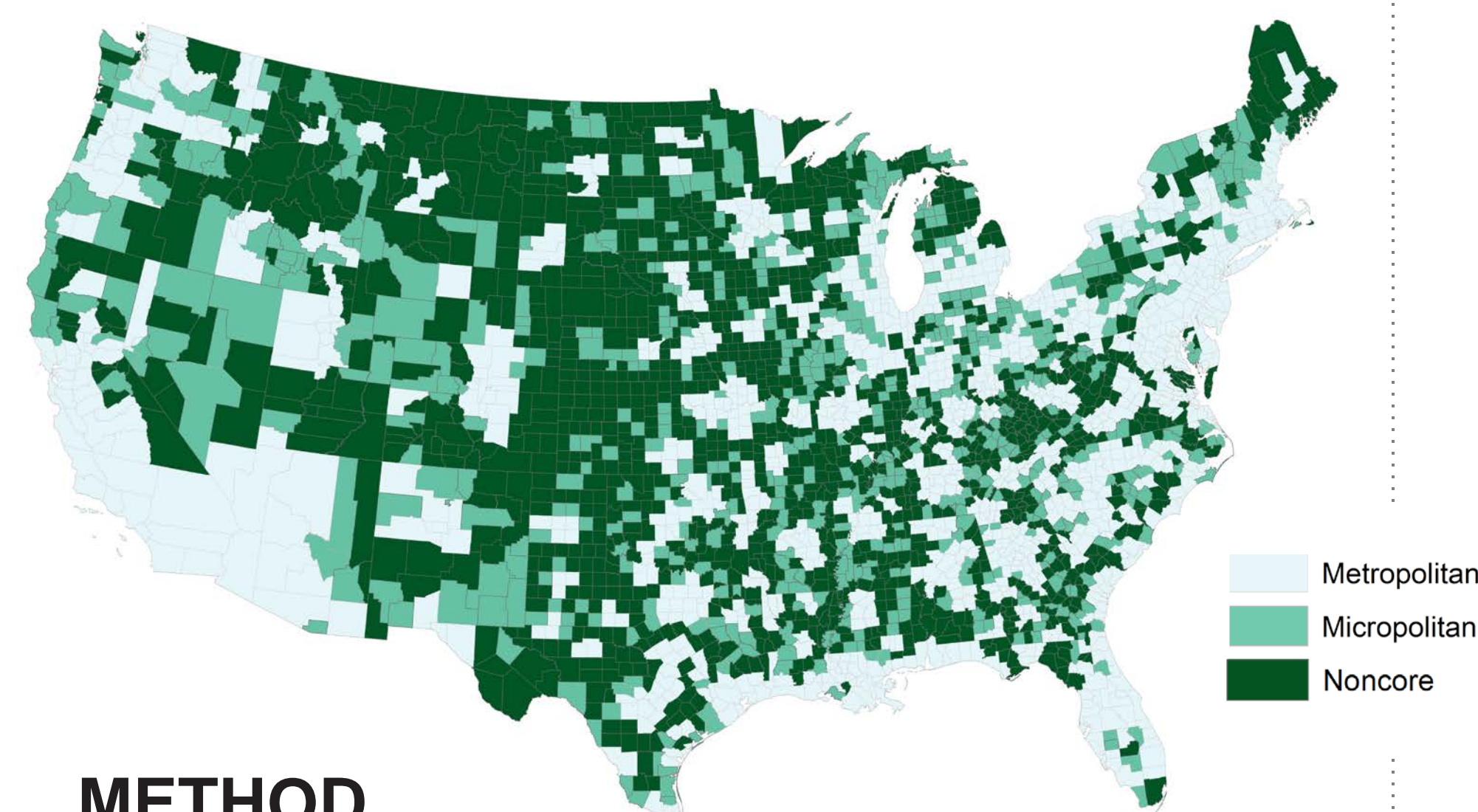


# The Community Reinvestment Act (CRA) and Non-Metropolitan Small Business Lending

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How does the presence or absence of small business loans affect the emergence and development of rural businesses in traditionally underserved areas? In our ongoing work, we have established that locally oriented businesses such as small manufacturing establishments and retail outlets are associated with a number of beneficial local outcomes and promote non-metropolitan community resilience. In this poster, we address how the Community Reinvestment Act (CRA) [and its economic capitals] have contributed to the growth of small businesses in areas that were previously credit-constrained. The CRA establishes lending, investments, and services in low- and moderate-income neighborhoods traditionally underserved by financial institutions. Using an innovative longitudinal dataset created in-house from public disclosure flat files, we employ data on lending in more than 3,000 U.S. counties. Ultimately, the goal of this poster project is to provide captivating analytical visualizations, along with relevant documentation to further the knowledge in the rural social sciences on small business lending in underserved non-metropolitan communities.

Figure 1. Urban Influence Codes (2013 – U.S. OMB)



## METHOD

Data for this poster was retrieved from the Federal Financial Institutions Examination Council's (FFIEC) public portal and processed using SAS for movement into the Texas Federal Statistical Data Center (at Texas A&M University, College Station, Texas), in support of TX1320 'Local Credit Availability and the Performance of Small and Young Businesses'. The data illustrated in this poster represents county-level total loan amounts originated to businesses with gross annual revenues of less than one million.

Figures 1 and 5 were compiled in ESRI ArcGIS Pro 2.0, and provide the standard for analyses (using the 2013 OMB Urban Influence Codes). Figures 2-4, with particular years chosen for their salience, were computed in GeoDa 1.8.16.4 using queen contiguity weights and compiled in ESRI ArcGIS Pro 2.0. The univariate LISA (Local Moran's I) test was chosen to demonstrate local spatial autocorrelation across the non-metropolitan geography; all mapped clusters are significant at  $p < .001$  with 999 permutations. Figure 5 represents the change from the average of the first three, and last three years of available loan data (with all counts weighted to the 2017 average annual consumer price index (CPI)). A choropleth thematic map is chosen to proportionally pattern and bin (in seven quantiles) the statistical variable. Graphical output emphasizes micropolitan and outside core based statistical areas. Six counties in Figure 5, finally, are profiled using the USDA County Typology Codes.

Figure 2. 1996 cross-sectional of small business lending in micropolitan and outside core-based statistical areas. Univariate Local Moran's I (Moran's I = 0.267)

