agricultural, Food, and Resource Economics

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# 2012 MICHIGAN LAND VALUES and Leasing Rates

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# **2012 MICHIGAN LAND VALUES**

# and

# **LEASING RATES**

by

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#### 2012 MICHIGAN LAND VALUES

Land is a natural resource that is valued for many reasons. Farmers utilize land to earn their livelihood and as a store of wealth for future retirement. Rural residents have increasingly sought open space for home sites and pursuit of a lifestyle. Developers seek financial opportunities to invest in and develop land for non-farm uses. For some, land is viewed as an investment and a hedge against inflation. This myriad of demands for land combined with its fixed supply continually alters its market price.

Land prices and expected changes in land prices are topics of interest to many. There are several sources of information on Michigan farmland values. The Federal Reserve Bank of Chicago reports quarterly farmland values for each state in its district based on a survey of lenders. However, Michigan farmland sales transactions are sporadically reported due to insufficient survey response. The USDA estimates the value of farmland and service buildings annually for every state based on a survey of farmers. Both of these surveys provide useful information on aggregate farmland values in the state. For land value information to be useful for individual decision-making, a more disaggregated measure of land values based on land type, location, and use is desired. The State Equalized Value (SEV) used to determine property taxes is set by township assessors at an estimated 50 percent of the market value of farmland based on comparative sales studies conducted annually. County Equalization Directors review the assessment rolls of local township assessors and make adjustments based on sales data. SEVs are useful in determining representative land values but are handicapped by the historical sales perspective upon which the appraisals are based.

Michigan State University (MSU) has also collected data on land values since 1991 by mail survey. The goal of the MSU study is to provide information on the value of land based on its agricultural use. The survey asks for information on the value of tiled and non-tiled land used to produce field and fruit crops as well as information on the value of land that is used for sugar beets and irrigated crops. The study also provides information on leasing rates and practices in the state. In addition, the study collects information on the non-agricultural use value of farmland. The remainder of this report contains the results for the MSU land value survey conducted in spring of 2012.

#### **Survey Methods**

The survey sample consists of members of the Farm Managers and Rural Appraisers Association, Michigan Agricultural Lenders, County Equalization Directors in Michigan, and members of the Farm Bureau Advisory Committees on feed grains, oil seeds, wheat, dry beans and sugar beets. After accounting for overlap between the different groups, the total sample consisted of 600 potential respondents. A total of 206 questionnaires were returned with useable information. In order to account for potentially large differences in soil and climate characteristics, information is reported separately for different regions of the state. Results are reported for two halves of the state, the southern-lower peninsula and the upper and northern-lower peninsula, which are split at a line running from Oceana County across to Bay County as shown in Figure 1. There were 165 responses received from the southern half of the Lower Peninsula (Area 2 in Figure 1). The remaining 41 responses were received from the Upper and Northern Lower Peninsula (Area 1 in Figure 1). This is a reasonable correspondence between the location of respondents and the geographic distribution of agricultural production in the state. Figure 1 shows the distribution of respondents by county and Figure 2 shows the total number of responses by the Agricultural Statistics District in the state. Results are also reported for the nine "Agricultural Statistics Districts" across the state (Figure 2). The results for Districts 1 through 4 were combined because of a low number of responses in that region. In addition, results are only reported for each question when at least five responses were received for a reporting area.

It should be noted that some respondents might have been reporting for a group of individuals who received the questionnaire, such as a Farm Credit Service branch or an appraisal group. It is also important to recognize that the survey respondents, in many cases, were experts on land values in their areas. These people often had access to a significant amount of land appraisal, transaction, and leasing information.

Each sample member received a cover letter encouraging their participation in the study and a two-page questionnaire asking for information on farmland. A summary of the survey results is provided

to the respondents upon request. The questionnaire was mailed in April of 2012. A postage paid return envelope was provided to minimize the cost to potential respondents. A follow-up letter asking for participation in the survey and a second copy of the questionnaire was sent to non-respondents approximately four weeks after the original questionnaire was sent. Copies of the questionnaire used in the survey are included in the Appendix.

Respondents were requested to provide the current agricultural-use value of the farmland, the change in value during the last year, the expected change in value during the next year, and the cash rental rate for their geographic area. In addition, information on the non-agricultural-use value of farmland was requested. Estimates on agricultural-use values for farmland were reported separately for tiled (non-irrigated) field crops, non-tiled field crops, fruit, sugar beets, and irrigated land. Price data on non-agricultural use land values were collected for residential, commercial, and recreational development. The respondents were also asked to indicate the county or counties to which their information corresponds. In addition, an opportunity was provided for each respondent to rank the major agricultural factors influencing land values and cash rents. Similarly, a ranking was requested of the major factors influencing land values in rural areas for land that appears destined to transition to non-agricultural uses.

