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## Michigan State University

Department of Agricultural, Food, and Resource Economics

## Report No. 638

December 2009

## 2009 MICHIGAN LAND VALUES and Leasing Rates

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# 2009 PRELIMINARY MICHIGAN LAND VALUES And LEASING RATES 

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## 2009 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 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 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 paper contains the results for the MSU land value survey conducted in spring of 2009.

## 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 202 questionnaires were returned with useable information. There were 155 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 2009. 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
Ag Statistics

| Districts |  | $\frac{\text { Number }}{}$ |
| :--- | :--- | ---: |
| North | D1-D4 | 43 |
| Central | D5 | 32 |
| East Central | D6 | 34 |
| Southwest | D7 | 27 |
| South Central | D8 | 44 |
| Southeast | D9 | $\underline{22}$ |
| Total |  | $\boxed{202}$ |



Figure 2. Agricultural Statistics Districts and Number of Respondents

## Data Gathering

Respondents were requested to provide for their geographic areas 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 tiled (nonirrigated) field crops, non-tiled field crops, fruit, sugar beets, and irrigated land. Price data on nonagricultural 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 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 $\$ 3,647$ per acre while non-tiled field cropland averaged $\$ 2,911$ per acre. In the Upper and Northern Lower Peninsula field crop land averaged \$1,995 and $\$ 1,757$ per acre for tiled and non-tiled, respectively.

Table 1 Michigan Average Agricultural Land Values, 2009

| Region | Land Use |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  | Field Crop <br> Tiled | Field Crop <br> Non-Tiled | Sugar <br> Beet | Irrigated | Fruit <br> Trees |
| Michigan | $\$ 3,425$ | $\$ 2,656$ | $\$ 3,292$ | $\$ 3,603$ | $\$ 5,782$ |
| Southern Lower <br> Peninsula | 3,647 | 2,911 | 3,407 | 3,790 | 6,009 |
| Upper \& Northern <br> Lower Peninsula | 1,995 | 1,757 | 2,260 | 2,294 | 5,367 |
| Districts 1-4 | 2,336 | 1,850 | $\mathrm{~N} / \mathrm{A}$ | 2,244 | 6,043 |
| District 5 | 2,959 | 2,516 | 3,032 | 3,336 | $\mathrm{~N} / \mathrm{A}$ |
| District 6 | 3,421 | 2,788 | 3,528 | 4,033 | $\mathrm{~N} / \mathrm{A}$ |
| District 7 | 4,385 | 3,515 | $\mathrm{~N} / \mathrm{A}$ | 4,285 | 6,450 |
| District 8 | 3,180 | 2,726 | 3,500 | 3,684 | $\mathrm{~N} / \mathrm{A}$ |
| District 9 | 4,407 | 2,958 | $\mathrm{~N} / \mathrm{A}$ | 3,880 | $\mathrm{~N} / \mathrm{A}$ |

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 tiled at $\$ 4,407$ per acre. District 7 had the highest for both field cropland tiled and non-tiled at $\$ 4,385$ and $\$ 3,515$ per acre, respectively. Values in these areas appear to
be the highest in the state and probably reflect the influence of non-agricultural demands. The South Central (D8) and East Central (D6) Districts had somewhat lower average values for tiled cropland ranging from \$3,180 to \$3,421 per acre and values ranging from \$2,726 to \$2,788 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 $\$ 5,752$ per acre across Michigan; this was a decrease of $\$ 1,494$ per acre over the 2008 Michigan Land Survey value of $\$ 7,246$ per acre. This may be a result of a lower value being placed on the non-agricultural aspect of the land value. The highest values reported for fruit tree acreage in 2009 was $\$ 6,450$ in (D7) Southwest District.

Land that can support sugar beets in its crop rotation averaged $\$ 3,292$ per acre with the sugar beet production being concentrated in the East Central and South East Districts. Michigan sugar beet land in 2008 average $\$ 3,460$ : a $5.0 \%$ decrease in the 2009 price of Michigan sugar beet land.

Irrigated land value averaged $\$ 3,603$ per acre in the state. 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 \$4,285 per acre.

