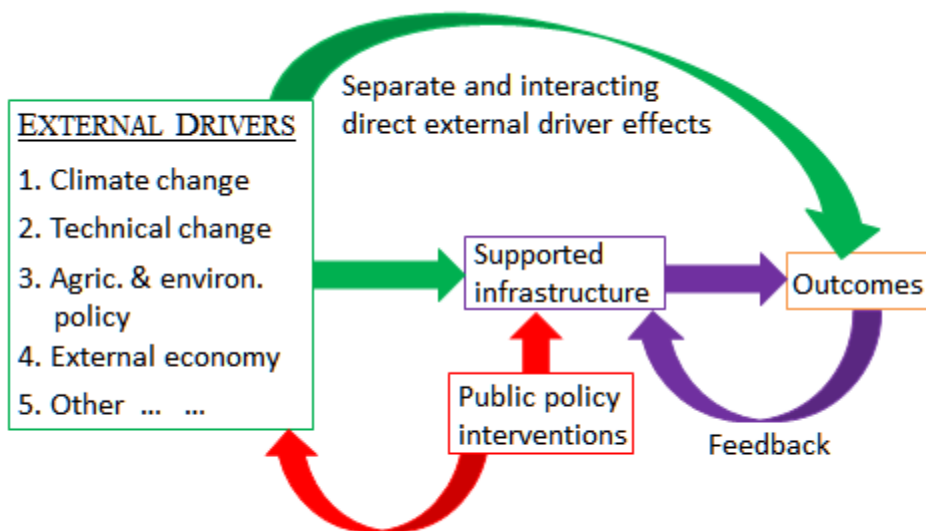


**Project Home Adaptation of agroecosystems to climate change at the edge of the U.S.
Cornbelt-assessing different drivers in a spatially explicit network of infrastructure**

An increasingly sophisticated network of infrastructure supports agricultural production systems in a given location. An understanding of this complex network is crucial for adaption to climate change, but few studies have systematically analyzed how interactions among this network and other driving factors affect system-level dynamics. This interdisciplinary research project will develop an integrated analytical framework to identify and evaluate adaptation strategies through systemic assessment of the roles of climate change in a spatially explicit network of infrastructure. We will focus on the agroecosystem of the Cornbelt’s northwest edge where agricultural production and land use changes have been especially dramatic over the past century, with significant impacts on regional ecosystem functions. Stakeholder views on the evolution of agricultural production systems and land uses, and adaptation strategies and policies will be solicited through focus group meetings and surveys. We will project changes in production systems and land uses under future climate scenarios and evaluate how infrastructure and other driving factors interact when facilitating or inhibiting the adaptation capacity of the region’s agroecosystem.



Schematic of direct and indirect factor impacts