Efforts were made to report only the value of land in its agricultural production use. However, it is difficult to separate out non-agricultural influences on land prices, so the agricultural-use values will certainly display some non-agricultural-use impacts. The magnitude of these influences will vary across local regions in state. The influences of non-agricultural factors on farmland values are addressed in more detail later in the report.

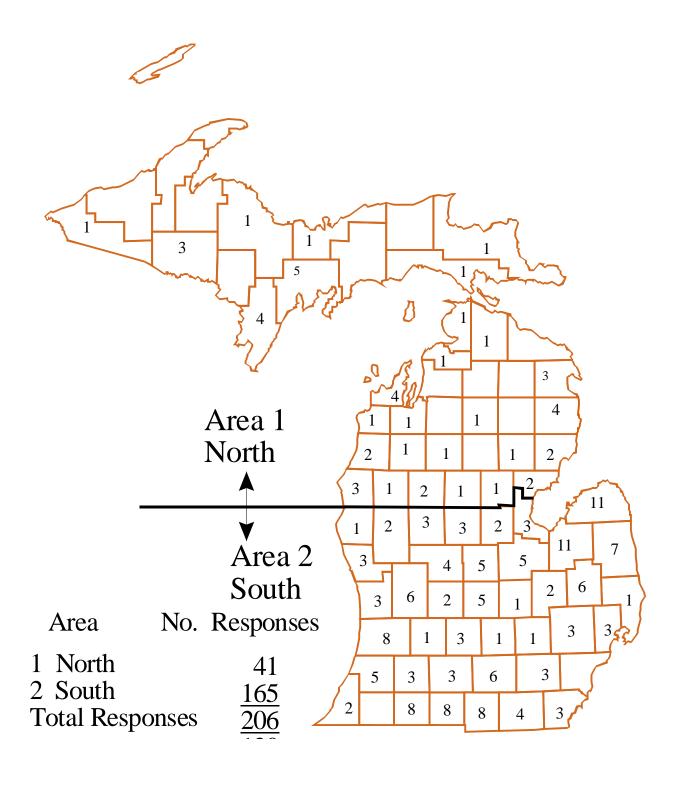


Figure 1. Farmland Value Questionnaire Responses

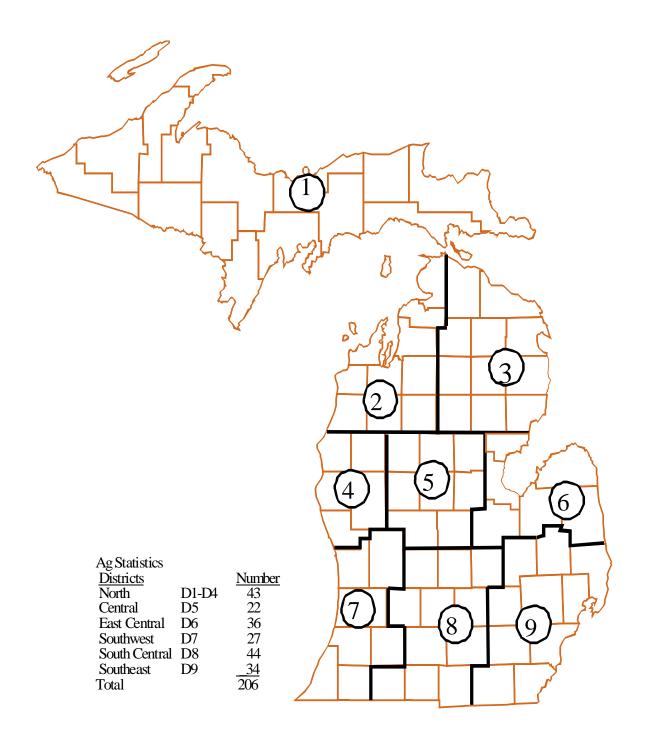


Figure 2. Agricultural Statistics Districts and Number of Respondents

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#### **Agricultural-Use Farmland Values**

Average Farmland Values

Average agricultural farmland values are reported in Table 1 for different regions in the state. In the Southern Lower Peninsula, the average value of tiled field cropland was \$4,115 per acre while non-tiled field cropland averaged \$3,371 per acre. In the Upper and Northern Lower Peninsula tiled and non-tiled field crop land averaged \$2,003 and \$1,660 per acre, respectively.