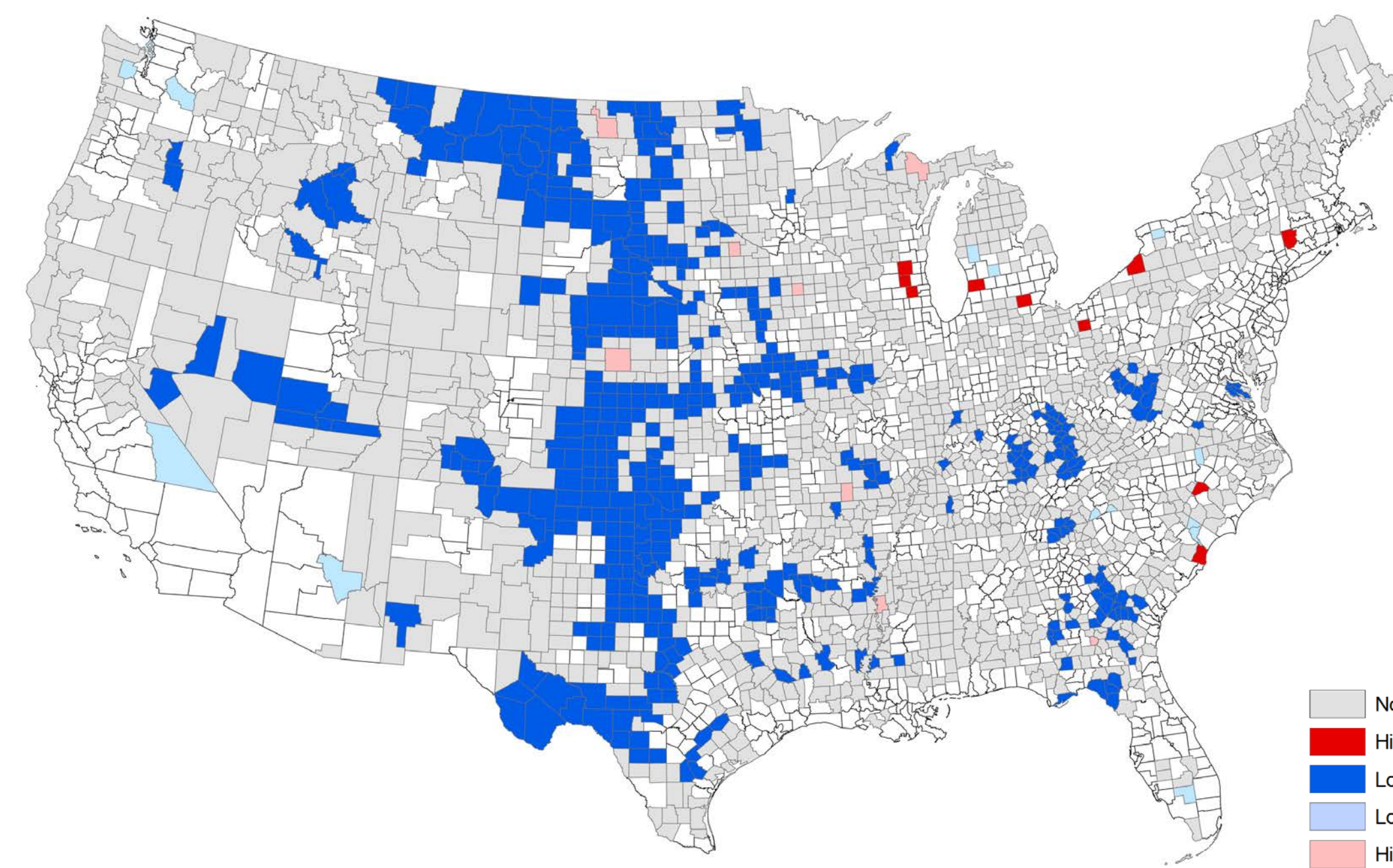


Figure 3. 2007 cross-sectional of small business lending in micropolitan and outside core-based statistical areas. Univariate Local Moran's I (Moran's I = 0.345)

