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Final GIS Report

Looking at County-Level Partisan Affiliation, Population, and Income in Response to Georgia's Fetal Heartbeat Bill.

One-Sentence Project Summary

This project looks at the current safe abortion locations in Georgia in response to the "Fetal Heartbeat Bill" to see who this bill will negatively impact the greatest in regard to partisan affiliation, rural vs. urban locale, and median household income .

Purpose & Background

On May 7th, 2019, Georgia's "Fetal Heartbeat Bill," also known as H.B. 481, was signed into law by Republican Governor, Brian Kemp. The bill itself will prohibit abortion procedures six weeks after conception. The "official" reasoning behind creating this deadline currently stands to be that doctors, at the 6-week mark, will be able to discern a fetal heartbeat, fueling the pro-life argument that an embryo should be able to claim basic human rights. However, the unofficial reasoning for this bill, aside from restricting a woman's right to choose, is that most women are still unaware of their pregnancy around the 6-week deadline. Therefore, H.B. 481 will make it nearly impossible for most women in the state of Georgia to respectfully, privately, and safely choose to end their pregnancies regardless of why they decide to do so.

Anti-abortion legislation has been a staple of the Republican party platform since the 1980s. With the 2020 election looming ahead of us, I wanted to examine where the current "bulk" of safe abortion sites are located throughout the state of Georgia. Specifically, I wanted to use to Georgia's 2018 Midterm election results to find a correlation between the amount of safe abortion locations in heavily GOP leaning Congressional districts versus that of Democrat districts. Throughout my research process I looked at the partisan affiliation, population, and median income of the counties and districts in which safe abortion

locations are located. The recent uproar of Georgia's 2018 Gubernatorial election indicates that the effects of Civil Rights-era racial resentment still lingers today, which may have inferences for how the upcoming 2020 election may play out in Southern states. By looking at these characteristics on the county and Congressional districts level made it easier to gage who exactly will be harmed the most by H.B. 481 and who exactly wanted this bill to pass to begin. More specifically, is the "bulk" of safe safe abortion locations located in heavily Republican areas?

With Roe v. Wade still in effect, the findings from my research could potentially be a first step in proving that anti-abortion bills of this nature mostly serve to disenfranchise women of color from lower-income, rural, or Democratic backgrounds. The aim for this map is to be as easily accessible as possible, so that any member of the electorate, regardless of education or interest level, will able to quickly understand what this map is trying to convey about anti-abortion bills in Georgia and its more widespread implications for similar legislation throughout the country.

Literature Review:

The extent of my previous research on abortion legislation has mostly been a widespread introduction to the topic itself. Most of the relevant studies I looked at, in other political science classes, surrounded the relationship between partisanship and policy preferences and were touched on broad range of topics. Thus, abortion was only one of the many highly polarized issues examined. In addition to this, in studies where abortion was the focal point, it was usually within a national study that failed to tie together the three other focuses of my study: partisan affiliation, income level, and race. Aside from academic studies, I looked at the response to H.B. 481 on a more localized scale. Using an article from Atlanta Magazine, I found a solid resource that detailed exactly who, within the state of Georgia, will be most negatively affected by this bill and why, with Georgia-specific reasons and statistics (Chapman 2019). Yet, this article failed to bring up the partisan nature of this bill and more importantly, race.

Although there have been previous political science-based arguments in support of the correlation between income-level and race, this cannot be assumed. Additionally, Georgia sometimes tends to be an outlier in studies involving race and class, specifically within Atlanta, which holds a significant portion of the population and is known to have a "good race relations" and "substantial economic growth" (Sjoquist 2000, 1).

Data:

For the maps depicting income and population density, I used the most available census data from the American Fact Finder (https://factfinder.census.gov/faces/nav/jsf/pages/searchresults.xhtml?refresh=t). The shapefiles of Georgia's counties (https://catalog.data.gov/dataset/tiger-line-shapefile-2017-nation-u-s-current-county-and-equivalent-national-shapefile) and Congressional Districts (https://www.census.gov/geographies/mapping-files/time-series/geo/tiger-line-file.2017.html) came from the U.S. Census Bureau website. For county-level partisan affiliation, I used 2018 Midterm district election results from Georgia's Secretary of State's Website to create a classified choropleth map of the percentage of Republican and Democratic turnout for the U.S. Representative and Gubernatorial races (https://results.enr.clarityelections.com/GA/91639/Web02-state.221451/#/). Finally, for the safe abortion locations, I created an excel file containing the various Planned Parenthood locations (https://www.plannedparenthood.org/health-center/ga) or approved locations, as determined by the National Abortion Federation website (https://prochoice.org/think-youre-pregnant/find-a-provider/).

Methodology:

I began my project by seeking out safe abortion locations on Planned Parenthood's website, that I would eventually geocode. However, I found that there are only **four** Planned Parenthood health centers in all of Georgia. Thankfully, I found a list of additional safe abortion locations that were approved by the

