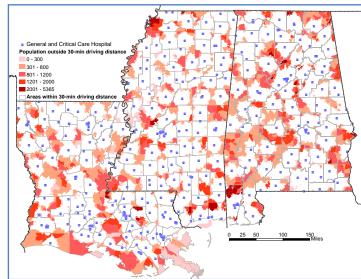
## Identifying Gaps in Available Healthcare Resources in Louisiana, Mississippi and Alabama

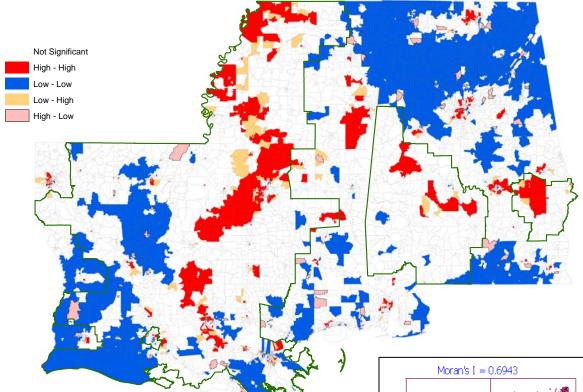
The Delta Regional Institute at UMMC, through a funding support from the US Department of Health and Human Services (HHS), has undertaken an initiative for an in-depth study of the health disparities in three southern states-- Louisiana, Mississippi and Alabama. The GIS and Remote Sensing program is working with DRI to quantify the disparities and identifying the healthcare resources gaps in the study area.

Studying health disparities is a major focus for DRI and MIGMH at UMMC. State site license is being critical for both training and research for these studies. A major project involves identifying the gaps in available healthcare resources in three southern states, Mississippi, Alabama and Louisiana, as it relates with the population needs and access. Below, Figure 1 shows the areas outside the 30-minute driving distance, which is threshold for many health issues requiring immediate medical care.

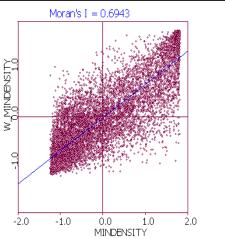


Areas without access to a hospital within 30 minutes (total calculated population = 927,042)

## Identifying spatial autocorrelation using Local indicators of spatial association (LISA) in the distribution of minority by census Block Group



Moran's I indicates existence of spatial auto-correlation among minority distributions and LISA map identifies the locations of different distribution characteristics. High-High indicates Block Groups with high number of minorities are surrounded by Block Groups with high number of minorities and Low-Low indicates Block Groups with low number of minorities are surrounded by Block Groups with low number of minorities, while Low-High and High-Low indicate no significant relationship. Green line outlines the Delta Region as defined by the Delta Regional Authority.



High value of local **Moran's I** indicates strong positive relationship for higher or lower rates than expected by chance