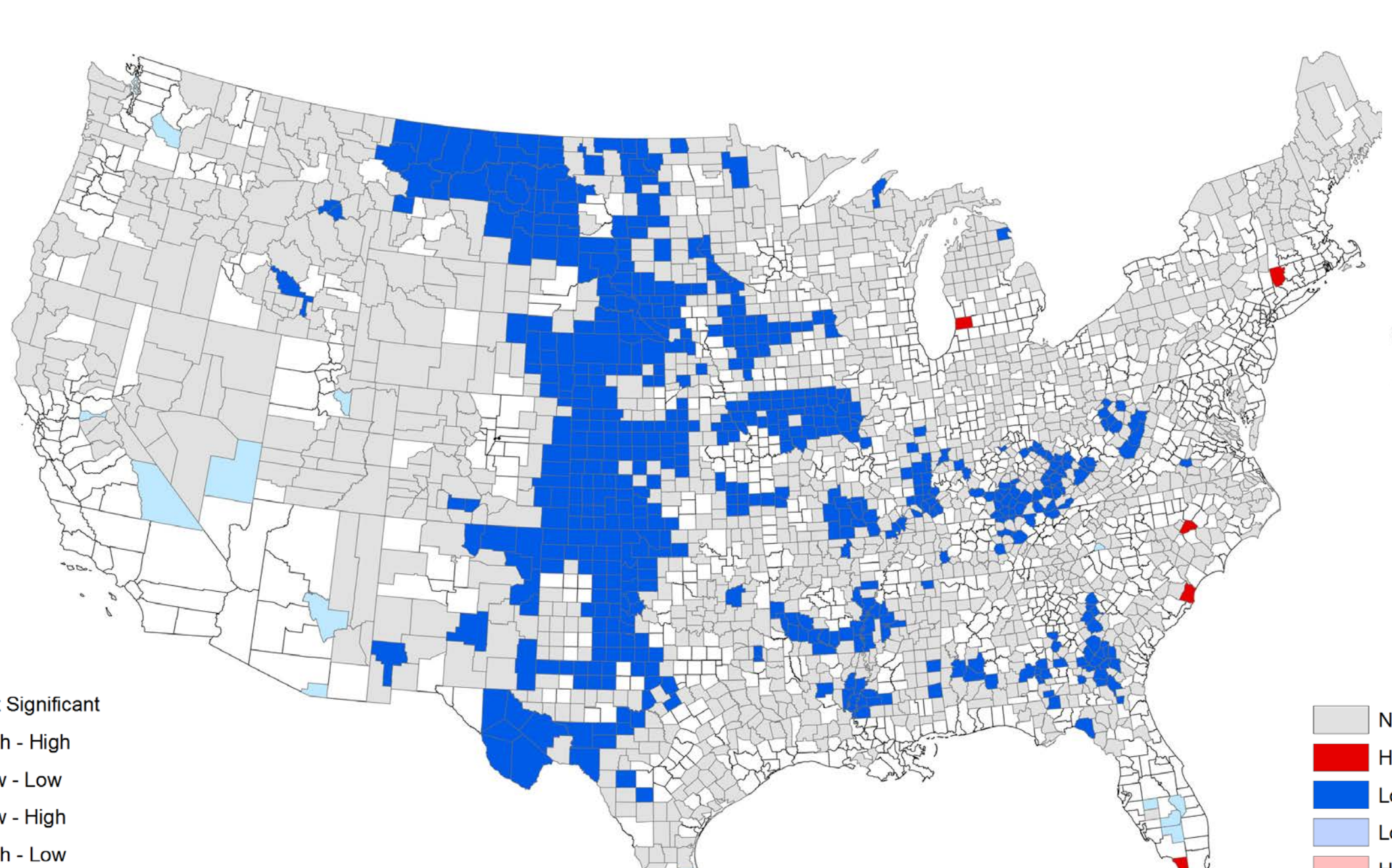


Figure 4. 2014 cross-sectional of small business lending in micropolitan and outside core-based statistical areas. Univariate Local Moran's I (Moran's I = 0.329)

