

BARRIERS TO PLANNED PARENTHOOD ABORTION CARE IN THE U.S. IN 2019, AND PROPOSED SITES FOR EXPANDING CARE

Background

1 in 4 women in the U.S. will have an abortion by the age of 45, yet significant barriers exist to this common procedure. Geographic access is not uniform across the U.S. Political, religious, and cultural objections have created a scarcity of resources and imposed barriers to access.

A variety of factors influence an individual's access to abortion care: geographic distance, political barriers such as policies that restrict or prohibit care, and affordability of care based on types of providers and insurance status. These are the primary focus of this analysis, but by no means the only barriers to accessing abortion care. Past literature suggests that these barriers and others lead patients to travel out-of-state for care, or may prohibit them from obtaining the care they need altogether.

Planned Parenthood Federation of America is the largest provider of reproductive health care in the U.S, including abortions. Planned Parenthood provides services to low-income patients, including those who do not have health insurance, making them an important provider for these populations.

Purpose:

The purpose of this project was to understand the spatiality of barriers to abortion care. Ultimately, these analyses were used to make recommendations about where future Planned Parenthood clinic locations may be most valuable. This was determined by assessing which states were most vulnerable based on restrictive abortion policies and financial barriers, and then by locating the Census tracts with the highest density of women of reproductive age in each of these two states, Texas and Mississippi. Data on spatial, political, and financial factors were used to map abortion access. Insurance status was the primary indicator of financial access to abortion care, and state-wide uninsurance rate was chosen as an indicator for poor financial access. This analysis sought to answer questions about how each of these barriers to accessing abortion care presents differentially across the U.S, and which regions are particularly burdened with barriers to care.

Past Literature on Barriers to Access and Current Applications:

Geographic Barriers:

In 2008, abortion recipients reported traveling an average of 30 miles one-way for their abortion care. This analysis is based around a map of Planned Parenthood clinics nationwide, up to date as of April 2019. These data were obtained using Python and the Scrapy library to crawl Planned Parenthood's list of health centers by state and scrape the contact information for each clinic. Addresses were geocoded using Geocod.io, and mapped across the U.S. A kernel density map of clinic locations was produced to visualize areas of scarcity around the U.S, shown above. This data was also used in the state maps to create population density maps with buffered regions of access to clinics.

Financial Barriers:

In recent years, abortions have become increasingly concentrated among low-income populations. In 2014, 75% of abortion patients were low-income. Nonetheless, financial barriers persist, and often, lack of insurance coverage prevents patients from accessing abortions. Using state-by-state uninsurance data, Texas was identified as the state with the highest uninsured rate (18%), and was subsequently used in analyses to determine where new clinics would be most valuable.

Political Barriers:

In 2014, 57% of women lived in a state that was considered "hostile" or "extremely hostile" towards abortion rights based on restrictive abortion policies in place. These restrictions were considered when identifying the two states for analysis. Mississippi is one of 8 states with all four of the policies considered below in place, and is notoriously anti-abortion. Consequently, Mississippi was included with Texas for further analysis.

Discussion of Results:

Across the U.S, major disparities in geographic access were identified. A large portion of the center of the country has extremely limited access to Planned Parenthood clinics, indicating a low density of accessible, affordable abortion providers. In contrast, regions in the Northeast and West coast had the highest density of Planned Parenthood clinics. Many states have at least one of the four key policy barriers to abortion in effect as of 2017, though new policies come in and out of effect regularly. When geographic access is considered within the political context of these barriers, it becomes apparent how necessary financially-accessible clinics like Planned Parenthood are. Mississippi, which was selected for its restrictive policies, has only one Planned Parenthood clinic in the state, though some tracts are within 50 miles of a clinic in a neighboring state. If a Planned Parenthood is the only provider that can reliably provide affordable, safe, legal abortion services, it is vital that more people have access in these "abortion hostile" states in particular.

In Texas and Mississippi, there are large swaths of the population who reside over 50 miles away from the nearest Planned Parenthood Clinic. When broken down into women of reproductive age, many dense regions were served by at least one Planned Parenthood clinic. However, several densely populated areas were not. "Reproductive age" was defined as women ages 6-54; average age of menarche in the U.S. is 12.5 and the average age of menopause is 51. For the sake of this analysis, the entire categories of women 6-18 and 45-54 were included, as Census tract data were not broken down more granularly, causing a probable overestimation.

The regions identified as potential sites for new Planned Parenthood clinics account for density of the population of women of reproductive age and distance to the nearest Planned Parenthood clinic. The final sites displayed are only the two or three highest-density zones in each state; each state resulted in many more buffer zones that would expand access to a 50 mile buffered-region of women of reproductive age.

