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2007 MICHIGAN LAND VALUES and Leasing Rates

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2007 MICHIGAN LAND VALUES And LEASING RATES

by

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2007 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 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 2007.

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 600 potential respondents. A total of 219 questionnaires were returned with useable information. There were 167 responses received from the southern half of the Lower Peninsula (Area 2 in Figure 1). The remaining 52 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 April of 2007. 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.

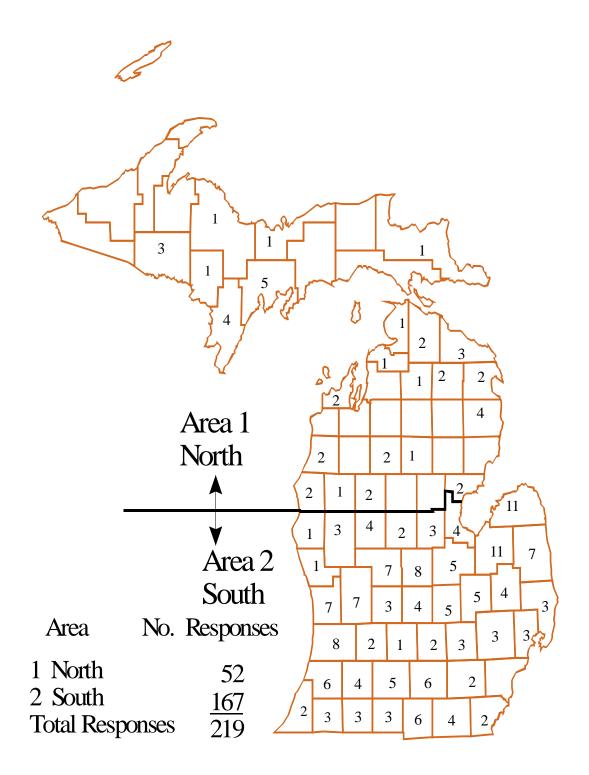


Figure 1. Farmland Value Questionnaire Responses

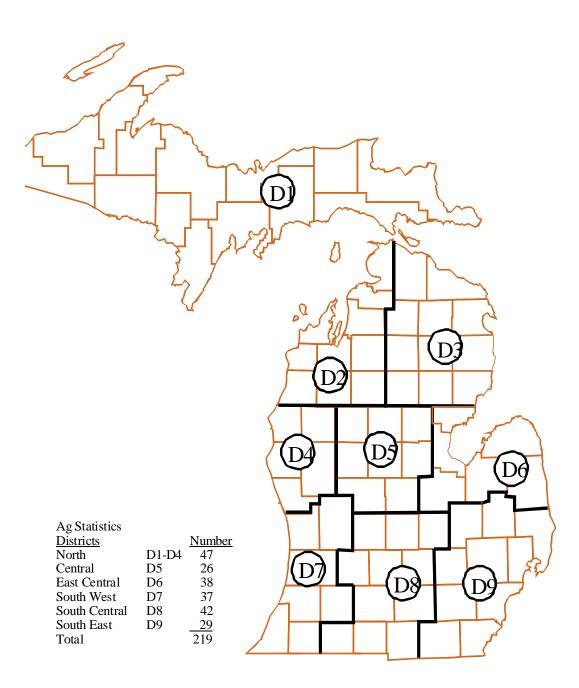


Figure 2. Agricultural Statistics Districts and Number of Respondents

Data Gathering

Respondents were requested to provide for their geographic areas the current 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 (non-irrigated) field crop, non-tiled field crop, fruit, sugar beet, and irrigated land. Price data on non-agricultural use land values were collected for residential, commercial, and recreational development. The respondents were also asked to indicate the county or counties to which their information corresponds. In addition, an opportunity was provided for each respondent to rank the major agricultural factors influencing land values and cash rents. Similarly, a ranking was requested of the major factors influencing land values in rural areas for land that appears destined to transition to non-agricultural uses.