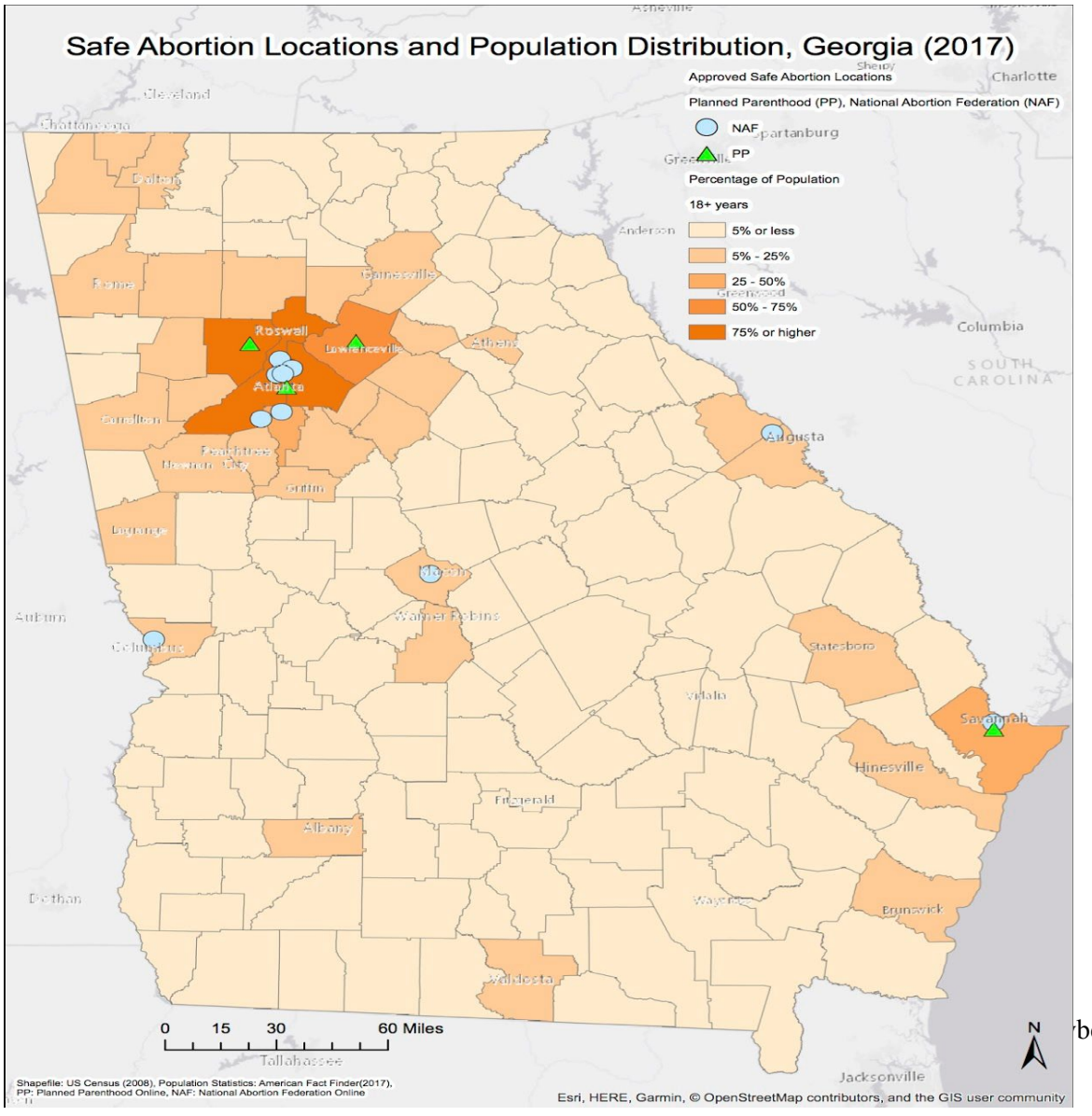
National Abortion Federation. Once these were found, I created an Excel file of the locations' names, their address, zip code, latitude/longitude and location type. For location types, I classified whether the location was a Planned Parenthood Health Center (PP) or an approved National Abortion Federation location (NAF). After this, I downloaded data from the American Fact Finder on Georgia's population and created an Excel file from this data that only contained population of citizens who are 18 years and older. While this significantly limits how those under 18 will be impacted by this bill, they cannot vote. Therefore, including Georgia citizens under 18 would be relevant towards the purpose of the project. I then downloaded data from the American Fact Finder on Georgia's median income estimates by county. With this, and the population distribution data, in mind, I then downloaded a US County shapefile from the US Census website.

