



Synopsis of Research Reports:

“The Influence of Urban Areas on Farmland Values”

Urban influence is an important determinant of farmland values in many areas throughout the United States. Farms close to urban areas have greater access to markets and, therefore, lower transportation costs, and these farms are also more susceptible to development pressure. The price for urban-fringe farmland may be “bid up” by competing uses, such as residential or commercial development.

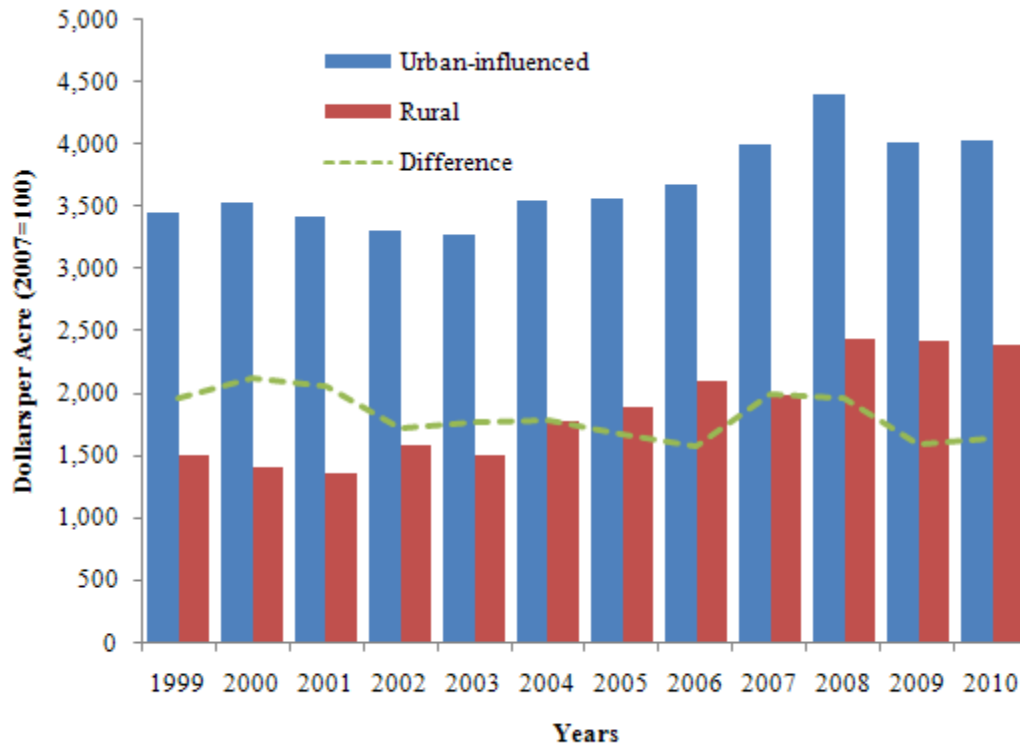
This study uses data from the USDA’s June Area Survey (JAS) to measure the impact of urban areas on U.S. cropland values from 1999 through 2010. The Economic Research Service’s Population Interaction Zones for Agriculture (PIZA) provided a definition of “rural” and “urban-influenced” regions based on the potential population interaction between nearby urban-related population and agricultural production activities.

Figure 1 shows the median, inflation-adjusted value per acre of cropland for rural and urban-influence parcels from 1999 to 2010. Median values in urban-influenced areas are consistently above those in rural areas, with an average difference of \$1,820 per acre. The difference between urban-influence and rural values ranges from \$1,576 in 2006 to \$2,122 in 2000. However, the average annual inflation-adjusted growth rate for rural cropland values is greater than that of urban-influenced areas (4.8% compared to 1.5%) which suggests that the difference between urban-influenced and rural cropland values is narrowing. This can also be observed by the dashed line.

While median cropland values are higher in urban-influenced areas, the premium is not necessarily the result of urban pressure alone. The deviation may be explained, in part, by differences in land quality or productivity. Figure 2 shows the ratio of market values to the agricultural use value of cropland parcels in 2000 and 2010. The agricultural use value of cropland is calculated by dividing the parcel’s rental rate by a discount factor – in this case, the 10-year Treasury note interest rate. When this ratio equals 1.0, it suggests that the parcel’s market value is equal to its implied agricultural use value. The whitespace indicates that no data were available or insufficient sample size for disclosure. The map suggests that cropland values deviate from their agricultural use values near urban areas, and the areas of greatest deviation are found throughout the Eastern U.S., as well as Eastern Texas and parts of the Upper Midwest.

