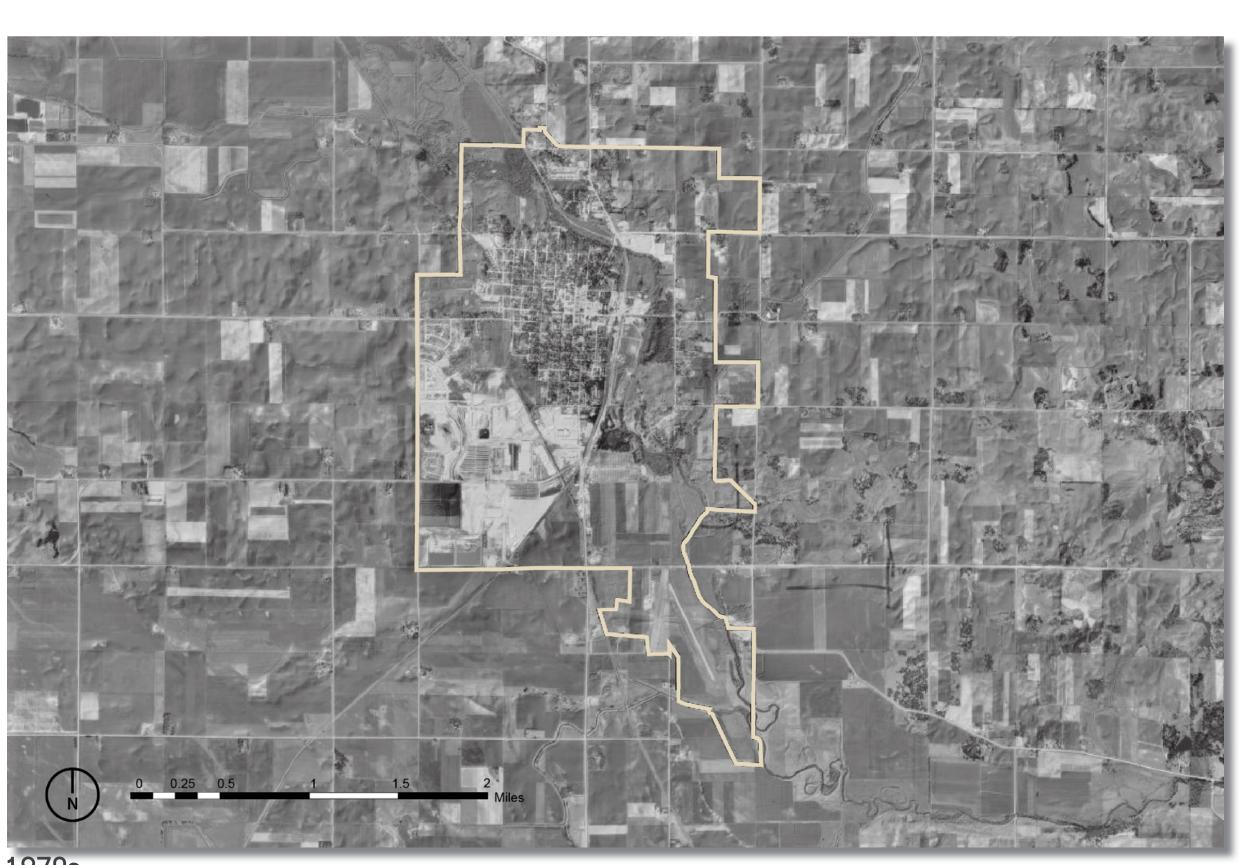


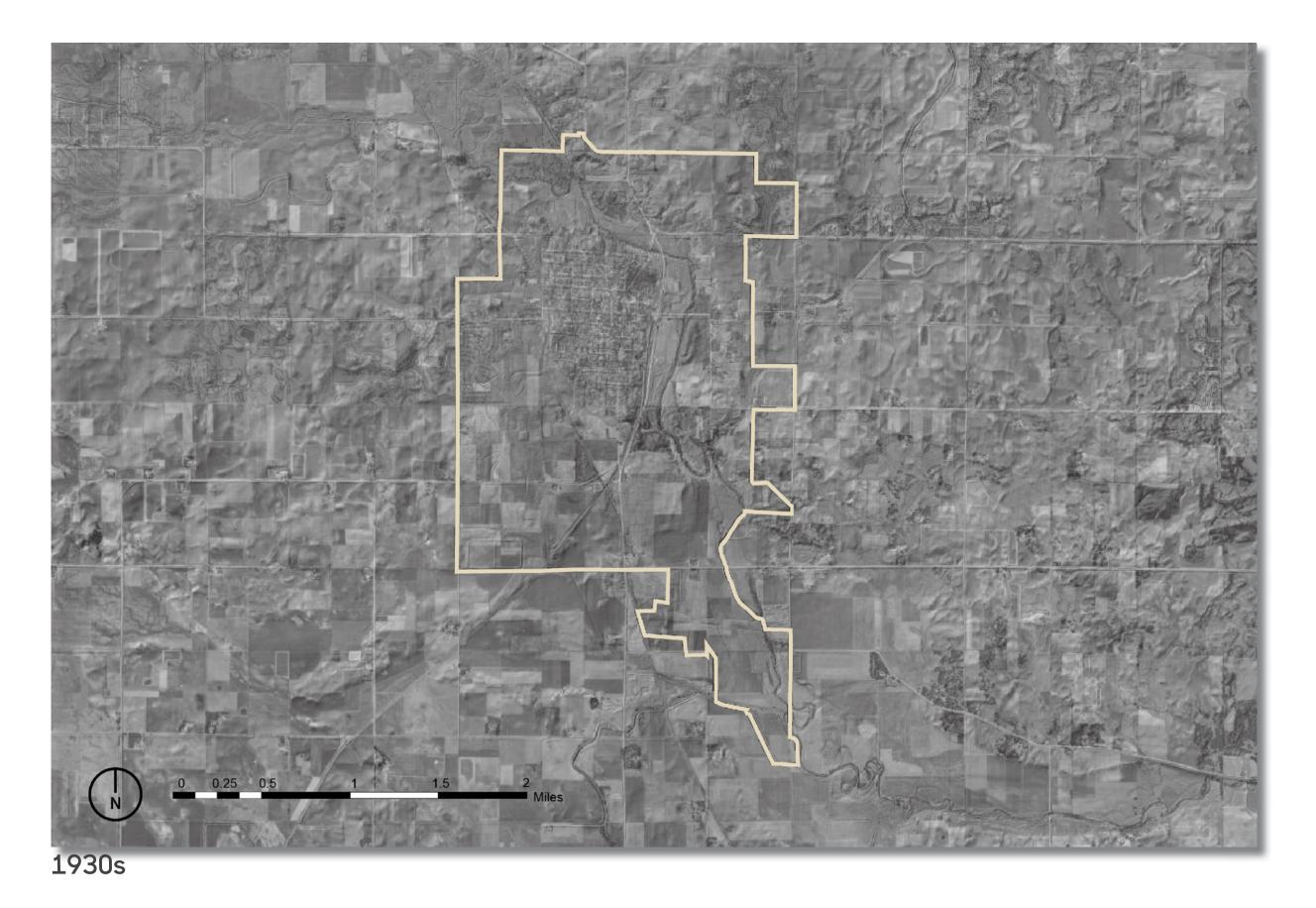
1875 Andreas Atlas

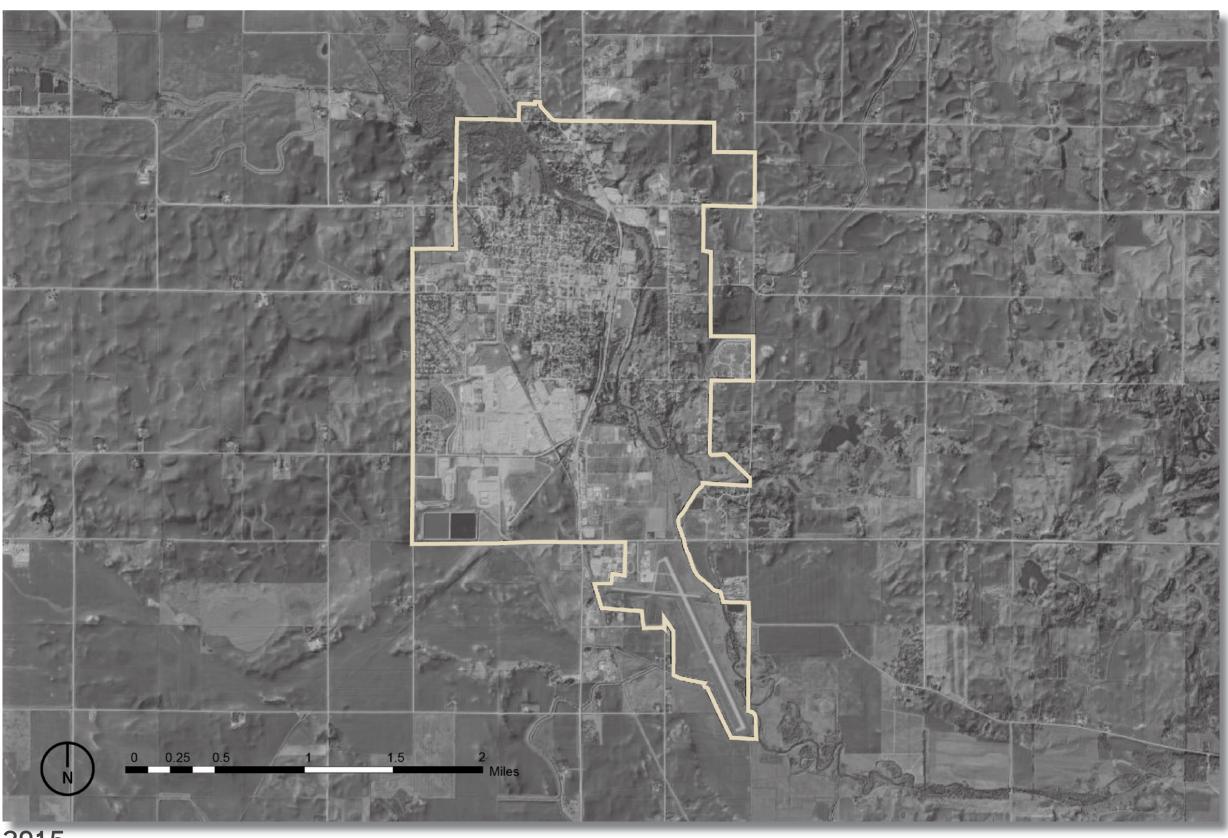


## 1970s

Map Source: ISU GIS Facility, "Iowa Geographic Map Server," http://www. http://ortho.gis.iastate.edu/.







2015

## **Bioregional Context**

Julia Badenhope, Casey Cox, Riley Dunn, Dominick Florer, Hatvany Gomez-Concepcion, Ngoc Ho, Henry Herman, Alysse Kirkman, Giannis Koutsou, Emma Lorenz, Zoey Mauck, Carol Ustine Iowa State University | Trees Forever | Iowa Department of Transportation



## Change Over Time

In the images to the left, you can observe how land use has changed over time from the observed landscape patterns in the 1800's Andreas Atlas, to the present day. By looking at landscape development patterns over time, one can begin to understand how technology, infrastructure, economic forces and desired lifestyles have interacted with landform, climate, and processes to create present day development patterns.

For example, consider how agricultural land use has changed land cover patterns. In general, one can see impacts of technology in larger field sizes, the reduction in wetlands and sloughs, and the elimination of fence lines as diverse farm crops and livestock production has given way to monoculture field crop production.

New roads have been developed, usually cutting across the landscape topography on compacted roadbeds. Highways usually have low slopes and more gentle curves to facilitate high speed movement, while roads targeted to more localized traffic can have steeper slopes and tighter curves. The result of these differences can be seen the earthwork used to flatten the roadbeds near highways, and the creation of "borrow pits" that sometimes appear as geometric ponds alongside highways.

Other observable changes are development that responds to floodplains. In many cases, development will avoid floodplains, because of the risks of property damage. Between the 40's and 60's, development was placed in floodplains with the protection of levees. These earthworks are less effective with today's intense summer rainfall patterns, and in the most recent image, this floodplain development may have moved as a result.

