

# City & Regional Planning

## Strategic Land Protection Plan for the Southern Madison Heritage Trust

CRP 558: City and Regional Planning Workshop, Fall 2005

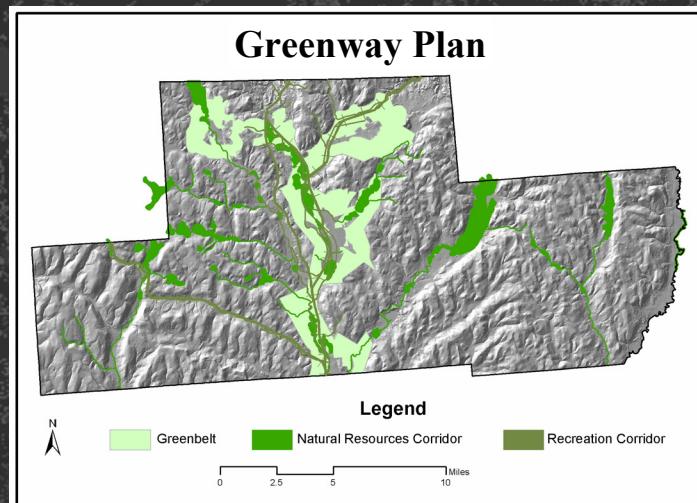
Faculty: Ole Amundsen III

Students: Matt Bishop, Heejae Chang, Adam Duchesneau, Nicholas Hayward, Kanako Iuchi, Matt Johnston, Danielle Lauber, Chia-Ping Lee, Ya-Shian Lin, Elizabeth Murphy, Tricia Ottley, Jonathan Sinker (TA)

*The prime farmland of Southern Madison County dotted with livestock provides a scenic countryside and has given the area its distinctive charm. However, the region faces increasing pressure from scattered housing development which threatens the region's natural resources and scenic values. Over the course of a semester, 12 students developed a land protection plan with a regional greenway component for the Southern Madison Heritage Trust to form a sustainable vision for the area.*

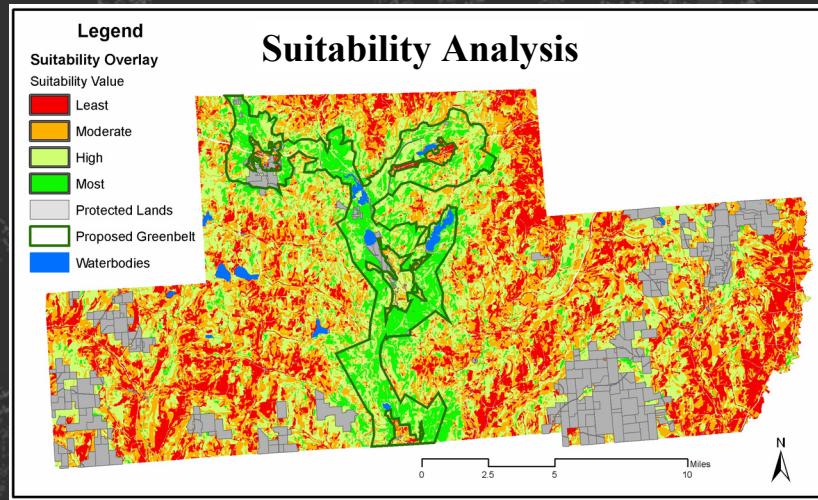


Front Row: Heejae Chang, Kanako Iuchi, Chia-Ping Lee, Elizabeth Murphy, Ole Amundsen, Ya-Shian Lin, Tricia Ottley  
Back Row: Jonathan Sinker, Nicholas Hayward, Adam Duchesneau, Matt Bishop, Steve Tutt, Greg Owens, Matt Johnston  
Missing: Danielle Lauber



The Greenway Plan for Southern Madison County to the left is comprised of three integrated components that independently provide recreational opportunity, resource protection, and growth management. The Recreational Corridors consist of abandoned railways, canals, and selected rivers that are near the former two elements. The Natural Resources Corridors aim to protect major rivers, lakes, DEC wetlands, forests, farmland, and other land cover with predicted high species richness. The design of the Greenbelt reinforces traditional settlement patterns in and around the Villages of Hamilton, Morrisville, Madison, and Earville. Collectively, the greenways provide a vision of sustainability for Southern Madison County's breathtaking scenic views, fresh waters, rich farmland, compact village centers and other valued resources. This plan will ensure that these natural assets may be enjoyed by future generations for years to come.

Taking into account the Greenway Plan, a Suitability Analysis was conducted for the entire service area to determine which lands were the most critical for conservation. The analysis considered the factors of land banking, scenic value, soil quality, parcel size, natural resources, and water resources. Each area was given a rank from 0 to 3 (3 being the highest) depending upon its conservation quality. Each factor was then given a certain weight placing the most emphasis on the proposed Greenbelt. The map to the right displays the results of combining all the factors after they were ranked and weighted, classified by each area's final score. The analysis allows the land trust to find easily the areas where they could focus their conservation efforts highlighted on the map in bright green.



Method of Conservation	Estimated Cost Per Acre	Greenbelt Conservation Total Acreage
Purchase Outright	\$829.91	3,579
PDR	\$248.16	3,567
Regulation	\$0	9,800
Total Cost		\$3,855,660.38

The chart at left displays the cost of a land conservation strategy that the SMHT could undertake to protect the area within the proposed Greenbelt. The strategy uses a combination of the outright purchase of property, the purchase of a parcel's development rights, and regulation to conserve property. This cost calculation is derived from the results of the Suitability Analysis.