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## Michigan State University

Department of Agricultural, Food, and Resource Economics

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# 2014 MICHIGAN LAND VALUES and Leasing Rates 

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# 2014 MICHIGAN LAND VALUES 

## and

## LEASING RATES

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## 2014 MICHIGAN LAND VALUES

Michigan State University (MSU) has collected information on land values since 1991 by a mail survey. The goal of the MSU study is to provide information on the value of land based on agricultural and non-agricultural use. The survey also collects information on leasing rates and practices in the state. This report contains the results for the MSU land value survey conducted in spring of 2014.

## Survey Methods

The survey sample consists of members of the Farm Managers and Rural Appraisers Association, Michigan Agricultural Lenders, County Equalization Directors in Michigan, and members of the Farm Bureau Advisory Committees on feed grains, oil seeds, wheat, dry beans and sugar beets. After accounting for overlap between the different groups, the total sample consists of 525 potential respondents. A total of 203 questionnaires were returned with useable information. In order to account for potentially large differences in soil and climate characteristics, information is reported separately for different regions of the state. Results are reported for two halves of the state, the southern-lower peninsula and the upper and northern-lower peninsula, which are split at a line running from Oceana County across to Bay County as shown in Figure 1. There were 158 responses received from the southern half of the Lower Peninsula (Area 2 in Figure 1). The remaining 45 responses were received from the Upper and Northern Lower Peninsula (Area 1 in Figure 1). This is a reasonable correspondence between the location of respondents and the geographic distribution of agricultural production in the state. Figure 1 shows the distribution of respondents by county and Figure 2 shows the total number of responses by the Agricultural Statistics District in the state. Results are also reported for the nine Agricultural Statistics Districts across the state (Figure 2). The results for Districts 1 through 4 were combined because of a low number of responses in that region. In addition, results are only reported for each question when at least five responses were received for a reporting area.

Note that some respondents were 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 respondents often had access to a significant amount of land appraisal, transaction, and leasing information.

The questionnaire was mailed in March of 2014. Each potential respondent received a cover letter encouraging their participation in the study and a two-page questionnaire asking for information on farmland. A postage paid return envelope was provided to minimize the cost to respondents. A followup letter asking for participation in the survey and a second copy of the questionnaire was sent to nonrespondents approximately four weeks following the original questionnaire. Copies of the questionnaire used in the survey are included in the Appendix.

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

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


Figure1. Farmland Value Survey Responses


## Average Farmland Values

Average agricultural farmland values are reported by region in Table 1. In the Southern Lower Peninsula, the average value of tiled field cropland was $\$ 5,090$ per acre while non-tiled field cropland averaged \$4,250 per acre. In the Upper and Northern Lower Peninsula tiled and non-tiled field crop land averaged \$2,191 and \$1,857 per acre, respectively.

Table 1 Michigan Average Agricultural Land Values, 2014

| Region | Land Use |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  | Field Crop <br> Tiled | Field Crop <br> Non-Tiled | Sugar <br> Beet | Irrigated | Fruit <br> Trees |
|  | $\$ /$ acre |  |  |  |  |
| Michigan | 4,646 | 3,699 | 6,550 | 5,144 | 8,516 |
| Southern Lower <br> Peninsula | 5,090 | 4,250 | 6,580 | 5,666 | 9,731 |
| Upper \& Northern <br> Lower Peninsula | 2,191 | 1,857 | 5,015 | 2,503 | 5,360 |
| Districts 1-4 | 2,629 | 2,104 | N/A | 3,478 | 7,533 |
| District 5 | 5,093 | 4,325 | 6,540 | 5,473 | N/A |
| District 6 | 6,370 | 4,828 | 6,779 | 6,947 | N/A |
| District 7 | 5,100 | 4,576 | N/A | 6,103 | 9,500 |
| District 8 | 4,095 | 3,610 | N/A | 4,724 | N/A |
| District 9 | 4,368 | 3,553 | 5,793 | 5,820 | N/A |

Note: Results were only reported when a minimum of five responses were received. These cases are denoted "N/A" in the table.