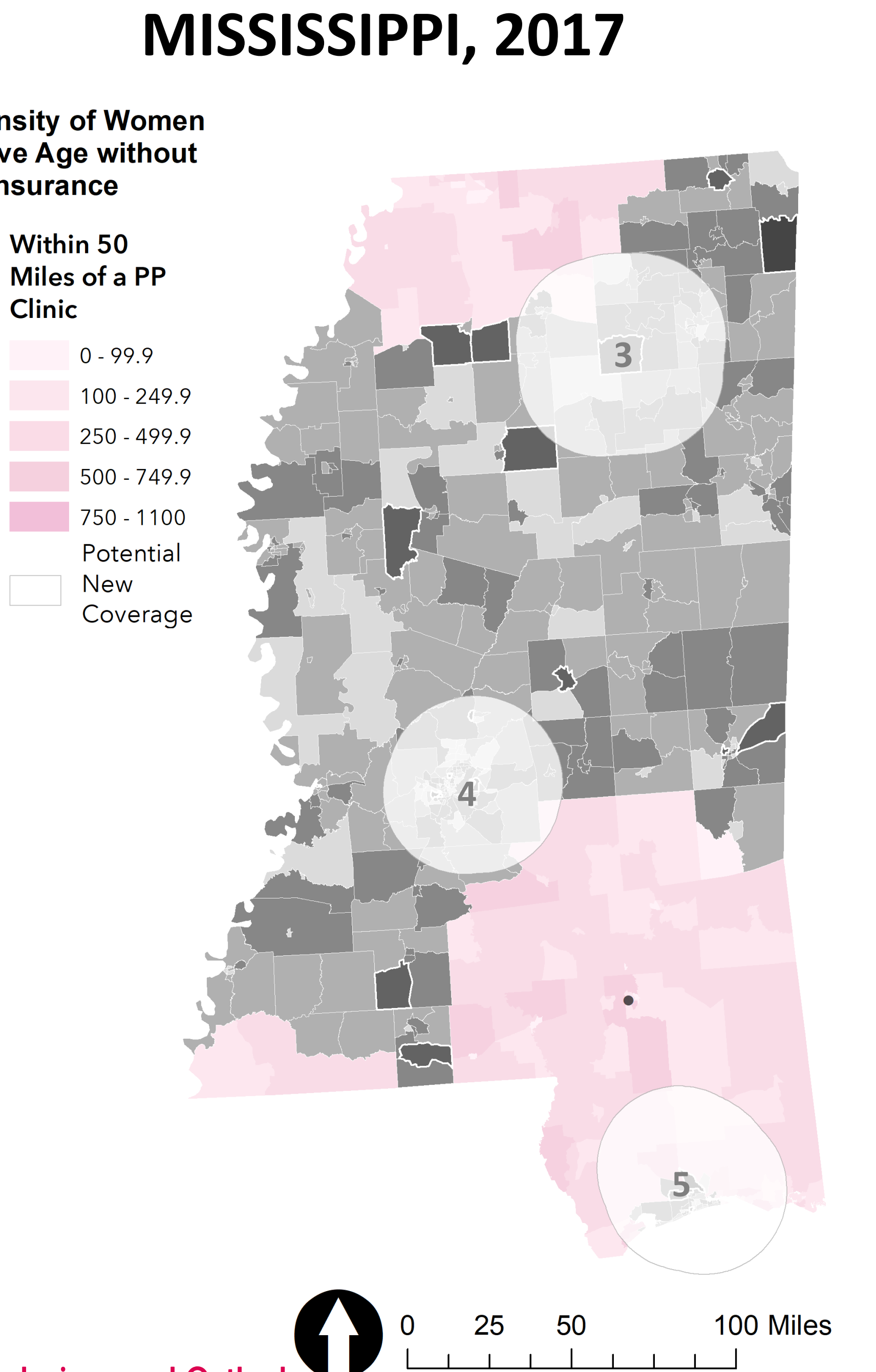
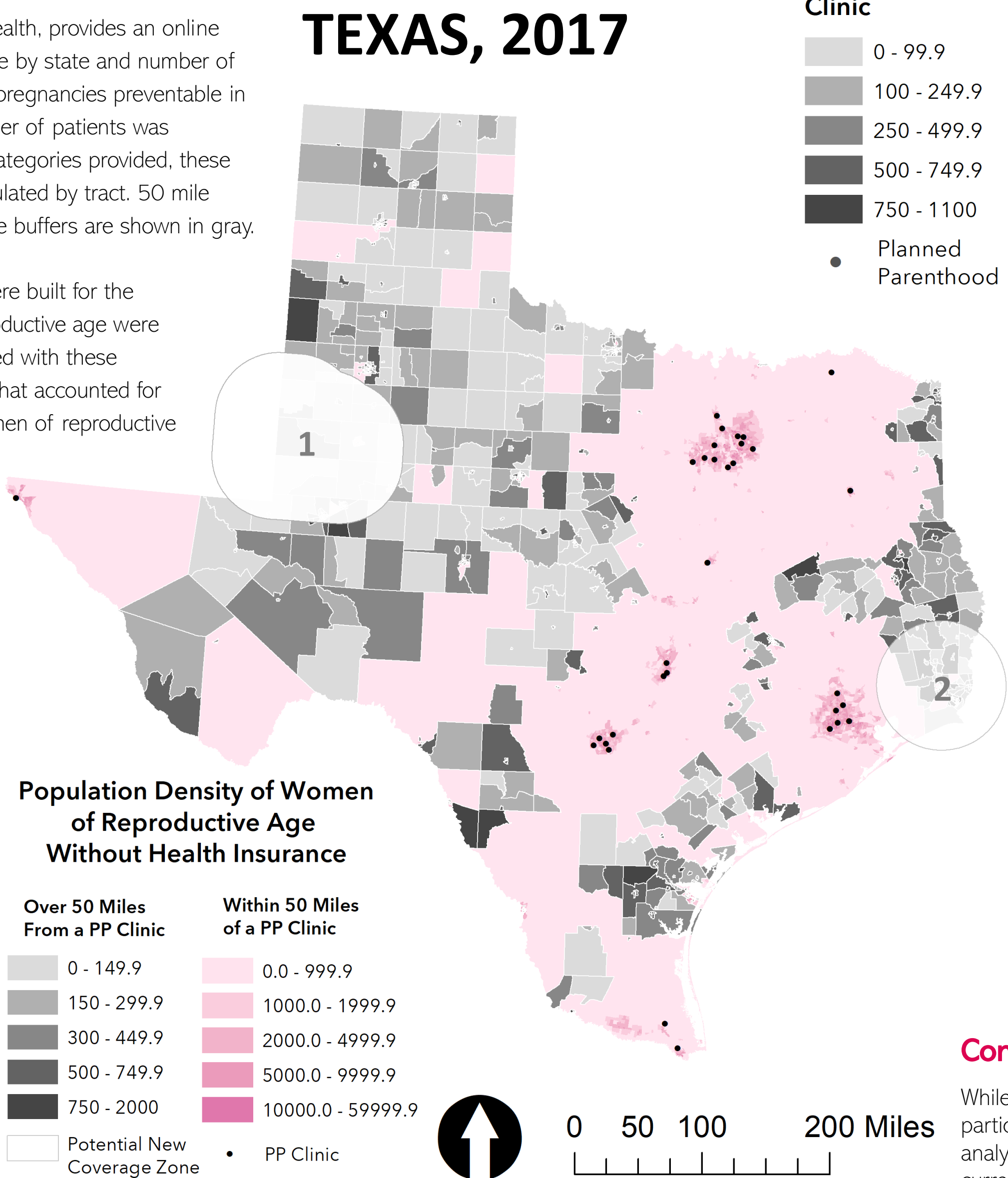