Table 1 Michigan Average Agricultural Land Values, 2012

	Land Use							
Region	Field Crop Tiled	Field Crop Non-Tiled	Sugar Beet	Irrigated	Fruit Trees			
Michigan	\$3,866	\$3,029	\$4,610	\$4,717	\$6,894			
Southern Lower Peninsula	4,115	3,371	4,806	5,144	7,529			
Upper & Northern Lower Peninsula	2,003	1,660	2,540	2,121	N/A			
Districts 1-4	1,997	1,693	N/A	2,556	6,833			
District 5	3,510	3,037	4,131	4,701	5,500			
District 6	4,872	3,652	5,140	6,350	N/A			
District 7	4,454	4,116	N/A	5,346	7,313			
District 8	3,851	3,276	4,803	4,932	N/A			
District 9	3,799	3,096	4,517	4,902	N/A			

Note: Results were only reported when a minimum of five responses were received.

For land producing grains, soybeans, and other field crops, Agricultural Statistics Districts 7 and 6 in Southern Michigan had the highest agricultural land values. District 6 in the southwest had the highest average values for tiled cropland \$4,872 per acre and District 7 was the next highest for field cropland tiled at \$4,454 per acre. Values in these areas appear to be the highest in the state and probably

reflect the influence of agricultural demand. The South Central (D8) and Central (D5) Districts had somewhat lower average values for tiled cropland ranging from \$3,851 to \$3,510 per acre and values ranging from \$3,276 to \$3,037 per acre for non-tiled cropland. Both district values increased over the 2011 reported values.

Land that produces higher valued crops can support a higher investment cost per acre of land. Fruit and sugar beets are commodities produced in Michigan that historically tended to generate both a higher gross and higher net income per acre. The highest priced agricultural land in Michigan produces fruit and is located in proximity to Lake Michigan. This land planted to fruit trees is highly valued not only because of its earnings potential from the harvested fruit but also because of non-agricultural demand due to its location (e.g., view and access to Lake Michigan). Land values reported for fruit tree acres averaged \$6,894 per acre across Michigan. This was a slight increase of \$14 per acre over the 2011 Michigan Land Survey value of \$6,880 per acre. The highest value reported for fruit tree acreage in 2012 was \$7,313 per acre in the Southwest District (D7).

Land that can support sugar beets in its crop rotation averaged \$4,610 per acre in 2012, a 13.5% increase over the 2011 value of \$4,062. The sugar beet production is concentrated in the East Central and South East Districts.

Irrigated land value in 2012 averaged \$4,717 per acre in the state, a 13.7% increase over the 2011 value. Most responses on irrigated land values came from East Central, Southwest and Southeast Michigan. Most responses on fruit land values came from District 2, 4, and 7, North and Southwest Districts of Michigan. Fruit tree land in the North (D2-D4) averaged \$6,833 per acre and Southwest District (D7) averaged \$7,313 per acre, these acres are typically used for cherries, apples, and peach production.

#### Change in Farmland Values

The changes in Michigan farmland values during the last 12 months along with the expected changes during the next 12 months are shown in Table 2. In the Southern Lower Peninsula, field cropland values

increased in 2012 from the levels observed in 2011 for tiled land and non-tiled land, 7.8% and 6.8% respectively. In the Upper and Northern Lower Peninsula, land values for field crops increased 6.6% for tiled land, and 4.7% for non-tiled land. Districts (D1-D4) reported the lowest rate increases in value for field cropland tiled land of 4.4% and non-tiled of 3.2%.

Table 2 Percentage Change in Michigan Farmland Value, 2012

	Type of Land Use										
Regions	Field Crop Tiled			Field Crop Non-Tiled		Sugar Beet		Irrigated		Tree Fruit	
	Last Year	Expected Next Year	Last Year	Expected Next Year	Last Year	Expected Next Year	Last Year	Expected Next Year	Last Year	Expected Next Year	
Michigan	7.6%	4.0%	6.5%	3.8%	9.7%	5.4%	9.4%	3.6%	9.3%	3.2%	
Southern Lower Peninsula	7.8	3.9	6.8	3.6	9.5	5.0	9.6	3.6	9.3	3.2	
Upper and Northern Lower Peninsula	6.6	5.0	4.7	4.5	N/A	N/A	6.3	2.5	N/A	N/A	
District 1-4	4.4	3.5	3.2	3.6	N/A	N/A	5.0	8.3	N/A	N/A	
District 5	8.5	4.5	6.9	4.6	9.3	5.6	9.6	3.5	N/A	N/A	
District 6	9.9	5.5	7.9	4.7	10.2	5.9	6.0	2.0	N/A	N/A	
District 7	6.8	1.4	5.9	1.0	N/A	N/A	10.9	2.3	7.1	1.0	
District 8	6.7	4.2	5.8	3.0	11.5	2.5	12.3	4.1	N/A	N/A	
District 9	7.7	3.0	9.2	4.8	6.7	5.0	10.0	2.0	N/A	N/A	

