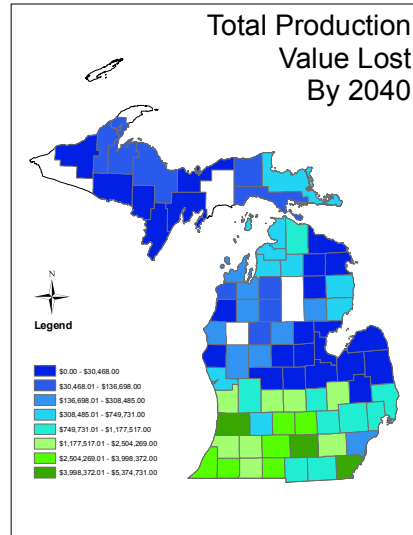


ban cores as well as limiting the consumption of prime farm-land with preservation strategies such as purchase of development rights programs, conservation design, and procurement of conservation easements.

The total loss for all commodities in this analysis for the State of Michigan is estimated at over \$235, million, this scale of damage to our agricultural economy could easily cripple the agricultural economy. The loss of farm land and farm income will have collateral effects that will be felt throughout the state's general economy. Can we afford to lose this?

"Michigan's future much like its past is tied closely of the integrity of our natural resource base. "

-Soji Adelaja, Director, MSU Land Policy Program



For Further Information Please contact the PMT Coordinator: Charles McKeown at (517) 432-8800 or mckeownc@msu.edu

Land Policy Program Overview

The Land Policy Program, a signature program of Michigan State University (MSU), provides leadership and coordination of multi-disciplinary land policy research and outreach activities at MSU. The program also promotes collaboration with other institutions of higher learning and stakeholder organizations in addressing critical land policy problems at local and statewide levels. The Land Policy Program brings to bear the vast array of expertise at MSU and other Michigan institutions of higher education to address land use issues relevant to decision makers and provide science-based solutions.

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MSU is an affirmative-action, equal-opportunity institution.

Related Websites

Michigan Natural Features Inventory: <http://web4.msue.msu.edu/mnfi/>
Public Sector Consultants: <http://www.publicsectorconsultants.com/>
Computational Ecology: <http://www.cevl.msu.edu/pages/lulc/peopleland.htm>
People and Land: <http://www.peopleandland.org/>

Picture Michigan Tomorrow Project Team

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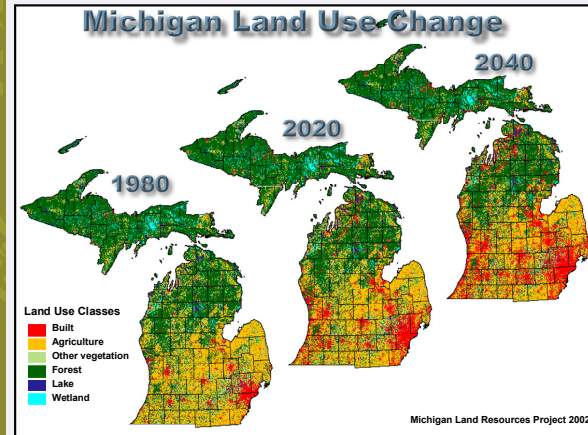
Picture Michigan Tomorrow Examines the Effects of Land Conversion on Michigan's Agricultural Production and Economy

Michigan's diverse natural resources have supported robust land based industries including some of the most diverse agriculture in the nation. This natural resource base has also been the core of our high quality of life. Enjoyed by Michigan residents. Many feel that we in Michigan have not yet reached the tipping point where our quality of life is substantially impaired by urban sprawl and land use change.

In 2001, a team of researchers from Michigan State University (MSU) in conjunction with Public Sector Consultants and the Planning and Zoning Center developed the Michigan Land Resource Project. With funding from the W.K. Kellogg and the Frey Foundation a land consumption model was developed for the state of Michigan. These projections show a scenario of land development. The sequel to that project is Picture Michigan Tomorrow (PMT). The MSU Land Policy Program and the W.K. Kellogg Foundation's People and Land Program are working on translating that projection into things that are important to people. Picture Michigan Tomorrow is also developing new models to expand our knowledge of the impacts of land use decision making in Michigan. Part of this process is taking a closer look at Michigan's future with the goal of articulating the economic, ecological and social problems related to land use in more accessible terms, with less jargon, and fewer abstract concepts. The future of land use in Michigan is the key to our future economic health, quality of life, and ecological sustainability.

"The 37 million acres that are Michigan is all the Michigan we will ever have..."