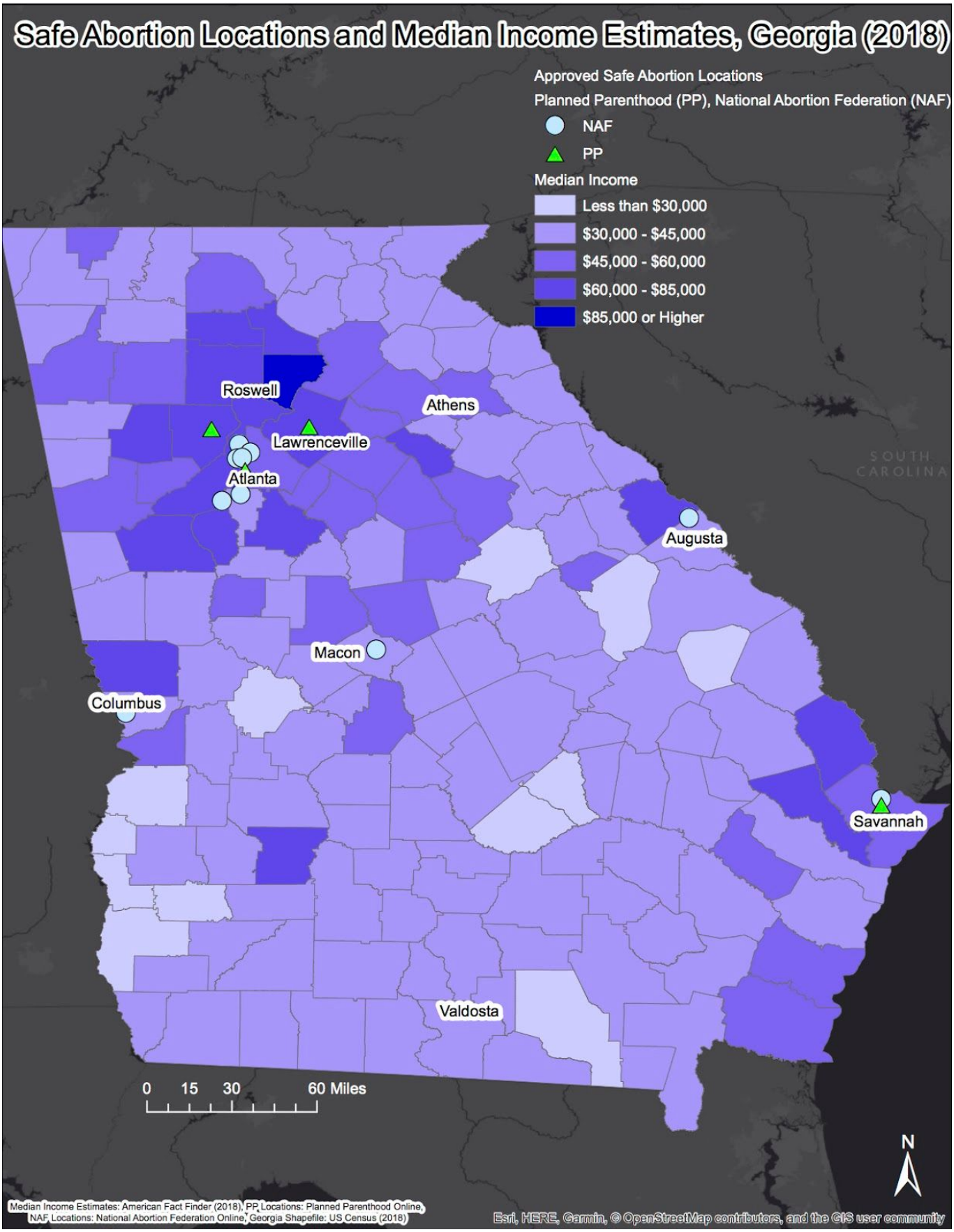
When adding this shapefile to ArcMap, I had to select by location to limit the file to only Georgia counties, before exporting the new layer to my hard-drive for subsequent Georgia maps. I then added the Excel file containing the safe abortion locations, selected "display XY data" and made sure that both GCS and PCS matched that of the county shapefile. Once the points were added, I de-selected the shapefile and added a basemap to make sure my locations were in the correct place before geocoding the addresses to make sure they all matched. Once this was finished, I changed the colors and shapes of the points to differentiate between PP and NAF locations and exported this data. I added the Excel file for Georgia's population by county, joined the sheet with the Shapefile, and normalized by the percentage of the total population in each county. I repeated these steps, albeit the geocoding all over again, when making the Median Income map.

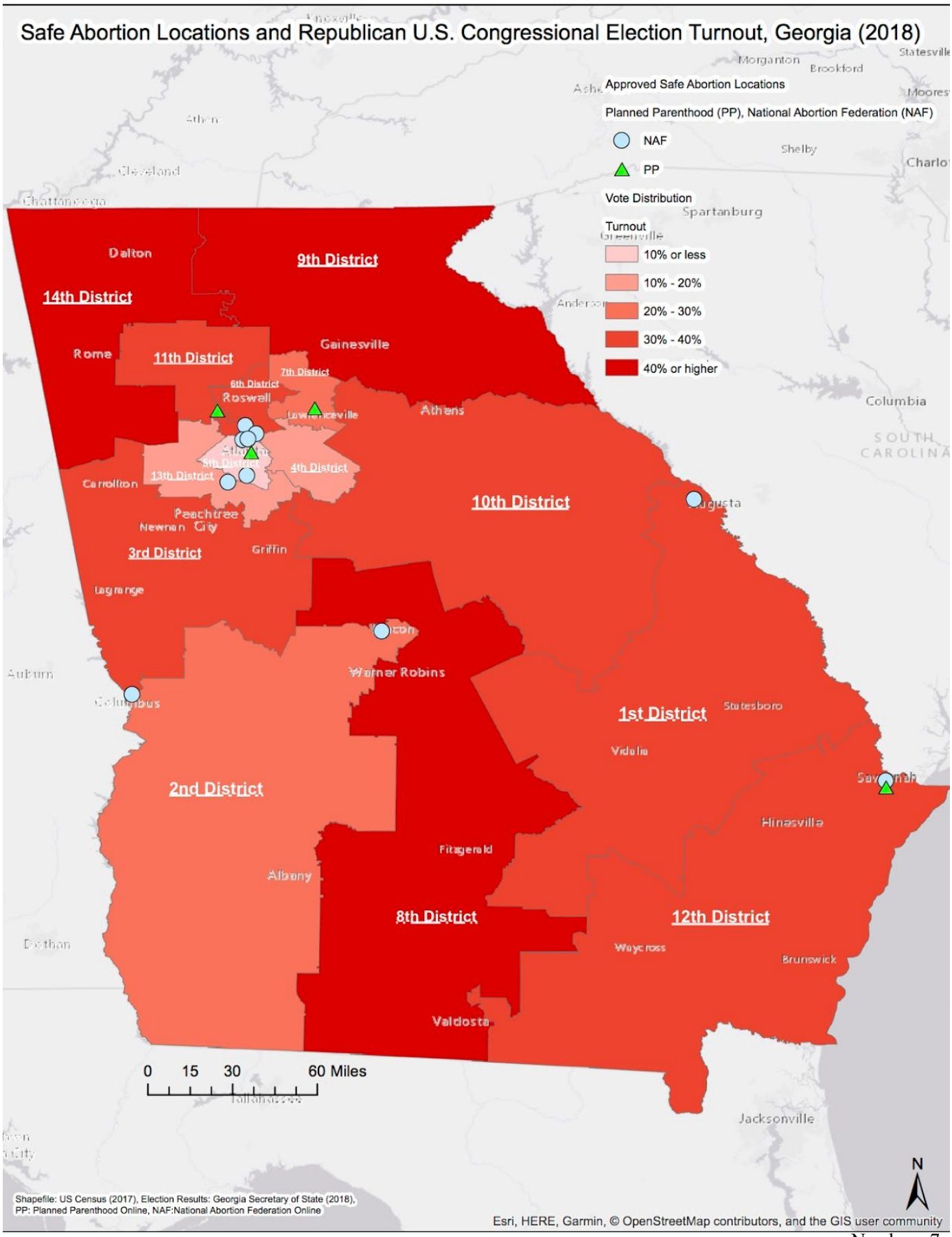
For the partisan affiliation, I downloaded an excel file of the 2018 election result data from Georgia's Secretary of State website. I then created two new excel files that depicted the total votes by Democrat or Republican, registration totals, and district numbers. For the gubernatorial race, registration stats and district numbers were by county. For the U.S. House race this was by Congressional district. I