For land producing grains, soybeans, and other field crops, Agricultural Statistics Districts 6 and 7 in Southern Michigan had the highest agricultural land values. District 6 in the southwest had the highest average values for field cropland tiled $\$ 6,370$ per acre and Districts 5 and 7 were the next highest for field cropland tiled both around $\$ 5,100$ per acre. Values in these areas appear to be the highest in the
state and probably reflected the influence of agricultural demand. The Southeast (D9) and South Central (D8) Districts had somewhat lower average values for tiled cropland ranging from $\$ 4,368$ to $\$ 4,095$ per acre and values ranging from $\$ 3,553$ to $\$ 3,610$ per acre for non-tiled cropland.

Land that produces higher valued crops can support a higher investment cost. Fruit and sugar beets are commodities produced in Michigan that historically tended to generate both a higher gross and higher net income per acre. The highest priced agricultural land in Michigan produces fruit and is located in proximity to Lake Michigan. This land planted to fruit trees is highly valued not only because of its earnings potential from the harvested fruit but also because of non-agricultural demand due to its location (e.g., view and access to Lake Michigan). Land values reported for fruit tree acres averaged \$8,516 per acre. This was an increase of $\$ 755$ per acre over the 2013 Michigan Land Survey value of $\$ 7,761$ per acre. The highest value reported for fruit tree acreage in 2014 was $\$ 9,731$ per acre in the Southern Lower Peninsula. 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 (D1-D4) averaged $\$ 7,533$ per acre and Southwest District (D7) averaged \$9,500 per acre, these acres are typically used for cherries, apples, and peach production.

Land that can support sugar beets in its crop rotation averaged \$6,550 per acre in 2014, a $5.6 \%$ increase over the 2013 value of $\$ 6,204$. The sugar beet production is concentrated in the East Central and South East Districts. Irrigated land value in 2014 averaged \$5,144 per acre in the state, a $2.8 \%$ decrease over the 2013 value. Most responses on irrigated land values came from East Central, Southwest and Southeast Michigan.

## 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 displayed in Table 2. In the Southern Lower Peninsula, field cropland values increased in 2014 from the levels observed in 2013 for tiled land and non-tiled land, 5.3\% and 4.2\%, respectively. In the Upper and Northern Lower Peninsula, land values for field crops increased
4.8\% for tiled land, and $3.6 \%$ for non-tiled land. Districts (D9) reported the lowest rate increases in value for field cropland tiled land of $1.4 \%$ and non-tiled of $1.3 \%$. For the previous five years, the Southern Lower Peninsula has the highest annual rate of increase in land values, averaging 5.43\%.