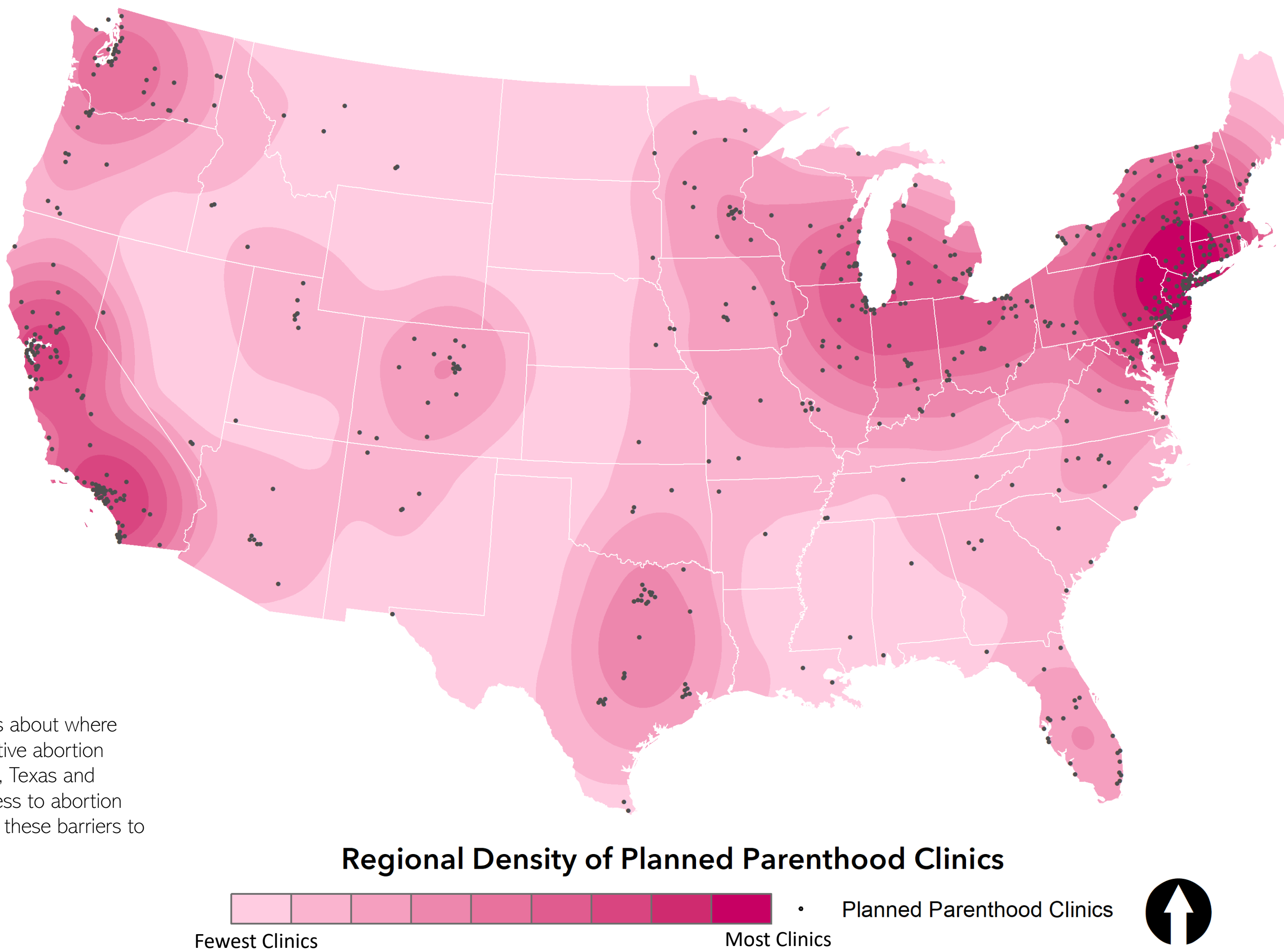
Estimating New Service Regions

