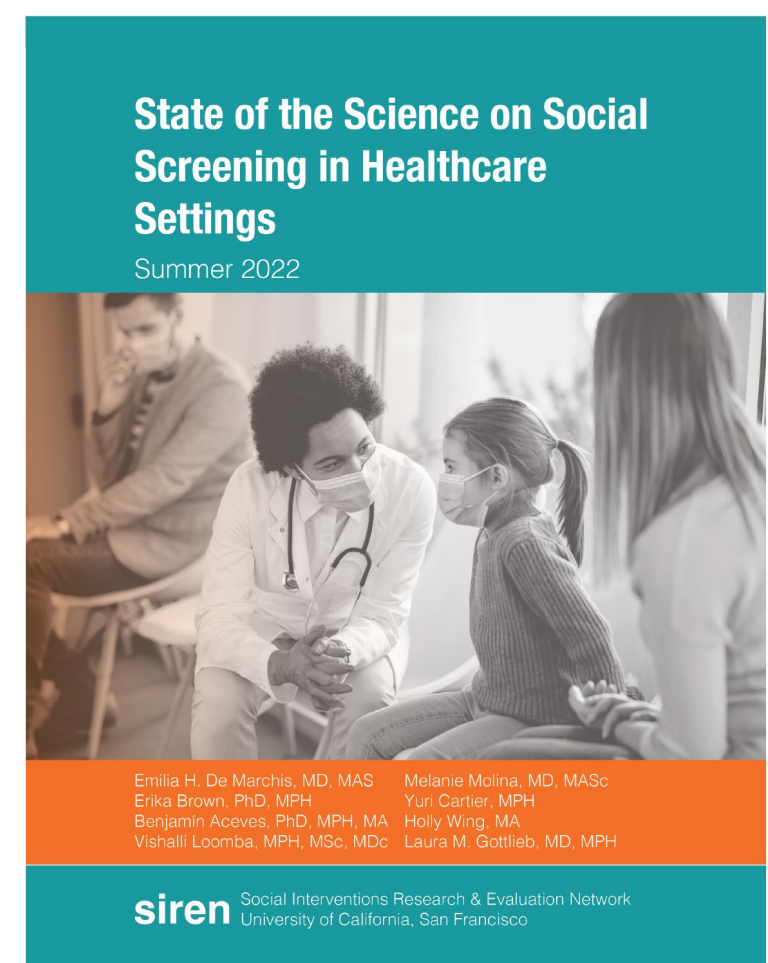


# THE SOCIAL DETERMINANTS OF HEALTH (SDH) CORE

## CONSULTATIONS

### INDIVIDUAL-LEVEL SDH MEASURES

Income, Wealth, Employment, Education, Occupation, Food insecurity, Housing insecurity, Financial insecurity, Living conditions, Transportation, Internet access, Family structure, Discrimination, Health literacy, etc.