Table 2 Percentage Change in Michigan Farmland Value, 2014

| Regions | Type of Land Use |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Field Crop Tiled |  | Field Crop <br> Non-Tiled |  | Sugar Beet |  | Irrigated |  | Tree Fruit |  |
|  | $\begin{aligned} & \hline \text { Last } \\ & \text { Year } \end{aligned}$ | Expected Next Year | $\begin{aligned} & \hline \text { Last } \\ & \text { Year } \end{aligned}$ | Expected Next Year | $\begin{aligned} & \hline \text { Last } \\ & \text { Year } \end{aligned}$ | Expected Next Year | Last Year | Expected Next Year | $\begin{aligned} & \hline \text { Last } \\ & \text { Year } \end{aligned}$ | Expected Next Year |
|  | \% Change |  |  |  |  |  |  |  |  |  |
| Michigan | 5.2 | 1.2 | 4.1 | 1.0 | 7.7 | 0.2 | 4.8 | 1.9 | 2.0 | 4.0 |
| Southern Lower Peninsula | 5.3 | 0.9 | 4.2 | 0.6 | 7.9 | 1.2 | 4.8 | 1.2 | N/A | 1.1 |
| Upper and Northern Lower Peninsula | 4.8 | 2.8 | 3.6 | 2.6 | N/A | N/A | 5.1 | 4.9 | 4.0 | 7.0 |
| District 1-4 | 5.7 | 4.1 | 4.3 | 3.6 | N/A | N/A | 5.5 | 4.8 | N/A | N/A |
| District 5 | 3.1 | -0.4 | 2.7 | -0.5 | 4.3 | -1.9 | 3.8 | 0.3 | N/A | N/A |
| District 6 | 9.8 | 0.7 | 6.8 | -0.5 | 8.6 | 0.2 | 8.4 | 1.6 | N/A | N/A |
| District 7 | 4.9 | 1.9 | 4.1 | 1.6 | N/A | N/A | 4.3 | 1.9 | N/A | N/A |
| District 8 | 2.7 | 0.4 | 3.0 | 0.6 | 9.0 | 6.5 | 5.2 | 0.8 | N/A | N/A |
| District 9 | 1.4 | 0.0 | 1.3 | 0.5 | 0.0 | 0.0 | 0.8 | 0.2 | N/A | N/A |

Note: Results were only reported when a minimum of five responses were received. Those categories without enough responses are denoted " $\mathrm{N} / \mathrm{A}$ " in the table.

Expectations on changes in Michigan farmland values indicate an increase in value in 2014 over the 2013 values. The largest expectations on changes in percentage land value were for District (D1-D4) at $4.1 \%$ for tiled and $3.6 \%$ for non-tiled. Field crop tiled land values in Michigan are expected to increase by $1.2 \%$ tiled cropland and $1.0 \%$ for non-tiled cropland. The Central District (D5) is expected to decrease by $0.4 \%$ of tiled cropland and decrease by $0.5 \%$ for non-tiled cropland. Overall, Michigan irrigated land values increased $4.8 \%$ and are expected to increase $1.9 \%$ during the upcoming year. District (D6)
irrigated land values have the largest increase in value of $8.4 \%$ over last year and the expected value to increase $1.6 \%$ for next year. Michigan sugar beet land values increased by $7.7 \%$ in 2014 and are expected to increase about 0.2\% in 2014.

## Farmland Leasing

Leasing or renting of land provides an alternative method for farmers to gain control of land. Beginning in 2013, the Farm Land Value Questionnaire collected information on land rental agreements based on cash rent without a bonus and cash rent with a bonus payment. Given farm commodity prices, yields and operating expenses are at times uncertain, operators and land owners could choose to avoid fixed cash rent and put some flexibility in the cash-rent arrangements.

Table 3 provides cash rents without bonus, with bonus and percentage of land leased. In Michigan cash rent without bonus was $\$ 136$ per acre with $72 \%$ of land leased. Cash rent of $\$ 147$ with a bonus of $\$ 44$ per acre with $7 \%$ of land leased. The higher cash rent per acre with the additional bonus were for higher valued land. Cash leasing was the predominant form of land rental but $21 \%$ of the crop acres were in some kind of share rental arrangement.

The Upper and Northern Lower Peninsula cash rent without bonus was $\$ 57$ per acres with $68 \%$ and only one percent of land was leased using a bonus. District (D1-D4) cash rent without bonus was $\$ 65$ per acre with $69 \%$ of land leased and cash rent of $\$ 166$ with a bonus of $\$ 31$ per acre with only $2 \%$ of land leased. These leasing agreements with large bonuses were the Ottawa, Muskegon and Leelanau counties, influenced by high land prices and high income per acre from higher valued crops. District D6 had the highest cash rent per acre without bonus at $\$ 179$ per acre with $64 \%$ of land leased and the highest cash rent with bonus of $\$ 152$ plus the bonus of $\$ 50$ per acre with $13 \%$ of land leased.

