

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

Report No. 642

November 2011

2011 MICHIGAN LAND VALUES
and
Leasing Rates

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And
LEASING RATES**

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2011 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. Potential rural residents have increasingly sought open space for a home site and pursuit of a lifestyle. Developers seek financial opportunities to invest in and develop it for non-farm uses. Recreational needs such as hunting are often met through use of land. 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, which is a monetary measure of its perceived value.

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 tilled and non-tilled land used to produce field and fruit crops as well as information on the value of land that is used for sugar beets and for 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 2011.

Survey Method

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 210 questionnaires were returned with useable information. There were 163 responses received from the southern half of the Lower Peninsula (Area 2 in Figure 1). The remaining 47 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.

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 2011. 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.

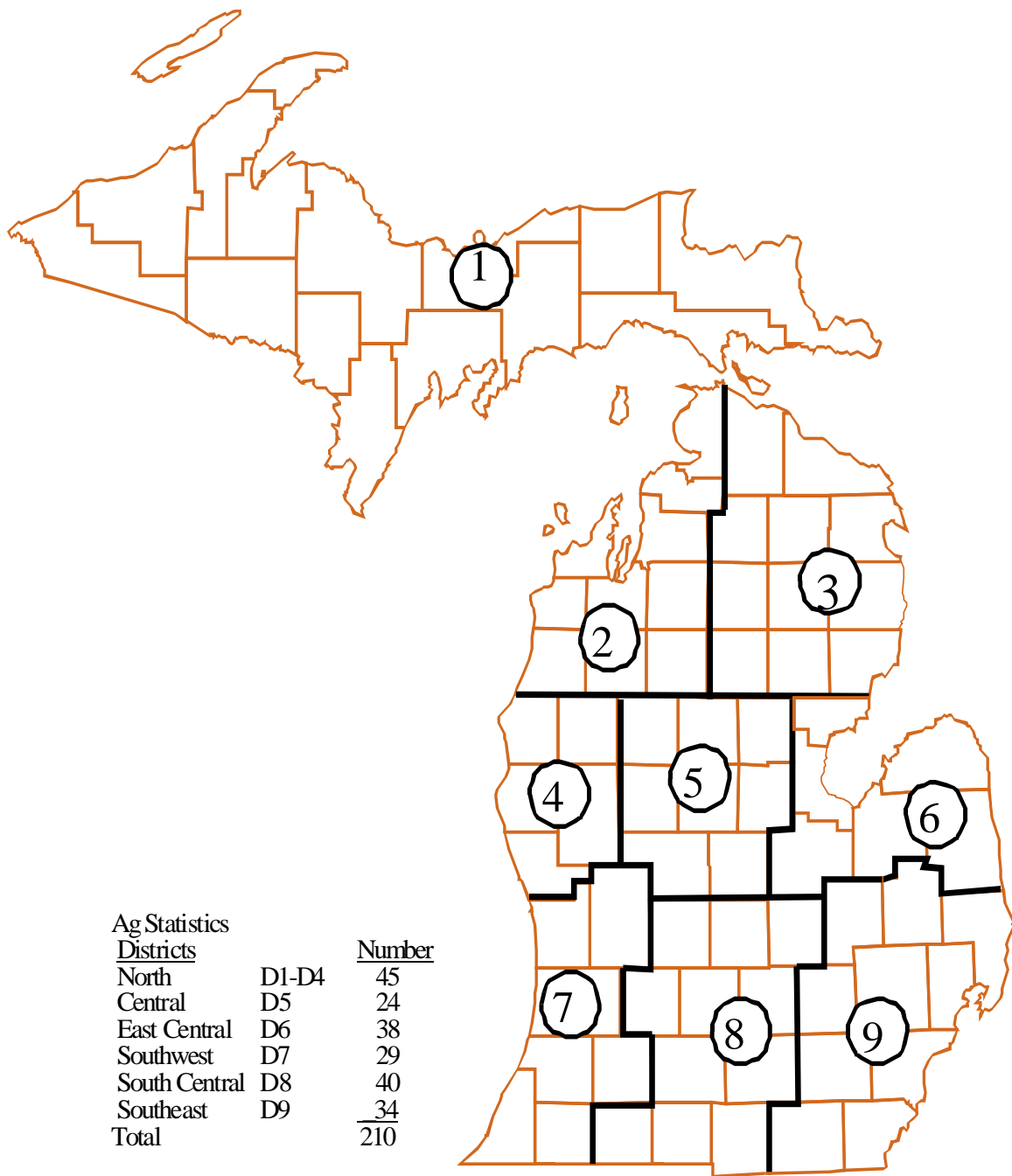


Figure 2. Agricultural Statistics Districts and Number of Respondents

Data Gathering

Respondents were requested to provide for their geographic area 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. In addition, information on the non-agricultural-use value of farmland was requested. Estimates on agricultural-use values for farmland were reported separately for tilled (non-irrigated) field crops, non-tilled 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.

