STATE TRAJECTORIES OF SUFFRAGE IN THE UNITED STATES, 1900-1950

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ABSTRACT

Rosemary Russo: State Trajectories of Suffrage in the United States, 1900-1950
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One of the most important components of a democratic state is the degree to which the citizenry can freely elect their leaders. Most political systems call for the universal suffrage of the citizenry, although this is rarely a reality. This paper adds to the current scholarship on suffrage by providing a new, more comprehensive measure for suffrage in the United States in the first half of the twentieth century which allows for the inclusion of extensions that occurred during that time as well as suffrage retractions such as poll taxes, literacy, felon disenfranchisement, and citizenship. Using this new measure, this project then provides longitudinal trajectories of each state’s suffrage expansions, and retractions during the first half of the twentieth century. A preliminary analysis of these trajectories is then completed in order to empirically test several theories on suffrage extensions and retractions and some mixed support of these theories is found.
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I. Introduction

Importance of Topic

One of the most important components of a democratic state is the degree to which the citizenry can freely elect their leaders. Most political systems call for the universal suffrage of the citizenry, although this is rarely a reality. Generally, nations that utilize democratic elections have a history of changes to their laws which stipulate who is and who is not eligible to vote. These transformations of the extent of suffrage not only map out the changing political power of the minority groups affected by such voting laws, they also provide an important account of public attitudes and political pressures that may have contributed to their passage. Therefore, understanding how suffrage extensions and retractions have been applied historically is important in order to understand how the nature of democracy has been transformed in relation to changing social and political factors and can also assist in better foreseeing future challenges to the democratic ideal of universal suffrage.

Objectives of Research

This paper adds to the current scholarship on suffrage by providing a new, more comprehensive measure for suffrage in the United States in the first half of the twentieth century which will allow for inclusion of extensions that occurred during that time as well as suffrage retractions such as poll taxes, literacy, felon disenfranchisement, and citizenship. Using this new measure, this project will also then be able to show
longitudinal trajectories of each state’s suffrage expansions, and retractions, during the first half of the twentieth century. Past research on suffrage in the United States has not included many of the components of this suffrage measure and by adding these factors a more complete picture of suffrage for each state over the course of this time period will be presented.

The history of suffrage in the United States can be understood as a record of both extensions and retractions, although the latter issue is not often addressed. Prior to the 1840’s, most states extended the franchise to immigrants who had not yet naturalized but had declared their intent to do so. This practice continued through the early 1900’s when a handful of states still allowed noncitizens to vote until the last state, Arkansas, passed a constitutional amendment in 1926 to ban all noncitizens from voting (Harper-Ho, 2000). Similarly, after passage of the Fifteenth Amendment to the U.S. Constitution in 1870, which banned states from using race as criteria for voting laws, many states passed literacy laws and poll taxes as a strategy to keep African Americans from voting. These were not all completely removed until the Voting Rights Act of 1965 was passed (Keyssar, 2000). Finally, passage of the Nineteenth Amendment to the U.S. Constitution in 1920 banned all states from using gender as a criterion for voting laws (Keyssar, 2000).

Even at the current time, true universal suffrage does not exist in the U.S. due to laws which restrict voting to a certain age, require U.S. citizenship, and bar certain populations from voting according to state laws (such as prisoners and felons, other institutionalized citizens, and non-citizens). Since each state in the U.S. has always been responsible for determining the criteria of who is eligible to vote, subject of course
to the relevant Federal constitutional amendments, unique paths to this current quasi-universal suffrage have emerged. While the overall trajectory of each state’s suffrage level has been expansionary, several states expanded the franchise at a much slower rate due to their enacting of restrictive laws, such as literacy requirements, citizenship requirements, and poll taxes.

This paper will address the question of how we can best describe the individual state trajectories of suffrage extensions and retractions in the United States during the first half of the twentieth century. The nature of how states individually progressed in expanding (and retracting) the franchise during this time period is an important issue for several reasons. First of all, while a large amount of research has been done on voting rights in the U.S., this research tends to focus on specific suffrage movements such as women’s suffrage, African American suffrage, noncitizen suffrage, and felon disenfranchisement. Developing and analyzing a measure of overall suffrage for each state which integrates each of these issues can provide a more complete story about the way in which each state was able to fulfill the democratic ideal of universal suffrage and what factors might be associated with faster or slower growth in political power of those residing in its territory.