Crop Acres Leased

In the Southern Lower Peninsula, an estimated $81 \%$ of leased or rented field crop acres were controlled by cash leases, while $69 \%$ of the leased or rented cropland in the Upper and Northern Lower Peninsula used cash leasing. The highest amount of leasing occurred in the Southwest District (D7) where $86 \%$ of the cropland is cash leased. As with the entire state, cash rent was the predominant leasing arrangement in all reporting districts of Michigan. Farms featuring fruit production appeared to be an exception to heavy use of leasing for agricultural crops reflecting the long term investment required for production of tree fruit.

Table 3 Characteristics of Leased Farmland in Michigan, 2014

| Region | Cash Rent <br> without Bonus | Percent of <br> Land <br> Leased | Cash Rent <br> with Bonus | Cash <br> Bonus | Percent of <br> Land <br> Leased | Percent <br> Share <br> Rented |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| \$/acre | $\%$ | $\$ /$ acre | $\$ /$ acre | $\%$ | $\%$ |  |
| Michigan | 136 | 72 | 147 | 44 | 7 | 21 |
| Southern <br> Lower <br> Peninsula | 150 | 73 | 147 | 45 | 8 | 19 |
| Upper and <br> Northern <br> Lower <br> Peninsula | 57 | 68 | 145 | 23 | 1 | 31 |
| Districts <br> $1-4$ | 65 | 69 | 166 | 31 | 2 | 29 |
| District 5 | 120 | 71 | 144 | 32 | 12 | 17 |
| District 6 | 179 | 64 | 152 | 50 | 13 | 23 |
| District 7 | 155 | 79 | 116 | 41 | 7 | 14 |
| District 8 | 135 | 72 | 144 | 48 | 7 | 21 |
| District 9 | 144 | 81 | 157 | 43 | 4 | 15 |

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

Cash rental amounts and their relationship to land values are shown in Table 4. Cash rents in the Southern Lower Peninsula averaged $\$ 156$ per acre for tiled cropland and $\$ 122$ 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 $\$ 49$ 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 \$189 per acre. Sugar beet land in Michigan rented for an average of \$208 per acre, and irrigated cropland rented for \$201 per acre. The Michigan cash rent value for tiled field cropland of $\$ 142$ per acre for the state is a decrease of \$12 per acre from the previous year. Average cash rental rates for Michigan croplands were down for all land types. Sugar beet cash rental per acres decreased by $\$ 31$ per acre and irrigated cropland decreased by \$31 per acre from 2013.

Table 4 Average Cash Rent and Value Multipliers for Michigan Agricultural Land Use, 2014

| Region | Type of Land Use |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Field Crop Tiled |  | Field Crop NonTiled |  | Sugar Beet |  | Irrigated |  |
|  | $\begin{gathered} \text { Rent } \\ \text { (\$/acre) } \\ \hline \end{gathered}$ | $\begin{gathered} \hline \text { Value/ } \\ \text { Rent } \end{gathered}$ | $\begin{gathered} \text { Rent } \\ \text { (\$/acre) } \end{gathered}$ | $\begin{aligned} & \hline \text { Value/ } \\ & \text { Rent } \end{aligned}$ | $\begin{gathered} \text { Rent } \\ \text { (\$/acre) } \end{gathered}$ | $\begin{gathered} \hline \text { Value/ } \\ \text { Rent } \end{gathered}$ | $\begin{gathered} \text { Rent } \\ \text { (\$/acre) } \end{gathered}$ | $\begin{gathered} \hline \text { Value/ } \\ \text { Rent } \end{gathered}$ |
| Michigan | 142 | 35 | 108 | 37 | 208 | 32 | 201 | 28 |
| Southern Lower Peninsula | 156 | 33 | 122 | 36 | 208 | 33 | 220 | 27 |
| Upper and Northern Lower Peninsula | 53 | 45 | 49 | 42 | 175 | 29 | 72 | 37 |
| District 1-4 | 68 | 44 | 60 | 42 | N/A | N/A | 111 | 36 |
| District 5 | 136 | 39 | 108 | 41 | 174 | 38 | 225 | 24 |
| District 6 | 189 | 34 | 136 | 37 | 227 | 30 | 219 | 32 |
| District 7 | 151 | 36 | 134 | 36 | N/A | N/A | 220 | 29 |
| District 8 | 145 | 29 | 114 | 32 | 205 | 27 | 215 | 23 |
| District 9 | 138 | 33 | 105 | 35 | 156 | 39 | 248 | 24 |