In order to account for potentially large differences in soil and climate characteristics, information is reported separately for different regions of the state. Results are reported for two halves of the state, the southern-lower peninsula and the upper and northern-lower peninsula, which are split at a line running from Oceana 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 \$3,123 per acre while non-tiled field cropland averaged \$2,782 per acre. In the Upper and Northern Lower Peninsula field crop land averaged \$1,936 and \$1,694 per acre for tiled and non-tiled, respectively.

| Region | Field Crop Tiled | Field Crop Non-Tiled | Land Use Sugar Beet | Irrigated | Fruit Trees |
|-------------------------------------|---------------------|-------------------------|---------------------------|-----------|----------------|
| Michigan | \$2,941 | \$2,513 | \$2,987 | \$3,084 | \$6,158 |
| Southern Lower Peninsula | 3,123 | 2,782 | 3,060 | 3,326 | 6,680 |
| Upper & Northern Lower Peninsula | 1,936 | 1,694 | 1,567 | 1,959 | 3,981 |
| Districts 1-4 | 1,948 | 1,704 | N/a | 2,040 | 3,936 |
| District 5 | 2,570 | 2,246 | 3,009 | 2,924 | N/a |
| District 6 | 2,882 | 2,336 | 3,120 | 3,600 | N/a |
| District 7 | 3,476 | 3,249 | N/a | 3,737 | 6,921 |
| District 8 | 2,893 | 2,620 | 2,980 | 3,106 | N/a |
| District 9 | 3,875 | 3,277 | 3,020 | 3,650 | N/a |

Table 1 Michigan Average Agricultural Land Values, 2007

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 \$3,875 and \$3,277 per acre for non-tiled cropland. Values in this area 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 similar average values for tiled cropland ranging from \$2,893 to \$2,882 per acre and values ranging from \$2,620 to \$2,336 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 \$6,158 per acre across Michigan; this was an increase of \$1,934 per acre over the 2006 Michigan Land Survey value of \$4,224 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 2007 was \$6,921 in (D7) Southwest District.

Land that can support sugar beets in its crop rotation averaged \$2,987 per acre with the sugar beet production being concentrated in the East Central and Southeast Districts. Michigan sugar beet land in 2006 average \$2,631: that's a 13.5 percent increase in the 2007 price of Michigan sugar beet land and the value of this land continued to grow in 2007.

Irrigated land value averaged \$3,084 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 \$3,737 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 2007 from the levels observed in 2006 by 8.7% for tiled land and 8.2% for non-tiled land. In the Upper Peninsula and Northern Lower Peninsula, land values for field crops increased 3.9% for tiled land, and around 5.3% for non-tiled land. The Southeast District (D9) reported the lowest annual growth rate in value for field cropland averaging 4.0% for tiled land and 5.5% non-tiled land. The largest percentage increase in land values occurred in Districts 6, where sales price for tiled field cropland increased approximately 10.0% and the sale price for non-tiled field cropland increased 8.0% in value. For the five prior years, the Upper Peninsula and the Northern Lower Peninsula have had the highest annual rate of increase in land values, averaging 8.0%; data sources are previous Michigan Farmland Value Surveys.

| | Type of Land Use | | | | | | | | | |
|--|---------------------|--------------------------|-------------------------|--------------------------|--------------|--------------------------|--------------|--------------------------|--------------|--------------------------|
| Regions | Field Crop Tiled | | Field Crop Non-Tiled | | Sugar Beet | | Irrigated | | Tree Fruit | |
| | Last Year | Expected Next Year | Last Year | Expected Next Year | Last Year | Expected Next Year | Last Year | Expected Next Year | Last Year | Expected Next Year |
| Michigan | 8.0 | 5.5 | 7.4 | 4.9 | 9.7 | 5.4 | 7.7 | 6.3 | 8.4 | 7.3 |
| Southern Lower Peninsula | 8.7 | 6.0 | 8.2 | 5.6 | 9.6 | 5.3 | 9.1 | 7.2 | 9.0 | 8.8 |
| Upper and Northern Lower Peninsula | 3.9 | 2.0 | 5.3 | 2.6 | N/a | N/a | 1.1 | 0.9 | N/a | N/a |
| District 1-4 | 6.6 | 1.9 | 6.7 | 2.4 | N/a | N/a | 4.3 | 0.9 | 16.0 | 0.5 |
| District 5 | 7.4 | 6.4 | 6.8 | 5.9 | 9.2 | 6.2 | 7.4 | 6.7 | N/a | N/a |
| District 6 | 10.0 | 6.5 | 8.0 | 6.2 | 10.0 | 5.6 | 9.1 | 8.0 | N/a | N/a |
| District 7 | 7.5 | 4.7 | 8.2 | 5.3 | N/a | N/a | 10.2 | 5.9 | 8.5 | 7.8 |
| District 8 | 8.9 | 6.8 | 8.3 | 6.3 | 8.6 | 4.9 | 7.5 | 8.2 | N/a | N/a |
| District 9 | 4.0 | 2.5 | 5.5 | 1.4 | N/a | N/a | N/a | N/a | N/a | N/a |