Finally, given the contemporary importance of immigration issues in the U.S., the incorporation of the extension (and later retraction) of voting rights in the U.S. among noncitizens in the early twentieth century is an important issue to explore. Current immigration flows (as a percentage of the total population) have recently begun to reach a level similar to that of the early twentieth century when the last of these noncitizen suffrage laws were revoked (Varsanyi, 2005). There have also been increased
restrictions on the amount of immigrants who are eligible for citizenship, while at the same time the process of becoming a citizen has become much more difficult (Kunnan, 2009). As a result, the percentage of noncitizens will likely continue to increase ensuring a paralleled increase in the percentage of people residing in this country who are not able to participate in the democratic process. Since the percentage of noncitizens in the U.S. is now similar to that of the early twentieth century, it is useful to understand the paths that led to such voting restrictions and what factors may have been associated with them. The answers to these questions may shed light on how we can best approach the problem of underrepresentation for the large amounts of immigrants not yet able to secure citizenship in the United States.

The purpose of this paper will therefore be to not only provide a more comprehensive way in which to measure suffrage on a state level but to further show how combing this measure across time by state can create longitudinal trajectories of suffrage which can be used for further analysis. The literature review below will help situate these goals within the context of past research on suffrage.
II. Literature Review

An important application of the subject of suffrage in past scholarly research is its use in measuring the concept of democracy. For example, Bollen (1998) created a measure of suffrage as a component to a cross-national data set which included several longitudinal indicators of liberal democracy from 1950-1990. The suffrage measure was created using a coding scheme for qualitative data depending on voting laws as well as quantitative demographic information in order to accurately estimate the percentage of adults 20 and older that were allowed by law to vote. These suffrage scores were assigned to each country for each year included in the data set, with a new score being assigned if relevant laws changed. Paxton and colleagues have recently completed an international comparative analysis of suffrage which extended the suffrage data to 2000 and compared different trends during the entire time period (Paxton, Bollen, Lee, Kim 2003). Using the same coding scheme for the measurement of suffrage as Bollen (1998), they were able to describe broad regional trends in suffrage and explore international comparisons.

Paxton (2000) used similar suffrage data, specifically data on women’s suffrage, to illustrate how the inclusion of a disenfranchised group in the measurement of democracy can have a large effect on how we view the timing of the transition to democracy and the causes of democratization. This again illustrates why suffrage is such an important issue to consider. Given that universal suffrage is a central aspect in the majority of liberal democratic ideologies (Paxton et al., 2003), not including a
measure that accounts for the degree of its presence or absence can drastically change how we identify if a nation is indeed a democracy. This can then, as Paxton (2000) shows in her analysis, result in a mischaracterization of our political theories that attempt to explain or predict democratic formations and transitions.

Another application of suffrage can be found in the calculation of voter turnout rates. Voter turnout rates are often used to provide information on the process of electoral participation, specifically the proportion of the eligible electorate that is taking part in the political process. One key component in determining the voter turnout rate for any election then is first having an understanding of the eligible electorate which also requires knowing what the relevant voting laws are as well as demographic information. A comprehensive suffrage measure would thus be helpful in providing this information, especially if turnout rates are needed on a state level. Indeed, McDonald and Popkin (2001) have recently developed new voter turnout rates by U.S. state for the elections from 1948-2000 using more detailed information on the electorate than Census estimates of the entire voting age population which is what it is more commonly used. In their analysis they show that incorporation of more accurate figures regarding the potential electorate is instrumental in showing that voter turnout is not decreasing as much as is currently reported, and in fact it is the ineligible voting population that is increasing which is causing turnout rates to fall. Therefore comprehensive state level suffrage measures are quite useful in creating more accurate turnout analyses.

Other scholarly research that has been done on the subject of suffrage in democratic countries often involves the development of theoretical arguments to explain the reasons for extensions and retractions. These generally focus on the question of
why those with political power would choose to expand the franchise and thereby possibly lose some of their power and influence (Przeworski, 2008). These theoretical arguments can be helpful in considering how to approach an analysis of suffrage trends and can also assist in developing hypotheses to explain the nature of change and variation in suffrage trends. These theories on suffrage transitions can be summarized according to the way in which their explanations for this phenomenon are characterized.