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. Results are also reported for the nine "Agricultural Statistics Districts" across the state. The results for Districts 1 through 4 are 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. The limited number of responses in some geographic areas resulted in unreported data.

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.

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 tilled field cropland was \$3,764 per acre while non-tilled field cropland averaged \$3,140 per acre. In the Upper and Northern Lower Peninsula field crop land averaged \$1,847 and \$1,678 per acre for tilled and non-tiled, respectively.

Table 1 Michigan Average Agricultural Land Values, 2011

Region	Land Use				
	Field Crop Tiled	Field Crop Non-Tiled	Sugar Beet	Irrigated	Fruit Trees
Michigan	\$3,472	\$2,823	\$4,062	\$4,147	\$6,880
Southern Lower Peninsula	3,764	3,140	4,345	4,625	6,909
Upper & Northern Lower Peninsula	1,847	1,678	2,207	2,201	6,800
Districts 1-4	1,950	1,746	N/A	2,176	5,960
District 5	3,058	2,846	3,577	3,466	N/A
District 6	4,337	3,315	4,631	5,329	N/A
District 7	4,237	3,795	N/A	6,147	8,333
District 8	3,196	2,743	4,083	3,736	N/A
District 9	3,592	2,974	N/A	4,678	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 field cropland tilled \$4,337 per acre and District 7 was the next highest for field cropland tilled at \$4,237 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 tilled cropland ranging from \$3,196 to \$3,058 per acre and values ranging from \$2,743 to \$2,846 per acre for non-tiled cropland. Both district values increased over the 2010 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 tend to generate both a higher gross and higher net income per acre. The highest priced agricultural land in Michigan are those acres producing fruit located in proximity to Lake Michigan. The climatic effects of Lake Michigan not only enable fruit production but also provide location amenities associated with 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 \$6,880 per acre across Michigan; this was a slight decrease of \$446, a 6% decrease, per acre over the 2010 Michigan Land Survey value of \$7,326 per acre. This may be the result of a relative poor fruit situation in the prior year. The highest value reported for fruit tree acreage in 2011 was \$8,333 in the Southwest District (D7).

Land that can support sugar beets in its crop rotation averaged \$4,062 per acre in 2011, an 11.5% increase over the 2010 value of \$3,643. The sugar beet production is concentrated in the East Central and South East Districts.

Irrigated land value in 2011 averaged \$4,147 per acre in the state, a 9.2% increase over the 2010 value. Most responses on irrigated land values came from East Central, Southwest and Southeast Michigan. Irrigated land in the Southwest District (D7) typically used for seed corn production and some specialty crops, averaged \$6,147 per acre.

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 \$6,800 per acre and Southwest District (D7) averaged \$8,333 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 2011 from the levels observed in 2010 for tilled land and non-tilled land, 6.4% and 6.8% respectively. In the Upper and Northern Lower Peninsula, land values for field crops increased 1.0% for tilled land, and 0.2% for non-tilled land. Districts (D9 and D1-D4) reported the lowest rate increases in value for field cropland tilled land of 1.7% and 1.4%, respectively, and reported an rate increase in value for non-tilled of 8.3% and 0.6%, respectively.

Table 2 Percentage Change in Michigan Farmland Value, 2011

Regions	Type of Land Use									
	Field Crop Tilled		Field Crop Non-Tilled		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	5.4	3.7	5.3	3.9	8.5	4.4	5.0	3.5	1.9	2.8
Southern Lower Peninsula	6.4	3.7	6.8	4.6	9.9	4.7	6.0	3.4	-0.8	1.8
Upper and Northern Lower Peninsula	1.0	3.7	0.2	1.7	N/A	N/A	1.0	3.9	9.4	5.6
District 1-4	1.4	3.4	0.6	2.1	N/A	N/A	1.7	3.8	5.2	3.8
District 5	4.7	4.5	5.3	4.5	5.4	4.2	5.0	5.2	N/A	N/A
District 6	13.6	4.9	12.0	4.9	12.4	6.0	13.2	4.6	N/A	N/A
District 7	2.8	2.2	3.2	3.0	N/A	N/A	8.5	4.6	0.0	1.4
District 8	3.5	3.3	2.8	2.7	3.7	1.0	3.4	2.3	N/A	N/A
District 9	1.7	2.9	8.3	7.9	N/A	N/A	4.0	1.5	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 4.84%.¹

¹ Percentage change calculated using previous Michigan Farmland Value Surveys for tilled and non-tilled values.