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 the corresponding cash rent value reported by each respondent. The value-to-rent ratio for tiled field crops in was 33 (i.e., land price was 33 times the rental rate) in the Southern Lower Peninsula. Southern Lower Peninsula sugar beet land had a value-to-rent ratio of 33, while irrigated land value-to-rent ratio was 27. In the Upper and Northern Lower Peninsula the ratio for field cropland tiled was 45 . These value-to-rent ratios in Michigan changed slightly from 2013 levels.

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-torent ratios to change: 1) the market anticipates that future cash flows will grow at a faster rate than for alternative land parcels located in other areas and/or used for lower valued purposes; 2) the land may be switched to alternative uses with higher expected cash flows in the future; 3) non-farm uses of the land in the future may provide higher cash flows than those expected from current land use; or 4) the market views the future cash flows to be less risky than the cash flows from alternative land locations and is therefore willing to pay a higher price. When agricultural land is being transitioned out of agriculture and/or its ownership is changed, land values may increase but agricultural rental values may not increase proportionately as long as the acreage is used for agricultural purposes. The highest cash rents per acre in Michigan tended to be associated with higher projected incomes per acre (e.g., from irrigated acres producing higher valued crops and/or higher yields) but also tended 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 were significantly above the agricultural-use value of the land and therefore tended to exert upward pressure on surrounding farmland values. The average value of farmland being converted to residential development was $\$ 7,920$ per acre in the Southern Lower Peninsula and $\$ 5,736$ per acre in the Upper and

Northern Lower Peninsula. The highest residential development values were found in the Southwest (D7) where the average value was $\$ 10,484$ per acre.

Table 5 Non-Agricultural-Use Value of Undeveloped Land in Michigan, 2014

| Region | Type of Land Use |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Residential | Commercial/Industrial | Recreational |  |  |  |
|  | \$/acre |  |  |  |  |  |
| Michigan | 7,398 | 13,923 | 3,278 |  |  |  |
| Southern Lower <br> Peninsula | 7,920 | 14,739 | 3,496 |  |  |  |
| Upper and Northern <br> Lower Peninsula | 5,736 | 11,126 | 3,551 |  |  |  |
| Districts 1-4 | 6,088 | 12,532 | 2,753 |  |  |  |
| District 5 | 6,655 | 12,401 | 3,477 |  |  |  |
| District 6 | 6,812 | 12,028 | 3,612 |  |  |  |
| District 7 | 10,484 | 11,500 | 3,286 |  |  |  |
| District 8 | 6,719 | 11,758 | 4,131 |  |  |  |
| District 9 | 8,848 |  |  |  |  |  |

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

The value of farmland being converted to commercial use was $\$ 14,739$ per acre in the Southern Lower Peninsula and $\$ 11,126$ per acre in the Upper and Northern Lower Peninsula. The average value for farmland that was converted to commercial use was $\$ 13,923$ per acre for the state of Michigan. However, the variance in these estimates was quite high.

The recreational development value of farmland averaged \$3,496 per acre in the Southern Lower Peninsula and $\$ 3,551$ per acre in the Upper and Northern Lower Peninsula. The highest average value for recreational development land was in the Southeast (D9) where land for recreational development averaged \$4,131 per acre. These reported price data on recreational values were also skewed by a few extremely high values attributed to the unique amenities of a particular parcel of land.