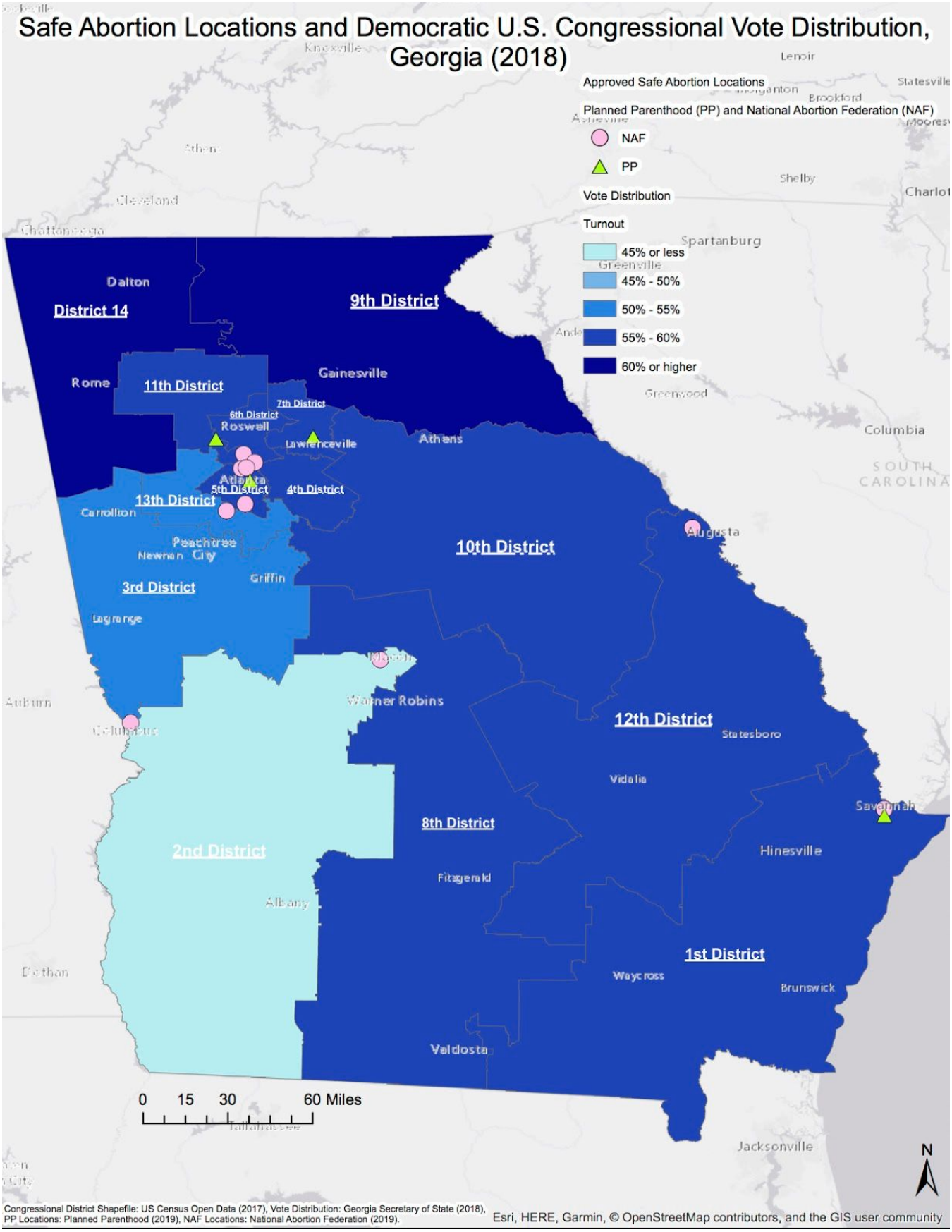
then created two maps depicting Gubernatorial race turnout, one for Democrats, and one for Republicans. I added the previously made Georgia county shapefile and the geocoded safe abortion location points. The classification of these maps were by the total votes by party, normalized by the total amount of registered Georgians. For the Congressional maps, I downloaded a shapefile containing all U.S. Congressional districts. I then made two more maps depicting U.S. House Representative turnout by party, selected Georgia Congressional Districts by location, and added the geocoded points. The classification for these maps were the same as the Gubernatorial Maps. Thus, all four partisan affiliation maps depicted turnout percentage by party for either Congressional District or County and used either red to depict GOP turnout or blue for Democratic turnout.