Table 2 Percentage Change in Michigan Farmland Value, 2007

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 2007 over the 2006 values. The highest expectations on changes in percentage land value were for District 8 at 6.8% for tiled and 6.3% for non-tiled. Field crop tiled land values in Michigan are expected

to rise about 5.5% 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 Southeast District 9 for non-tiled cropland. Sugar beet land values increased by about 9.7% in 2006 and are expected to increase in value of 5.4% in the coming year. Overall, irrigated land values increased 7.7% in value and are expected to rise 6.3% during the upcoming year. District 8 irrigated had the highest expectation with a projected 8.2% 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 indicate that half, 51.8 percent, of the crop acres in Michigan are controlled by lease. Cash leasing is the predominant form of land rental with 82.7% of leased land controlled by cash rental arrangements.

Crop Acres Leased

In the Southern Lower Peninsula, an estimated 54.5% of field crop acres appear to be controlled by leases, while 41.2% 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 60.9% 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.

| Region | Crop Acres Leased | Land Leased Under Cash Lease | Fruit Acres Leased |
|---------------------------------------|----------------------|---------------------------------|-----------------------|
| Michigan | 51.8% | 82.7% | 13.6% |
| Southern Lower Peninsula | 54.5 | 80.5 | 13.5 |
| Upper and Northern Lower Peninsula | 41.2 | 91.8 | 14.2 |
| Districts 1-4 | 36.1 | 88.9 | 16.4 |
| District 5 | 50.2 | 70.6 | N/a |
| District 6 | 48.4 | 82.0 | N/a |
| District 7 | 56.2 | 80.4 | 8.6 |
| District 8 | 60.9 | 82.2 | N/a |
| District 9 | 60.0 | 91.7 | N/a |

Table 3 Characteristics of Leased Farmland in Michigan, 2007

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 \$101 and \$78 per acre for tiled and non-tiled field cropland, respectively. In the Upper and Northern Lower Peninsula, tiled field cropland rented for an average of \$51 per acre, while non-tiled land rented for \$36 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 \$117 per acre. Sugar beet land in Michigan rented for an average of \$136 per acre, and irrigated cropland rented for \$136 per acre. The cash rent values for tiled field cropland for the state increased \$11 per acre from the previous year. Cash rental rates were up for sugar beet acres at \$18 per acre, while rental rates for non-tiled land increased \$8 per acre from last year. The reported rental rates for 2007 illustrate that rates increased significantly over last year.

| | | | | Type of I | Land Use | | | |
|--|------------------|----------------|------|--------------------------|----------|----------------|-------|----------------|
| Region | Field Crop Tiled | | | Field Crop Non- Tiled | | Sugar Beet | | gated |
| | Rent | Value/ Rent | Rent | Value/ Rent | Rent | Value/ Rent | Rent | Value/ Rent |
| Michigan | \$94 | 35 | \$69 | 42 | \$136 | 23 | \$136 | 27 |
| Southern Lower Peninsula | 101 | 33 | 78 | 38 | 137 | 23 | 148 | 24 |
| Upper and Northern Lower Peninsula | 51 | 47 | 36 | 56 | 90 | 21 | 57 | 44 |
| District 1-4 | 40 | 52 | 31 | 60 | N/a | N/a | 71 | 45 |
| District 5 | 95 | 34 | 73 | 37 | 147 | 21 | 138 | 23 |
| District 6 | 117 | 26 | 83 | 30 | 134 | 24 | 153 | 23 |
| District 7 | 88 | 41 | 73 | 46 | N/a | N/a | 143 | 28 |
| District 8 | 100 | 30 | 84 | 33 | 122 | 25 | 148 | 23 |
| District 9 | 94 | 42 | 67 | 50 | 124 | 25 | 140 | 29 |