UAB Toolkit



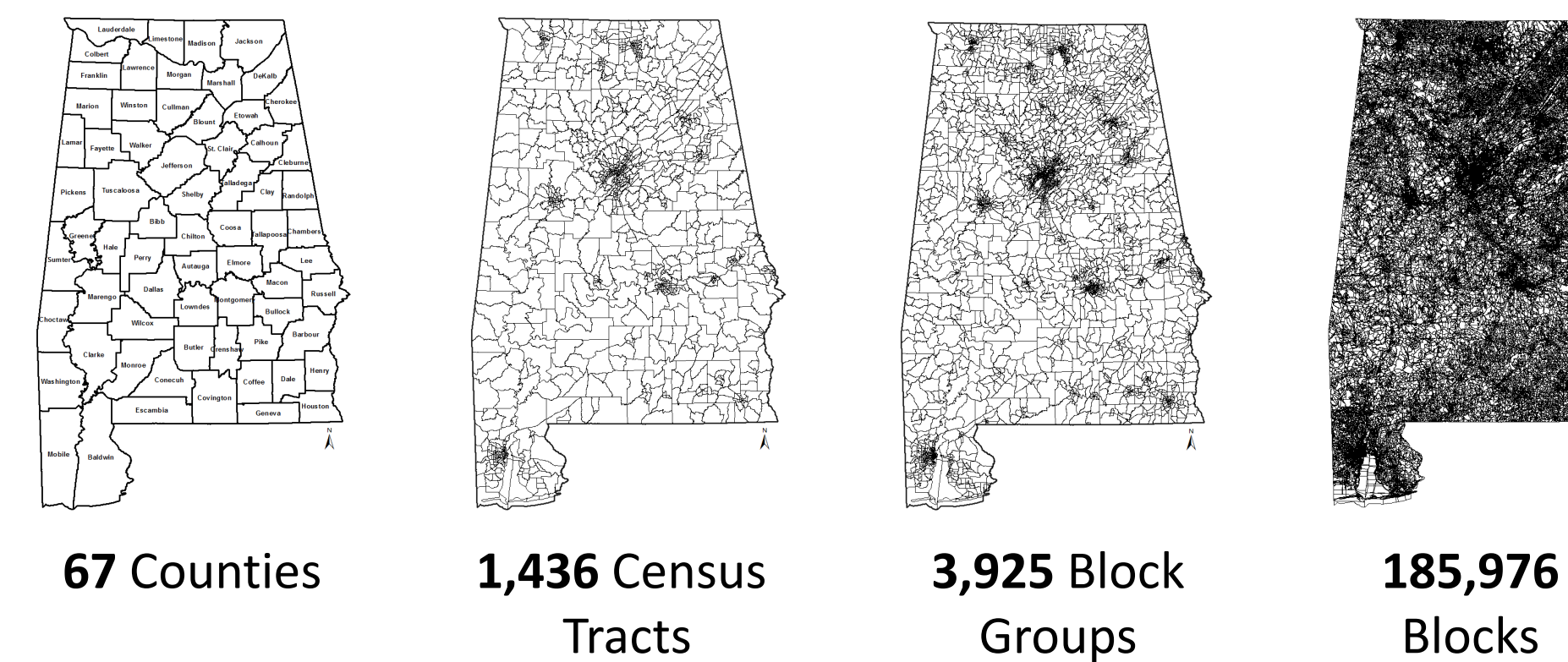
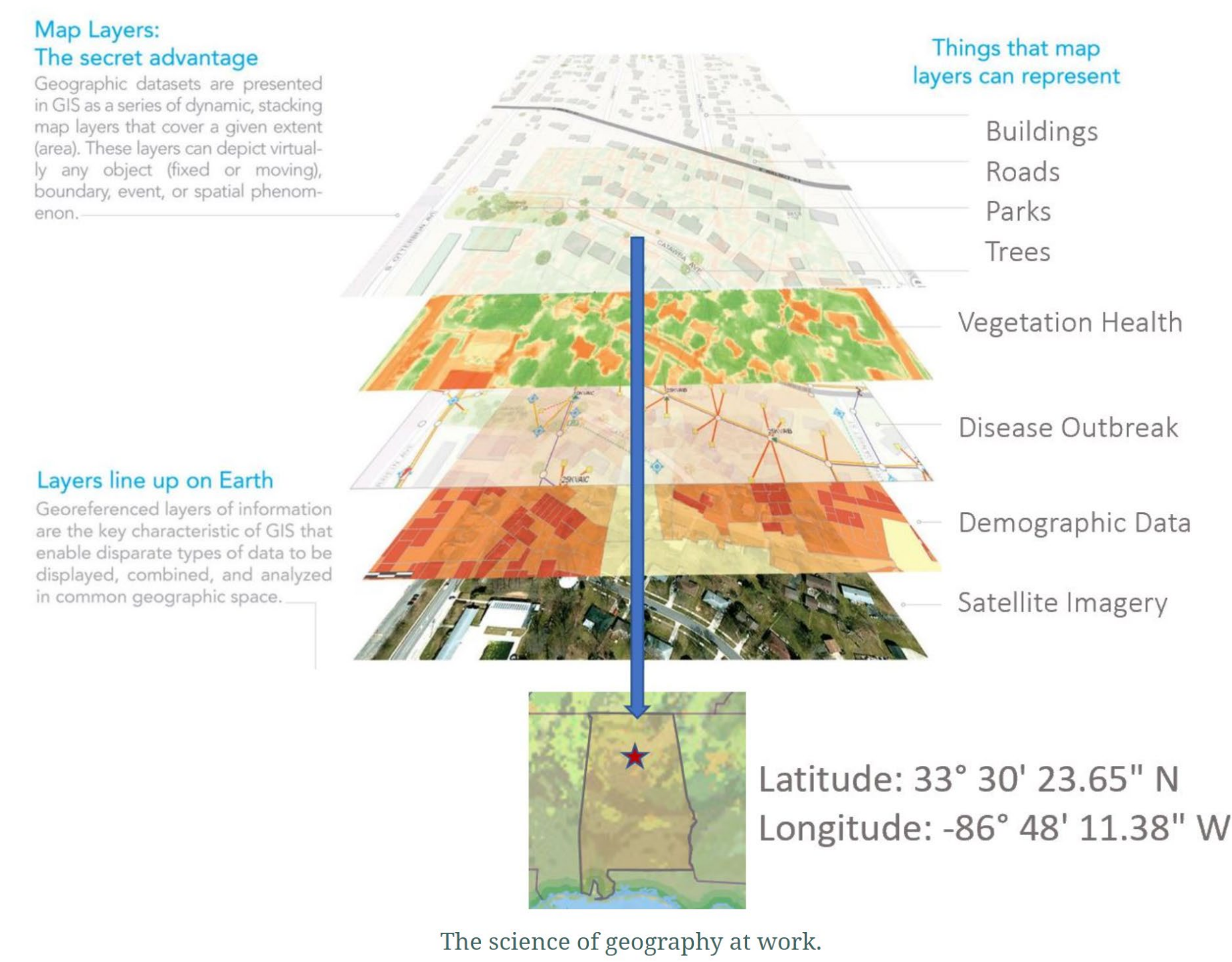
### AREA-LEVEL SDH MEASURES