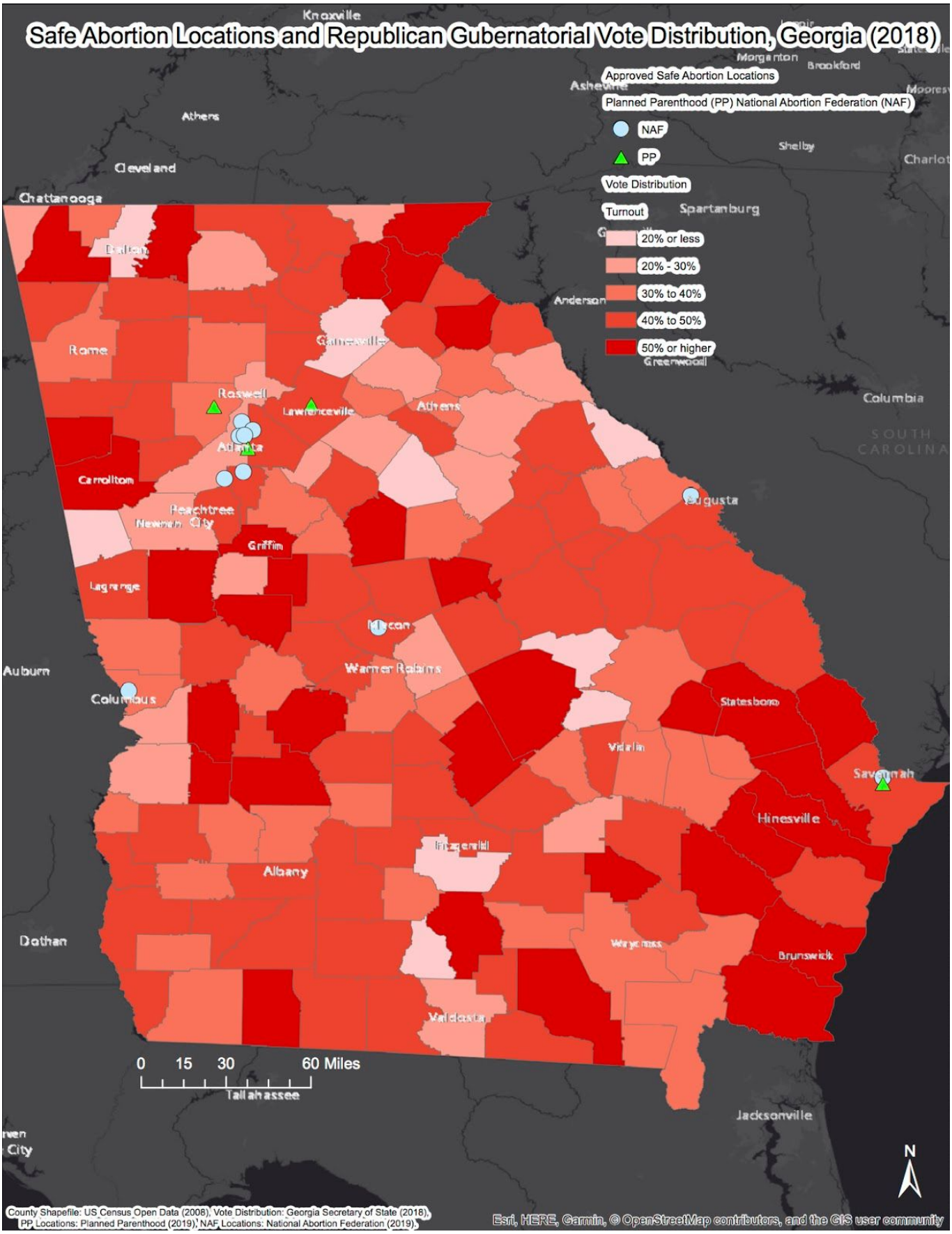
Findings

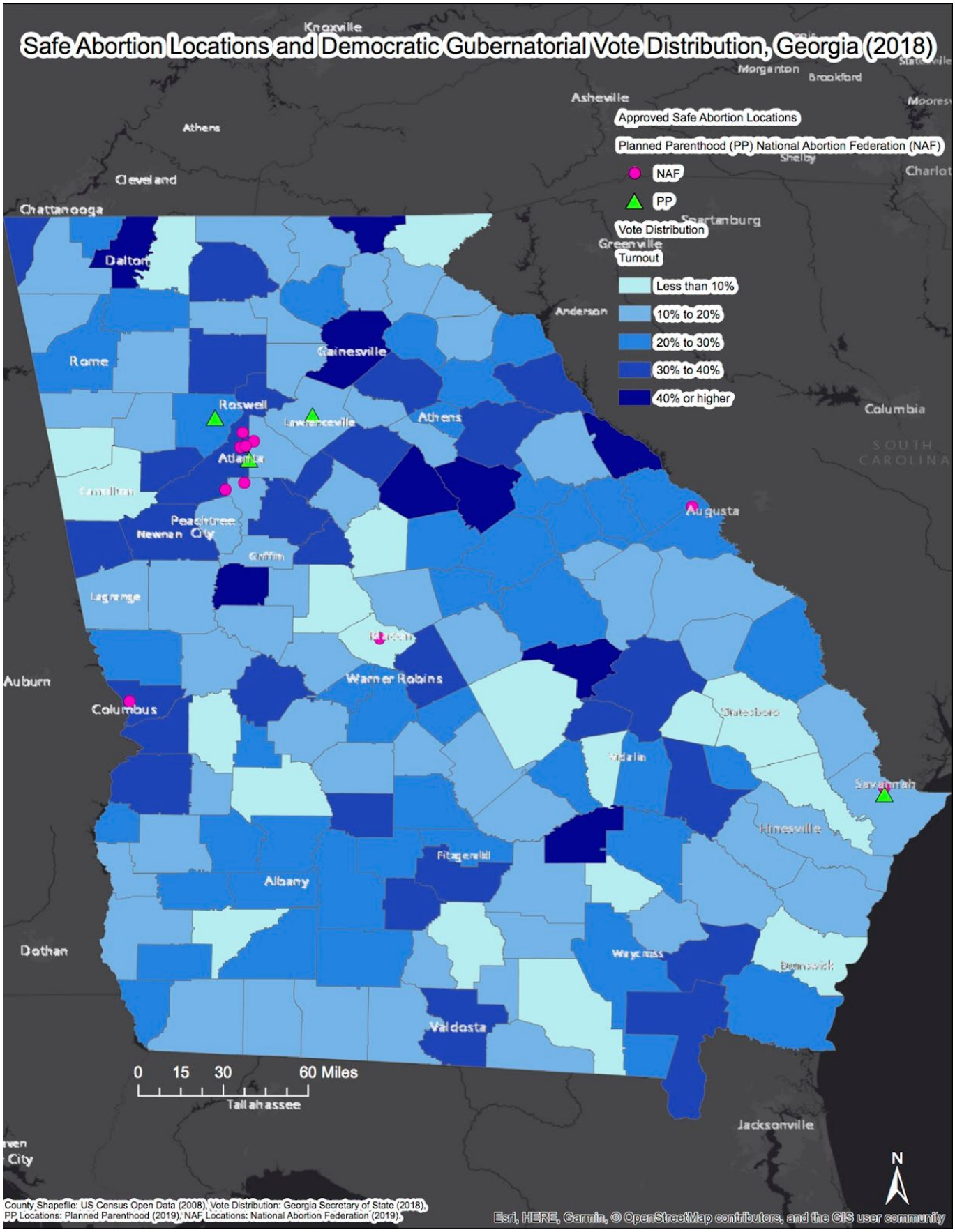



Safe Abortion Locations and Median Income Estimates, Georgia (2018)
Approved Safe Abortion Locations
Planned Parenthood (PP), National Abortion Federation (NAF)
NAF
PP
Median Income
Less than $30,000
$30,000 - $45,000
$45,000 - $60,000
$60,000 - $85,000
$85,000 or Higher
Roswell
Athens
Lawrenceville
Atlanta
SOUTH CAROLINA
Augusta
Macon
Columbus
Savannah
Valdosta
0 15 30 60 Miles
N
Median Income Estimates: American Fact Finder (2018), PP Locations: Planned Parenthood Online, NAF Locations: National Abortion Federation Online, Georgia Shapefile: US Census (2018)
Esri, HERE, Garmin, © OpenStreetMap contributors, and the GIS user community


Safe Abortion Locations and Republican U.S. Congressional Election Turnout, Georgia (2018)
Approved Safe Abortion Locations
Planned Parenthood (PP), National Abortion Federation (NAF)
NAF
PP
Vote Distribution
Turnout
10% or less
10% - 20%
20% - 30%
30% - 40%
40% or higher
9th District
14th District
11th District
7th District
6th District
5th District
4th District
13th District
10th District
3rd District
1st District
2nd District
8th District
12th District
Dalton
Rome
Gainesville
Roswell
Athens
Carrollton
Peachtree City
Newnan
Griffin
Lagrange
Warner Robins
Statesboro
Vidalia
Hinesville
Fitzgerald
Albany
Waycross
Brunswick
Valdosta
Columbia
Spartanburg
Shelby
Morganton
