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**Michigan State University**  
**Department of Agricultural Economics**  
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**2005 MICHIGAN LAND VALUES**  
**and Leasing Rates**

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**2005 MICHIGAN LAND VALUES  
And  
LEASING RATES**

by

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## **2005 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 life style. Developers seek financial opportunities to invest and "develop" the land for non-farm uses. Recreational needs are often met with 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-agriculture use value of farmland. The remainder of this paper contains the results for the MSU land value survey conducted in spring of 2005.

## **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 and wheat, and dry beans and sugar beets. After accounting for overlap between the different groups, the total sample consisted of 587 potential respondents. A total of 206 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 43 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 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. Respondents were to be provided a summary of the survey results upon request. The questionnaire was mailed in May of 2005. 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.



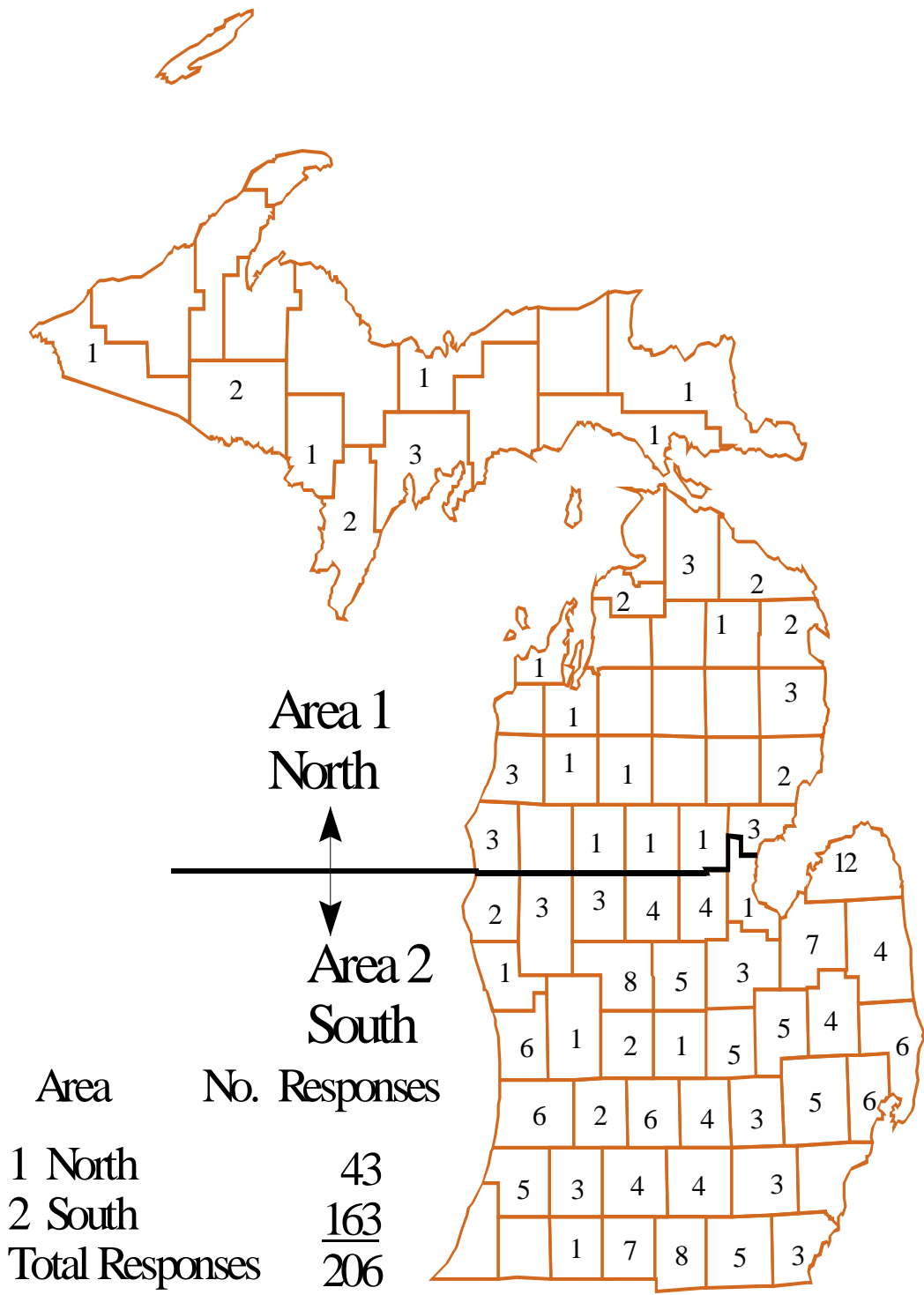


Figure 1. Farmland Value Questionnaire Responses

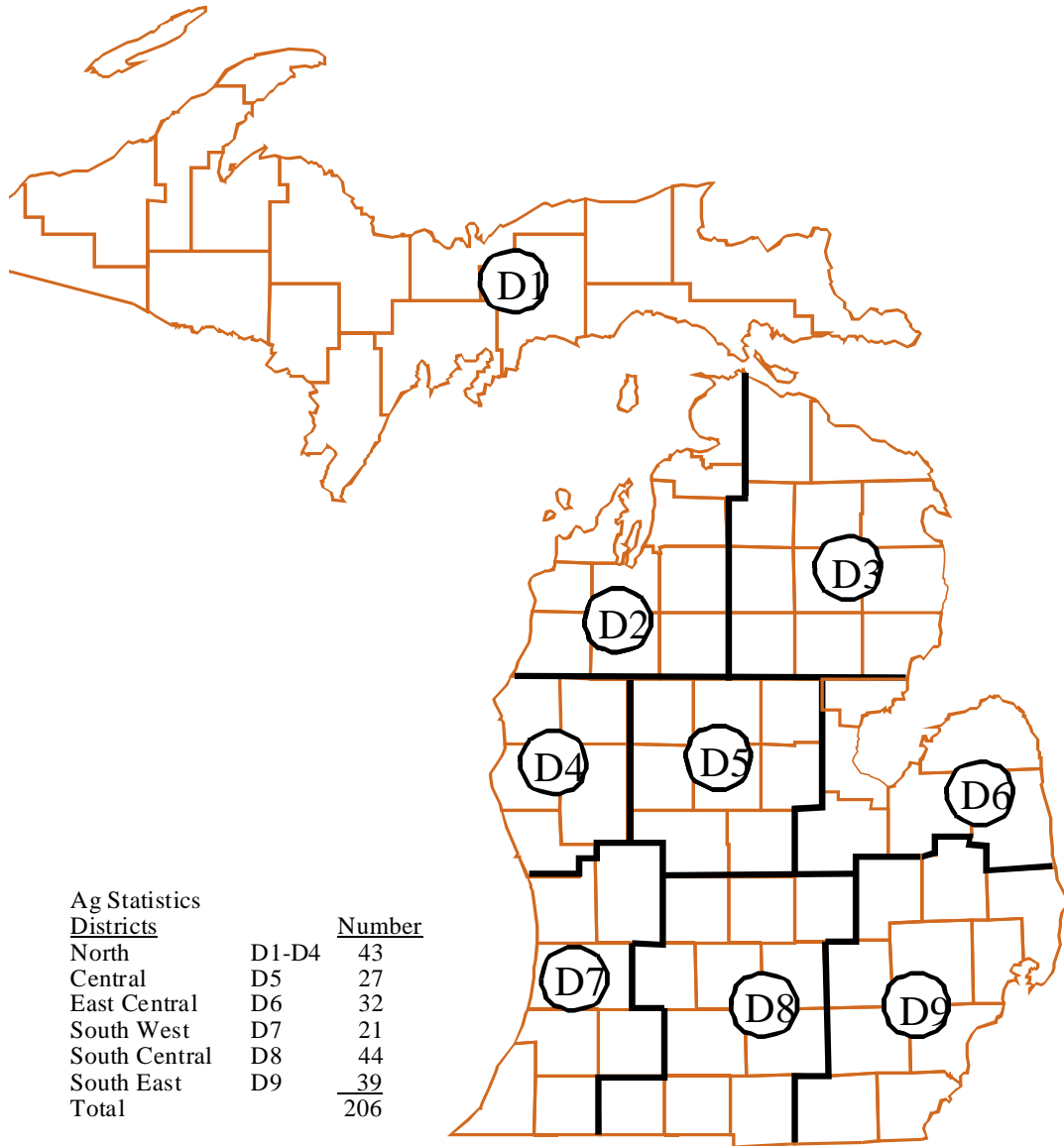


Figure 2. Agricultural Statistics Districts and Number of Respondents

## **Data Gathering**

Respondents were requested to provide for their geographic areas: the current agriculture-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 agriculture-use value of farmland was requested. Estimates on agriculture-use values for farmland were reported separately for tilled (non-irrigated) field crop, non-tilled field crop, fruit, sugar beet, and irrigated land. Price data on non-agriculture 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 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 and so the agriculture-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 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 \$2,864 per acre while non-tilled field cropland averaged \$2,513 per acre. In the upper and northern-lower peninsula field crop land averaged \$1,719 and \$1,487 per acre for tilled and non-tilled, respectively.