Note: Results were only reported when a minimum of five responses were received.

For the previous five years, the Southern Lower Peninsula has had the highest annual rate of increase in land values, averaging 4.86%.

Expectations on changes in Michigan farmland values indicate that land should increase in value in 2013 over the 2012 values. The largest expectations on changes in percentage land value were for District (D6) at 5.5% for tiled and District (D9) at 4.8% for non-tiled. Field crop tiled land values in Michigan are expected to increase by 4.0% tiled cropland and 3.8% for non-tiled cropland. The Central District (D5) is expected to increase by 4.5% of tiled cropland and 4.6% for non-tiled cropland. Overall,

irrigated land values increased 9.4% and are expected to increase 3.6% during the upcoming year. District (D8) irrigated land values have the largest increase in value of 12.3% over last year and are expected to increase in value for next year by 4.1%. Districts (D1 –D4) land values increased 5.0% with an expected 2013 land value increase of 8.3%. Michigan's sugar beet land values increased by 9.7% in 2012 and are expected to increase about 5.4% in 2013.

#### **Farmland Leasing**

Leasing or renting of land provides an alternative method for farmers to gain control of land. Table 3 reports land leasing activity in Michigan and indicates that 56.5% of crop acres are controlled by lease. Cash leasing is the predominant form of land rental with 81.2% of leased land in Michigan controlled by cash rental arrangements.

#### Crop Acres Leased

In the Southern Lower Peninsula, an estimated 57.9% of field crop acres appear to be controlled by leases, while 48.2% of the cropland in the Upper and Northern Lower Peninsula is leased. The highest amount of leasing occurs in the Southeast District (D9) where 65.1% of the cropland is leased. As with the entire state, cash rent is the predominant leasing arrangement in all reporting districts of Michigan.

Farms featuring fruit production appear to be an exception to heavy use of leasing for agricultural crops. One possible explanation for this difference is the long term investment required for production of tree fruit. Renting provides flexibility in control of the land for both the lessee and lessor. This flexibility is not an advantage for someone considering an investment in, for example, orchards or vineyards which require several years of cash outflow before generating sales. Because tree fruit is a long-term investment, leasing arrangements depend upon the age of the trees and expectation for maintenance.

Table 3 Characteristics of Leased Farmland in Michigan, 2012

Region	Crop Acres Leased	Land Leased Under Cash Lease	Fruit Acres Leased
Michigan	56.5%	81.2%	7.3%
Southern Lower Peninsula	57.9	79.4	8.4
Upper and Northern Lower Peninsula	48.2	92.5	2.0
Districts 1-4	49.9	86.2	2.1
District 5	58.1	69.3	20.0
District 6	47.4	81.1	N/A
District 7	50.3	87.6	17.5
District 8	64.7	81.9	4.3
District 9	65.1	82.0	9.2

Note: Results were only reported when a minimum of five responses were received.

#### Cash Rent Levels

Cash rental arrangements provide the opportunity for a landowner to receive a fixed payment from a tenant for control of the land. Cash rental amounts and their relationship to land values are shown in Table 4. Cash rents in the Southern Lower Peninsula averaged \$145 per acre for tiled cropland and averaged \$111 for non-tiled cropland. In the Upper and Northern Lower Peninsula, tiled field cropland rented for an average of \$65 per acre and non-tiled cropland rented for an average of \$35 per acre. The highest rent levels for field cropland were found in the East Central (D6) where tiled land commanded an average cash rent of \$179 per acre. Sugar beet land in Michigan rented for an average of \$189 per acre, and irrigated cropland rented for \$217 per acre. The cash rent value for tiled field cropland of \$139 per acre for the state is an increase of \$22 per acre from the previous year. Cash rental rates for Michigan cropland were up for sugar beet acres by \$24 per acre and rental rates for non-tiled land were up \$14 per acre from last year. The reported rental rates for 2012 indicate that rates increased for all land use types over last year.

