

## Environmental Integrity Indicator: Land for Agriculture

**Why:** Accepted sustainability principles encourage consumption of local food. Nearby agricultural operations increase the likelihood of local food consumption and reduce the environmental impact of transporting food products from distant areas. More land for agriculture also contributes to higher quality of life with more open space and associated aesthetics.

**What:** Any land used for primarily for agricultural production including crop farming, orchards, livestock and dairy, pastures, and so forth. Data is collected every five years. 2007 data will be available in February 2009. Per capita acres were calculated using U.S. Census Bureau population totals or estimates for the indicated year and geography.

**Where:** U.S. Department of Agriculture, *The Census of Agriculture*, <http://www.agcensus.usda.gov/>.

Land for Agriculture <i>acres per capita</i>						
Geography	1997		2002		2007	
	Acres	Index Score	Acres	Index Score	Acres	Index Score
<b>Muskegon County</b>	1.00	2.7	0.42	1.7	0.46	1.8
Kent County	0.13	1.2	0.29	1.5	0.28	1.5
Ottawa County	1.24	3.1	0.65	2.1	0.66	2.1
<b>West MI Average</b>	0.79	2.3	0.45	1.8	0.40	1.7
Bay County	1.60	3.7	1.71	3.9	1.73	3.9
Genesee County	0.27	1.5	0.32	1.5	0.30	1.5
Saginaw County	0.89	2.5	0.56	1.9	1.60	3.7
<b>East MI Average</b>	0.92	2.5	0.86	2.4	0.86	2.4
Michigan	0.99	2.7	1.00	2.7	1.00	2.7
U.S.	3.38	5.0	3.16	5.0	3.03	5.0

### Index Scores

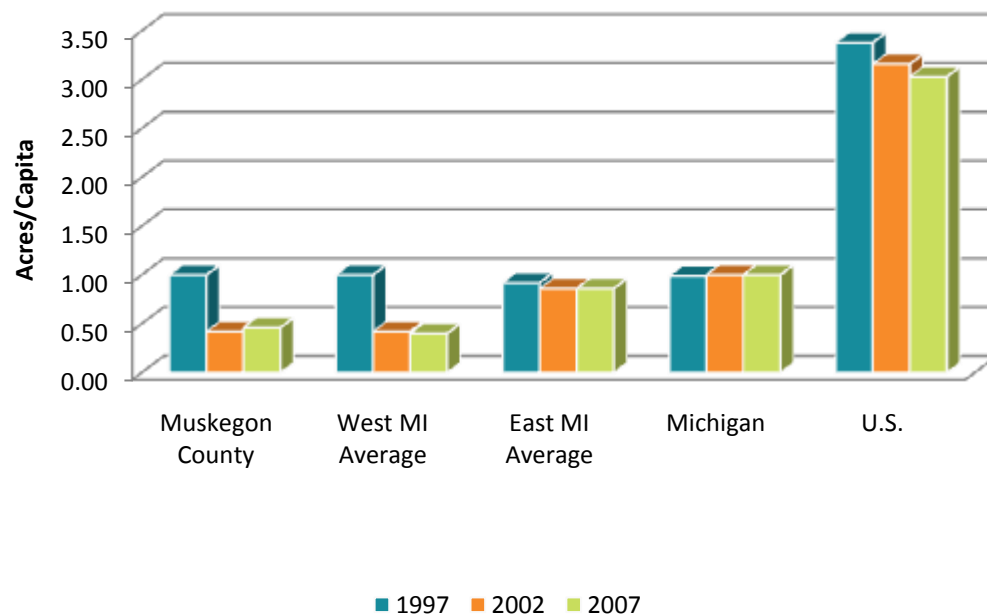
**Rubric:** According to a Cornell University research report<sup>1</sup>, 1.2 acres of agricultural land per person is required to meet average dietary needs. The sustainable level was set at 1.2 acres land for agriculture per capita.

**Scale:** Simple scale of 0.6 acres per capita between levels. Index scores are higher for higher levels of land used for agriculture.

Rubric: Land for Agriculture		
Level	Index	Acres/ Capita
Thriving	5	2.4
Advancing	4	1.8
Sustainable	3	1.2
Needs Improvement	2	0.6
Failing	1	0.0

<sup>1</sup> David Pimentel, Ph.D.

## Land Used for Agriculture



- *Between 1997 and 2007, agricultural land on a per capita basis declined significantly in Muskegon and Ottawa Counties.*
- *Among the reported geographies, only two counties –Genessee and Kent– showed an decrease in the per capita amount of land used for agriculture between 2002 and 2007.*
- *The amount of land used for agriculture in Michigan held fairly steady, but is still below what is considered sustainable.*