**Table 1 Michigan Average Agricultural Land Values, 2005**

Region	Land Use				
	Field Crop Tiled	Field Crop Non-Tiled	Sugar Beet	Irrigated	Fruit Trees
Michigan	\$2673	\$2288	\$2545	\$3144	\$5401
Southern Lower Peninsula	2864	2513	2557	3428	6144
Upper & Northern Lower Peninsula	1719	1487	N/a	1725	3638
Districts 1-4	1733	1510	N/a	1713	3508
District 5	2286	1945	2563	2667	N/a
District 6	2225	1792	2474	2767	N/a
District 7	3016	2655	N/a	4178	6000
District 8	2567	2306	2900	2706	3800
District 9	4323	3763	2788	N/a	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 9 in Southern Michigan had the highest agricultural land values. District 9 in the southeast had the highest average values for field cropland tilled at \$4,323 and \$3,763 per acre for non-tilled cropland.

Values in this area appear to be the highest in the state and probably reflect the influence of non-agricultural demands. The Central (D5) and East Central (D6) Districts had somewhat similar average values for tilled cropland ranging from \$2,225 to \$2,286 per acre and values ranging from \$1,792 to \$1,945 per acre for non-tiled cropland.

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 \$5,401 per acre across Michigan; this was an increase of \$1,990 per acre over the 2004 Michigan Land Survey value of \$3,411 per acre. This increase in value may be partly due to the small number reporting tree fruit land values. The highest values reported for fruit tree acreage in 2005 was \$6,144 in the Southern Lower Peninsula.

Land that can support sugar beets in its crop rotation averaged \$2,545 per acre with the sugar beet production being concentrated in the East Central and Central Districts. Uncertainty regarding availability of capacity to process sugar beets was in doubt in 2001. Processing was acquired for 2001 and was available for 2002, 2003, and 2004 crops. Additional uncertainty associated with agricultural policy regarding sugar beets was also addressed in the 2002 farm bill. This reduction of uncertainty may have contributed to the 7.8% increase in the 2005 price of Michigan sugar beet land and the value of this land continued to grow in 2005.

Irrigated land value averaged \$3,144 per acre in the state. Most responses on irrigated land values came from central, south central and southwest Michigan. Irrigated land in the Southwest District (D7) typically used for seed corn production and some specialty crops, averaged \$4,178 per acre.

### Change in Farmland Values

The changes in Michigan farmland values during the last 12 months and the expected changes during the next 12 months are shown in Table 2. In the southern-lower peninsula field crop land values increased in 2005 from the levels observed in 2004 by 6.2% for tilled land and 5.9% for non-tiled land. In the Upper Peninsula and northern-lower peninsula land values for field crops increased 10.9% for tilled land, and around 9.1% for non-tiled land. The East Central District (D6) reported the lowest annual growth rate in value for field cropland averaging 4.3% for tilled land and 3.9% non-tiled land. The largest percentage increase in land values occurred in Districts 1-4, where sales price for tilled field cropland increased approximately 14.0% and the sale price for non-tiled field cropland increased 10.1% in value. For the five prior years, the Upper Peninsula and the Northern Lower Peninsula have had the higher annual rate of increase in land values, averaging 11.1%.

**Table 2 Percentage Change in Michigan Farmland Value, 2005**

Regions	Type of Land Use									
	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
<b>Michigan</b>	6.2	4.4	5.9	4.0	7.7	2.8	6.1	5.6	6.1	7.3
<b>Southern Lower Peninsula</b>	5.4	4.5	4.9	4.1	7.9	2.8	5.4	5.3	6.9	8.0
<b>Upper and Northern Lower Peninsula</b>	10.9	3.8	9.1	3.6	N/a	N/a	9.6	7.0	N/a	N/a
<b>District 1-4</b>	14.0	5.1	10.1	4.4	5.0	8.0	10.2	7.9	2.5	5.8
<b>District 5</b>	4.5	4.1	4.4	4.9	3.5	3.0	5.1	5.1	N/a	N/a
<b>District 6</b>	4.3	2.9	3.9	2.3	8.5	2.2	3.4	2.3	N/a	N/a
<b>District 7</b>	5.6	4.7	5.0	4.0	N/a	N/a	6.4	6.1	8.1	6.8
<b>District 8</b>	5.8	5.4	5.2	4.6	11.0	4.3	4.7	4.3	N/a	N/a
<b>District 9</b>	5.7	4.1	5.1	3.8	6.7	4.0	N/a	N/a	N/a	N/a