Expectations on changes in Michigan farmland values indicate that land should increase in value in 2012 over the 2011 values. The largest expectations on changes in percentage land value were for District 6 at 4.9% for tilled and District 9 at 7.9% for non-tiled. Field crop tilled land values in Michigan are expected to increase by 3.7% tilled cropland and 3.9% for non-tiled cropland. The Central District (D5) is expected to increase by 4.7% of tilled cropland and 4.5% for non-tiled cropland. Sugar beet land values increased by 8.5% in 2011 and are expected to increase about 4.4% in 2012. Overall, irrigated land values increased 5.0% and are expected to increase 3.5% during the upcoming year. District (D6) irrigated land values have the largest increase in value of 13.2% over last year and are expected to increase in value for next year by 4.6%.

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 53.80% of crop acres are controlled by lease, which is more than half of the crop acres in Michigan. Cash leasing is the predominant form of land rental with 82.4% of leased land in Michigan controlled by cash rental arrangements.

Crop Acres Leased

In the Southern Lower Peninsula, an estimated 55.1% of field crop acres appear to be controlled by leases, while 49.0% of the cropland in the Upper and Northern Lower Peninsula is leased. The highest amount of leasing occurs in the South Central District (D8) where 65.3% 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 to the advantage for someone considering an investment in trees, which require several years of

cash outflow before trees bear fruit. 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, 2011

Region	Crop Acres Leased	Land Leased Under Cash Lease	Fruit Acres Leased
Michigan	53.8%	82.4%	16.6%
Southern Lower Peninsula	55.1	81.3	16.5
Upper and Northern Lower Peninsula	49.0	87.6	17.0
Districts 1-4	44.6	84.7	16.7
District 5	52.6	76.9	N/A
District 6	50.7	78.9	N/A
District 7	47.2	84.2	11.9
District 8	65.3	85.5	21.4
District 9	59.4	83.4	20.0

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 who gains control of the land in exchange for their payment. Cash rental amounts and their relationship to land values are shown in Table 4. Cash rents in the Southern Lower Peninsula averaged \$126 per acre for tilled cropland and averaged \$95 for non-tiled cropland. In the Upper and Northern Lower Peninsula, tilled field cropland rented for an average of \$58 per acre and non-tiled cropland rented for an average of \$37 per acre. The highest rent levels for field cropland were found in the East Central (D6) where tilled land commanded an average cash rent of \$146 per acre. Sugar beet land in Michigan rented for an average of \$165 per acre, and irrigated cropland rented for \$197 per acre. The cash rent value for tilled field cropland of \$117 per acre for the state is an increase of \$9 per acre from the previous year. Cash rental rates for Michigan cropland were up for sugar beet acres by \$7 per acre and rental rates

for non-tiled land were up \$9 per acre from last year. The reported rental rates for 2011 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, 2011

Region	Type of Land Use							
	Field Crop Tiled		Field Crop Non-Tiled		Sugar Beet		Irrigated	
	Rent	Value/ Rent	Rent	Value/ Rent	Rent	Value/ Rent	Rent	Value/ Rent
Michigan	\$117	33	\$85	40	\$165	26	\$197	25
Southern Lower Peninsula	126	32	95	36	173	26	206	24
Upper and Northern Lower Peninsula	58	38	37	61	94	28	121	33
District 1-4	62	38	37	63	N/A	N/A	96	37
District 5	104	33	85	42	142	26	166	19
District 6	146	31	100	34	182	26	187	30
District 7	128	36	104	40	N/A	N/A	255	26
District 8	110	30	91	32	166	25	198	20
District 9	123	30	94	34	N/A	N/A	230	21

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 32 in the Southern Lower Peninsula. This number means that land is valued 32 times the current rental rate. Southern Lower Peninsula sugar beet land had a value-to-rent ratio of 26, while irrigated land's value-to-rent ratio was 24. In the Upper and Northern Lower Peninsula

the ratio for field cropland tilled was 38. These value-to-rent ratios in Michigan changed little from 2010 levels, indicating that land prices and cash rents both increased for 2011.