Area Deprivation Index, Social Vulnerability Index, Environmental Justice Index, Crime Index, Walkability Index, Child Opportunity Index, Food Access, Rurality, Residential Segregation, Climate Justice, Structural Racism, etc.

Overall Environmental Justice Rank	Environmental Justice Index		Social Vulnerability Index	
	Racial/Ethnic Minority Status	Minority Status	Socioeconomic Status	Overall Vulnerability
	<ul style="list-style-type: none"> <li>Racial/Ethnic Minority Status</li> <li>Minority Status</li> <li>Poverty</li> <li>No High School Diploma</li> <li>Unemployment</li> <li>Socioeconomic Status</li> <li>Housing Tenure</li> <li>Housing Burdened Lower Income Households</li> <li>Lack of Health Insurance</li> <li>Lack of Broadband Access</li> <li>Age 65 and Older</li> <li>Age 17 and Younger</li> <li>Civilian with a Disability</li> <li>Speaks English "Less than Well"</li> <li>Group Quarters</li> <li>Mobile Homes</li> </ul>	<ul style="list-style-type: none"> <li>Minority Status</li> <li>Poverty</li> <li>No High School Diploma</li> <li>Unemployment</li> <li>Socioeconomic Status</li> <li>Housing Tenure</li> <li>Housing Burdened Lower Income Households</li> <li>Lack of Health Insurance</li> <li>Lack of Broadband Access</li> <li>Age 65 and Older</li> <li>Age 17 and Younger</li> <li>Civilian with a Disability</li> <li>Speaks English "Less than Well"</li> <li>Group Quarters</li> <li>Mobile Homes</li> </ul>	<ul style="list-style-type: none"> <li>Relative 100% Poverty</li> <li>Unemployed</li> <li>Housing Cost Burden</li> <li>No High School Diploma</li> <li>No Health Insurance</li> <li>Age 65 &amp; Older</li> <li>Age 17 &amp; Younger</li> <li>Civilian with a Disability</li> <li>Single Parent Households</li> <li>English Language Proficiency</li> <li>Presence or Lack of any need</li> <li>Black or African American, Not Hispanic or Latino</li> <li>American Indian or Alaska Native, Not Hispanic or Latino</li> <li>Native Hawaiian or Other Pacific Islander, Not Hispanic or Latino</li> <li>Two or More Races, Not Hispanic or Latino</li> <li>Other Race, Not Hispanic or Latino</li> <li>Multi-Unit Structures</li> <li>Mobile Homes</li> <li>Crowding</li> <li>No Vehicle</li> <li>Group Quarters</li> </ul>	<ul style="list-style-type: none"> <li>Relative 100% Poverty</li> <li>Unemployed</li> <li>Housing Cost Burden</li> <li>No High School Diploma</li> <li>No Health Insurance</li> <li>Age 65 &amp; Older</li> <li>Age 17 &amp; Younger</li> <li>Civilian with a Disability</li> <li>Single Parent Households</li> <li>English Language Proficiency</li> <li>Presence or Lack of any need</li> <li>Black or African American, Not Hispanic or Latino</li> <li>American Indian or Alaska Native, Not Hispanic or Latino</li> <li>Native Hawaiian or Other Pacific Islander, Not Hispanic or Latino</li> <li>Two or More Races, Not Hispanic or Latino</li> <li>Other Race, Not Hispanic or Latino</li> <li>Multi-Unit Structures</li> <li>Mobile Homes</li> <li>Crowding</li> <li>No Vehicle</li> <li>Group Quarters</li> </ul>
	Area Deprivation Index (ADI)			
<ul style="list-style-type: none"> <li>PM2.5</li> <li>Air Pollution</li> <li>Diesel Particulate Matter</li> <li>Air Toxics Cancer Risk</li> <li>National Priority List Sites</li> <li>Toxic Release Inventory Sites</li> <li>Treatment, Storage, and Disposal Sites</li> <li>Risk Management Plan Sites</li> <li>Coal Mines</li> <li>Lead Mines</li> <li>Recreational Parks</li> <li>Houses Built Pre-1980</li> <li>Walkability</li> <li>High-Volume Roads</li> <li>Transportation Infrastructure</li> <li>Railways</li> <li>Airports</li> <li>Impaired Surface Water</li> <li>Water Pollution</li> </ul>	<ul style="list-style-type: none"> <li>PM2.5</li> <li>Air Pollution</li> <li>Diesel Particulate Matter</li> <li>Air Toxics Cancer Risk</li> <li>National Priority List Sites</li> <li>Toxic Release Inventory Sites</li> <li>Treatment, Storage, and Disposal Sites</li> <li>Risk Management Plan Sites</li> <li>Coal Mines</li> <li>Lead Mines</li> <li>Recreational Parks</li> <li>Houses Built Pre-1980</li> <li>Walkability</li> <li>High-Volume Roads</li> <li>Transportation Infrastructure</li> <li>Railways</li> <li>Airports</li> <li>Impaired Surface Water</li> <li>Water Pollution</li> </ul>	<ul style="list-style-type: none"> <li>1 % aged ≥25 y with &lt;9 years of education</li> <li>2 % aged ≥25 y with at least high school diploma</li> <li>3 % employed in white-collar occupations</li> <li>4 Median family income, \$</li> <li>5 Income disparity</li> <li>6 Median home value, \$</li> <li>7 Median gross rent, \$</li> <li>8 Median monthly mortgage, \$</li> <li>9 % owner-occupied housing units</li> <li>10 % unemployed</li> <li>11 % families below FPL</li> <li>12 % below 150% of the FPL</li> <li>13 % single-parent households with children</li> <li>14 % households without a motor vehicle</li> <li>15 % households without a telephone</li> <li>16 % housing units w/out complete plumbing</li> <li>17 % households with &gt;1 person per room</li> </ul>	<ul style="list-style-type: none"> <li>1 % aged ≥25 y with &lt;9 years of education</li> <li>2 % aged ≥25 y with at least high school diploma</li> <li>3 % employed in white-collar occupations</li> <li>4 Median family income, \$</li> <li>5 Income disparity</li> <li>6 Median home value, \$</li> <li>7 Median gross rent, \$</li> <li>8 Median monthly mortgage, \$</li> <li>9 % owner-occupied housing units</li> <li>10 % unemployed</li> <li>11 % families below FPL</li> <li>12 % below 150% of the FPL</li> <li>13 % single-parent households with children</li> <li>14 % households without a motor vehicle</li> <li>15 % households without a telephone</li> <li>16 % housing units w/out complete plumbing</li> <li>17 % households with &gt;1 person per room</li> </ul>	