Table 4 Average Cash Rent and Value Multipliers for Michigan Agricultural Land Use, 2007

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 33 in the Southern Lower Peninsula. This number means that land is valued 33 times the current rental rate. In the Upper and Northern Lower Peninsula the ratio was 47. Sugar beet land had a value-to-rent ratio of 23, while irrigated land's value-to-rent ratio was 27. 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 valueto-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-torent 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 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 \$11,251 per acre in the Southern Lower Peninsula and \$4,515 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 \$29,523 per acre.

The value of farmland being converted to **commercial** use was \$32,543 in the Southern Lower Peninsula and \$45,720 in the Upper and Northern Lower Peninsula. The average value for farmland that was converted to commercial use is approximately \$35,281 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."

| | | Type of Land Use | |
|---------------------------------------|-------------|-----------------------|--------------|
| Region | Residential | Commercial/Industrial | Recreational |
| Michigan | \$9,516 | \$35,281 | \$3,566 |
| Southern Lower Peninsula | 11,251 | 32,543 | 4,060 |
| Upper and Northern Lower Peninsula | 4,515 | 45,720 | 2,288 |
| Districts 1-4 | 3,854 | 40,475 | 2,489 |
| District 5 | 5,393 | 10,130 | 2,469 |
| District 6 | 8,732 | 13,267 | 3,784 |
| District 7 | 9,739 | 28,643 | 5,742 |
| District 8 | 5,935 | 30,429 | 3,452 |
| District 9 | 29,523 | 86,109 | 5,722 |

Table 5 Non Agricultural-Use Value of Undeveloped Land in Michigan, 2007

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

The **recreational** development value of farmland was \$4,060 per acre in the Southern Lower Peninsula and \$2,288 per acre in the Upper and Northern Lower Peninsula. The highest average value for recreational development land was in the Southwest (D7) where land for recreational development averaged \$5,742 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 and expansion by farmers were the highestranking items, at 4.4 and 3.8 respectively. Next in order of importance were "Milk Prices", "Low Interest", and "Livestock Prices" with rating scores of 3.6, 3.5, and 3.5, 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. 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.

| Regions | Expansion by | Gove | Government Programs | | | Prices | | | |
|------------------------|--------------|------|----------------------------|-------------|-------|--------|-----------|------|--|
| Regions | farmers | CRP* | 2002 Farm Bill | Low Int. | Fruit | Grain | Livestock | Milk | |
| Michigan | 3.8 | 2.6 | 2.8 | 3.4 | 2.5 | 4.2 | 3.4 | 3.6 | |
| Southern Lower | 3.8` | 2.6 | 2.8 | 3.5 | 2.6 | 4.4 | 3.5 | 3.6 | |
| Upper & North Lower | 3.6 | 2.8 | 3.1 | 3.3 | 2.5 | 3.7 | 3.3 | 3.5 | |
| District 1-4 | 3.5 | 2.7 | 3.1 | 3.2 | 2.5 | 3.6 | 3.3 | 3.5 | |
| District 5 | 3.8 | 2.6 | 2.8 | 3.6 | 1.7 | 4.6 | 3.7 | 3.9 | |
| District 6 | 4.2 | 2.6 | 3.0 | 3.7 | 1.6 | 4.6 | 3.4 | 3.6 | |
| District 7 | 3.5 | 2.4 | 2.7 | 3.3 | 3.8 | 4.4 | 3.7 | 3.6 | |
| District 8 | 4.3 | 2.9 | 2.9 | 3.7 | 2.7 | 4.5 | 3.5 | 3.7 | |
| District 9 | 3.0 | 2.5 | 2.5 | 3.4 | 1.9 | 3.8 | 2.8 | 2.8 | |

 Table 6 Rating Importance of Agricultural Factors Affecting Value of Michigan Farmland, 2007

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 grain prices and expansion by farmers, with rating scores of 3.7 and 3.6 respectively.