Response to a Revolutionary Threat

A long-standing explanation for suffrage extension that can be traced back to Britain’s Earl Grey in 1832 (Przeworski, 2008) and developed formally by Tilly (2000) and Bendix (2003) illustrates that the expansion of voting rights can be understood as a strategy of the political elites used in response to fears of a possible revolution by the masses during periods of popular unrest and strife. Voting rights are therefore expanded to certain parts of the disenfranchised masses in order to assuage their frustrations, thereby preventing revolution. The example of suffrage extensions to the middle classes in Britain in 1832 illustrates this as explained by Przeworski (2008) and Acemoglu & Robinson (2000). Earl Grey, the prime minister at the time, explained when proposing reforms for suffrage extension that he was doing so in order to prevent revolution, although he did not agree with the ideal of universal suffrage himself (Acemoglu & Robinson, 2000).

Tilly’s (2000) analysis goes further by considering the casual mechanisms (and blockages) of democratization in several European countries from 1650 to the present. He identifies a specific “mobilization-repression-bargaining” cycle in regards to the
diffusion of political power to those excluded from it. The mobilization phase of this cycle is characterized by a collective uprising of those without political power which represents a threat to the government authority. The repression phase is the government response to this uprising, which fails in the scenario of democratization. Finally, the bargaining phase occurs after the failed government repression as a last resort by the government to maintain authority in exchange for the extension of some political rights to those who were originally mobilized (Tilly, 2000). Although most examples of this process have occurred simultaneously with the formation of industrialization, Bendix (2003) further asserts that the extension of suffrage is a distinct process.

Similar to the above view but with more nuance, Acemoglu and Robinson (2000) argue that the decision by elites to extend suffrage is sometimes, but not always, the chosen response to a revolutionary threat. They argue that the decision to expand the franchise depends on the nature of the revolutionary threat and the credibility of the promises of future redistribution (reduced inequality) by elites in the absence of extended suffrage. They reason that if the poor are not well organized they only represent a ‘transitory’ threat and therefore an elite response of promising future redistributions will not be credible. They argue that this will likely result in attempted, although likely short-lived, revolution unless the elites extend the franchise. On the other hand, if it is believed that the masses have the capacity to maintain some form of permanent resistance, (the threat of revolution is not transitory) there will be a higher credibility that political elites will keep the promises for future redistribution, since the
threat of revolution will remain. Suffrage is not granted in these cases and instead redistribution is granted in response to the revolutionary threat.

An example they provide which illustrates their reasoning is the fact that while the disenfranchised in nineteenth century Germany were highly organized (socialist party) the German elites did not extend the franchise, but instead responded with the development of the welfare state. In contrast, Britain and France did extend the franchise during this time despite the fact that the lower classes were not as organized (Acemoglu & Robinson, 2000). Therefore, suffrage extensions from this perspective can be understood as a strategic decision by elites when faced with demands of redistribution by the masses.

**Political Opportunities, Desires, and Competition**

While the aforementioned theories on suffrage extension focus on perceived threats of revolution, other researchers have developed alternative theoretical arguments to explain such extensions. Lizzeri and Persico (2004) focus on existing divisions within the ruling political elite that may create a predisposition towards suffrage extension. These divisions occur naturally due to the nature of the political system wherein certain groups in the elite may benefit more with the extension of the franchise. One example used in their paper is the 1867 Reform Act in Britain wherein the rapid growth of cities had led to an increased demand for public goods such as roads and sanitation. This increased demand for public goods in turn caused a majority of those in political power to support governmental reforms that would address these issues and provide necessary improvements and additions to infrastructure. They further explain
that such reforms on public goods were ‘inextricably linked’ to parliamentary reforms which included the extension of the franchise (Lizzeri & Persico, 2004).