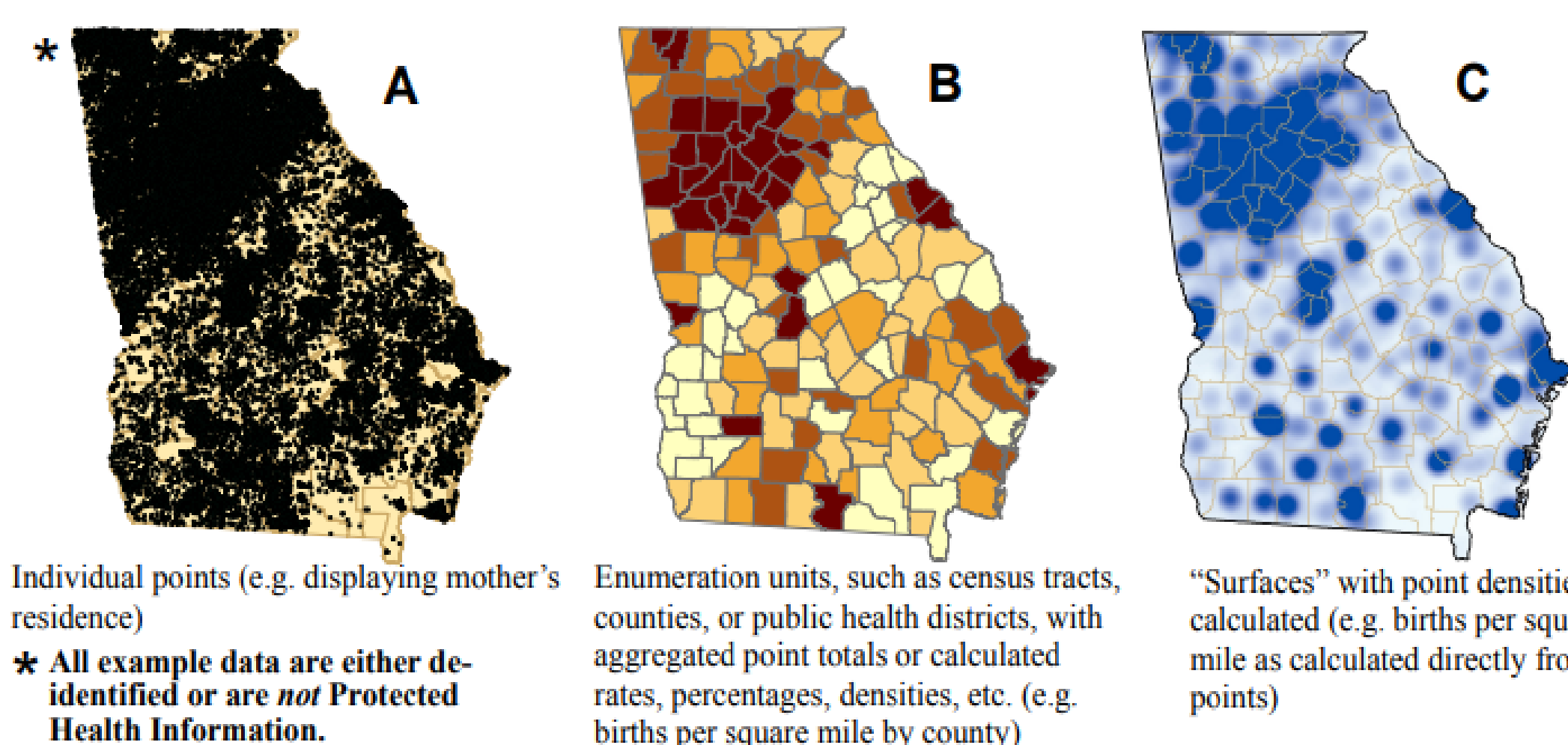