Brookford
Jacksonville
0 15 30 60 Miles
N
Shapefile: US Census (2017), Election Results: Georgia Secretary of State (2018),
PP: Planned Parenthood Online, NAF:National Abortion Federation Online
Esri, HERE, Garmin, © OpenStreetMap contributors, and the GIS user community


Safe Abortion Locations and Democratic U.S. Congressional Vote Distribution, Georgia (2018)
Approved Safe Abortion Locations
Planned Parenthood (PP) and National Abortion Federation (NAF)
NAF
PP
Vote Distribution
Turnout
45% or less
45% - 50%
50% - 55%
55% - 60%
60% or higher
District 14
9th District
11th District
7th District
6th District
5th District
4th District
13th District
10th District
3rd District
12th District
8th District
2nd District
1st District
Dalton
Rome
Gainesville
Roswell
Lawrenceville
Athens
Atlanta
Carrollton
Peachtree
Newnan City
Griffin
Lagrange
Augusta
Warner Robins
Columbus
Auburn
Statesboro
Vidalia
Savannah
Hinesville
Fitzgerald
Albany
Waycross
Brunswick
Valdosta
Jacksonville
Spartanburg
Greenville
Greenwood
Columbia
SOUTH CAROLINA
Shelby
Lenoir
Statesville
Brookford
Cleveland
Chattanooga
Knoxville
Dothan
0 15 30 60 Miles
N
Congressional District Shapefile: US Census Open Data (2017), Vote Distribution: Georgia Secretary of State (2018),
PP Locations: Planned Parenthood (2019), NAF Locations: National Abortion Federation (2019).
Esri, HERE, Garmin, © OpenStreetMap contributors, and the GIS user community