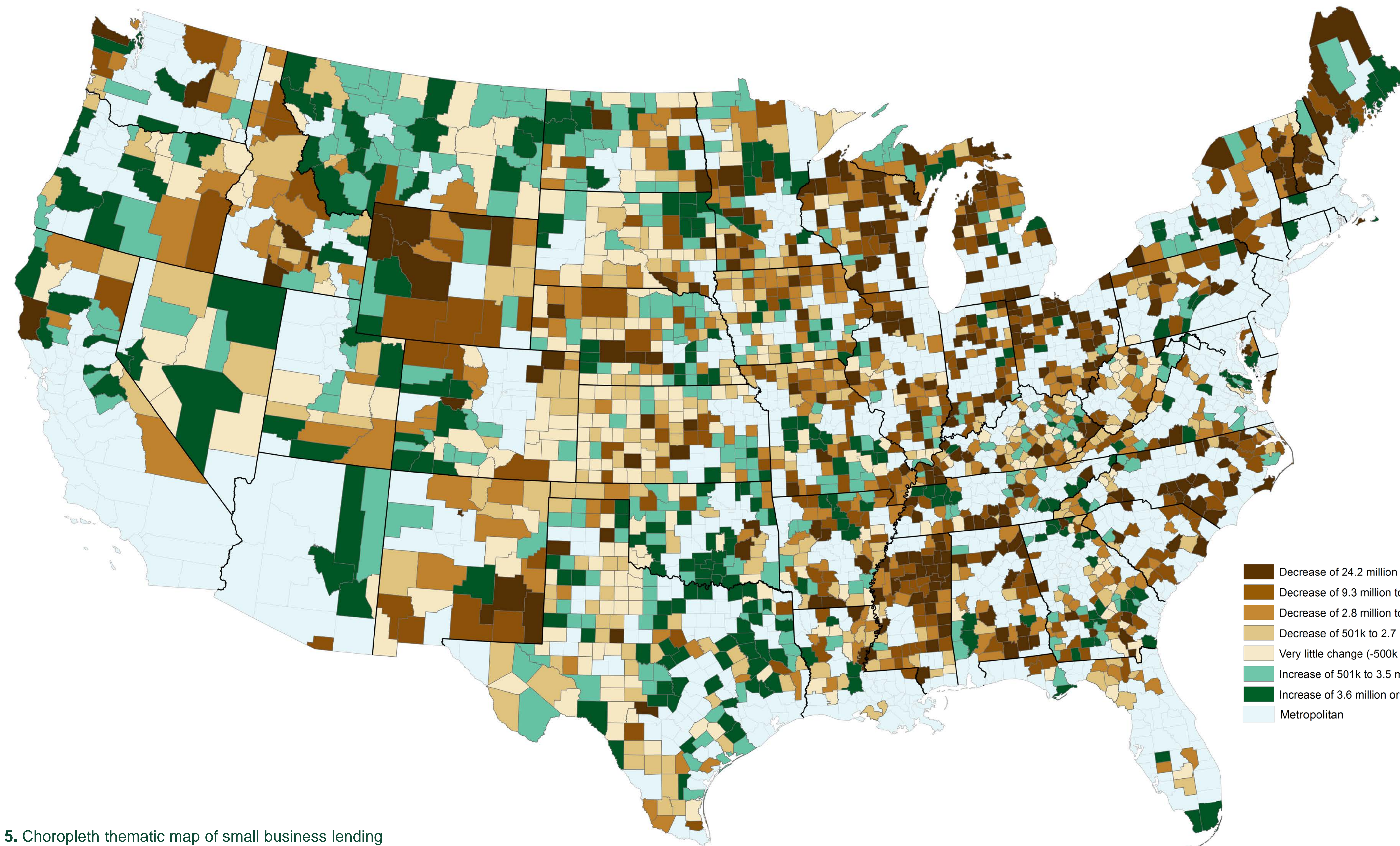
