

Reducing food insecurity: Revitalizing farmers' markets in the United States

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Reducing Food Insecurity: Revitalizing Farmers’ Markets in the United States

Stephen Loverde

Abstract:

The modern American food system has succeeded in increasing yields of cash crops for an international market, but comes up short in the equitable distribution of food amongst its own population. There is no cure-all that can be applied to remedy the situation, rather small scale changes are necessary to facilitate improvements. Here, Arc GIS was used to construct a set of maps of the contiguous United States that established a comparison of Supplementary Nutrition Assistance Program (SNAP, formerly Food Stamps)-EBT accepting farmers’ markets to counties characterized by a high percentage of the population receiving SNAP benefits. The focus of this study was three geographic regions of the US: the Northwest, Northeast, and Southeast, each chosen for its socioeconomic qualities; this study reveals a substantial number of farmers’ markets, which are a well known source of fresh, local food in the country, and highlights the need for the conversion of these resources to become capable of handling SNAP transactions. Increased numbers of SNAP-accepting markets, and reduced distance between such markets and SNAP-reliant counties can diminish food insecurity by making it realistic for a greater portion of the population to purchase healthy and locally grown food.

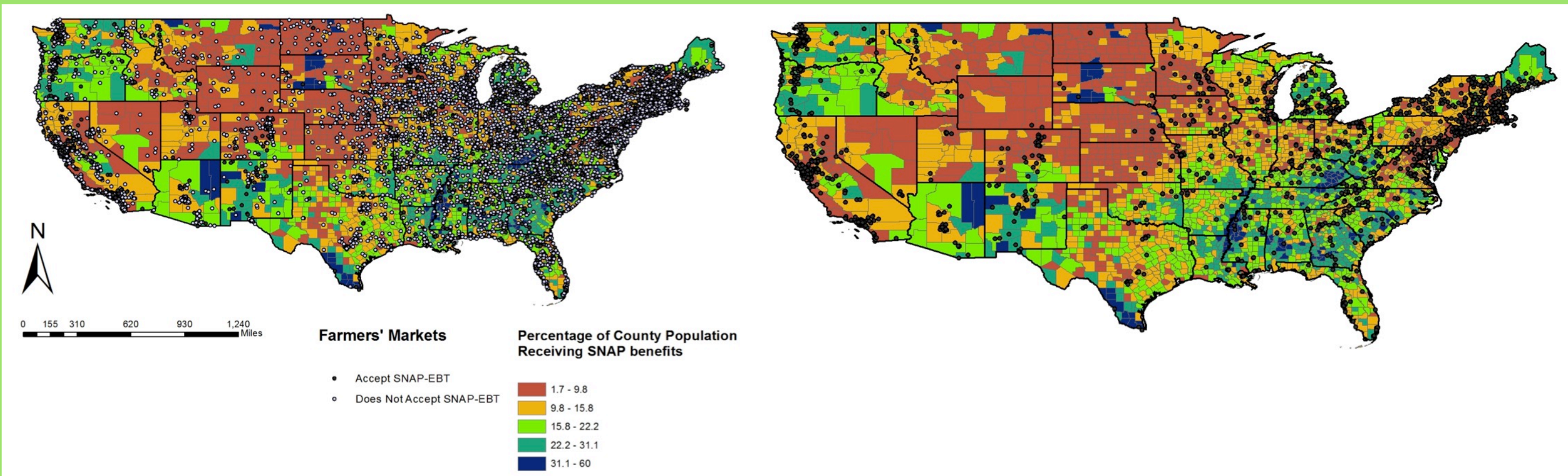


Figure 1. Set of maps of the contiguous US illustrating the locations of all farmers’ markets (left) and those that accept SNAP-EBT (right). Clearly, the heaviest concentration of all farmers’ markets, and especially those capable of accepting SNAP-EBT, is in the eastern US; there is a belt of markets along the west coast as well. Layered beneath the farmers’ markets is the data illustrating the percentage of county population receiving SNAP benefits. The Northeast and the Midwest are the regions with the lowest percentage of county residents in the food assistance program. The Pacific Northwest is one pocket of increased SNAP participation, and the Southeast (specifically the Appalachian region) is the country’s area of densest food assistance need.