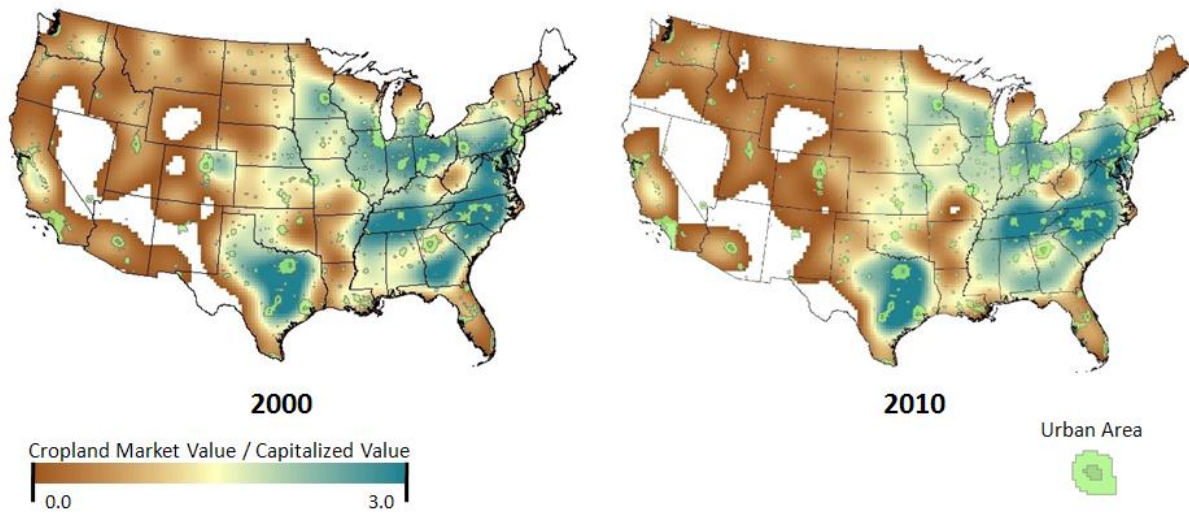
The degree of urban-influence on farmland prices is also expected to vary based on the characteristics of the urban area and the characteristics of the surrounding agricultural lands. Figure 3 shows the difference between cropland market values and agricultural use values over the years 1999 to 2010 for farmland parcels with 300 miles of four metropolitan areas: Atlanta, Chicago, Dallas, and Minneapolis. The difference between market and agricultural use values were greatest surrounding Atlanta, at a range of \$1,957 (1999) to \$3,509 (2005). The deviation is much lower in Chicago and Minneapolis. The figure also suggests a narrowing of the difference between urban-influenced and rural cropland values in Atlanta, Chicago, and Dallas.

Available at: [Kuethe, T.H., J. Ifft, and M. Morehart \(2011\) "The Influence of Urban Areas on Farmland Values" Choices.](#)



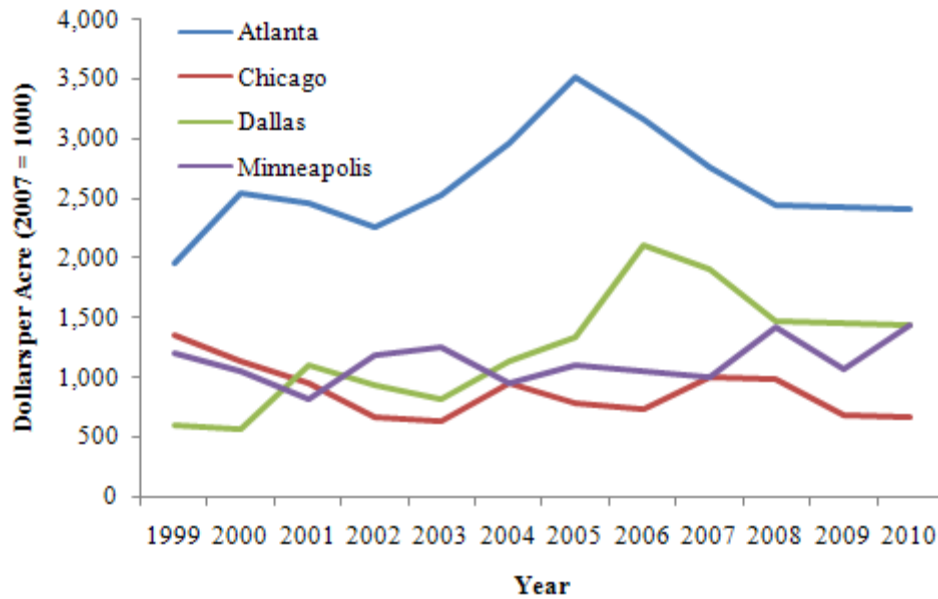
Source: USDA/NASS June Area Survey

Figure 1. Urban-Influence on Median per Acre Cropland Values, 1999 – 2010



Source: USDA/NASS June Area Survey

Figure 2: Urban Influence on Cropland Values, 2000 and 2010



Source: USDA/NASS June Area Survey

Figure 3: The Difference between Market and Agricultural Use Values for Cropland, 1999 – 2010