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

Expectations on changes in Michigan farmland values indicate that land will increase in value in 2005 over the 2004 values. The highest expectations on changes in percentage land value were for the Districts 8 at 5.4% for tilled and 4.6% for non-tiled. Field crop tilled land values in Michigan are expected to rise about 4.4% during the next year. For non-tiled land, the percentage change in land value is expected to increase more in the Southern Lower Peninsula than in the Upper and Northern-lower peninsula. The weakest expected gains in land value for the upcoming year are in the East Central District 6 for non-tiled cropland. Sugar beet land values increased by about 7.7% in 2005 and are expected to increase in value of 2.8% in the coming year. Overall, irrigated land values increased 6.1% in value and are expected to rise 5.6% during the upcoming year. District 1-4 irrigated had the highest expectation with a projected 7.9% increase in value for next year.

### **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 half, 50.2 percent, of the crop acres in Michigan are controlled by lease. Cash leasing is the most predominant form of land rental with 78.4% of leased land controlled by cash rental arrangements.

#### *Crop Acres Leased*

In the southern Lower Peninsula, an estimated 52.6% of field crop acres appear to be controlled by leases, while 40.3% of the cropland in the upper and northern-lower peninsula is leased. The highest amount of leasing occurs in the South East District (D9) where 58.8% of the cropland is leased. 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. As 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, 2005**

<b>Region</b>	<b>Crop Acres Leased</b>	<b>Land Leased Under Cash Lease</b>	<b>Fruit Acres Leased</b>
Michigan	50.2%	78.4%	9.7%
Southern-Lower Peninsula	52.6	77.4	12.1
Upper and Northern Lower Peninsula	40.3	83.2	3.1
Districts 1-4	36.2	81.4	3.9
District 5	50.8	71.5	5.0
District 6	50.2	76.3	N/a
District 7	51.3	77.1	11.7
District 8	54.0	81.1	15.0
District 9	58.8	80.7	22.0

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 his/her payment. Cash rental amounts and their relationship to land values are shown in Table 4. Cash rents in the southern-lower peninsula averaged \$87 and \$64 per acre for tilled and non-tilled field cropland, respectively. In the upper and northern-lower peninsula, tilled field cropland rented for an average of \$44 per acre, while non-tilled land rented for \$30 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 \$113 per acre. Sugar beet land in Michigan rented for an average of \$120 per acre, and irrigated cropland rented for \$125 per acre. The cash rent values for tilled field cropland for the state decreased \$4 per acre from the previous year. Cash rental rates were down slightly for sugar beet acres at \$1 per acre, while rental rates for non-tilled land decreased \$6 per



acre from last year. The reported rental rates for 2005 illustrate that rates remained constant or declined slightly. The reasons for this decline are unknown since the 2004 Michigan Cash Grain Farm Business Analysis Summary indicates that 2004 was a better year than 2003 from a profitability viewpoint.

**Table 4 Average Cash Rent and Value Multipliers for Michigan Agricultural Use, 2005**

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
<b>Michigan</b>	\$81	38	\$58	45	\$120	22	\$125	31
<b>Southern Lower Peninsula</b>	87	38	64	43	121	22	140	30
<b>Upper and Northern Lower Peninsula</b>	44	41	30	52	N/a	N/a	43	41
<b>District 1-4</b>	39	44	29	53	N/a	N/a	51	39
<b>District 5</b>	81	31	56	36	124	21	154	19
<b>District 6</b>	113	20	75	25	125	20	147	19
<b>District 7</b>	82	34	70	35	N/a	N/a	156	28
<b>District 8</b>	76	36	63	38	90	34	129	23
<b>District 9</b>	81	65	55	76	109	26	N/a	N/a

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

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 38 in the southern-lower peninsula. This number means that land is valued 38 times the current rental rate. In the upper and northern-lower peninsula the ratio was 41. Sugar beet land had a value-to-rent ratio of 22, while irrigated land's value-to-rent ratio was 31. These value-to-rent ratios have increased in recent years indicating that land prices have increased relatively more than have cash rents. The highest value-to-rent ratios appear to be in areas where land values have drastically

increased, primarily in the northern part of Michigan. It is hypothesized that those high value-to-rent ratios occur most often when ownership has a greater tendency to transition to non-agricultural uses. Although the land may continue to be farmed during these transition years, the operating farmer will bid a rental amount based on the agricultural value of the land, not on its non-agricultural investment value.

