

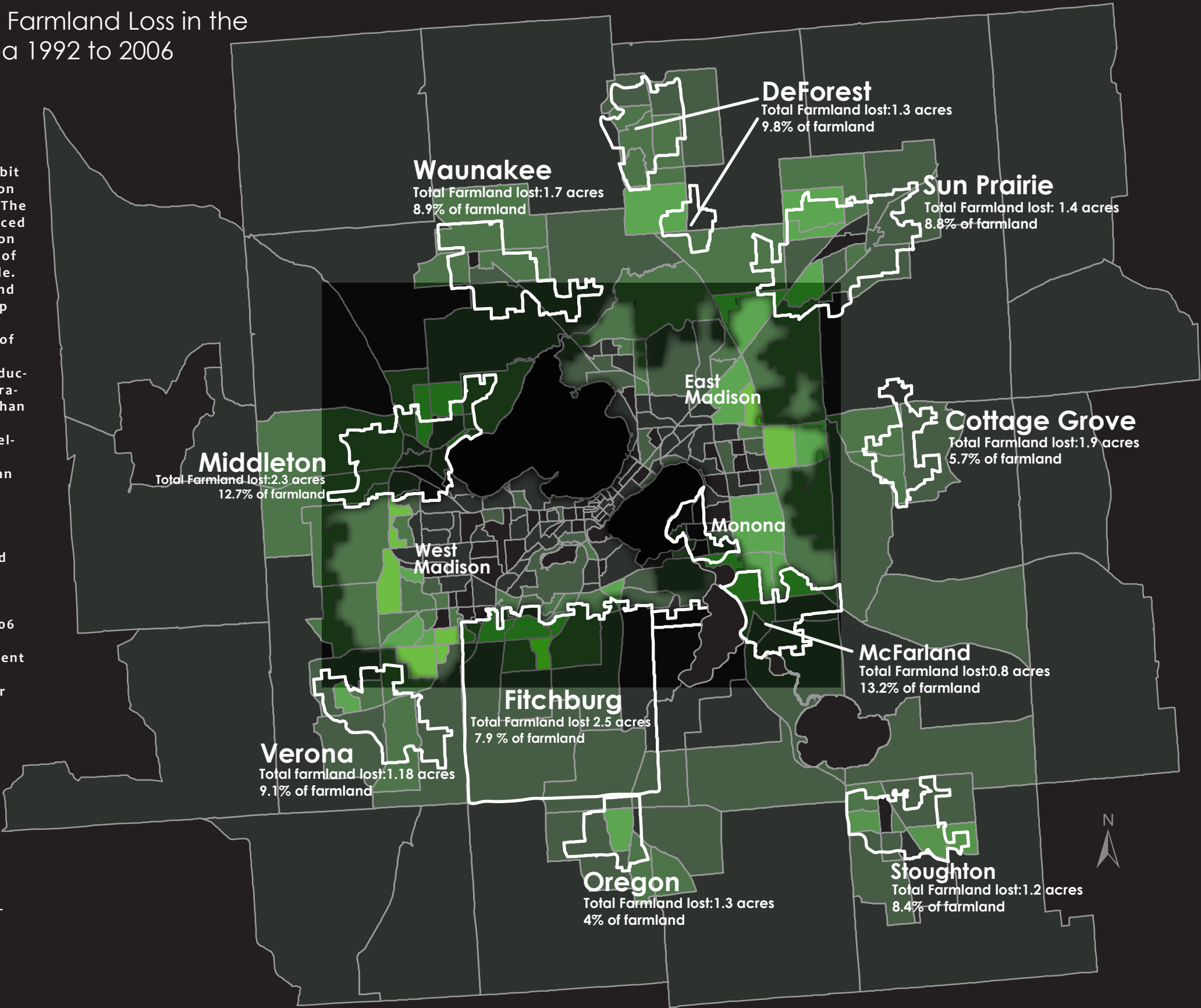
Urbanization of Madison's Farmland

Mapping the Rate of Farmland Loss in the Greater Madison Area 1992 to 2006

We live in an increasingly urbanized world where people continue to inhabit urban centers at a faster rate. Madison is no exception to this phenomenon. The farm state of Wisconsin has experienced changes in the landscape as population increases and pushes the boundaries of Madison outward onto the county side. Urbanization continues to increase and has pushed suburban areas to develop onto Wisconsin's farmland. Findings have brought concerns over the loss of ecosystem services that many rural landscapes bring including: food production, wildlife habitat and water infiltration. Across the United States more than 41 million of acres of farmland in the United States were converted to developed uses from 1982 to 2007. Information from choropleth maps can provide local decision makers with added information about the level of farmland loss.

The approach described here involved using GIS software to overlay two different sets of National Land Use Cover Data, maps representing urban and farmland areas from 1992 and 2006 for the greater Madison area. By overlaying these datasets from different time period it is then possible to produce statistics of development for each census block.

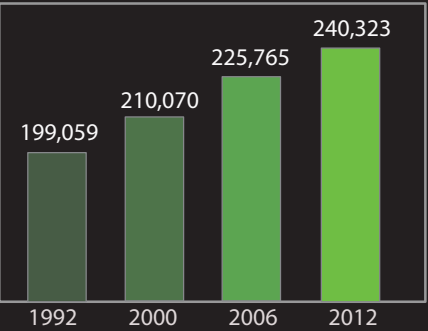
Policy in Wisconsin is working to protect human health and well-being from urbanization. Compared with other Midwestern states Wisconsin has taken a proactive policy approach to address the threat of urban development to farmland through the Working Lands Initiative that was authorized by the state legislature in 2009. This added policy preserves farmland and forestland through farmland planning, preservation and purchase of agriculture conservation easements.



Highest Urbanization in Madison 1992-2006

1. McFarland
2. Middleton
3. DeForest
4. Verona
5. Sun Prairie

Population Increase of Madison 1992-2012



Various reasons have led to the urbanization of Madison. These include employment opportunity, education, and population increase. Madison and its surrounding cities have experienced an increase in population which will continue to push the city boundaries out onto farmland and other landscapes such as open space and forests. These issues should be addressed before we lose vital agricultural land.

- Dane Municipalities 2013
- USA Block Group Boundaries