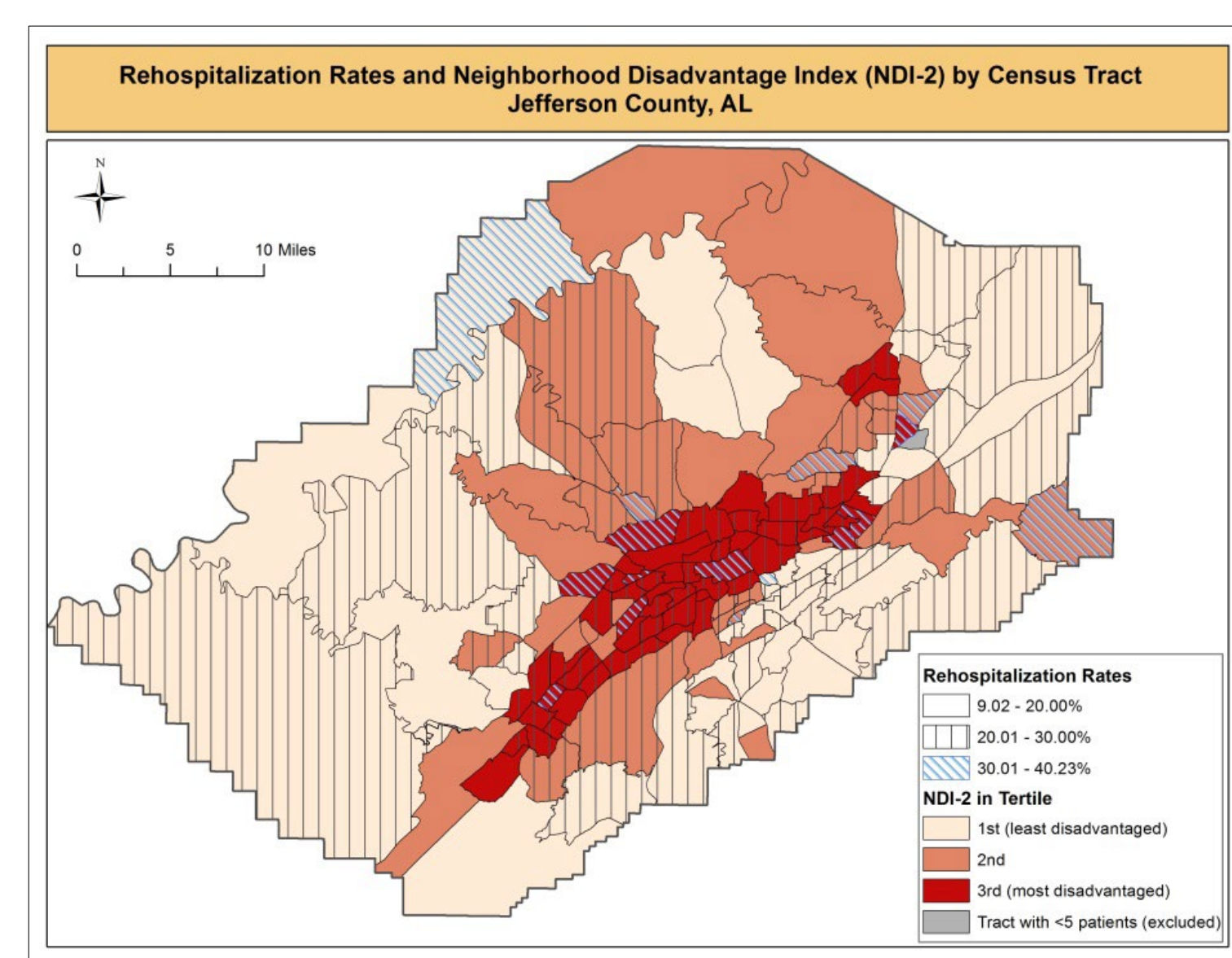