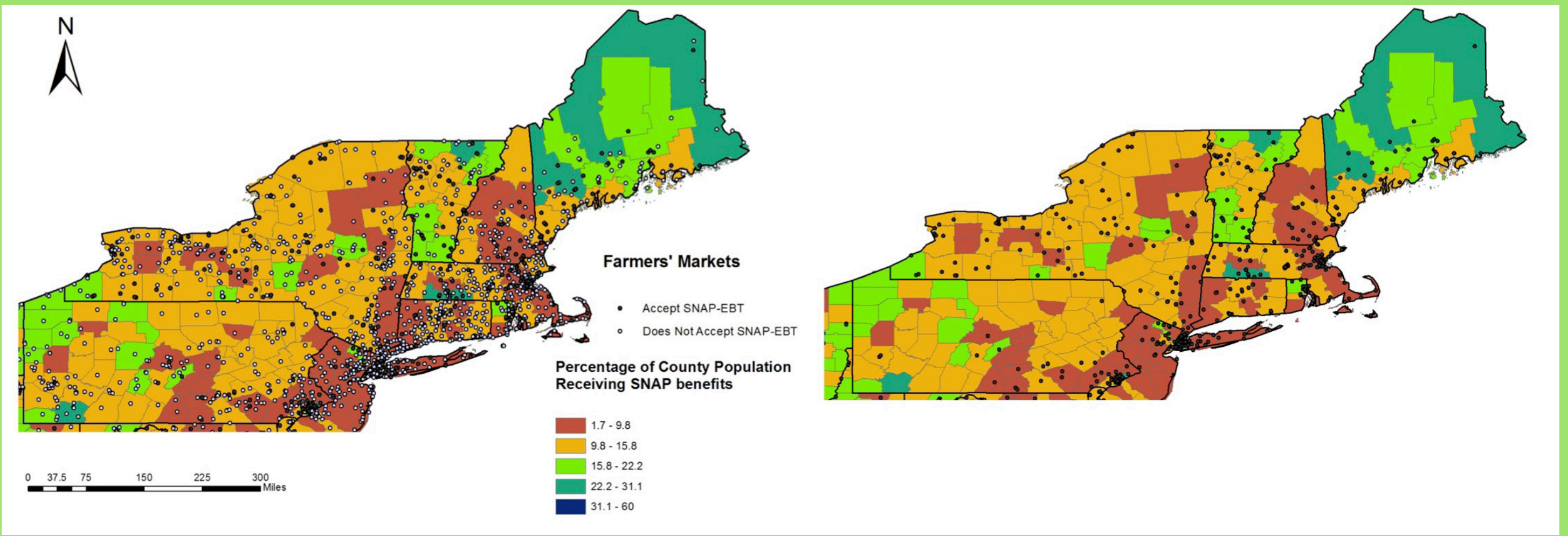


Figure 2. A comparison of farmers’ markets accepting SNAP benefits (right) versus all farmers’ markets (left) in the Northeast, with county data regarding percentage of population receiving SNAP benefits. In general, the vast majority of counties represented do not have a substantial portion of the population receiving SNAP benefits (fewer than 16%). There is a good dispersion of all types of farmers’ markets, except in northern Maine where the relative SNAP participation increases disproportionately to the location of farmers’ markets.