In a similar vein, Ticchi and Vindigni (2006) draw from Machiavelli’s *Discourses* and argue that suffrage extension among the masses may also be bestowed by political elites as a type of payment or promise in return for costly acts and sacrifices needed for current or future wars (such as the enlistment of military volunteers or women taking the place of men in factories when they leave for war). This can be understood as distinct from the aforementioned explanation of a threat of revolution because the threat which motivates these voting reforms is coming from an outside source instead of the disenfranchised themselves. Also, Ticchi and Vindigni further point out that oftentimes the needed military action is also not so much in response to an immediate threat to the country, but instead used for economic and political gains of the ruling elite. Therefore gaining the cooperation and support of the masses leads to further benefits and is worth the relinquishment of some domestic political power that occurs due to the franchise extending (Ticchi & Vindigni, 2006).

A similar explanation for suffrage extension suggests that certain political elites may choose to extend the franchise in order to obtain more votes or allies so they may better pursue their political interests. Llavador and Oxoby (2005) look at how enfranchisement and economic growth are connected. In their work they looked at suffrage extensions in eleven countries from 1850 to World War I and found that industrialization policies would be encouraged if a majority of political elites, who were experiencing competition and division, extended suffrage to industrial workers. This also rested on the assumption that there is a sufficient number of workers and
capitalists to foster economic growth. An example they use which illustrates this was the suffrage extension in Germany in 1867 by Bismarck (prime minister of Prussia) who used a conservative strategy which combined a proposal for extended suffrage with proposals for other economic changes which were favored by the agricultural workers in order to capture both liberal and conservative votes. Therefore, suffrage in this case was used as a way to assist in the political elites’ larger goal of conservative economic reforms amidst competition and conflict with other ruling political elites.

Also related to partisan motivations, McConnaughy (2005) completed an event history analysis of voting laws in order to determine what factors were significantly associated with the extension of suffrage to women in the United States. Her analysis indicates that these suffrage extensions were the result of partisan politics, and specifically this occurred through the process of ‘programmatic enfranchisement’. This partisan process of enfranchisement involved special interest groups (organized groups working for women’s’ suffrage) developing and maintaining coalitions with other political party groups in order to influence party politics. This influence led to the incorporation of women’s suffrage policies amongst other policies that were favored by party members and therefore had a higher potential of being adopted by the party. Given the success of this process (as shown by the empirical results of the event history analysis), McConnaughy concludes that successful suffrage extensions in these cases can be understood as a state level process which primarily involved the coalitions between party politics and well-organized interest groups.

Similar to this, Banaszak (1996) contends that the success of women’s suffrage movements was due in large part to hard work and a “prolonged struggle”, as opposed
to being simply the result of economic forces. Using interviews from activists along with data on suffrage laws and the census, she compares the movements in the United States and Sweden in order to understand the mechanisms behind the much earlier success for the U.S. movement along with the extremely late adoption of suffrage rights for women in Sweden. She concludes that specific movement tactics and value systems were instrumental in the much earlier state level successes in the U.S. A further examination of the relationship between women’s suffrage in the U.S. and political opportunities was presented by McCammon, Campbell, Granberg, Mowery (2001). After completing an event history analysis of state level suffrage data from 1866-1919, they specifically found that ‘gendered opportunities’ were instrumental in the success of state level women’s suffrage movements. They define such opportunities as the result of society’s changing gender relations which paved the way for those with political power to accept the extension of political power to women.

Another theory which explores this concept of partisan competition was recently proposed in a paper by Soumyanetra Munshi (2010) wherein she developed the hypothesis that a higher level of partisan competition can lead to suffrage extensions while a low level of competition (one party dominates) hinders such extensions. Competition in this view is defined as a party having an abundance of support from the electorate. To illustrate this argument Munshi considers the case of women’s suffrage in the U.S., looking at how competition between Democrats and Republicans in the Western United States was associated with their early enfranchisement of women, while states in which one party dominated the political landscape did not extend the franchise for women until they were forced to by the Federal Government.
Finally, another recent theoretical work on the explanation of suffrage extensions focused on women’s suffrage and the impact that the sex ratio of a state has on such extensions. A paper by Braun and Kvasnicka (2011) examined women’s suffrage extensions in the United States and argued that the scarcity of women (low ratio of women to men in the state population) was a major factor in the extension of suffrage. Their work suggests that vote extension to women was used as a strategy to attract more women to move to these particular states.