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

agricultural land in Michigan. Table 7 summarizes the **non-agricultural** factors influencing land values for land in rural areas that appears to be transitioning out of agriculture.

| Regions | Fishing Access | Hunting Access | Home Sites | Interest Rate | Development | Small Farms | Wood Lots | Water Access |
|------------------------------|-------------------|-------------------|---------------|------------------|-------------|----------------|--------------|-----------------|
| Michigan | 2.3 | 3.7 | 4.2 | 3.5 | 2.3 | 3.5 | 3.1 | 3.2 |
| Southern Lower Peninsula | 2.1 | 3.5 | 4.1 | 3.6 | 2.3 | 3.5 | 2.9 | 3.0 |
| Upper &N. Lower Peninsula | 2.7 | 4.2 | 4.3 | 3.4 | 2.2 | 3.5 | 3.8 | 4.0 |
| District 1-4 | 2.6 | 4.3 | 4.3 | 3.3 | 2.3 | 3.4 | 3.9 | 4.2 |
| District 5 | 1.9 | 3.8 | 4.0 | 3.3 | 1.7 | 2.9 | 2.7 | 2.7 |
| District 6 | 2.1 | 3.8 | 4.1 | 3.8 | 1.4 | 3.3 | 3.0 | 2.4 |
| District 7 | 2.0 | 2.9 | 4.2 | 3.6 | 3.0 | 3.7 | 2.9 | 3.3 |
| District 8 | 2.5 | 3.9 | 4.0 | 3.6 | 2.3 | 3.8 | 3.2 | 3.5 |
| District 9 | 2.1 | 3.0 | 4.4 | 3.6 | 2.9 | 3.7 | 2.4 | 2.9 |

 Table 7 Rating of Non-Agricultural Factors Affecting Value of Michigan Farmland, 2007

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 4.1. The second most important item at 3.6 was the impact of interest rates. 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.

For the Upper Peninsula and the Northern Lower Peninsula, the highest ranked **non-agricultural** factor influencing land values was "Home Sites" ranked 4.3. 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 2007. 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 8.5% over the value reported in 2006. Sugar beet land values increased by 9.6% and irrigated land values were up 9.1%. Rental rates in the Southern Lower Peninsula averaged \$101 per acre for tiled ground and \$78 per acre for non-tiled ground, an increase of \$11 for tiled and increase of \$9 for non-tiled ground over 2006 rental rate. Sugar beet acreage rented for \$137 per acre, and increase of \$14 per acre over 2006, while irrigated land averaged \$148 per acre, an increase of \$16 per acre from the 2006 rate.

Land values relative to cash rents were highest in Districts (1-4) and Southeastern (D9). In Districts (1-4), the value-to-rent ratios were 52 and 60 for tiled and non-tiled land respectively, while the value-to-rent ratios for Southeastern (D9) were 42 for tiled land and 50 for non-tiled land. The value-torent ratios for most of the regions in the state are closer to 35. The 35 value-to-rent ratio implies a gross current return to investment of 2.9 percent per year. A higher value to rent ratio suggests a lower annual current return to investment. 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 2008 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 2008. When (and if) interest rates begin to increase, the demand for land should be dampened and prices should moderate.

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

Table 8 Percentage Change in Land Value from 1991-2007 in the Southern Lower Peninsula

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-Soybean-Cropland – above average and below average.

Appendix

FARMLAND VALUE QUESTIONNAIRE April 2007

Make the best estimates you can for your area. Complete only the sections applicable to your area.

Indicate which county or counties you are reporting on.

1. Agricultural-Use Value

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

2. Non Agricultural-Use Value

| | | Current Range in Value | |
|----------------------------------|--------------------------|---------------------------|---------|
| Undeveloped Land [*] | Current Average 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.

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.