## GEOCODING



## MAPPING

- Study area mapping
- Hot-spot analysis
- Driving distance
- Interactive mapping
- Mapping or publications
- Mapping for privacy

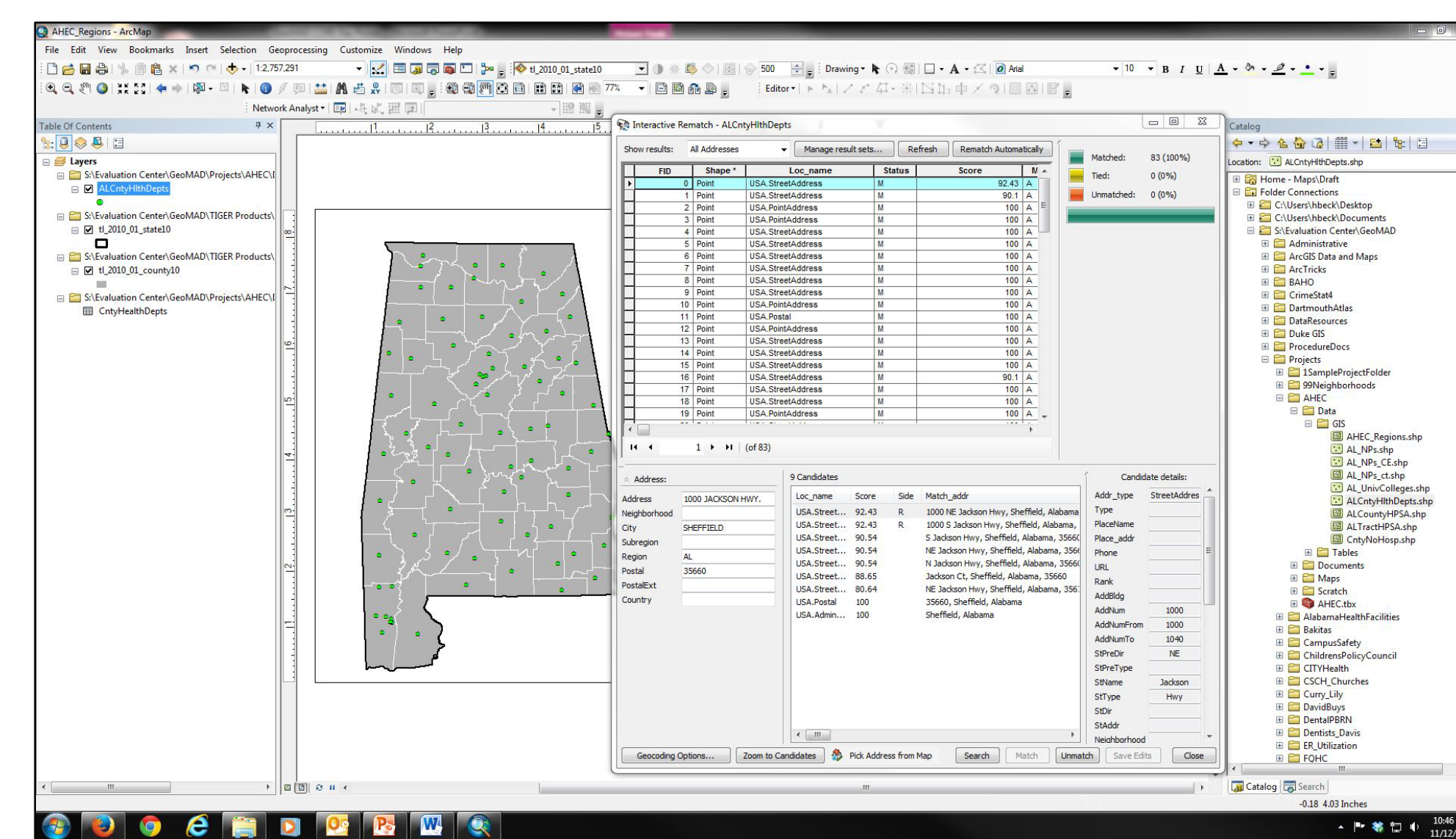


## DATA INTEGRATION

- Obtain geolocation based on address
- Using GIS software, assign a geo-identifier (FIPS code) to each address
- Download SDH data for FIPS codes
- Link SDH data to patient data