## 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 decreased in 2009 from the levels observed in 2008 by $0.6 \%$ for tiled land and $1.2 \%$ for non-tiled land. In the Upper Peninsula and Northern Lower Peninsula, land values for field crops decreased $2.3 \%$ for tiled land, and decreased $1.7 \%$ for non-tiled land. The North Districts (D1-D4) reported the largest annual rate decrease in value for field cropland averaging $4.4 \%$ for tiled land and 2.4\% non-tiled land. The only district that where land values remained steady occurred in Districts 7, where sales price for tiled field cropland increased slightly $1.6 \%$ and the sale price for non-tiled field cropland decreased $2.0 \%$ in value. For the previous five years, the Southern Lower Peninsula has had the highest annual rate of increase in land values, averaging 7.52\%; data sources are previous Michigan Farmland Value Surveys using the tiled and non-tiled percentage change. In 2009 land values decreased slight or remained steady.

Table 2 Percentage Change in Michigan Farmland Value, 2009

| Regions | Type of Land Use |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Field Crop Tiled |  | Field Crop Non-Tiled |  | Sugar Beet |  | Irrigated |  | Tree Fruit |  |
|  | $\begin{aligned} & \text { Last } \\ & \text { Year } \end{aligned}$ | Expected Next Year | $\begin{aligned} & \text { Last } \\ & \text { Year } \end{aligned}$ | Expected Next Year | $\begin{aligned} & \text { Last } \\ & \text { Year } \end{aligned}$ | Expected Next Year | $\begin{aligned} & \text { Last } \\ & \text { Year } \end{aligned}$ | Expected Next Year | $\begin{aligned} & \text { Last } \\ & \text { Year } \end{aligned}$ | Expected Next Year |
| Michigan | -1.0 | -1.0 | -1.3 | -1.0 | -1.0 | -1.3 | -1.2 | -1.0 | 0.0 | -5.0 |
| Southern Lower Peninsula | $-0.7$ | -1.3 | -1.2 | -1.3 | -1.2 | -1.4 | -0.4 | -1.0 | 5.8 | -4.9 |
| Upper and Northern Lower Peninsula | -2.3 | 1.1 | -1.7 | 0.2 | N/A | N/A | -8.5 | 1.5 | 0.0 | -5.0 |
| District 1-4 | -4.4 | -0.8 | -2.4 | -1.3 | N/A | N/A | -12.3 | -1.3 | -1.5 | -2.6 |
| District 5 | -1.4 | 0.3 | -1.5 | 0.1 | -0.5 | 0.0 | -2.6 | -0.5 | N/A | N/A |
| District 6 | -1.0 | -1.7 | -0.3 | -1.7 | -1.7 | -2.1 | 5.8 | 2.3 | N/A | N/A |
| District 7 | 1.6 | -2.0 | -0.5 | -2.1 | N/A | N/A | 0.8 | -0.8 | 2.2 | -4.8 |
| District 8 | -0.8 | -1.1 | -1.8 | -0.8 | 0.0 | 0.0 | -0.7 | -0.8 | N/A | N/A |
| District 9 | -0.7 | -0.2 | -0.4 | -2.0 | N/A | N/A | -0.2 | -4.0 | 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 decrease in value in 2010 over the 2009 values. The largest expectations on changes in percentage land value were for

District 7 at $-2.0 \%$ for tiled and $-2.1 \%$ for non-tiled. Field crop tiled land values in Michigan are expected to decline about $1.0 \%$ during the next year. For non-tiled land, the percentage change in land value is expected to decrease more in the Southern Lower Peninsula than in the Upper and Northern Lower Peninsula. The districts with the highest expected loss in land value for the upcoming year are in the Districts (D7 and D9) for non-tiled cropland. Sugar beet land values decreased by about $1.0 \%$ in 2009 and are expected to decrease in value by $1.3 \%$ in the coming year. Overall, irrigated land values decreased $1.2 \%$ in value and are expected to decline $1.0 \%$ during the upcoming year. Districts (D1-D4) irrigated land values have the largest expectation decline of (projected 12.3\%) 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 on land leasing activity in Michigan and indicates that $53.2 \%$ which is more than half of the crop acres in Michigan are controlled by lease. Cash leasing is the predominant form of land rental with $83.0 \%$ of leased land in Michigan controlled by cash rental arrangements.