The current price of land is a direct function of the future cash flows expected (or speculated) to be generated by the land. Higher expected future cash flows are "capitalized" into the price of the land today, increasing 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. As speculation and expectations increase about future cash flows, the resultant value-to-rent ratio will increase; and conversely the current return on investment will decrease. The value-to-rent ratio calculation and movement is analogous to the price/earnings ratio in equity stocks and funds traded on national exchanges. Relatively high value-to-rent ratios suggest four possible situations: 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 agriculture 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 Agriculture-Use Values of Farmland**

The value of farmland for development purpose is summarized in Table 5. In most cases, these values are significantly above the agriculture-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 \$14,351 per acre in the southern lower-peninsula and \$3,426 per acre in the upper and northern-lower peninsula. The highest residential development values are found in the Southeast (D9) where the average value is \$29,969 per acre.

The value of farmland being converted to **commercial** use was \$41,669 in the southern-lower peninsula and \$29,930 in the upper and northern-lower peninsula. The average value for farmland that was converted to commercial use is approximately \$38,907 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."

**Table 5 Non Agricultural-Use Value of Undeveloped Land in Michigan, 2005**

Region	Type of Land Use		
	Residential	Commercial/Industrial	Recreational
Michigan	\$11,903	\$38,907	\$4,391
Southern Lower Peninsula	14,351	41,669	5,021
Upper and Northern Lower Peninsula	3,426	29,930	2,594
Districts 1-4	4,996	30,580	2,707
District 5	5,829	84,750	3,835
District 6	6,715	11,382	3,183
District 7	13,417	51,333	7,590
District 8	7,959	15,161	3,315
District 9	29,969	55,229	9,122

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

**Recreational** development values for farmland were higher than the agricultural-use value of farmland for each crop-reporting district in Michigan. The recreational development value of farmland was \$5,021 per acre in the southern lower-peninsula and \$2,594 per acre in the upper and northern-lower peninsula. The highest average value for recreational development land was in the South East (D9) where land for recreational development averaged \$9,122 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, expansion by farmers and a low interest rate were the highest-ranking item at 3.8 and 3.7, respectfully. Next in order of importance were “Milk Prices” and “Grain Prices”, and “Livestock Prices” with rating scores of 3.4, 3.3, and 3.1, respectively. The 2002 Farm Bill provides a floor for prices of program crops and reduces the crop price risk to farmers. Crop prices that are prevented from falling below the level provided by government programs should also provide support to land prices through the implicit subsidy effect. Livestock prices that impact land price will vary by the predominate livestock in the reporting area. Higher prices enable higher incomes to drive the 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). With lower interest rates, it is easier to manage the debt often associated with land purchases. Higher incomes from higher product

prices and the strategy to increase farm size will almost certainly drive higher the price of farmland. 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 Farm Land, 2005**

Regions	Expansion by farmers	Government Programs			Prices			
		CRP*	2002 Farm Bill	Low Int.	Fruit	Grain	Livestock	Milk
Michigan	3.7	2.7	2.9	3.6	2.5	3.2	3.1	3.3
Southern Lower	3.8	2.7	2.9	3.7	2.5	3.3	3.1	3.4
Upper & N. Lower	3.3	2.5	2.8	3.4	2.0	2.8	3.2	3.2
District 1-4	3.4	2.3	2.6	3.2	2.4	2.7	3.1	3.1
District 5	4.2	3.0	3.3	3.9	2.2	3.7	3.3	3.6
District 6	4.0	3.0	3.2	4.0	1.9	3.4	3.5	3.8
District 7	3.7	2.6	2.6	4.0	3.5	3.1	3.1	3.2
District 8	3.9	3.0	3.2	3.9	2.6	3.4	3.2	3.5
District 9	3.2	2.4	2.5	3.2	2.4	2.9	2.6	2.6

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 Peninsula and the Northern part of the Lower Peninsula, the two highest agricultural related factors influencing land prices were the low interest rates and expansion by farmers, with rating scores of 3.4 and 3.3 respectively. Identification of these items is probably reflective of the pervasive influence of interest rates on the cost of financing.