Table 4 Average Cash Rent and Value Multipliers for Michigan Agricultural Land Use, 2012

	Type of Land Use									
Region	Field Cr	op Tiled		Field Crop Non- Tiled		Sugar Beet		Irrigated		
	Rent	Value/ Rent	Rent	Value/ Rent	Rent	Value/ Rent	Rent	Value/ Rent		
Michigan	\$139	31	\$99	36	\$189	27	\$217	26		
Southern Lower Peninsula	145	30	111	33	194	26	229	24		
Upper and Northern Lower Peninsula	65	42	35	55	125	30	120	33		
District 1-4	72	40	38	53	N/A	N/A	129	39		
District 5	121	30	95	34	146	28	228	23		
District 6	179	28	128	30	203	26	229	28		
District 7	122	39	103	44	N/A	N/A	238	27		
District 8	146	27	116	30	245	24	232	22		
District 9	138	29	103	34	187	26	229	22		

Note: Results were only reported when a minimum of five responses were received.

#### Land Value-to-Rent Multiplier

The value-to-rent ratios presented in Table 4 were calculated by dividing the land value reported by each respondent by the corresponding cash rent value reported by the same respondent. The value-to-rent ratio for tiled field crops was 30 (i.e., land price is 30 times the rental rate) in the Southern Lower Peninsula. Southern Lower Peninsula sugar beet land had a value-to-rent ratio of 27, while irrigated land's value-to-rent ratio was 26. In the Upper and Northern Lower Peninsula the ratio for field cropland tiled was 42. These value-to-rent ratios in Michigan changed little from 2011 levels.

The current price of land is a direct function of the future cash flows expected (or speculated) to be generated by the land. Expected future cash flows are "capitalized" into the price of the land today, increasing or decreasing its value relative to the current year's cash flow. In other words, higher expected

future cash flows translate into higher value-to-rent ratios and lower expected cash flows translate into lower value-to-rent ratios. As speculation and expectations change about future cash flows, the resultant value-to-rent ratio changes. The value-to-rent ratio calculation and movement is analogous to the price/earnings ratio in equity stocks and funds traded on national exchanges. There are four possible situations for the value-to-rent ratios to change: 1) the market anticipates that future cash flows will grow at a faster rate than for alternative land parcels located in other areas and/or used for lower valued purposes; 2) the land may be switched to alternative uses with higher expected cash flows in the future; 3) non-farm uses of the land in the future may provide higher cash flows than those expected from current land use; or 4) the market views the future cash flows to be less risky than the cash flows from alternative land locations and is therefore willing to pay a higher price. When agricultural land is being transitioned out of agriculture and/or its ownership is changed, land values may increase but agricultural rental values may not increase proportionately as long as the acreage is used for agricultural purposes. It can be noted that the highest cash rents per acre in Michigan tend to be associated with higher projected incomes per acre (e.g., from irrigated acres producing higher valued crops and/or higher yields) but also tend to have the lowest value-to-rent ratios.

#### Non-Agricultural-Use Values of Farmland

The value of farmland for development purposes are summarized in Table 5. In most cases, these values are significantly above the agricultural-use value of the land and therefore tend to exert upward pressure on surrounding farmland values. The average value of farmland being converted to residential development was \$6,566 per acre in the Southern Lower Peninsula and \$3,500 per acre in the Upper and Northern Lower Peninsula. The highest residential development values were found in the Southeast (D9) where the average value was \$7,665 per acre.

Table 5 Non-Agricultural-Use Value of Undeveloped Land in Michigan, 2011

Region	Residential	Commercial/Industrial	Recreational
Michigan	\$5,972	\$12,851	\$3,063
Southern Lower Peninsula	6,566	14,420	3,291
Upper and Northern Lower Peninsula	3,500	5,679	2,386
Districts 1-4	3,563	5,682	2,446
District 5	4,512	7,688	2,550
District 6	6,420	10,147	3,168
District 7	7,589	19,921	3,464
District 8	6,450	12,017	2,924
District 9	7,665	21,892	4,819

Note: Results were reported when a minimum of five responses were received.

The value of farmland being converted to commercial use was \$14,420 per acre in the Southern Lower Peninsula and \$5,679 per acre in the Upper and Northern Lower Peninsula. The average value for farmland that was converted to commercial use was \$12,851 per acre for the state of Michigan. However, the variance in these estimates is quite high. The occasional extremely high values reported probably reflect the often recited real estate mantra of "location, location, location."

