

Environmental Integrity Indicator: Toxic Release Inventory

Why: Toxic Release Inventory (TRI) is a measure of toxic chemicals released into the environment in a particular location. These chemicals are released into the air, disposed on the ground, or discharged to ground and surface water. High levels of toxic releases do not contribute to sustainability.

What: TRI is reported by the U.S. Environmental Protection Agency (EPA) each year for data collected two years prior. TRI contains information on waste management activities and tracks over 650 chemicals by county. This inventory was established under the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA) and expanded by the Pollution Prevention Act of 1990. Per capita pounds were calculated using U.S. Census Bureau population totals or estimates for the indicated year and geography.

To calculate the pounds per capita, the U.S. Census Bureau population totals reported for the indicated geography were used. Pounds per capita were calculated to limit population influences on the TRI numbers reported.

| Geography | Toxic Release Inventory <i>pounds per capita</i> | | | | | | | |
|------------------------|--|-------------|--------|-------------|--------|-------------|--------|-------------|
| | 2000 | | 2005 | | 2006 | | 2007 | |
| | Pounds | Index Score | Pounds | Index Score | Pounds | Index Score | Pounds | Index Score |
| Muskegon County | 13.85 | 3.2 | 11.38 | 3.5 | 10.39 | 3.6 | 11.75 | 3.4 |
| Kent County | 5.95 | 4.2 | 1.37 | 4.8 | 1.70 | 4.8 | 0.75 | 4.9 |
| Ottawa County | 45.49 | 0.0 | 31.44 | 0.8 | 33.55 | 0.5 | 20.90 | 2.2 |
| West MI Average | 21.76 | 2.1 | 14.73 | 3.0 | 15.21 | 3.0 | 11.13 | 3.5 |
| Bay County | 50.23 | 0.0 | 34.26 | 0.4 | 33.59 | 0.5 | 38.50 | 0.0 |
| Genesee County | 3.01 | 4.6 | 1.77 | 4.8 | 1.67 | 4.8 | 1.64 | 4.8 |
| Saginaw County | 6.28 | 4.2 | 2.22 | 4.7 | 1.40 | 4.8 | 2.09 | 4.7 |
| East MI Average | 19.84 | 2.4 | 12.75 | 3.3 | 12.22 | 3.4 | 14.08 | 3.1 |
| Michigan | 14.32 | 3.1 | 10.17 | 3.6 | 8.69 | 3.8 | 9.86 | 3.7 |
| U.S. | 23.58 | 1.9 | 14.68 | 3.0 | 14.19 | 3.1 | 13.51 | 3.2 |

Where: U.S. Environmental Protection Agency. <http://www.epa.gov/triexplorer>

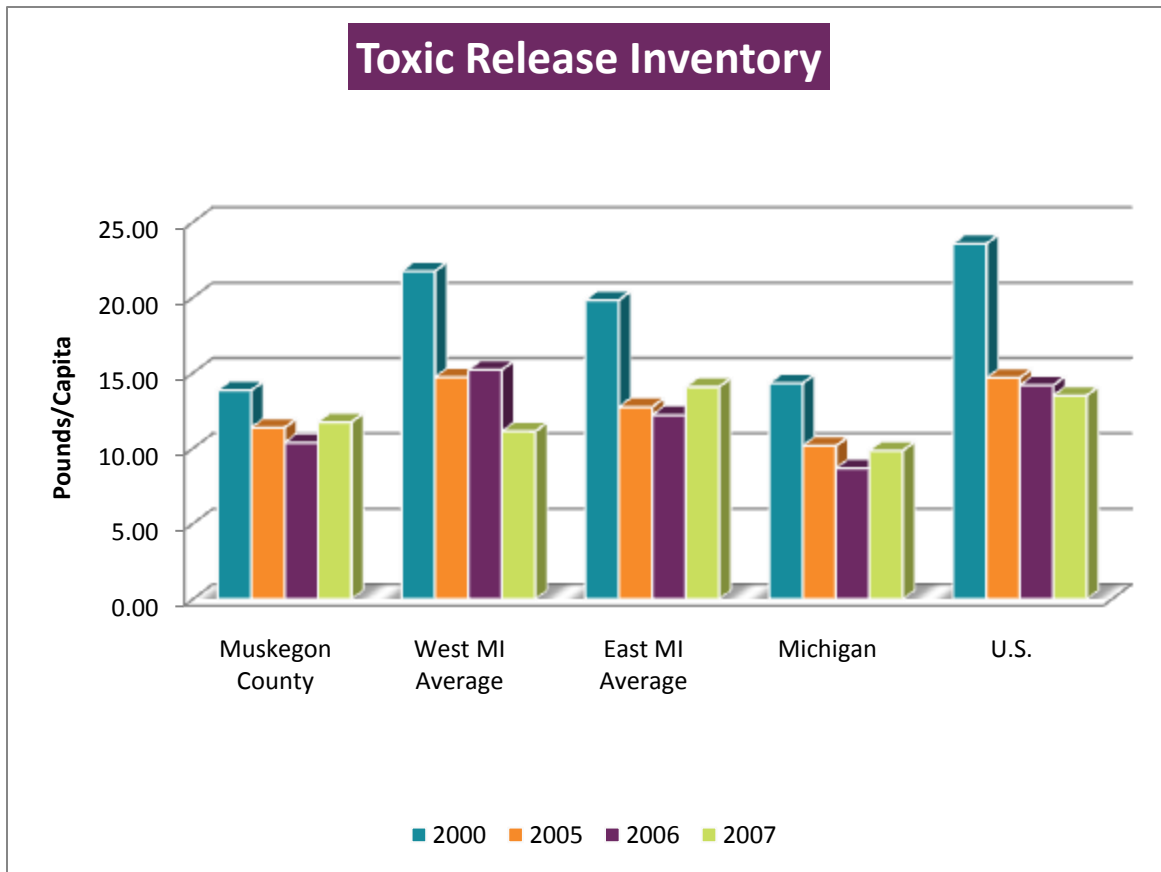
Index Scores

Rubric: There is no sustainability standard for TRI. Zero release of toxic substances was set as the target for the highest score level.

Scale: Simple scale of 7.5 pounds per capita between levels. Index scores are lower for higher pounds per capita of TRI.

| Rubric: Toxic Release Inventory | | |
|---------------------------------|-------|-------------------|
| Level | Index | Pounds per capita |
| Thriving | 5 | 0.00 |
| Advancing | 4 | 7.50 |
| Sustainable | 3 | 15.00 |
| Needs Improvement | 2 | 22.50 |
| Failing | 1 | 30.00 |

Toxic Release Inventory



- *In the last year, Muskegon County a slight increase in the amount of toxic chemicals released into the environment.*
- *Of the geographies analyzed, TRI per capita in Bay and Ottawa Counties has been significantly higher for each period.*
- *In 2007, the average per capita TRI in the West Michigan Counties for each period was lower than the numbers reported for Michigan and the East Michigan Counties.*