**Explanation of Suffrage Retractions**

While not many of these theories discuss the disenfranchisement, or retraction of suffrage, a few scholars have specifically focused on explaining this. Griffin (1997) has developed a theoretical framework for explaining disenfranchisement of African Americans during the early twentieth century by showing it as “a rational collective action motivated by the interests of white Democrats, especially those in lowland “black-belt” counties, in eradicating electoral opposition and establishing political, economic, and racial hegemony”. These “black-belt” counties were defined as counties wherein the majority of the population is African American. This theoretical framework could also possibly be adapted in order to explain the disenfranchisement laws passed in the late 1800’s and early 1900’s which excluded non-citizen immigrants from voting. Beherens, Uggen and Manza (2003) have extensively looked at the history, precursors, and consequences of felon disenfranchisement in the United States. From a statistical analysis of the history of felon disenfranchisement laws they found that if a state’s
prison population is majority African American, the state is significantly more likely to enact or extend these laws.

Another scholar, Richard Valely, considers the mechanisms behind African American disenfranchisement in his book, *The Two Reconstructions: The Struggle for Black Enfranchisement* (2004). His historical analysis finds that African American disenfranchisement was the result of a type of “policy diffusion” wherein lawyers and journalists would travel from states that had succeeded with disenfranchisement to other states that had yet to enact such legislation and work to further efforts of making the electorate white only. He further notes that this process was perpetuated by both Republicans and Democrats in many states.

Finally, a paper written by Monica Varsanyi (2005) details the retraction of voting rights for noncitizens in the U.S. and also provides an account of contemporary attempts that have been made to reinstate voting rights for noncitizens. Non-citizen voting is presented in this article as a case study which is then used to describe how immigration has shaped boundaries in the United States with respect to citizenship and voting. By looking at the complete history of the retractions and extensions of suffrage to noncitizens Varsanyi shows how a process of territorialization occurred from the 1700’s to the mid 1960’s wherein the voting population slowly changed to match those living in the territory, followed by a period of deterritorialization, wherein continued immigration and lack of voting rights for non-citizens lead to the voting population no longer encompassing all those in the territory. This trend towards a growing population of noncitizens is shown by the Varsanyi to present a type of ‘democratic challenge’ since an increasing amount of the population has no democratic voice.
Current Study

This paper adds to the current scholarship on suffrage by providing a new, more comprehensive measure for suffrage in the United States in the first half of the twentieth century which will allow for inclusion of extensions that occurred during that time as well as suffrage retractions such as poll taxes, literacy, felon disenfranchisement, and citizenship. Using this new measure, this project will also then be able to show longitudinal trajectories of each state's suffrage expansions, and retractions, during the first half of the twentieth century. Past research on suffrage in the United States has not included many of the components of this suffrage measure and by adding these factors a more complete picture of suffrage for each state over the course of this time period will be presented. Also, this new measure will be used to extend the analysis of McDonald and Popkin (2001) on the state level voter turnout rates in the U.S. to the first half of the twentieth century.

The second part of this paper will use these suffrage trajectories to perform a regression analysis in order to test some of the theoretical explanations that have been proposed for the expansion and contraction of voting rights. One hypothesis that will be examined in this fashion is the extent to which the economic development level in a state may be associated with the rate of suffrage extensions. Based on the findings of Llavador and Oxoby (2005) mentioned earlier, it is hypothesized that economic development would be positively associated with the extent of suffrage and its growth rate. Another hypothesis that will be tested is that the sex ratio is positively related to suffrage extensions as was suggested by the work of Braun and Kvasnicka (2011). The hypothesis suggested by Munshi (2010) will also be tested which predicted that the
level of party competition is a major factor in suffrage extensions. Finally, the suffrage retraction hypothesis of Griffin (1997) and Beherens, et al. (2003) will be tested which postulates that higher concentrations of African Americans will be related to higher suffrage retractions and thus lower suffrage rates.
III. Data & Methods

