This research proposed strategies for spatial regeneration in Iowa in order to address the infrastructural inefficiencies and social instability in the contemporary landscape. This modern landscape was produced in the nineteenth century as a reflection of the rationality of capitalist production, which followed the western expansion of the United States after the Louisiana Purchase. The resulting grid system of surveys indiscriminately subdivided the land subduing its embodied natural and cultural characteristics. The grid provided the structure whereby farms, towns and cities were created to cover the entirety of the state and established a network of agricultural and industrial production. This modern landscape also produced the culture of the family farm, which, until the mid twentieth century, was the dominant production unit in Iowa. In the twenty first century, Iowa is experiencing significant challenges on social, economic and environmental levels that accentuate the tension between the modern cycles of production and the sustainability of the social and natural environment. This research is an attempt to negotiate this tension by proposing a spatial regeneration scheme for Iowa that is developed through interdisciplinary research and cartographic analysis and production.
Reflections on the Impact of the RFP Research Grant for “Guideline for Spatial Regeneration in Iowa” Project

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For the last six years, I have been researching the evolution of the Iowa landscape and its evolution in the last two centuries. This research made me realize the centrality of the spatial conditions of the Midwest to the current urban waste that is generated by the recession in family farming and the town economy that serves it. In 2007, I received, in collaboration with my colleague Peter Goche, an AIA-RFP grant for our research project, “Guideline for Spatial Regeneration in Iowa”. At that point, I was prepared to study ways in which spatial design can contribute to the development of Iowa’s landscape into a more socially and environmentally sustainable one. Given that spatial conditions are seldom linked to the farming conditions in Iowa, this research was venturing into a new form of architecture practice, a practice that starts by studying spatial configurations to identify waste, or what gets wasted, in order to develop and design new spatial strategies that deals with existing waste and minimize its future production. In that sense waste is multifaceted, such as social waste which results in the recession of small towns and communities and rural-urban migration; economic waste such as the diminishing of family farming economic system; environmental waste such as soil depletion and fossil fuel overuse; and material waste such as the empty and dilapidating buildings that are spread in the towns and farms of Iowa.

Given that this design project proposed a non-traditional process of investigation and resources for architecture practice, it was only possible to develop it within an academic setting using professional tools of analysis and representation. Accordingly, our AIA-funded project allowed us to produce an original form of design project that addressed political and economic conditions as much as physical and material ones. Eventually, the project was a starting point to demonstrate the significance of having a practice that does not only connect different disciplines but also connects academic research to professional practice.
I am currently initiating the next phase of this research, which should include public state agencies and other professionals. While it is too soon to articulate the future projects that will develop from the guidelines that resulted from our research, the project had an immediate impact on my teaching, research, academic development and architectural practice. Immediately after its completion, the project attracted interest from different faculty members and research centers at Iowa State University, which resulted in several presentations for faculty, graduate and undergraduate students. The paper became an assigned reading for a graduate course, and the research material generated a substantial resource for the course I teach, “Spatial Dialectics in the American Midwest.” Furthermore, the opportunity to conduct such an applied research project contributed to my tenure application, which was presented last year resulting in my promotion and tenure at Iowa State University in June 2008. Last October I was invited by the transportation engineering unit at Iowa State to collaborate on a funded research project to be conducted at the Institute for Transportation. This invitation was based on our finding in the “Spatial Regeneration” project in which we established a connection between the spatial configuration of roads and environmental and economic waste being produced.

Finally, the RFP grant allowed me to demonstrate the value of applied interdisciplinary research as a new form of architectural practice. Such a practice is necessary to address the complex challenges our built environment faces in the 21st century on a national and global scale. What is more significant is that applied research in architecture practice defines the central role that architects can play in addressing these challenges.