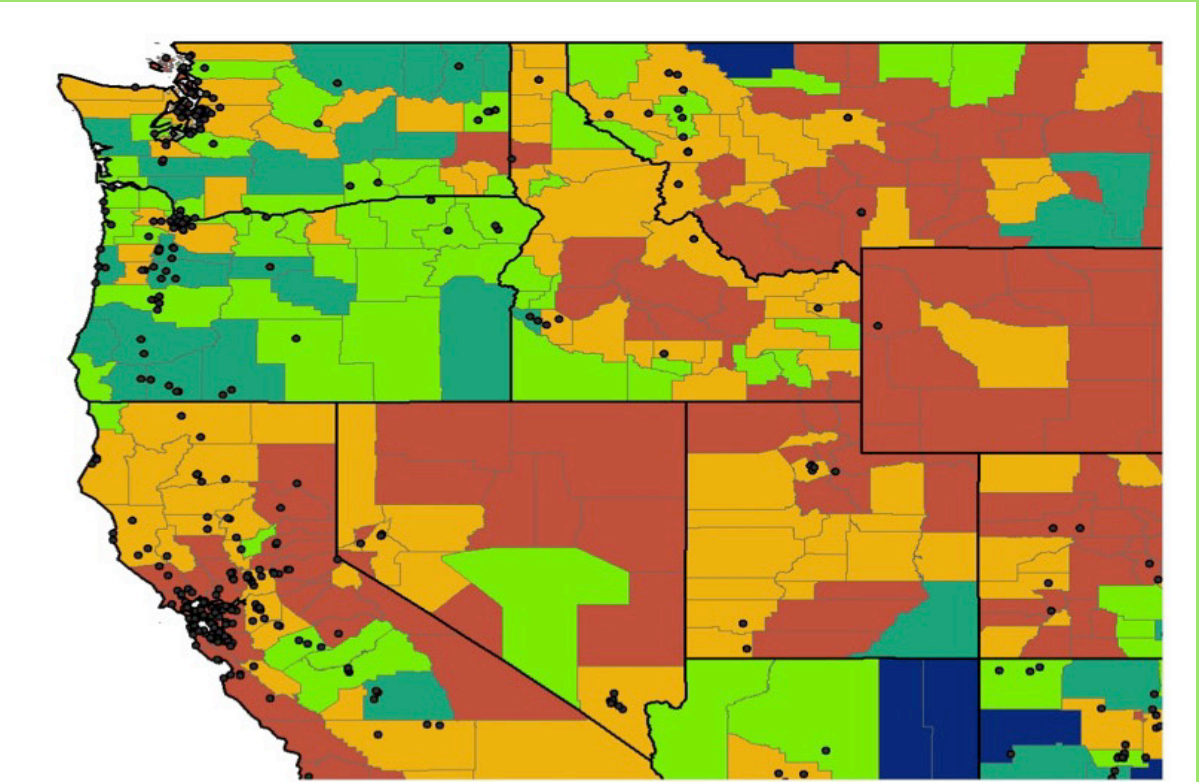
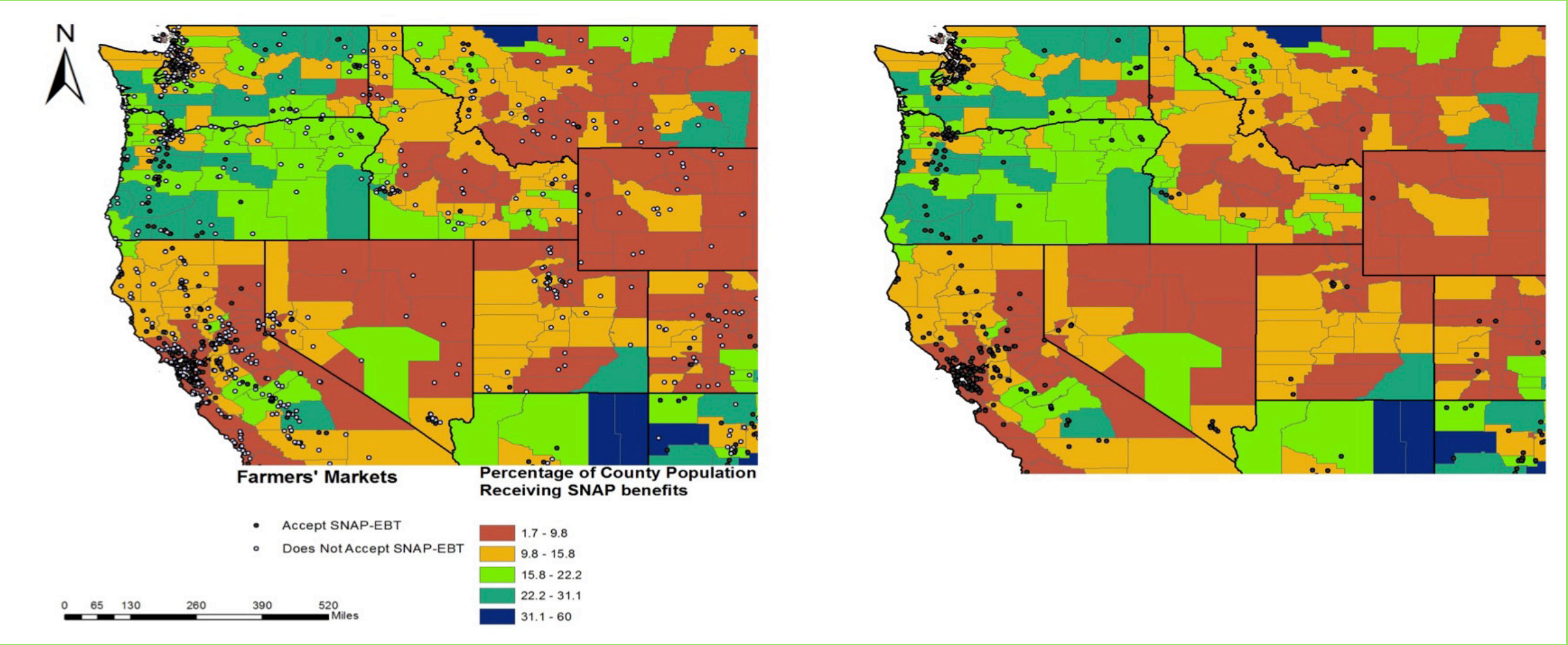


Figure 3. Farmers’ markets in the Northwestern US (all: left, SNAP-accepting: right) overlaying relative SNAP participation by county. Counties in Washington and Oregon tend to have the greatest percentage of citizens in the SNAP program in this region, but most of these counties are lacking cooperating farmers’ markets. However, there are a significant number of general farmers’ markets in this region- nearly every county in Washington and Oregon have at least one market. Northern California has a high ratio of total to SNAP-accepting markets, and may serve as a model of success for the transition process in other regions of the US.

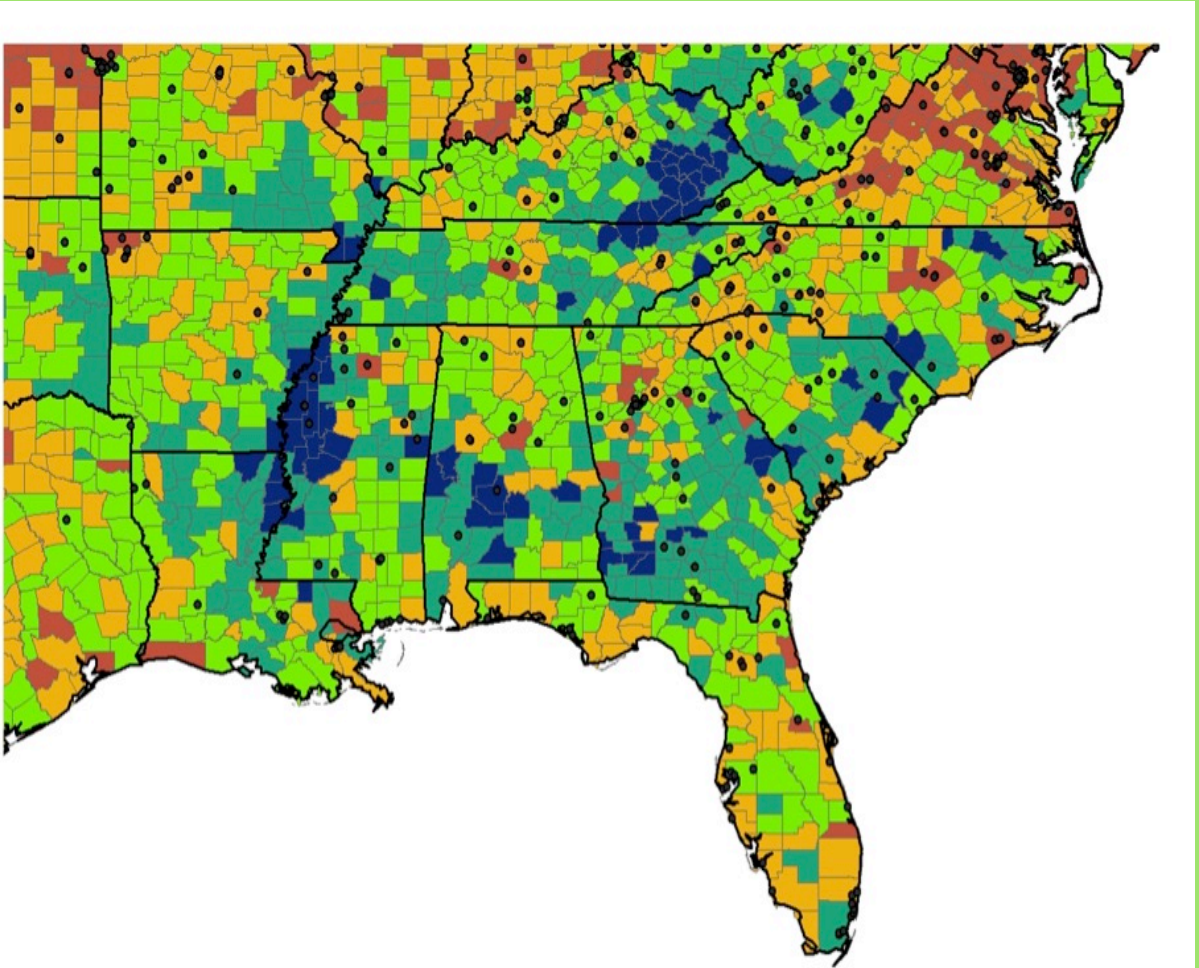
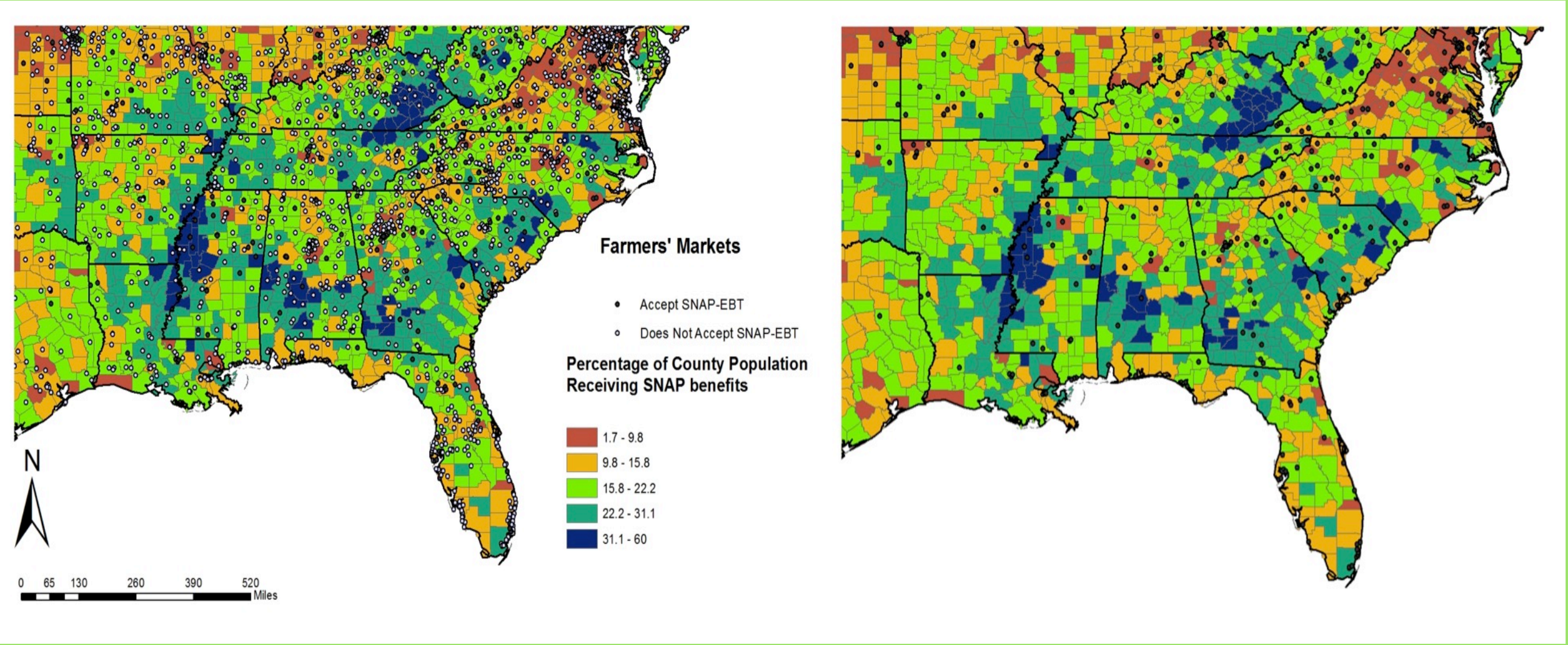


Figure 4. Counties in the southeastern US and their need for nutritional assistance against locations of SNAP-accepting (right) and all (left) farmers’ markets. Many counties in the Appalachia region have 15-60% of the population receiving government aide and yet the availability of SNAP-accepting markets is incredibly low across this entire region. Still, there are a notable number of famers’ markets; just about every county has one even if the market is unable to process SNAP-EBT. The relationship of SNAP accessible farmers’ markets to SNAP usage is most harrowing here, because of the clearly disproportionate correlation of the two.

Results and Conclusions:

In 2012, there were a reported 8,144 farmers’ markets across the US and 2,007- about 25%- were able to handle SNAP-EBT transactions. A reported 14% of the US population received SNAP benefits as of 2010 (last year of complete USDA data). It is apparent from these Arc GIS maps that farmers’ markets (especially those accepting SNAP-EBT) are concentrated primarily in the Eastern US, though there is a high concentration on the western coast as well. Proportion of farmers’ markets with SNAP capabilities is highest on the West Coast, though there is not a high need there. Reception of SNAP benefits is lowest in the Midwest and in the Northeast US, and farmers’ market access is great in terms of quantity and type. However, there is a severe disparity between counties with a high incidence of SNAP usage and farmers’ markets accepting such benefits in the Southeast, mainly the Appalachia region, and also the Pacific Northwest. When including the non-SNAP markets, there is a relative abundance in these regions illustrating the small percentage of markets enabled to accept these food bucks. Were these markets to begin accepting SNAP transactions, how might the purchasing habits of poor families there change? Their ability to acquire healthier and fresher foods would undoubtedly increase. Though the transition process to accepting SNAP-benefits may be arduous, it holds immense power in shaping food access for millions of people. Revitalizing the American food system cannot happen overnight nor with one simple solution, and yet a small change such as equipping those sources of fresh, healthy food to accept SNAP-EBT is a pragmatic step that will greatly impact the lives of many.

Source: USDA Agricultural Marketing Service (2014) and USDA Economic Research Service (2013)