Initial Dataset

Using a similar method to that of Paxton, et al. (2003) a suffrage percentage measure, based on the ratio of adults who could vote over the total population of adults, was calculated for each state during each census year (48 total since Hawaii and Alaska were not yet admitted to the Union during this time period), beginning with 1900 and ending at 1950. For these data, in order to remain consistent with the Paxton, et al. (2003) method, the adult population included all people in the state that were 20 years or older. The denominator for each score was therefore the entire state adult population, as recorded by the US Census Bureau, and the numerator began with this same number and then deductions were made for each voting restriction according to the appropriate state voting laws for participating in national elections (such as electing President or a Congressional representative). Information on these laws for each state and for each census year were obtained from 2 major sources, A Statistical History of the American Electorate (Rusk, 2001) and The Right to Vote: The Contested History of Democracy in the United States (Keyssar, 2000).

Possible deductions included age (all 20 year olds were deducted since every state required a voter to be at least 21 years of age), women, the illiterate portion of the population, non-citizens, poll taxes, and felon disenfranchisement. Demographic data on population subgroups, (women and non-citizen immigrants) and literacy for these
deductions was obtained from an ICPSR dataset (Haines, 2010) which included state level historical demographic data from the U.S. Census Bureau. Since exact numbers on those affected by felon disenfranchisement and poll taxes could not be obtained, the standard deductions used by Paxton, et al. (2003) were used for these laws (.02% for poll tax and .005% for felon disenfranchisement). This combined dataset, once complete, thus provided individual longitudinal trajectories of suffrage percentages for each state from 1900 to 1950. Finally, for the calculation of voter turnout rates for the time period also required the use of political data, specifically the total number of votes cast in each state for the presidential elections of 1900, 1912, 1920, 1932, 1940, and 1952 (since no presidential elections were held in the census years of 1910, 1930, or 1950 the nearest elections after each census year were used instead). This voting data was obtained from another ICPSR dataset which includes state level voting data from this time period (Burnham & Flanigan, 1992).

**Analytical Strategy for Longitudinal Trajectories**

Prior exploratory work with these data indicated that the best way to analyze these longitudinal trajectories was by using a linear growth model that also included a dummy variable to indicate whether and when a law allowing women’s suffrage was present in each state. The trajectories were estimated with an OLS regression of the suffrage percent on year and the dummy variable for the existence of female suffrage in that year, doing this for each state separately. This created estimates of the intercept of suffrage, a growth factor (coefficient for the impact of time) for each state, and a coefficient for a dummy variable that accounts for the presence or absence of women’s
suffrage for each state in each year. The first level of this model is illustrated by the following equation:

\[ y_{it} = \alpha_i + \beta_1 \lambda_t + \beta_2 D_t + \varepsilon_{it} \]

where \( \alpha \) represents the intercept for state \( i \), \( \beta_1 \) represents the coefficient for state \( i \) associated with time trend variable \( \lambda \) at time \( t \), \( \beta_2 \) represents the coefficient for state \( i \) associated with the dummy variable, \( D_t \), for the presence of a women’s suffrage law at time \( t \), and \( \varepsilon \) represents the residual error term for state \( i \) at time \( t \). These estimates of the intercept and growth parameters were then used to create a new data set that allowed them to each be analyzed as outcome variables.

The second level of the model then enabled theoretically motivated variables to be tested to see if they had a significant influence on the intercept or growth parameters. This specified by taking the coefficient estimates obtained in the first level and treating them as dependent variables in the following equations:

\[ \alpha_i = \Pi_\alpha + \Gamma_\alpha X_{\alpha i} + \varepsilon_{\alpha i} \]

\[ \beta_{1i} = \Pi_{\beta 1} + \Gamma_{\beta 1} X_{\beta 1 i} + \varepsilon_{\beta 1 i} \]

\[ \beta_{2i} = \Pi_{\beta 2} + \Gamma_{\beta 2} X_{\beta 2 i} + \varepsilon_{\beta 2 i} \]

The first equation illustrated above is used to predict \( \alpha \), the individual intercept values for each state \( i \) that were obtained from the first level. The \( \Pi_\alpha \) term represents the intercept value for this equation; \( X_{\alpha} \) represents a vector of explanatory variables for state \( i \), which are used to predict \( \alpha_i \), and the \( \Gamma_\alpha \) term represents a vector of the estimated
coefficients for these explanatory variables. Finally, the $\varepsilon_\alpha$ term represents the residual error term of this equation for state $i$.