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 will change. 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 actually 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 is \$6,929 per acre in the Southern Lower Peninsula and \$3,487 per acre in the Upper and Northern Lower Peninsula. The highest residential development values are found in the Southwest (D7) where the average value is \$11,273 per acre.

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

Region	Type of Land Use		
	Residential	Commercial/Industrial	Recreational
Michigan	\$6,174	\$13,074	\$2,518
Southern Lower Peninsula	6,929	13,411	2,646
Upper and Northern Lower Peninsula	3,487	10,955	2,122
Districts 1-4	5,049	12,955	2,010
District 5	2,875	9,213	2,175
District 6	6,217	10,368	2,633
District 7	11,273	15,091	4,100
District 8	6,102	14,917	2,380
District 9	5,695	16,091	2,526

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

The value of farmland being converted to commercial use was \$13,411 in the Southern Lower Peninsula and \$10,955 in the Upper and Northern Lower Peninsula. The average value for farmland that was converted to commercial use is approximately \$13,074 per acre for the state of Michigan. However, the variance in this data 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 \$2,646 per acre in the Southern Lower Peninsula and \$2,122 per acre in the Upper and Northern Lower Peninsula. The highest average value for recreational development land was in the Southwest (D7) where land for recreational development averaged \$4,100 per acre. These reported price data on recreational values are also subject to a high variance because of the occasional extremely high value attributed to the unique amenities of a particular parcel of land.

Major Factors Influencing Land Values and Rents in Michigan

What drives agricultural land values? Respondents were provided the opportunity to indicate their perception of the importance of some agricultural-related factors that can influence farmland values and cash rents. On a scale from one to five with one being “Not Important” and five being “Very Important”, respondents were asked to rank their perception of the importance of expansion by farmers, selected government programs, and certain prices. The actual items identified and requested for assessment are presented in question 6 of the survey instrument (see Appendix), and the results are presented in Table 6. For Southern Michigan, “Grain Prices”, “Expansion by Farmers”, and “Low Interest Rates” were the highest-ranking items at 4.6, 4.4 and 4.0, respectively. Next in order of importance were “Milk Prices” and “Livestock Prices” with rating scores of 3.7 and 3.6, 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, 2011

Regions	Expansion by farmers	Government Programs			Prices			
		CRP*	Current Farm Bill	Low Int.	Fruit	Grain	Livestock	Milk
Michigan	4.3	2.4	2.5	3.9	2.5	4.4	3.6	3.6
Southern Lower	4.4	2.3	2.4	4.0	2.6	4.6	3.6	3.7
Upper & North Lower	3.8	2.5	2.6	3.4	2.1	3.8	3.3	3.6
District 1-4	3.6	2.5	2.6	3.2	2.4	3.5	3.3	3.5
District 5	4.5	2.3	2.4	4.1	1.9	4.7	3.8	3.9
District 6	4.7	2.0	2.2	4.3	1.9	4.8	3.5	3.6
District 7	4.3	2.4	2.6	3.6	3.5	4.5	3.7	3.6
District 8	4.5	2.4	2.4	4.0	2.6	4.6	3.8	3.8
District 9	4.4	2.7	2.6	4.2	2.2	4.7	3.5	3.5

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

*CRP -- Conservation Reserve Program

For the Upper and the Northern Lower Peninsula, the two highest agricultural related factors influencing land prices were “Expansion by Farmers” and “Grain Prices” with a score of 3.8 and a 3.8 for both factors.

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.

Table 7 Rating of Non-Agricultural Factors Affecting Value of Michigan Farmland, 2011

Regions	Fishing Access	Hunting Access	Home Sites	Interest Rate	Development	Small Farms	Wood Lots	Water Access
Michigan	2.2	3.5	2.9	3.6	1.6	3.0	3.0	2.9
Southern Lower Peninsula	2.2	3.3	2.9	3.7	1.6	2.9	2.9	2.7
Upper &N. Lower Peninsula	2.4	3.9	3.1	3.3	1.4	3.4	3.4	3.5
District 1-4	2.5	3.9	3.3	3.2	1.6	3.2	3.5	3.7
District 5	2.2	3.6	2.4	3.8	1.4	3.2	3.0	2.7
District 6	2.1	3.5	2.8	3.9	1.2	2.7	2.8	2.2
District 7	2.4	3.0	2.8	3.3	1.6	2.6	2.8	3.0
District 8	2.1	3.4	2.7	3.8	1.7	3.0	2.9	2.8
District 9	2.0	3.2	3.2	3.8	1.9	3.4	3.0	2.9

Note: Response scale ranges from one to five with one designating not important and five designating 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 3.3 was “Hunting Access”. Land also provides space for a house, space for raising a family, and space for privacy, security and R&R (rest and relaxation) and these land-related amenities have been and continue to be in demand.