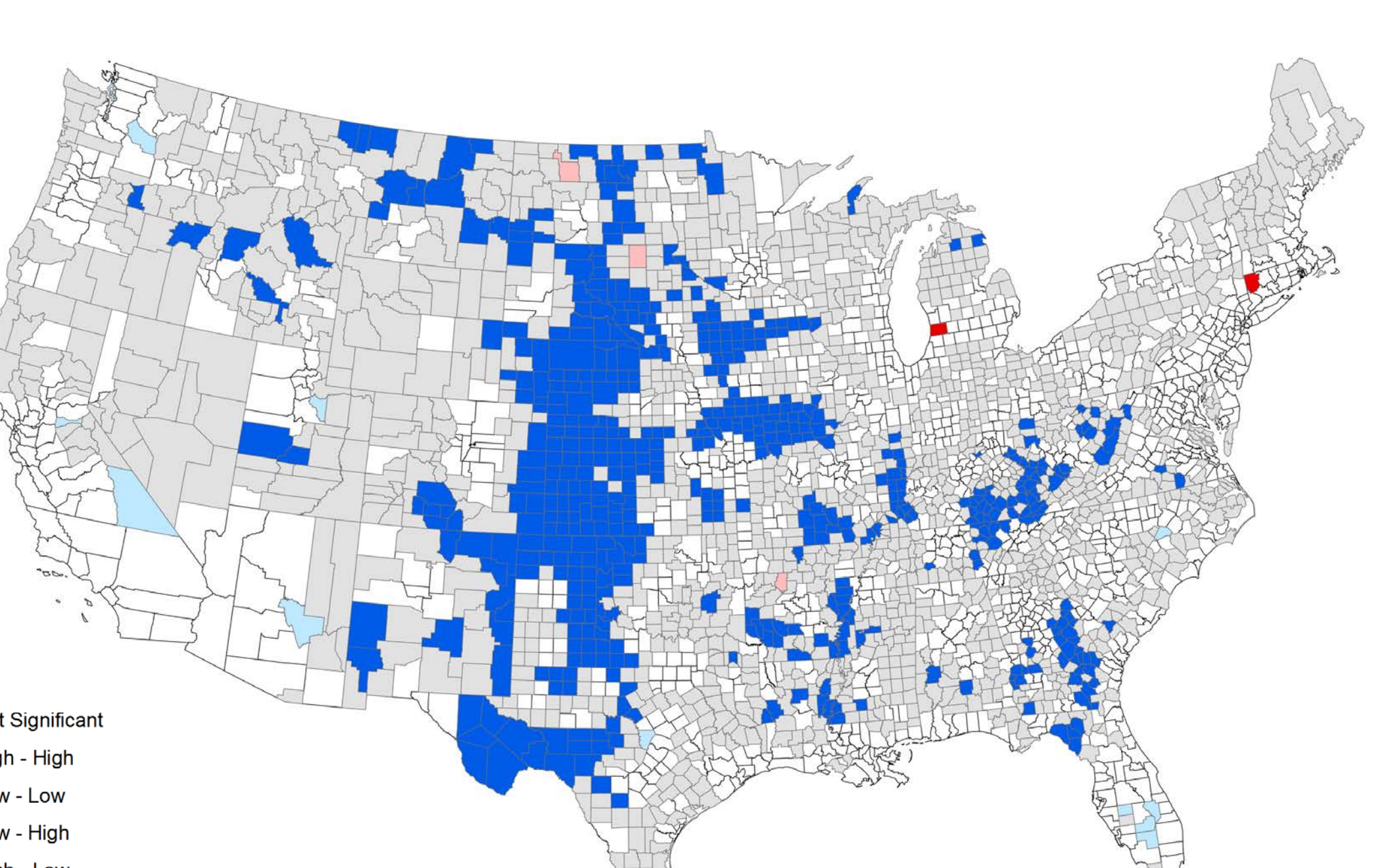