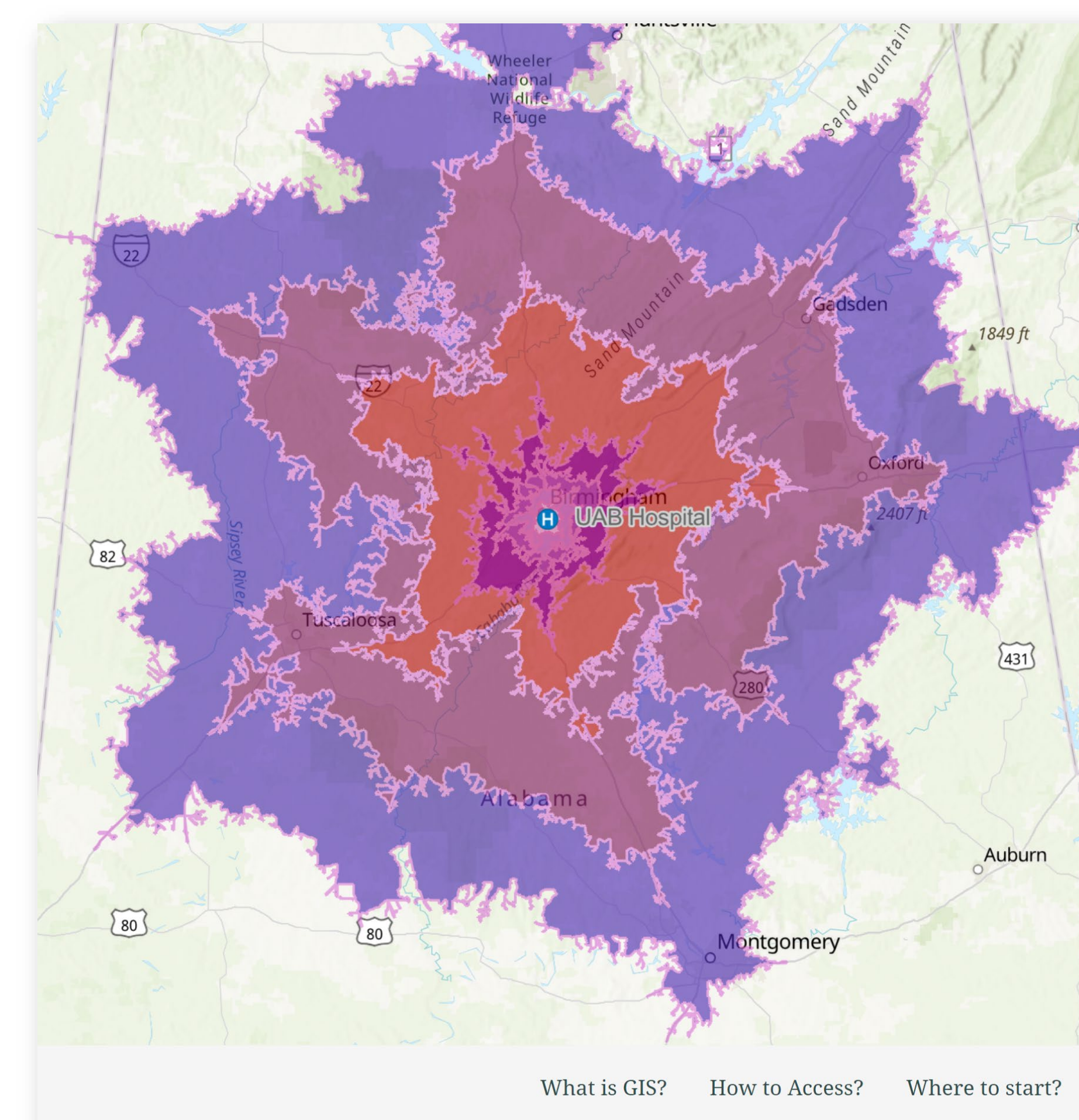
- HIPAA compliant
- Highly accurate



## RESOURCES

### Geospatial Research and Information Domain (GRID)

- **License:** Free Site License for Esri ArcGIS
- **Access:** ArcPro, ArcGIS Online, other Esri desktop, mobile, and cloud-based technology
- **Training:** Online learning modules



## STATISTICAL ANALYSIS

- Statistical analysis and model development
- Generalized linear mixed models
- Generalized estimating equations
- Robust standard errors with regression