## Factors Influencing Land Values and Rents in Michigan

The survey also solicited opinions about the major factors driving land values. Respondents were provided the opportunity to indicate their perception of the importance of some agricultural-related factors that influenced farmland values and cash rents. Factors including farm expansion, government programs, interest rates, and prices of agricultural commodities were rated on a scale from one to five with one being "Not Important" and five being "Very Important." The mean ratings are presented in Table 6. For Southern Lower Michigan, grain prices, expansion by farmers, and milk price were the highest-ranking items at 4.5, 4.5 and 4.1, respectively. Next in order of importance were livestock price, agricultural commodity programs, and energy/fuel programs with rating scores of 3.8, 3.0 and 3.0, respectively. 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.

Table 6 Rating Importance of Agricultural Factors Affecting Value of Michigan Farmland, 2014

| Regions | Expansion <br> by farmers | Government Programs |  |  | Prices |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Conser <br> vation | Ag <br> commodity | Energy/ <br> fuel | Fruit | Grain | Livestock | Milk |
| Michigan | 4.3 | 2.6 | 3.0 | 3.0 | 2.5 | 4.4 | 3.7 | 3.9 |
| Southern <br> Lower | 4.5 | 2.5 | 3.0 | 3.0 | 2.5 | 4.5 | 3.8 | 4.1 |
|  <br> North Lower | 3.7 | 2.9 | 3.1 | 2.9 | 2.5 | 3.8 | 3.5 | 3.3 |
| District 1-4 | 3.7 | 2.9 | 3.1 | 2.9 | 2.7 | 3.8 | 3.5 | 3.2 |
| District 5 | 4.6 | 2.5 | 2.9 | 3.0 | 2.1 | 4.7 | 4.0 | 4.4 |
| District 6 | 4.7 | 1.8 | 2.9 | 3.0 | 2.2 | 4.3 | 4.1 | 4.5 |
| District 7 | 4.4 | 2.9 | 3.2 | 2.9 | 3.3 | 4.5 | 3.8 | 3.7 |
| District 8 | 4.4 | 2.8 | 3.1 | 3.1 | 2.6 | 4.6 | 3.9 | 4.2 |
| District 9 | 4.3 | 2.6 | 2.8 | 2.9 | 2.0 | 4.7 | 3.2 | 3.7 |

Note: Response scale was $1=$ not important, 2=somewhat unimportant, 3=neutral, 4=somewhat important, $5=$ very important.

For the Upper and the Northern Lower Peninsula, the two highest agricultural related factors influencing land prices were grain prices and expansion by farmers with a score of 3.8 and a 3.7, respectively.

Assessing the importance of non-agricultural factors upon land values in rural areas for land that appears destined to transition from ownership by farmers was addressed with the final set of survey questions. Many factors not related to agriculture can influence the value of agricultural land. 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, 2014

| Regions | Interest <br> Rates | Home <br> Sites | Fishing <br> Access | Hunting <br> Access | Develop <br> ment | Small <br> Farms | Wood <br> Lots | Water <br> Access | Energy <br> Prices |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Michigan | 3.6 | 3.0 | 2.6 | 3.1 | 1.8 | 2.9 | 2.9 | 3.0 | 3.2 |
| Southern <br> Lower <br> Peninsula | 3.7 | 3.0 | 2.4 | 2.9 | 1.9 | 2.9 | 2.8 | 2.9 | 3.2 |
| Upper \& N. <br> Lower <br> Peninsula | 3.1 | 3.2 | 3.3 | 3.6 | 1.7 | 3.0 | 3.3 | 3.6 | 3.1 |
| District 1-4 | 4.1 | 3.3 | 3.3 | 3.6 | 1.8 | 3.1 | 3.4 | 3.5 | 3.2 |
| District 5 | 3.6 | 2.8 | 2.3 | 3.0 | 1.3 | 2.4 | 2.4 | 2.9 | 2.5 |
| District 6 | 4.1 | 2.5 | 1.9 | 2.7 | 1.5 | 2.5 | 2.3 | 2.3 | 3.3 |
| District 7 | 3.1 | 3.1 | 2.7 | 2.5 | 2.0 | 3.2 | 2.8 | 2.9 | 3.1 |
| District 8 | 4.0 | 3.0 | 2.9 | 3.3 | 2.1 | 3.1 | 3.2 | 3.4 | 3.5 |
| District 9 | 3.8 | 3.6 | 2.0 | 3.1 | 2.0 | 3.0 | 2.8 | 3.0 | 3.4 |