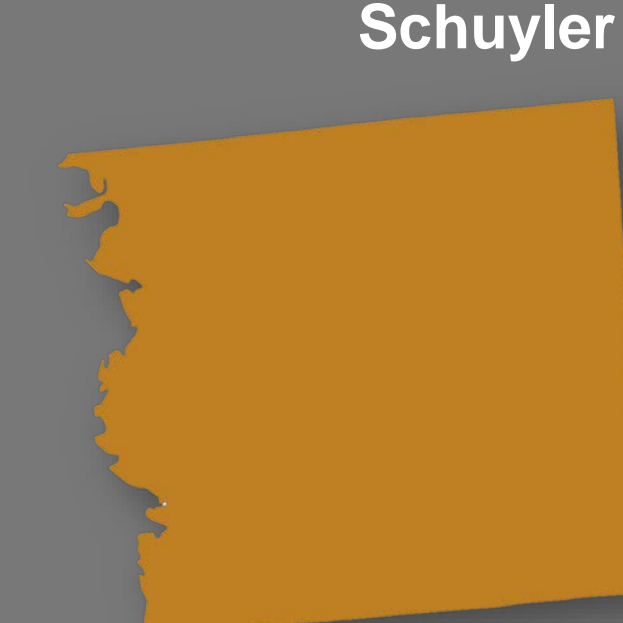
Figure 5. Choropleth thematic map of small business lending in micropolitan and outside core-based statistical areas. Change between 1995/6/7 and 2013/4/5 (years averaged, adjusted for inflation)