- Michigan Governor William Milliken



"Polls show that citizens care about land use change: 72% are concerned about loss of agriculture land, 65% believe that loss of forests is a serious problem"

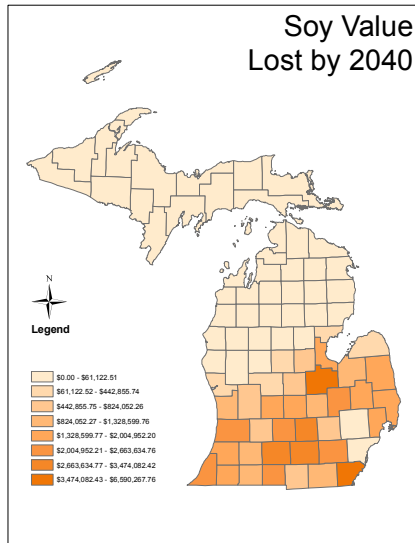
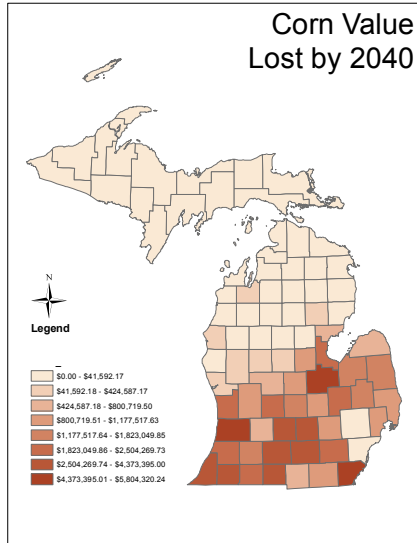
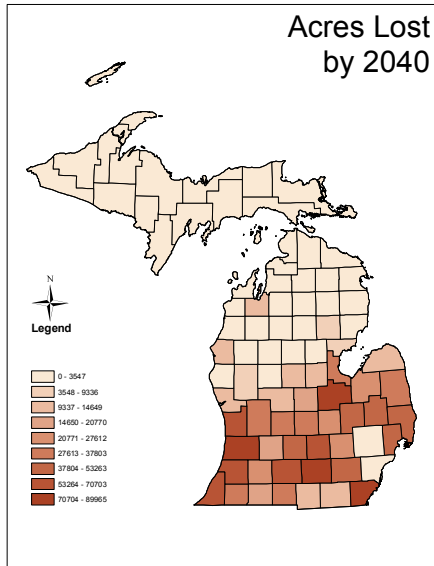
-Institute of Public Policy and Social Research (2002)



Picture Michigan Tomorrow Examines the Effects of Land Conversion on Michigan's Agricultural Production and Economy

Michigan's future much like its past is tied closely of the integrity of our natural resource base. The viability of our land based industries is a concern statewide due to the continued decline of the manufacturing sector nationwide which has disproportionately effected Michigan.

Using the Land Transformation Model outputs, Picture Michigan Tomorrow analyzed the potential impact on row crop agriculture in Michigan due to the development of farmland. This analysis is a precursor to PMT's efforts to develop models and analysis that will depth, accuracy, and completeness. The Land Resource Project projections need to be updated in smaller time steps and with greater predictive capacity. This will be done with a model that takes into account more variables and allows local decision makers to visualize the future impact of planning; these are both goals of Picture Michigan Tomorrow. The work developing the expertise is in process, and as resources become available the land projections will be improved upon. This effort will allow state and local policy makes to look at a clearer picture of the impacts of their decisions and develop preemptive strategies to deal with the future.



Picture Michigan Tomorrow Examines the Effects of Land Conversion on Michigan's Agricultural Production and Economy

The model predicts a loss of seventeen percent of the acres in farmland by the year 2040 in Michigan. The commodity loss was calculated by multiplying the loss of farmland in acres by the county yield average (from the National Agricultural Statistics Service) , then by the 2000 U.S. national season average index price for each commodity. The reduction in tillable land was applied to each row crop equally as the cost of development for tilled land is not impacted by the crop grown on that land. This translation of land use into dollars only includes row crops due to the cost of development being higher in orchards and other types of agriculture.

These losses are concentrated in the southern third of the state and almost all of the land lost is considered prime farmland by the U.S. Department of Agriculture. The grain belt of Michigan is the engine that powers our agricultural economy; however, it also surrounds the majority of our urban areas and is under continual pressure for development. If the future of agriculture in Michigan is left under this pressure we stand to lose not only a large part of our rural character, but also a large part of our economy (see example losses in 2000 dollars for selected commodities). The value lost is highest in corn and soy but the loss of other commodities is equally significant because the diversity of Michigan's agriculture is also the prime source of its long term resiliency.

The scale of the projected farmland loss in Michigan means a large economic loss for the state and a weakening of our natural resource base. Protecting all of the farmland under threat of development in Michigan is an impossible task. Population growth in our state will happen and it is incumbent on us to strategically plan at both the state and local levels for new development that will minimize the damage to this economic engine. The fasted growing regions in the state are surrounded by prime farmland that is increasingly under threat from development surrounding the urban centers. Policy steps can be taken that channel this growth back into the ur-