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 Farm Land, 2005**

Regions	Fishing Access	Hunting Access	Home Sites	Interest Rate	Development	Small Farms	Wood Lots	Water Access
Michigan	2.2	3.7	4.4	3.9	2.3	3.7	3.1	3.2
Southern Lower Peninsula	2.2	3.6	4.5	4.0	2.5	3.8	3.0	3.1
Upper &N. Lower Peninsula	2.5	4.2	4.4	3.7	1.7	3.6	3.5	3.9
District 1-4	2.6	4.2	4.5	3.6	1.8	3.5	3.5	3.9
District 5	2.0	4.1	4.2	3.9	2.0	3.6	3.2	3.0
District 6	2.2	4.0	4.3	4.0	2.0	3.3	2.8	2.7
District 7	1.9	2.4	5.0	4.1	3.1	4.1	2.8	3.4
District 8	2.2	3.8	4.4	4.0	2.3	3.9	3.2	3.2
District 9	2.4	3.2	4.6	4.1	3.0	4.0	2.9	3.2

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 land values was the demand for home building sites. For the Southern Lower Peninsula, home building sites received an importance ranking of 4.5. The second most important item at 4.0 was the impact of interest rates, which during 2005 were at a 40-year low. Land provides space for a house, space for raising a family; and space for privacy, security and R&R (rest and relaxation). These land-related amenities have been and continue to be in demand. The low interest rates experienced in 2005 have contributed to the ability of buyers to service higher levels of debt, and to an apparent willingness to bid higher prices for land. Continuation of low interest rates would continue to contribute to higher prices for land; and the converse would be true if interest rates were expected to increase.

For the Upper Peninsula and the Northern Lower Peninsula, the highest ranked **non agricultural** factor influencing land values was “Home Sites” ranked 4.4. Land in Michigan’s rural areas provides space and habitat for many species of wildlife. The opportunity to hunt, ranked second at 4.2, and to capture the outdoor experience is apparently highly valued by a significant portion of the Michigan population. It can be noted that the non-agricultural factor of home sites was much higher in its perceived influence upon land values than were any of the identified agricultural factors.

## **Conclusions**

Farmland values in Michigan continued to increase in 2005. The annual data presented in Table 8, indicate that land values for field crops in the southern Lower Peninsula showed strong annual gains of around 5% over the value reported in 2004. Sugar beet land values increased by 7.9% and irrigated land values were up 5.4%. Rental rates in the southern lower-peninsula averaged \$87 per acre for tilled ground and \$64 per acre for non-tilled ground, the same rental rate as 2004 for tilled but a slight decrease in non-tilled cropland from the prior year. Sugar beet acreage rented for \$120 per acre the same as 2004, while irrigated land averaged \$140 per acre, up \$10 from the 2004 rates.

Land values relative to cash rents were highest in Southeastern (D9) and Districts (1-4). In Southeastern (D9), the value-to-rent ratios were 65 for tilled land and 76 for non-tilled land, while the value-to-rent ratios for Districts (1-4) were 44 and 53 for tilled and non-tilled land respectively. The value-to-rent ratios for most of the regions in the state are closer to 38. The 38 value-to-rent ratio implies a gross current return to investment of 2.6 percent per year. A higher value to rent ratio suggests a lower annual current return to investment. Apparently as demand drives land prices up, the new owners are willing to accept a short run cash rent return that more closely approaches an agricultural use value. Although land prices have trended upward since 1987, land prices can and have in the past turned in a downward direction. The direction of Michigan agricultural land prices in the future remains a question. Michigan’s economy has a diversified structure led by industry with tourism and the agriculture/food industry vying closely for the number two ranking in contribution to the economy. 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 2005 and beyond is whether the financial performance from agriculture can successfully pay for land at these increased valuations that are often buoyed up by non-agricultural demand. But this non-agricultural demand can be effective only if Michigan employment levels and income rates continue to increase.

The forecasting view on land values can never be clear and certain but the authors believe that modest growth in agricultural land values will be continued in the year beyond 2005. When (and if) interest rates begin to increase, the demand for land should be dampened and prices should moderate.



**Table 8 Percentage Change in Land Value from 1991-2005 in the Southern-Lower Peninsula**

Year	Land Type			
	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
Average	6.0	5.5	4.6	6.6

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

Appendix

**FARM LAND VALUE QUESTIONNAIRE**

**April 2005**

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 2002	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)					
_____	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.

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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.