## Crop Acres Leased

In the Southern Lower Peninsula, an estimated $55.9 \%$ of field crop acres appear to be controlled by leases, while $40.9 \%$ 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 $61.2 \%$ 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. 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, 2009

| Region | Crop Acres <br> Leased | Land Leased <br> Under Cash Lease | Fruit Acres <br> Leased |
| :--- | :---: | :---: | :---: |
| Michigan | $53.3 \%$ | $83.0 \%$ | $10.0 \%$ |
| Southern Lower Peninsula | 55.9 | 83.7 | 6.4 |
| Upper and Northern <br> Lower Peninsula | 40.9 | 79.6 | 16.3 |
| Districts 1-4 | 29.0 | 75.0 | 9.0 |
| District 5 | 54.4 | 78.2 | $\mathrm{~N} / \mathrm{A}$ |
| District 6 | 54.8 | 82.4 | $\mathrm{~N} / \mathrm{A}$ |
| District 7 | 57.3 | 89.1 | 12.0 |
| District 8 | 61.2 | 85.4 | 5.0 |
| District 9 | 56.2 | 89.5 | $\mathrm{~N} / \mathrm{A}$ |

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 $\$ 116$ per acre for tiled cropland and averaged $\$ 85$ for non-tiled cropland. In the Upper and Northern Lower Peninsula, tiled field cropland rented for an average of \$53 per acre and non-tiled cropland rented for an average of $\$ 39$ 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 $\$ 136$ per acre. Sugar beet land in Michigan rented for an average of $\$ 139$ per acre, and irrigated cropland rented for $\$ 173$ per acre. The cash rent values for Michigan tiled field cropland for the state increased $\$ 1$ per acre or remained steady, from the previous year. Cash rental rates were down for sugar beet acres at $\$ 9$ per acre and rental rates for nontiled land increased $\$ 1$ per acre from last year. The reported rental rates for 2009 indicate that rates decreased slightly over last year.

Table 4 Average Cash Rent and Value Multipliers for Michigan Agricultural Land Use, 2009

| Region | Type of Land Use |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Field Crop Tiled |  | Field Crop NonTiled |  | Sugar Beet |  | Irrigated |  |
|  | Rent | Value/ Rent |  |  | Rent | Value/ <br> Rent | Rent | Value/ Rent |
| Michigan | \$108 | 35 | \$76 | 40 | \$139 | 25 | \$173 | 23 |
| Southern Lower Peninsula | 116 | 34 | 85 | 37 | 144 | 24 | 180 | 22 |
| Upper and Northern Lower Peninsula | 53 | 41 | 39 | 53 | 81 | 30 | 115 | 28 |
| District 1-4 | 52 | 46 | 35 | 58 | N/A | N/A | 104 | 29 |
| District 5 | 114 | 28 | 81 | 33 | 135 | 24 | 173 | 21 |
| District 6 | 136 | 26 | 96 | 31 | 146 | 24 | 173 | 23 |
| District 7 | 96 | 50 | 73 | 52 | N/A | N/A | 176 | 26 |
| District 8 | 106 | 31 | 89 | 37 | 140 | 25 | 193 | 20 |
| District 9 | 119 | 39 | 82 | 39 | N/A | N/A | 180 | 22 |

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-torent ratio for tiled field crops was 34 in the Southern Lower Peninsula. This number means that land is valued 34 times the current rental rate. Southern Lower Peninsula sugar beet land had a value-to-rent ratio of 24, while irrigated land's value-to-rent ratio was 22. In the Upper and Northern Lower Peninsula the ratio was 41 . These value-to-rent ratios decreased in 2009 indicating that land prices have decreased relative to cash rents. The lower value-to-rent ratios appear to be in areas where land values have drastically decreased, primarily in the northern and southern parts of Michigan. In the central part of Michigan the value-to-ratios increased slight or remained stable with land value increasing.

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. Four possible situations for a 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 $\$ 7,344$ per acre in the Southern Lower Peninsula and $\$ 3,657$ 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 $\$ 13,250$ per acre.