The Guttmacher Institute, a research and policy organization with a focus in reproductive and sexual health, provides an online tool that estimates the potential impact of expanded access to various forms of reproductive healthcare by state and number of new patients and services. This tool was utilized to estimate the number of abortions and unintended pregnancies preventable in each region identified from analyses of Texas and Mississippi with expanded access to care. The number of patients was estimated using Census-tract level data about health insurance status by age and sex. Given the age categories provided, these numbers are likely to overestimate the impact slightly. Density of women of reproductive age was calculated by tract. 50 mile buffers were created around each Planned Parenthood clinic in both states, and tracts outside of these buffers are shown in gray.

All tracts outside of these 50 mile buffers were considered as sites for a new clinic. 50 mile buffers were built for the highest density tracts in each state. Census tract data including numbers of uninsured women of reproductive age were spatially joined with these new buffers to identify the highest-value service regions that could be created with these potential new clinics. In regions where multiple high-density tracts overlapped substantially, the buffer that accounted for the highest density was included. On the right are the service regions with the greatest density of women of reproductive age. These populations were used in the Guttmacher tool to calculate the benefits in the table below.

Zone	Population	Abortions Prevented	Unintended Pregnancies Prevented	Total Savings
1 Western Texas	37,722	2,740	8,100	\$51,424,550
2 Eastern Texas	38,100	2,770	8,190	\$51,939,860
3 Northern	15,160	1,100	3,260	\$13,920,030
4 Central	26,315	1,910	5,650	\$24,162,640
5 Southern Mississippi	24,525	1,780	5,270	\$22,519,050

Table 1: Guttmacher estimates of cost savings and prevention outcomes calculated for each potential new clinic service region.



Conclusions and Outlook:

While no state has perfect access to abortion care, this analysis offers recommendations for two particularly vulnerable states by identifying key areas with a high population of need. This analysis provides very modest recommendations for expanding access in states that are currently underserved. Abortion access can be expanded in other regions of these states and across the U.S.

Future work in this area ought to examine not just Planned Parenthood clinics, but all clinics that provide low cost abortions to uninsured or low income individuals. This exclusion limited the reliability of the current analysis. Furthermore, future analyses ought to consider factors besides Euclidean buffer distance, such as roadways, driving conditions, and other travel barriers and costs. Additionally, other policies may become relevant, particularly if political changes further jeopardize access to safe, legal abortion care at the state or national level.

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Sources: U.S. Census Bureau, 2017 1-Year American Community Survey Insurance data by Age and Sex, Texas and Mississippi tracts; Planned Parenthood Clinic Locator, 2019 (extracted by John C. Merfeld using Scrapy); Guttmacher Institute Data Center; ESRI Map of United States

Literature:
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Planned Parenthood Federation of America. <https://www.plannedparenthood.org/>

Policy Access:

