



**KEOUGH SCHOOL
OF GLOBAL AFFAIRS**

Transportation as a Barrier to Employment: The Case of Wayne County, WV

A Report for Coalfield Development

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BACKGROUND

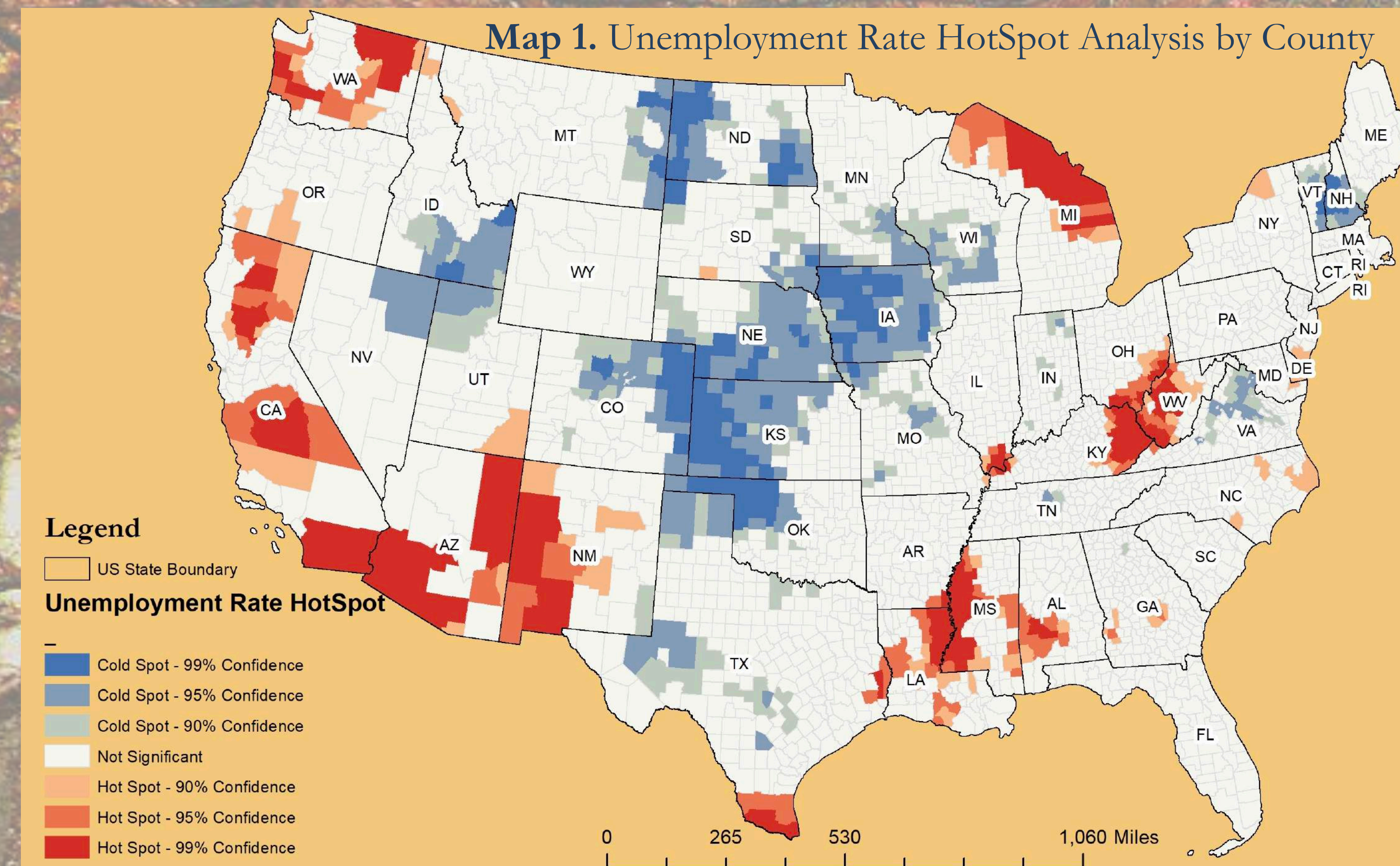
Once characterized by the coal mining industry, West Virginia, the poorest state in the United States, has long struggled to move up the economic and development ladder at the same rate as the rest of the country. With unemployment wavering above national averages, issues with social exclusion and transport poverty are at the helm. Key informant interviews and panel discussions with employees and leadership of Coalfield Development (a non-profit social enterprise in Wayne County, WV) revealed transportation as a critical barrier to work.

To provide some initial scoping for the organization in order to address employee transportation challenges, this analysis looks at public transit options and usage, in addition to unemployment and other potential factors.

METHODS

This analysis focused on transport poverty and employment, using 2018 data from the US Census Bureau (unemployment, labor force participation, poverty, population density) and the Bureau of Labor Statistics, and spatial data retrieved from the US Census Bureau's TIGER Files. It also used image files from the Tri-State Transit Authority to digitize available bus routes in Wayne County, WV.

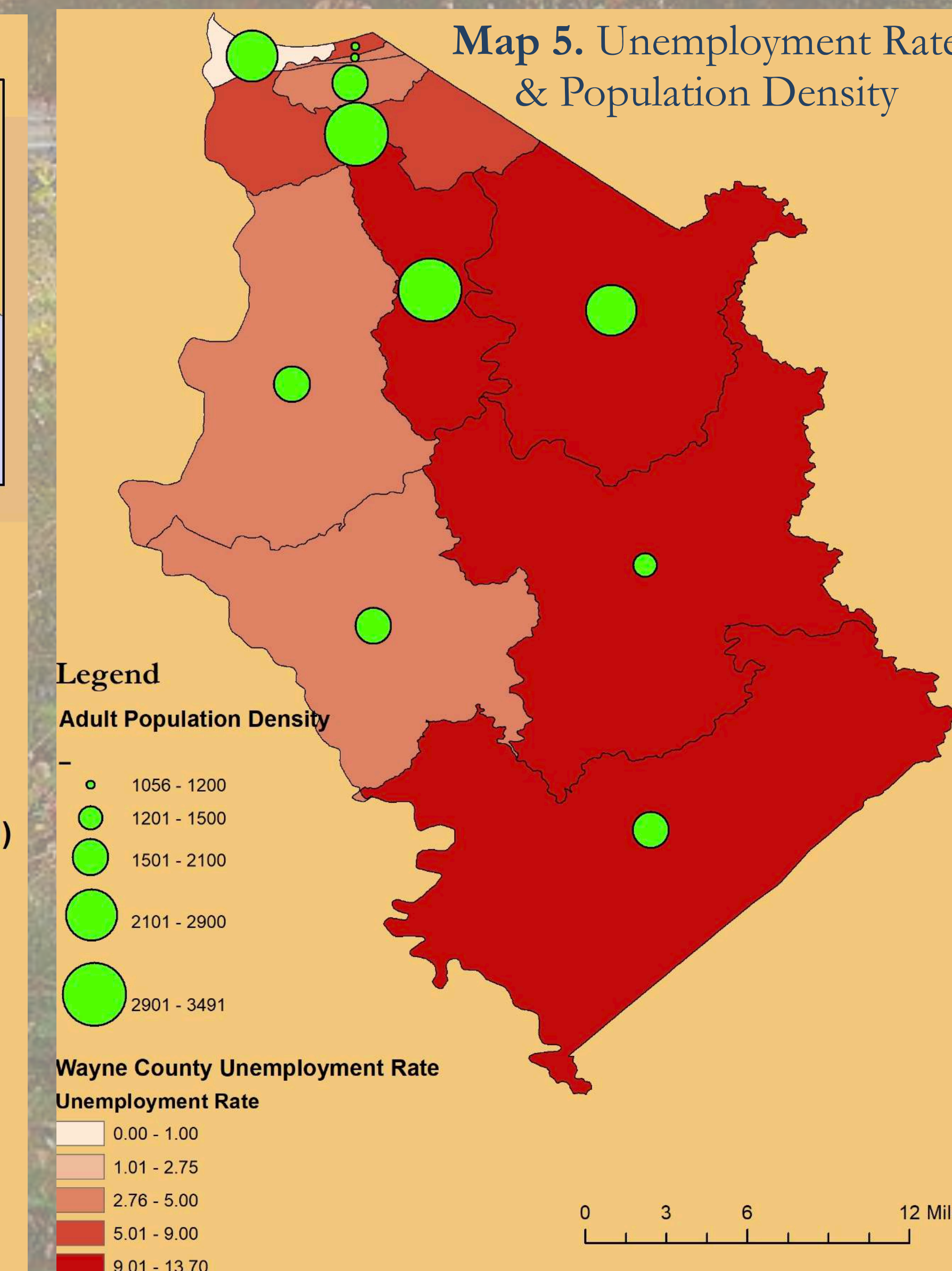
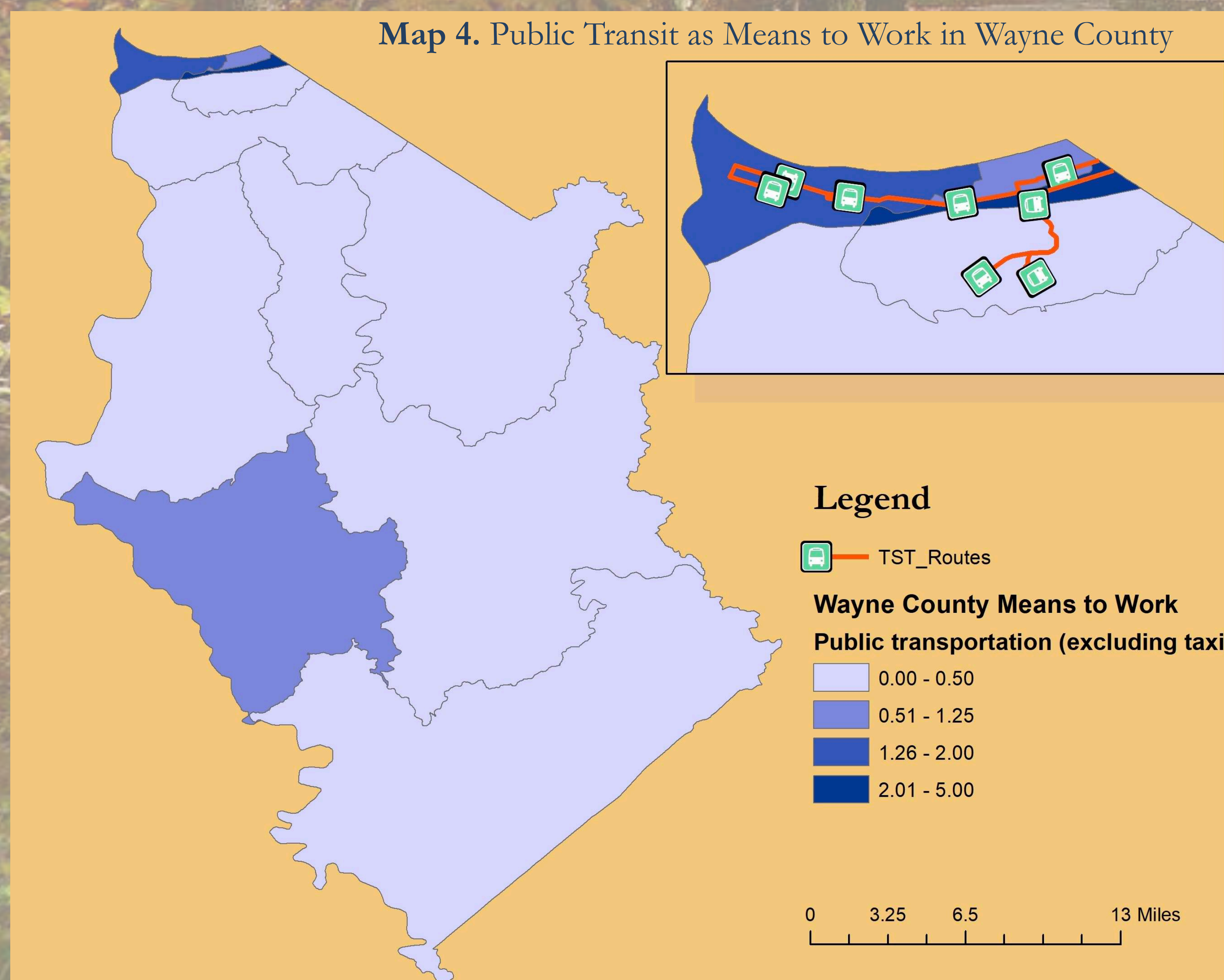
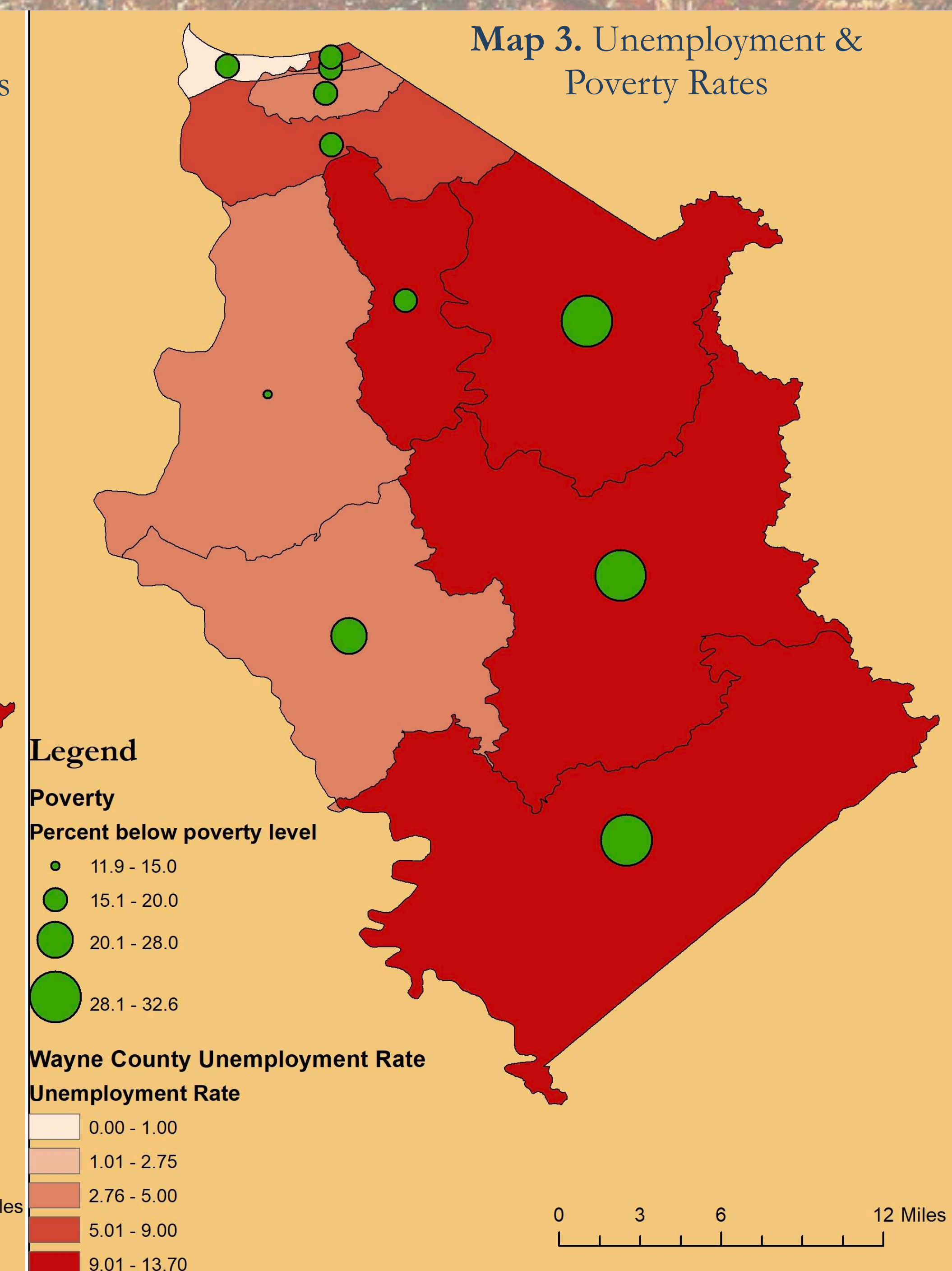
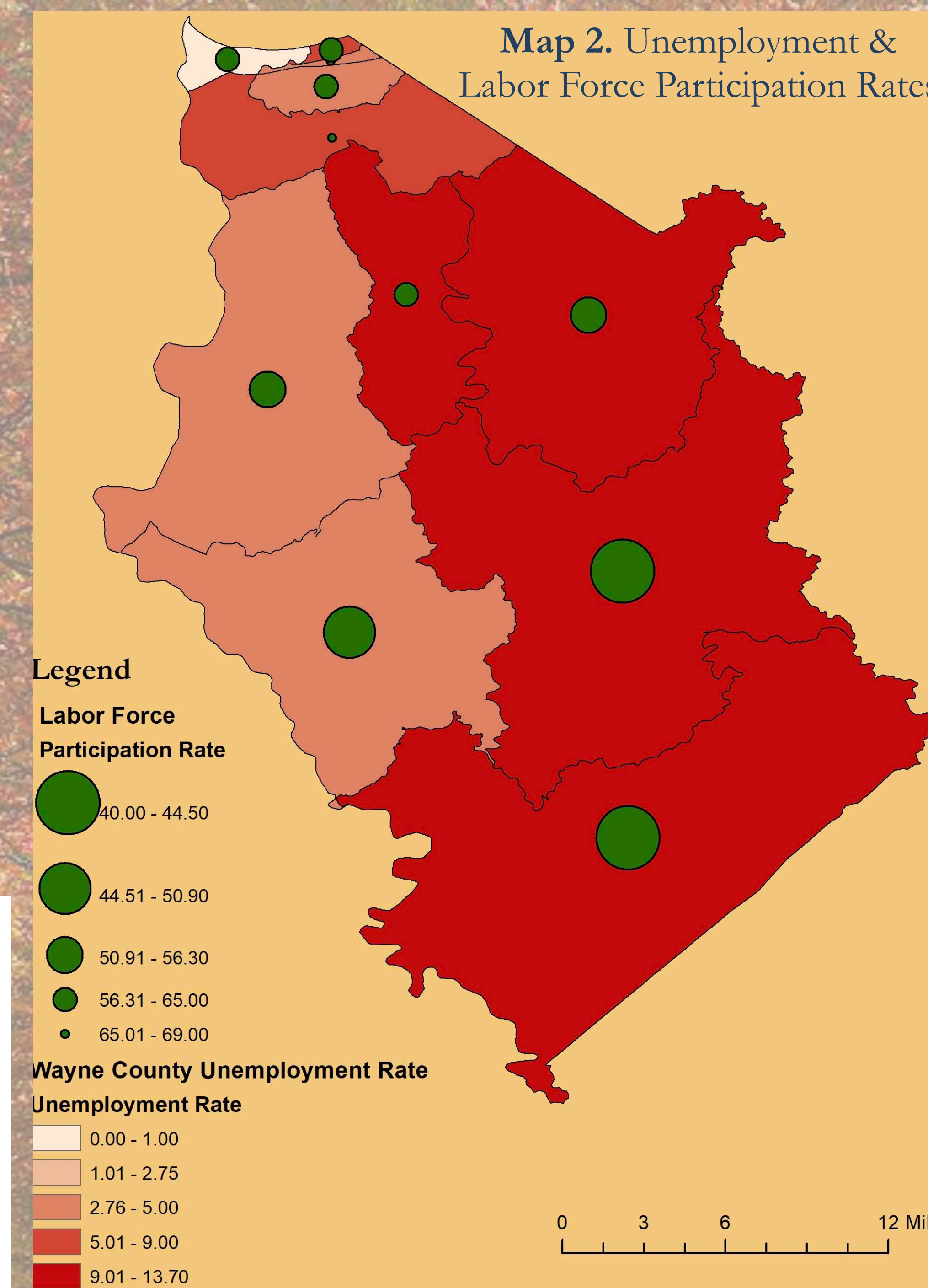
First, **Map 1** used a HotSpot analysis of unemployment in the contiguous United States. **Map 2** and **Map 3** joined demographic data to WV shape file to create a choropleth map showing unemployment rates in Wayne census tracts and graduated symbols to represent labor force participation and poverty rates. **Map 4** joined demographic data to WV shape file to create a choropleth showing public transit usage as a means to work. It also used digitizing to highlight the limited public transit routes available in the county. Lastly, **Map 5** used the same method as maps 2 and 3, but looked at population density.



DISCUSSION

The HotSpot analysis highlighted most of West Virginia as a hotspot for unemployment (see **Map 1**). A detailed look at Wayne County showed high levels of unemployment (9.01% - 13.70%) in four of the census tracts. In addition, these census tracts had labor force participation rates as low as 40% (see **Map 2**) and poverty rates as high as 32.6% (see **Map 3**).

It was curious to note that the northernmost census tracts tended to have better outcomes than the four previously mentioned tracts. Three potential contributing factors include the tracts' proximity to the city of Huntington, border with Ohio, and access to the only public transit routes in the county. As can be noted in **Map 4**, public transit as a means of transportation to work had low usage throughout the county, with the highest use rates concentrated in the northernmost census tracts.



NEXT STEPS

From this initial scoping it would be interesting to further explore the need and impact of expanding public transit into the most affected census tracts. For greatest impact this focus should be on those tracts with higher population density (see **Map 5**), as an intervention would reach a broader percentage of the population. Further analysis should include additional factors such as major employment hubs and distance to populated areas, major/paved roads and their conditions, as well as consumer preferences to public transit options

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