## SERVICE REQUEST

### WEBSITE:

[www.uab.edu/medicine/mherc/research/research-cores/social-determinants-health-core](http://www.uab.edu/medicine/mherc/research/research-cores/social-determinants-health-core)

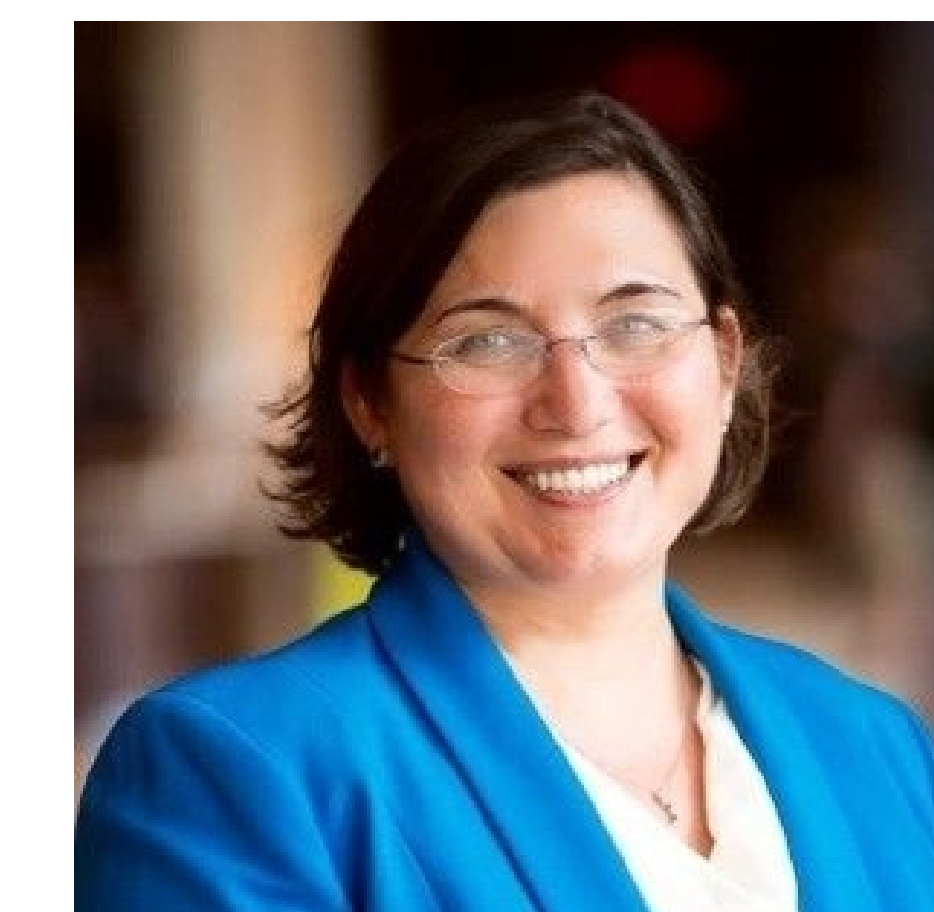
CONTACT: SDHCore@uabmc.edu

### DROP-IN CLINICS:

BDB 826

Monday, 10 am-12pm; Friday, 9:30-11am

## CORE TEAM



Gabriela Oates, PhD  
Director



Elizabeth Baker, PhD  
Co-Director



Ariann Nassel, MA  
Geospatial Scientist



Lucia Juarez, PhD  
Data Analyst