The recreational development value of farmland was \$3,291 per acre in the Southern Lower Peninsula and \$2,386 per acre in the Upper and Northern Lower Peninsula. The highest average value for recreational development land was in the Southeast (D9) where land for recreational development

averaged \$4,819 per acre. These reported price data on recreational values wee also skewed by a few extremely high values attributed to the unique amenities of a particular parcel of land.

#### Factors Influencing Land Values and Rents in Michigan

The survey also elicited opinions about the major factors driving land values. Respondents were provided the opportunity to indicate their perception of the importance of some agricultural-related factors that influenced farmland values and cash rents. Factors including farm expansion, government programs, interest rates and prices of agricultural commodities were rated on a scale from one to five with one being "Not Important" and five being "Very Important. The mean ratings are presented in Table 6. For Southern Michigan, "Grain Prices", "Expansion by Farmers", and "Low Interest Rates" were the highest-ranking items at 4.4, 4.3 and 4.1, respectively. Next in order of importance were "Milk Prices" and "Livestock Prices" with rating scores of 3.7 and 3.7, respectively. The 2008 Farm Bill provides a floor for prices of program crops and reduces the crop price risk to farmers. Crop prices and milk prices that are prevented from falling below the level provided by government programs should also provide support to land prices. Livestock prices that impact land price will vary by the predominant livestock in the reporting area. As commodity prices change cash flow also changes which affect demand for agricultural land. Expansion by farmers suggests the strategy of lowering costs of production by exploiting the concept of economies of size (i.e., costs decrease as the fixed costs of controlling capital inputs, such as machinery, are spread over more acres) or the need for more land to support a possible expansion of the management team associated with the expansion. With lower interest rates, it is easier to manage the debt often associated with land purchases. The direction for land prices based on agricultural factors becomes less certain when low agricultural commodity and product prices are combined with the perceived need by farmers to lower unit cost of production by producing more units from an expanded land base.

Table 6 Rating Importance of Agricultural Factors Affecting Value of Michigan Farmland, 2012

Regions	Expansion by	Government Programs			Prices			
b	farmers	CRP*	Current Farm Bill	Low Int.	Fruit	Grain	Livestock	Milk
Michigan	4.3	2.4	2.4	4.1	2.9	4.4	3.7	3.7
<b>Southern Lower</b>	4.4	2.3	2.4	4.2	2.9	4.5	3.8	3.7
Upper & North Lower	3.6	2.5	2.5	3.8	2.9	3.7	3.5	3.5
District 1-4	3.7	2.4	2.4	3.7	3.1	3.5	3.6	3.4
District 5	4.4	2.5	2.4	4.2	2.7	4.1	3.8	3.6
District 6	4.5	2.1	2.2	4.3	2.0	4.9	3.8	3.7
District 7	4.0	2.1	2.3	3.8	3.8	4.2	3.9	3.8
District 8	4.5	2.5	2.6	4.3	2.8	4.6	3.9	4.0
District 9	4.5	2.5	2.4	4.2	2.6	4.8	3.5	3.3

Note: Response scale ranges from one to five with one designating not important and five designating very important.

For the Upper and the Northern Lower Peninsula, the two highest agricultural related factors influencing land prices were "Low Interest Rates" and "Grain Prices" with a score of 3.8 and a 3.7, respectively.

Assessing the importance of non-agricultural factors upon land values in rural areas for land that appears destined to transition from ownership by farmers was addressed with the final set of survey questions. It is recognized that many factors not related to agriculture can influence the value of agricultural land in Michigan. Table 7 summarizes the non-agricultural factors influencing land values for land in rural areas that appears to be transitioning out of agriculture.

<sup>\*</sup>CRP -- Conservation Reserve Program

Table 7 Rating of Non-Agricultural Factors Affecting Value of Michigan Farmland, 2012

Regions	Fishing Access	Hunting Access	Home Sites	Interest Rate	Development	Small Farms	Wood Lots	Water Access
Michigan	2.2	3.2	2.8	3.7	1.6	3.0	2.9	2.7
Southern Lower Peninsula	2.1	3.1	2.8	3.7	1.7	2.9	2.7	2.6
Upper &N. Lower Peninsula	2.6	3.7	2.9	3.8	1.5	3.3	3.5	3.1
District 1-4	2.6	3.6	3.0	3.6	1.4	3.3	3.4	3.2
District 5	2.2	3.3	2.3	3.9	1.4	2.6	2.9	2.5
District 6	2.0	3.0	2.4	3.9	1.4	2.5	2.4	2.0
District 7	2.4	2.9	3.3	3.2	2.2	3.1	2.7	2.8
District 8	2.3	3.4	2.9	3.8	1.8	3.0	3.0	2.9
District 9	1.9	2.9	2.9	4.0	1.7	3.1	2.7	2.7

Note: Response scale ranged from one (not important) to five (very important).