The value of farmland being converted to commercial use was $\$ 22,576$ in the Southern Lower Peninsula and $\$ 24,353$ in the Upper and Northern Lower Peninsula. The average value for farmland that was converted to commercial use is approximately $\$ 22,882$ 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, 2009

| Region | Type of Land Use |  |  |
| :--- | :---: | :---: | :---: |
|  | Residential | Commercial/Industrial | Recreational |
| Michigan | $\$ 6,514$ | $\$ 22,882$ | $\$ 3,134$ |
| Southern Lower <br> Peninsula | 7,344 | 22,576 | 3,343 |
| Upper and Northern <br> Lower Peninsula | 3,657 | 24,353 | 2,237 |
| Districts 1-4 | 3,370 | 29,275 | 2,488 |
| District 5 | 4,219 | 7,650 | 2,433 |
| District 6 | 6,315 | 11,294 | 3,203 |
| District 7 | 6,914 | 17,175 | 4,857 |
| District 8 | 6,725 | 21,707 | 3,487 |
| District 9 | 13,250 | 47,267 | 3,194 |

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

The recreational development value of farmland was $\$ 3,343$ per acre in the Southern Lower Peninsula and $\$ 2,237$ per acre in the Upper and Northern Lower Peninsula. The highest average value for
recreational development land was in the South West (D7) where land for recreational development averaged $\$ 4,857$ 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 "Milk Prices" were the highest-ranking items, at 4.3, 4.3 and 4.0 respectively. Next in order of importance were "Low Interest" and "Livestock Prices" with rating scores of 3.8 and 3.7, 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. 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 effect 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, 2009

| Regions | Expansion by <br> farmers | Government Programs |  |  | Prices |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Current <br> Farm Bill | Low <br> Int. | Fruit | Grain | Livestock | Milk |  |
| Michigan |  | 2.6 | 2.7 | 3.8 | 2.4 | 4.2 | 3.6 | 4.0 |
| Southern Lower |  | 2.5 | 2.7 | 3.8 | 2.4 | 4.3 | 3.7 | 4.0 |
| Upper \& North <br> Lower | 3.9 | 2.7 | 2.7 | 3.7 | 2.3 | 3.6 | 3.5 | 3.9 |
| District 1-4 | 3.9 | 2.6 | 2.7 | 3.9 | 2.8 | 3.5 | 3.6 | 4.1 |
| District 5 | 4.5 | 2.5 | 2.3 | 3.8 | 2.1 | 4.1 | 3.5 | 3.9 |
| District 6 | 4.3 | 2.2 | 2.7 | 4.0 | 1.4 | 4.5 | 3.6 | 3.9 |
| District 7 | 4.4 | 2.3 | 2.4 | 3.7 | 3.3 | 4.1 | 3.5 | 3.7 |
| District 8 | 4.1 | 2.8 | 3.1 | 3.8 | 2.5 | 4.3 | 3.8 | 4.1 |
| District 9 | 4.0 | 2.7 | 2.8 | 3.7 | 2.3 | 4.5 | 3.9 | 4.1 |

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 the milk prices and expansion by farmers, with both rating scores of 3.9.