**Union County, Georgia**




- Decrease of 35m in lending
- Noncore not adjacent
- Recreation economy
- Average education
- Less than 65% employed
- No population decline
- Less than 20% in poverty

**Schuyler County, Missouri**




- Decrease of 3m in lending
- Micro not adjacent to metro
- Farm economy
- Average education
- Average unemployment
- No population decline
- Persistent rel. child poverty

**Adair County, Iowa**



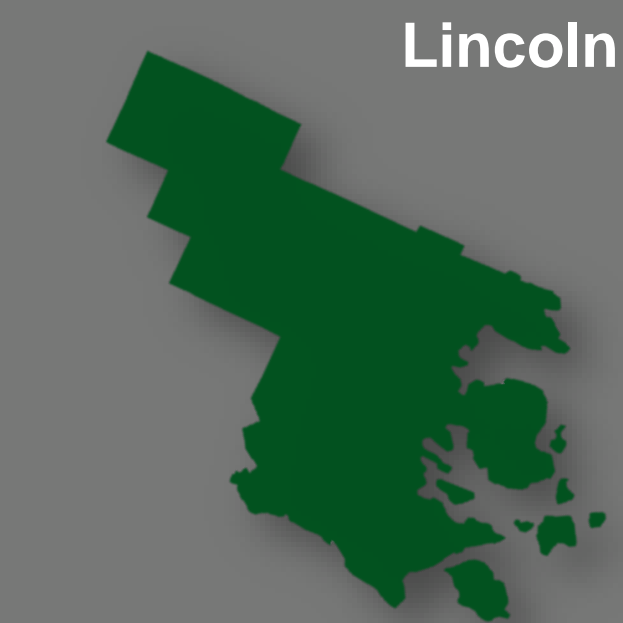
- Very little change (4.8k)
- Noncore adjacent to metro
- Nonspecialized economy
- Average education
- Less than 65% employed
- Population loss
- Less than 20% in poverty

**Pulaski County, Illinois**



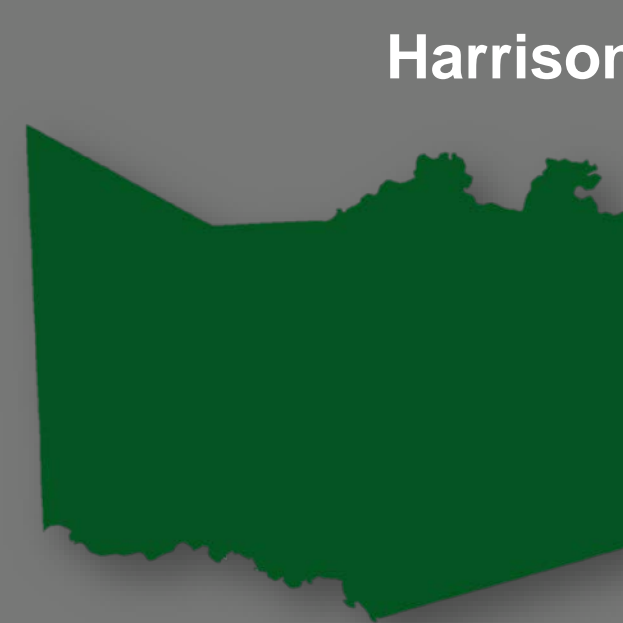
- Increase of 645k in lending
- Noncore adjacent to metro
- Government economy
- Average education
- Less than 65% employed
- Population loss
- Persistent poverty

**Lincoln County, Maine**



- Increase of 12m in lending
- Micro not adjacent to metro
- Recreation economy
- Average education
- Average unemployment
- No population decline
- Less than 20% in poverty

**Harrison County, Texas**



- Increase of 38m in lending
- Micro adjacent to metro
- Mining economy
- Average education
- Average unemployment
- No population decline
- Persistent related child poverty



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The Center for Community Research and Development was established at Baylor University in 1979 as a multidisciplinary entity with a mission of engaging Baylor faculty and students in applied social research to improve quality of life through local, state, and national research