The most important non-agricultural factor influencing Michigan statewide land values were interest rates. For the Southern Lower Peninsula, "Interest Rates" ranked the highest at 3.7. The second most important item at 3.1 was "Hunting Access". For the Upper and the Northern Lower Peninsula, the highest ranked non-agricultural factor influencing land values were "Interest Rates" and "Hunting Access", scoring 3.8 and 3.7, respectively. Interest rates impact land values, as rates decline the cost of borrowed funds for land purchases decreases. The opportunity to hunt and to capture the outdoor experience is apparently highly valued by a significant portion of the Michigan population. Land in Michigan's rural areas provides space and habitat for many species of wildlife.

Percentage change in land value from 1991-2012 are displayed in Table 8. These percentage changes are related to Southern Lower Peninsula region reported for Field Crop Tiled, Field Crop Nontiled, Sugar Beet and Irrigated cropland. There has been a general increase in all values except for 2009 following the world-wide financial crisis when all reported values were negative.

Table 8 Percentage Change in Land Value from 1991-2012 in the Southern Lower Peninsula

	Land Type							
Year	Field Crop Tiled <sup>1</sup>	Field Crop Non tiled	Sugar Beet	Irrigated				
1991	5.0%	3.0%	9.0%	N/a				
1992	2.5	1.6	3.0	3.4%				
1993	2.0	1.4	1.9	3.6				
1994	4.6	4.1	4.8	5.4				
1995	4.3	3.3	6.2	2.8				
1996	8.1	6.8	8.4	7.3				
1997	8.4	8.1	5.3	10.0				
1998	10.2	10.2	5.9	12.7				
1999	7.0	7.5	2.3	9.2				
2000	8.8	7.8	2.3	7.1				
2001	7.4	6.8	-0.4	4.8				
2002	4.2	3.9	2.3	6.5				
2003	3.7	3.6	2.4	4.5				
2004	8.9	9.3	7.9	9.8				
2005	5.4	4.9	7.9	5.4				
2006	5.7	6.0	4.9	5.8				
2007	8.7	8.2	9.6	9.1				
2008	8.9	8.8	9.9	9.5				
2009	-0.6	-1.2	-1.2	-0.2				
2010	0.2	0.0	4.4	1.1				
2011	6.4	6.8	9.9	6.0				
2012	7.8	6.8	9.5	9.6				
Average	5.8	5.4	5.3	6.4				

<sup>&</sup>lt;sup>1</sup> Beginning with the 1998 Survey, the question on agriculture land values and cash rents referred to "Field-crop tiled" and "Field-crop non-tiled". Previously the similar categories were referred to as Corn-Soybean-Cropland – above average and below average.

#### **Conclusions**

Farmland values in Michigan overall increased in 2012 over 2011 values. This will be 21 years of steady growth, except for 2009, sense the beginning of the annual Michigan Land Value Survey. Sugar beet land values increased by 9.7%, irrigated land values increased by 9.4% and tree fruit values increased by 9.3% for last year (Table 2).

Rental rates in the Southern Lower Peninsula (Table 4) averaged \$145 per acre for tiled ground and \$111 per acre for non-tiled ground, an increase of \$19 for tiled and increase of \$16 for non-tiled ground over 2011. In addition, sugar beet acreage rented for \$194 per acre, an increase of \$19 per acre over 2011, while irrigated land averaged \$229 per acre, an increase of \$23 per acre from the 2011 rate.

Land values relative to cash rents were highest in Districts (1-4) and Southwestern (D7). In Districts (1-4), the value-to-rent ratios were 40 and 53 for tiled and non-tiled land respectively, while the value-to-rent ratios for Southwestern (D7) were 39 for tiled land and 44 for non-tiled land. The value-to-rent ratios for most of the regions in the state are closer to 35. The 35 value-to-rent ratio implies a gross current return to investment of 2.9 percent per year. A higher value to rent ratio suggests a lower annual current return to investment.