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, 2009

| Regions | Fishing <br> Access | Hunting <br> Access | Home <br> Sites | Interest <br> Rate | Development | Small <br> Farms | Wood <br> Lots | Water <br> Access |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Michigan | 2.3 | 3.5 | 3.2 | 3.7 | 1.8 | 3.1 | 3.0 | 2.9 |
| Southern Lower <br> Peninsula | 2.3 | 3.4 | 3.2 | 3.7 | 1.9 | 3.1 | 2.8 | 2.7 |
| Upper \&N. <br> Lower Peninsula <br> District 1-4 | 2.4 | 3.8 | 3.4 | 3.8 | 1.6 | 3.2 | 3.7 | 3.3 |
| District 5 | 2.3 | 3.8 | 3.5 | 3.8 | 1.6 | 3.0 | 3.7 | 3.3 |
| District 6 | 2.4 | 3.7 | 3.2 | 3.7 | 1.7 | 3.3 | 2.9 | 2.6 |
| District 7 | 1.9 | 3.3 | 2.8 | 3.8 | 1.1 | 2.9 | 2.8 | 2.2 |
| District 8 | 2.0 | 2.9 | 2.8 | 3.7 | 2.1 | 3.0 | 2.6 | 2.6 |
| District 9 | 2.7 | 3.8 | 3.3 | 3.7 | 2.1 | 3.3 | 3.2 | 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 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 3.4 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 interest rates and hunting access ranked 3.8. 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 decline after 21 years of steady growth sense the beginning of the annual Michigan Land Value Survey, 2009 marks the $1^{\text {st }}$ year to experience a decline. The annual data presented in Table 8, indicate that land values for field crops in the Southern Lower Peninsula showed annual decline of around $0.95 \%$ over the value reported in 2008, average of tiled and non-tiled cropland. Sugar beet land values decreased by $1.2 \%$ and irrigated land values decreased by $0.2 \%$. Rental rates in the Southern Lower Peninsula (Table 4) averaged \$116 per acre for tiled ground and \$85 per acre for nontiled ground, a decrease of $\$ 31$ for tiled and decrease of $\$ 2$ for non-tiled ground over 2008 rental rate. Sugar beet acreage rented for $\$ 144$ per acre, a decrease of $\$ 8$ per acre over 2008, while irrigated land averaged $\$ 180$ per acre, a decrease of $\$ 2$ per acre from the 2008 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 46 and 58 for tiled and non-tiled land respectively, while the value-to-rent ratios for Southwestern (D7) were 50 for tiled land and 52 for non-tiled land. The value-torent ratios for most of the regions in the state are closer to 39 . The 39 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.

Michigan farmland values in 2009 declined and land rental rates also declined after 21 years of steady gain. The direction of Michigan agricultural land prices in the future remains a question. While the effects of the US economic meltdown have affected Michigan's farmland values somewhat but not as much as housing and commercial real estate. The decline in the 1980's on land values and demand was sharp. In contract, today land values have softened but demand is still strong. Weak crop prices and low milk prices in 2009 helped push farmland values down. However, current economic conditions suggest the earnings for crop and dairy producers in 2010 should be better than 2009. Federal Reserve has held prime rate in 2009 constant at 3.25 \% in respond to the slowing economy. Interest rates also impact land values and as interest rates decline the cost of borrowed funds for land purchases.

Michigan economy has a diversified structure with tourism and the agriculture/food vying closely for the number one ranking and with industry 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 nonagricultural interests. Concern for year 2010 and beyond is whether the financial performance from agriculture can successfully pay for land at the current prices. Non-agricultural demand have 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 wanting to expand and outside investors are still bullish about agriculture. Michigan land values should remain stable during 2010 with a possible slight decline.

Table 8 Percentage Change in Land Value from 1991-2009 in the Southern Lower Peninsula

| Year | Land Type |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Field Crop Tiled ${ }^{1}$ | Field Crop <br> 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 | -. 06 | -1.2 | -1.2 | -0.2 |
| Average | 6.0 | 5.5 | 4.9 | 6.5 |

${ }^{1}$ Beginning with the 1998 Survey, the question on agriculture land values and cash rents referred to
"Field-crop tiled and non-tiled." Previously the similar categories were referred to as Corn-SoybeanCropland - above average and below average.

## Appendix

## FARMLAND VALUE QUESTIONNAIRE April 2009

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. $\qquad$

1. Agricultural-Use Value

| Type of Land | Current <br> Average Value | Percent Change in Value (Indicate + or -) |  | Average Cash Rent |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Last <br> 12 Months | Expected in Next 12 Months |  |
| A. Field Crop (Non-irrigated) 1.Tiled for drainage | \$/acre | \% change | \% change | \$/acre |
|  |  |  |  |  |
| 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 <br> in Value |  |
| :--- | :---: | :---: | :---: |
| Undeveloped <br> Land | Current <br> Average Value <br> \$/acre | High | Low |
|  |  |  | \$/acre |

* 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? $\qquad$ \%
4. What percentage of the leased field crop acres is on a cash-rent lease? $\qquad$
5. What percentage of the fruit crop acres in your area is leased? $\qquad$
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 |  | Very |
| :---: | :---: | :---: |
| Important | Neutral | 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 <br> (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 <br> I. Other: (please list)    <br> $l$ 1 2 3 <br> 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.