For the Upper and the Northern Lower Peninsula, the highest ranked non-agricultural factor influencing land values were “Hunting Access” and “Water Access”, scoring 3.9 and 3.5, 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.

Conclusions

Farmland values in Michigan overall increased in 2011 over 2010 values. This will be the 20 years of steady growth, except for 2009, since the beginning of the annual Michigan Land Value Survey. Sugar beet land values increased by 8.5%, irrigated land values increased by 5.0% and tree fruit values slightly increased by 1.9% (Table 2). Rental rates in the Southern Lower Peninsula (Table 4) averaged \$126 per acre for tilled ground and \$95 per acre for non-tiled ground, an increase of \$15 for tilled and increase of \$11 for non-tiled ground over 2010. In addition, sugar beet acreage rented for \$173 per acre, an increase of \$8 per acre over 2010, while irrigated land averaged \$206 per acre, an increase of \$35 per acre from the 2010 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 38 and 63 for tilled and non-tiled land respectively, while the value-to-rent ratios for Southwestern (D7) were 36 for tilled land and 40 for non-tiled land. The value-to-rent ratios for most of the regions in the state are closer to 37. The 37 value-to-rent ratio implies a gross current return to investment of 2.7 percent per year. A higher value to rent ratio suggests a lower annual current return to investment.

Michigan farmland values in 2011 increased and land rental rates also increased in 2011. The direction of Michigan agricultural land prices suggest a continuing upward trend. Strong milk prices and strong crop prices in 2011 helped push farmland values up. Economic conditions at the end of 2011 suggest the earnings for field crops should be good in 2012, however milk price forecasts indicate a slight decrease from 2011. Federal Reserve has held prime rate in 2011 constant at 3.25 % in response to the slowing economy. Interest rates also impact land values and as interest rates decline the cost of borrowed funds for land purchases also declines.

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 2012 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 and this non-agricultural demand can be an effective influence only if Michigan unemployment levels decline and income rates 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 2012.

Table 8 Percentage Change in Land Value from 1991-2011 in the Southern Lower Peninsula

Year	Land Type			
	Field Crop Tiled ¹	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
Average	5.7	5.3	5.1	6.2

¹ 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.

Appendix
FARMLAND VALUE QUESTIONNAIRE
April 2011

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 Average Value	Percent Change in Value (Indicate + or -)		Average Cash Rent
		Last 12 Months	Expected in Next 12 Months	
	\$/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

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

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

3. What percentage of field crop acres in your area is leased? _____%
4. What percentage of the leased field crop acres is on a **cash-rent** lease? _____%
5. What percentage of the fruit crop acres in your area is leased? _____%

6. What are the major **agricultural** factors influencing farm land values and cash rents in your area? Indicate your assessment of the situation by circling the appropriate number on the scale below.

	Not Important		Neutral		Very Important
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 (Commodity Programs)	1	2	3	4	5
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)					
_____	1	2	3	4	5
_____	1	2	3	4	5

7. What are the major **non-agricultural** factors influencing land values in rural areas for land that appears destined to transition from ownership by farmers?

A. Fishing Access	1	2	3	4	5
B. Hunting Access	1	2	3	4	5
C. Home Building Sites	1	2	3	4	5
D. Interest Rates for Borrowing	1	2	3	4	5
E. Mall & Shopping Development	1	2	3	4	5
F. Farm/Ranchettes of 10 acres or so	1	2	3	4	5
G. Timber and Woodlots	1	2	3	4	5
H. Water for Recreation	1	2	3	4	5
I. Other: (please list)					
_____	1	2	3	4	5
_____	1	2	3	4	5

8. Please provide other general comments you have about land values and rents in your area.

If you are interested in receiving a copy of the Michigan Farmland Value survey results, please provide your name, address and telephone number.

Name: _____ Phone: _____

Street: _____

Town/City: _____

Zip Code: _____

You can return this request in a separate mailing if anonymity is an issue; or if not, include it in the envelope provided in the questionnaire.