Note: Response scale was 1= not important, 2=somewhat unimportant, 3=neutral, 4=somewhat important, $5=$ 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 3.2 was energy prices. For the Upper and the Northern Lower Peninsula, the highest ranked non-agricultural factor influencing land values were water access and hunting access, scoring 3.6 and 3.6 , respectively. The opportunity to hunt and water recreation, that to capture the outdoor experience is apparently highly valued by a significant portion of the Michigan population.

Percentage calculated change in land value from 1991-2014 are displayed in Table 8. These percentage changes are related to Southern Lower Peninsula region reported for Field Crop Tiled, Field Crop Non-tiled, Sugar Beet and Irrigated cropland.

Table 8 Percentage Calculated Change in Land Value from 1991-2014 in the Southern Lower Peninsula

| Year | Land Type |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Field Crop <br> Tiled $^{1}$ | Field Crop <br> Non tiled | Sugar Beet | Irrigated |
|  | \% Calculated Change |  |  |  |
| 1992 | 0.9 | 7.1 | 5.8 | 0.0 |
| 1993 | -3.6 | 1.4 | -12.1 | -3.4 |
| 1994 | 15.0 | 8.2 | 13.5 | 21.8 |
| 1995 | -2.5 | 0.8 | 6.1 | 7.1 |
| 1996 | 13.3 | 11.7 | 8.7 | 5.5 |
| 1997 | 7.8 | 12.1 | 6.0 | -0.6 |
| 1998 | 16.9 | 18.1 | 15.5 | 21.1 |
| 1999 | 12.0 | 6.7 | -3.0 | 11.4 |
| 2000 | 8.0 | 12.9 | -1.9 | 19.1 |
| 2001 | 7.8 | 9.7 | -1.5 | -0.9 |
| 2002 | 8.2 | 14.7 | 13.5 | 3.9 |
| 2003 | 12.4 | 3.8 | 2.5 | 9.7 |
| 2004 | 7.5 | 14.1 | 9.2 | 5.9 |
| 2005 | 10.1 | 9.6 | 5.6 | 24.5 |
| 2006 | -0.4 | -1.4 | 6.2 | -5.9 |
| 2007 | 9.8 | 12.4 | 12.7 | 4.6 |
| 2008 | 16.3 | 13.0 | 17.9 | 23.3 |
| 2009 | 0.4 | -7.4 | -5.6 | -7.6 |
| 2010 | -8.2 | -4.4 | 10.5 | 4.1 |
| 2011 | 12.4 | 12.9 | 15.4 | 17.3 |
| 2012 | 9.3 | 7.7 | 9.9 | 10.6 |

[^0]
## Conclusions

Farmland values in Michigan for 2014 increased by 5.1\% for Field Crop Tiled, increased by 3.9\% for Field Crop Non Tiled, Sugar Beet reported $0.0 \%$ change and Irrigated Cropland increased by $0.9 \%$ over 2013.

Rental rates in the Southern Lower Peninsula averaged \$156 per acre for tiled ground and \$122 per acre for non-tiled ground, a decrease of \$8 for tiled and increase of $\$ 1$ for non-tiled ground over 2013. In addition, sugar beet acreage rented for $\$ 208$ per acre, a decrease of $\$ 43$ per acre over 2013, while irrigated land averaged $\$ 220$ per acre, a decrease of $\$ 19$ per acre from the 2013 rate.