Michigan farmland values in 2012 increased and land rental rates also increased in 2012. The direction of Michigan agricultural land prices suggests a continuing upward trend. However, the drought of 2012 for most of the Michigan and the corn/soybean belt regions of the US, the worst since 1988 has helped increase commodity prices since this survey was performed. Higher prices for corn, soybeans and hay will have a cascading affect on all related livestock industries. Economic conditions at the end of 2012 suggest the earnings for field crops should be strong in 2013. Interest rates also impact land values. The "prime rate" charged by banks again held constant at 3.25 % in 2012.

The Michigan economy has a diversified structure with tourism and agriculture/food industries vying closely for the number one ranking and with manufacturing following closely behind. It has been noted that land in rural areas is valued not only for its agricultural productivity but for other amenities that are valued by non-agricultural interests. Concern for year 2013 and beyond is whether the financial

performance from agriculture can sustain the current land prices. In the past, non-agricultural demand has held farmland values high but this non-agricultural demand can be an effective influence only if Michigan unemployment levels decline and incomes increase.

The forecasting view on land values can never be clear and certain but the authors believe that agricultural producers planning to expand and outside investors are still bullish about agriculture. Michigan land values should remain strong during 2013.

# Appendix

# FARMLAND VALUE QUESTIONNAIRE

April 2012

Make the best estimates you can for your area. Complete only the sections applicable to your area. Indicate which county or counties you are reporting on.

1.	Agricultural-Use	Value

Type of Land	Current		nge in Value e + or -)	Average Cash
	Average Value	Last 12 Months	Expected in Next 12 Months	Rent
	\$/acre	% change	% change	\$/acre
A. Field Crop (Non-irrigated) 1.Tiled for drainage				
2.Not tiled				
B. Irrigated Field Crop				
C. Sugar Beet				
D. Fruit Trees- Bearing				
E. Orchard Acreage, No Trees				

#### 2. Non Agricultural-Use Value

		Current Range in Value		
Undeveloped Land <sup>*</sup>	Current Average Value	High	Low	
	\$/acre	\$/acre	\$/acre	
A. Residential				
B. Commercial/ Industrial				
C. Recreational				

<sup>\*</sup> Land that may be in agricultural use but the land value is being influenced by residential, commercial or recreational development pressure.

What are the major <b>agricultural</b> fa Indicate your assessment of the sit						
In	nportant		Neutral		Importar	
A. Expansion by Farmers	1	2	3	4	5	
B. Government Programs:						
1. Conservation Reserve	1	2	3	4	5	
2. Farm Bill of 2008	1	2	3	4	5	
(Commodity Programs)						
C. Interest Rates - @ 40 year low	1	2	3	4	5	
D. Prices:						
1. Fruit	1	2	3	4	5	
2. Grain	1	2	3	4	5	
3. Livestock	1	2	3	4	5	
4. Milk	1	2	3	4	5	
E. Other: (please list)						
E. Other: (please list)	1	2	3	4	5	
What are the major <b>non-agricultu</b>	1 ral factors	2 influenci	3 and values	4	5	
What are the major non-agricultu appears destined to transition from A. Fishing Access B. Hunting Access C. Home Building Sites D. Interest Rates for Borrowing E. Mall & Shopping Development F. Farm/Ranchettes of 10 acres or so G. Timber and Woodlots	1 ral factors	2 influenci	3 and values	4	5	
What are the major non-agricultu appears destined to transition from A. Fishing Access B. Hunting Access C. Home Building Sites D. Interest Rates for Borrowing E. Mall & Shopping Development F. Farm/Ranchettes of 10 acres or so G. Timber and Woodlots H. Water for Recreation I. Other: (please list)	1 ral factors ownership 1 1 1 1 1 1 1	influencia by farmo 2 2 2 2 2 2 2 2 2	ang land values ers?  3 3 3 3 3 3 3 3 3	4 4 4 4 4 4 4 4	5	
appears destined to transition from  A. Fishing Access B. Hunting Access C. Home Building Sites D. Interest Rates for Borrowing E. Mall & Shopping Development F. Farm/Ranchettes of 10 acres or so G. Timber and Woodlots H. Water for Recreation	1 ral factors ownership 1 1 1 1 1 1 1	influencing by farmer 2 2 2 2 2 2 2 2 2	ang land values ang land value	4 4 4 4 4 4 4	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	

Name:	Phone:	
Street:		
Town/City:		
Zip Code:		
You can return this request in a se envelope provided in the question	arate mailing if anonymity is an issue; or if not, include it in the	he

If you are interested in receiving a copy of the Michigan Farmland Value survey results, please provide