Safe Abortion Locations and Republican Gubernatorial Vote Distribution, Georgia (2018)
Approved Safe Abortion Locations
Planned Parenthood (PP) National Abortion Federation (NAF)
NAF
PP
Vote Distribution
Turnout
20% or less
20% - 30%
30% to 40%
40% to 50%
50% or higher
Knoxville
Athens
Cleveland
Chattanooga
Rome
Gainesville
Roswell
Lawrenceville
Athens
Atlanta
Carrollton
Peachtree
Griffin
Lagrange
Macon
Warner Robins
Auburn
Columbus
Albany
Dothan
Valdosta
Augusta
Statesboro
Vidalia
Savannah
Hinesville
Brunswick
Jacksonville
Tallahassee
Columbia
Spartanburg
Anderson
Shelby
0 15 30 60 Miles
N
County Shapefile: US Census Open Data (2008), Vote Distribution: Georgia Secretary of State (2018),
PP Locations: Planned Parenthood (2019), NAF Locations: National Abortion Federation (2019).
Esri, HERE, Garmin, © OpenStreetMap contributors, and the GIS user community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Approved Safe Abortion Locations
Planned Parenthood (PP) National Abortion Federation (NAF)
NAF
PP
Vote Distribution
Turnout
Less than 10%
10% to 20%
20% to 30%
30% to 40%
40% or higher
Knoxville
Asheville
Athens
Cleveland
Chattanooga
Dalton
Rome
Gainesville
Roswell
Lawrenceville
Athens
Atlanta
Carrollton
Peachtree
Newnan City
Griffin
Lagrange
Auburn
Columbus
Warner Robins
Augusta
Columbia
SOUTH CAROLINA
Statesboro
Savannah
Hinesville
Albany
Dothan
Valdosta
Jacksonville
0 15 30 60 Miles
Tallahassee
N
County Shapefile: US Census Open Data (2008), Vote Distribution: Georgia Secretary of State (2018),
PP Locations: Planned Parenthood (2019), NAF Locations: National Abortion Federation (2019).
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Income & Poverty	Fulton County, Georgia	Bibb County, Georgia	Chatham County, Georgia	Richmond County, Georgia	Muscogee County, Georgia
Black or African American alone, percent (a)	**44.6%**	**55.3%**	**40.7%**	**56.7%**	**47.6%**
PEOPLE					
Income & Poverty					
Median household income (in 2017 dollars), 2013-2017	$61,336	$38,183	$52,215	$39,430	$43,239
Per capita income in past 12 months (in 2017 dollars), 2013-2017	$41,041	$23,426	$28,765	$21,464	$24,604
Persons in poverty, percent	14.8%	25.0%	16.3%	23.7%	22.6%

U.S. Census Bureau.gov. *Quick Facts, Income & Poverty* in Fulton County (Atlanta), Bibb County (Macon), Chatham County (Savannah), Richmond County (Augusta), and Muscogee County (Columbus). 2017.

Race and Hispanic Origin	Fulton County, Georgia	Bibb County, Georgia	Chatham County, Georgia	Richmond County, Georgia	Muscogee County, Georgia
Black or African American alone, percent (a)	**44.6%**	**55.3%**	**40.7%**	**56.7%**	**47.6%**
PEOPLE					
Race and Hispanic Origin					
White alone, percent	45.8%	40.7%	53.6%	38.2%	45.9%
Black or African American alone, percent (a)	**44.6%**	**55.3%**	**40.7%**	**56.7%**	**47.6%**
American Indian and Alaska Native alone, percent (a)	0.3%	0.3%	0.4%	0.4%	0.5%
Asian alone, percent (a)	7.2%	2.2%	3.0%	1.8%	2.8%
Native Hawaiian and Other Pacific Islander alone, percent (a)	Z	0.1%	0.1%	0.2%	0.2%
Two or More Races, percent	2.1%	1.5%	2.3%	2.6%	3.0%
Hispanic or Latino, percent (b)	7.3%	3.3%	6.6%	5.0%	7.6%
White alone, not Hispanic or Latino, percent	39.8%	38.3%	48.4%	34.8%	40.4%

U.S. Census Bureau.gov. *Quick Facts, Race & Hispanic Origin* in Fulton County (Atlanta), Bibb County (Macon), Chatham County (Savannah), Richmond County (Augusta), and Muscogee County (Columbus). 2017.

Discussion of Findings

The first map depicts the population density of Georgia residents, ages 18 years and above by county. The plurality of Georgians reside within the metropolitan area of Atlanta and its various surrounding suburbs such as Roswell and Lawrenceville. Aside from having the majority of citizens, the five counties that encompass the "Greater Atlanta Area," also has the majority of safe abortion locations with 11 out the total 15 locations. The other safe abortion locations are located within Georgia's

subsequent larger cities such as Savannah, Columbus, Macon, and Augusta. The second map depicts the median household income estimates for Georgia families from 2018. While the majority of safe abortion locations are within the wealthiest region of the state (i.e., Atlanta), the other locations are within counties that fall in the $30,000 - $45,000 median household income bracket. However, despite the lower-income, these areas are still amongst the more populated counties. This alone proves one my arguments: that residents from lower-income but higher populated areas will be more negatively affected by the Fetal Heartbeat Bill.