Land values relative to cash rents were highest in Districts (D1-D4) and Central (D5). In Districts (D1-D4), the value-to-rent ratios were 44 and 42 for tiled and non-tiled land respectively, while the value-to-rent ratios for Central (D5) were 39 for tiled land and 41 for non-tiled land. The value-to-rent ratios for most of the regions in the state are closer to 32.3. The 32.3 value-to-rent ratio implies a gross current return to investment of 3.1 percent per year. A higher value to rent ratio suggests a lower annual current return to investment.

Michigan farmland values in 2014 increased slightly and land rental rates decreased in 2014. The direction of Michigan agricultural land prices suggests some correction but should remain constant. Grain production and price after 2012 drought have responded with increased supply and downward pressure on price. Economic conditions at the end of 2014 suggest the earnings for field crops will be down. Concern for 2015 and beyond is whether the financial performance from agriculture can sustain the current land prices.

## Appendix <br> FARM LAND VALUE QUESTIONNAIRE March 2014

Report your best estimates. 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 <br> (Indicate + or -) | Average Cash <br> Rent |
| :--- | :--- | :--- | :--- |
|  |  | Last <br> 12 Months | Expected <br> in Next <br> 12 Months |
|  |  | \% change | \% change |$|$| \$/acre |
| :--- |
| A. Non-Irrigated Field Crop <br> 1.Tiled for drainage |
| 2.Not tiled |

2. Non Agricultural-Use Value

|  |  | Current Range in Value |
| :--- | :--- | :--- |
|  | Current <br> Average <br> Value \$/acre | High |
| \$/acre |  |  |$\quad$ Low | \$/acre |
| :--- |

*Land in agricultural use where its value is influenced by residential, commercial, recreational development pressure.

## 3. Land Rental Agreements

Land rental is often cash rent or share but it is increasingly common for agricultural producers to use a base rent plus a bonus that is either cash or a share of price or revenue. Please fill in values applicable to your area for these contract types.

|  | Rental Rates |  |
| :--- | :--- | :--- |
|  | Base or <br> Average <br> Cash Rent <br> (\$/acre) | Cash Bonus <br> (\$ or \%acre) |
| A. Cash rent <br> without bonus |  |  |
| B. Cash Rent <br> with bonus |  | (Circle One) (\$ or \%) |

4. 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: <br> 1. Conservation Prog. | 1 | 2 | 3 | 4 | 5 |
| 2. Ag Commodity Prog. | 1 | 2 | 3 | 4 | 5 |
| 3. Energy/fuel Prog. | 1 | 2 | 3 | 4 | 5 |
| C. Product \|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 |
| D. Other: (please list) |  |  |  |  |  |
|  | 1 | 2 | 3 | 4 | 5 |
|  | 1 | 2 | 3 | 4 | 5 |

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

| Not | Very |  |
| :---: | :---: | :---: |
| Important | Neutral | Important |


| A. Interest Rates | 1 | 2 | 3 | 4 | 5 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| B. Home Building Sites | 1 | 2 | 3 | 4 | 5 |
| C. Fishing Access | 1 | 2 | 3 | 4 | 5 |
| D. Hunting Access | 1 | 2 | 3 | 4 | 5 |
| E. Mall \& Shopping Develop. | 1 | 2 | 3 | 4 | 5 |
| F. Ranchettes (10 ac 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 |
| J. Energy Prices (nat. gas or wind) | 1 | 2 | 3 | 4 | 5 |
| I. Other: (please list) |  |  |  |  |  |
|  | 1 | 2 | 3 | 4 | 5 |
|  | 1 | 2 | 3 | 4 | 5 |

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

[^0]:    ${ }^{1}$ 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.