The third and fourth maps depicts the turnout rate, by party and Congressional District. The result of this race was 5 counties going blue, but the 9 others remaining red. Despite it's low Democratic voter turnout, Congressional District 2 was the only district, that was not amongst the surrounding Atlanta 4th, 5th, 6th, and 13th districts, where Democrats won (Washington Post 2018). Finally, the fifth and sixth maps depicts the turnout rate for Georgia's highly contested Gubernatorial race between Brian Kemp and Stacey Abrams (Williams 2018). Both the Congressional and Gubernatorial maps found that in districts and counties with high Democrat voter turnout, such as Whitfield County (containing Dalton, GA) or Hall County (containing Gainesville, GA), or any Southern Georgia county, there are no safe abortion locations. With this in mind, it is not surprising that the majority of these counties, with high Democrat turnout, were won by Republicans. Looking at the surrounding Atlanta area, there is lower turnout than anticipated amongst Democrats. However, a potential reason behind why this is, could be the vast reports of Democratic voter suppression that hit the greater Atlanta area during the 2018 race (Anderson 2018). However, Abrams, unsurprisingly, also won in the counties containing Macon, Columbus, Savannah, and Augusta (Politico 2018). Thus, the cities in which safe abortion locations are located were seen to come out and vote against Brian Kemp and the restrictive platform of the Georgia's unified Republican General Assembly.

Limitations and Conclusions

The biggest limitation to this data was the amount of abortion locations already in the state of Georgia. As previously explained, there is a total of fifteen approved safe abortion locations throughout the entire state of Georgia. Four of which are Planned Parenthood health centers and the rest are a variety of women's health centers, OB/GYNs, and wellness clinics. Every single one of these locations are located in the Northern, wealthier, more populated ⅔ of the state. While women living in the southern ⅓ of Georgia could travel across state borders to the multiple safe abortion locations in Tallahassee or Jacksonville, it is unlikely that they would do so, considering the higher density of GOP turnout in these districts. However, even if a Republican woman, within this part of Georgia, were to seek an abortion out of state , the passage of H.B. 481 has now rendered that option nearly impossible. One of the new provisions of H.B. 481 is its ability to charge women living in Georgia with conspiracy to commit murder, if she's caught traveling out of state to have an abortion (Stern 2019). This is a crime punishable by ten years of incarceration if charged. Thus, there is little incentive for rural and/or lower income women living to bear the costs, or even consider, travelling to Florida to obtain an abortion.

As the data has shown, the majority of the people harmed by this bill will be lower income Democratic women. The counties and districts containing safe abortion locations all voted Democrat in the 2018 midterms (Politico 2018). Furthermore, the majority of the safe abortion locations were in counties whose median household income was estimated to be below the statewide median (US Census Bureau 2019). Interestingly, I noticed that there are no abortion locations in Athens, Georgia, the home of the University of Georgia. Athens, located in Clarke County, is one of the counties in which Stacey Abrams won at least 70% of the county's vote in 2018. More importantly, Clarke is one of the few counties in which a Democrat won but does not have a safe abortion location within a 30-mile radius, despite being home to Georgia's top college town. Future studies should look at how female college

students in Georgia obtain a safe abortions, how they handle its transportation and procedural costs, and how (and if) they plan on finding a different way to procure a safe abortion procedure while in college.

In addition to this, a comparative study between restrictive abortion bills like Georgia's H.B. 481, and that of another state, such as Mississippi, Georgia's neighbor would be interesting and salient as well. Regardless of what the exact focal point is, future research needs to be done to assess the extent of the damage H.B. 481 will cause and how quickly it can do so. Making access to a safe abortion an illegal and punishable offense will not magically make abortion procedures in Georgia disappear. By prioritizing the apparent "human rights" of a six-week old embryo that is about the size of a lentil, over the lives of the women carrying it, will instead incentivize these women to seek out dangerous and desperate measures to end their pregnancy in ways that could put their own lives stake.

Sources Cited

Anderson, C. (2018, November 7). Brian Kemp's Lead in Georgia Needs an Asterisk. *The Atlantic*. Retrieved from https://www.theatlantic.com/ideas/archive/2018/11/georgia-governor-kemp-abrams/575095/

POLITICO. (2018, November 6). Georgia Election Results 2018. *POLITICO*. Retrieved from https://www.politico.com/election-results/2018/georgia/

Stern, M. J. (2019, May 7). Georgia Just Criminalized Abortion. Women Who Terminate Their Pregnancies Would Receive Life in Prison. *Slate*. Retrieved from https://slate.com/news-and-politics/2019/05/hb-481-georgia-law-criminalizes-abortion-subjects-women-to-life-in-prison.html

The Washington Post. (2018, November 6). Georgia Election Results. Retrieved April 26, 2019, From: https://www.washingtonpost.com/election-results/georgia/?utm_term=.267858615c01

Williams, V. (2018, November 29). Lawsuit by Abrams PAC continues debate over voter suppression in bitter Georgia governor's race. *The Washington Post*. Retrieved from https://www.washingtonpost.com/politics/lawsuit-alleges-voter-suppression-in-bitter-georgia-governors-race-and-seeks-protections-for-future-races/2018/11/29/750afc20-f353-11e8-aeea-b85fd44449f5_story.html?utm_term=.2d470d79d802

Chapman, G. (2019, March 20). Who stands to lose the most under Georgia's anti-abortion bill?.

Retrieved from https://www.atlantamagazine.com/news-culture-articles/who-stands-to-lose-the-most-under-georgias-anti-abortion-bill

Sjoquist, D. L. (Ed.). (2000). *Atlanta Paradox*. Russell Sage Foundation.

Mervosh, S. (2019, March 30). Georgia Is Latest State to Pass Fetal Heartbeat Bill as Part of Growing Trend. Retrieved from https://www.nytimes.com/2019/03/30/us/georgia-fetal-heartbeat-abortion-law.html