The second equation illustrated above is used to predict $\beta_1$, the individual time trend (growth factor) coefficient values for each state $i$ that were obtained from the first level. The $\Pi_{\beta_1}$ term represents the intercept value for this equation; $X_{\beta_1}$ represents a vector of explanatory variables for state $i$, which are used to predict the dependent variable, and $\Gamma_{\beta_1}$ term represents a vector of the estimated coefficients for these explanatory variables. Finally, the $\varepsilon_{\beta_1}$ term represents the residual error term of this equation for state $i$.

The third equation illustrated above is used to predict $\beta_2$, the individual coefficient values associated with the dummy variable of the first level equation ($D_i$, the indication of the presence of a women’s suffrage law for each state $i$) which are the dependent variable observations in this equation. The $\Pi_{\beta_2}$ term represents the intercept value for this equation; $X_{\beta_2}$ represents a vector of explanatory variables for state $i$, which are used to predict the dependent variable, and $\Gamma_{\beta_2}$ term represents a vector of the estimated coefficients for these explanatory variables. Finally, the $\varepsilon_{\beta_2}$ term represents the residual error term of this equation for state $i$.

These second level regression results can then be used to help provide some insight into which factors may predict the starting point of a state’s suffrage measure, the growth factor, and the impact of women’s suffrage on the overall suffrage measure and thus allow for the testing of the several hypotheses mentioned earlier on mechanisms for suffrage extensions and retractions and if they correspond with the
experience of state level voting rights changes in the United States during the first half of the twentieth century.

**Independent Variables for Longitudinal Trajectories**

For the scope of this study, theoretically motivated independent variables were collected based on data availability. Only one time point, 1900, was used for the purpose of this study, however further analyses could be completed in the future which may look at how time varying independent variables impact these trajectories.

The log of the per capita manufacturing output in 1900, obtained from ICPSR (Haines, 2010), was used as a measure for economic development which is a variable motivated by the findings of Llavador and Oxoby (2005) mentioned earlier. Specifically, this measure is the log of the dollar value of the manufacturing output per capita for the year 1900. It was hypothesized that this variable would be positively associated with the initial starting point (intercept) of suffrage and the growth rate (slope). A second variable in the analysis is the proportion of the population in the state that was female in 1900 and was used as a measure for the sex ratio as was suggested by the work of Braun and Kvasnicka (2011). Based on their work it was hypothesized that this variable would be negatively related to initial levels of suffrage (intercept), the growth rate (slope), and that it would be positively related to the impact of women’s suffrage on the state’s longitudinal trajectory.

A variable measuring political party domination was used to test the hypothesis suggested by Munshi (2010) which predicted that the level of party competition is a major factor in suffrage extensions. This variable was obtained using an ICPSR dataset which provides state level party voting information for 1900 (David, 1998). The
measure was constructed using the percentage of the presidential vote for the party that had the highest percentage of votes for that state, thereby giving states with high levels of party competition smaller scores and states with high levels of party domination higher scores. It was therefore hypothesized, based on Munshi’s work, that higher levels of political domination would be negatively associated with the initial trajectory level (intercept) and the growth factor (slope).

Finally, in order to test the suffrage retraction hypothesis of Griffin (1997) and Behrens et al. (2003), which postulated that higher concentrations of African Americans are related to higher suffrage retractions (and thus lower suffrage rates), a variable was used to indicate the magnitude of ‘black-belt’ counties in a state which is a term used by Griffin (1997). This is a therefore a measure of the concentration of such counties in a state (proportion) for the year 1900, and was collected from the US Census report of that year which has county level racial population data. Given both Griffin’s and Behrens’ et al., it was predicted that the amount of black-belt counties in a state would be negatively related to the initial starting point of the suffrage rate (intercept) and the growth factor (slope).
IV. Results

Descriptive Analysis of Overall State Suffrage Levels

The descriptive statistics for the overall means of the suffrage measure for each census year is provided in Table 1. For 1900, the first year in the data set, the mean suffrage is just under one half, 49.2%. Louisiana, the state with the lowest suffrage for 1900 had 28% while Colorado, the highest had 92.1%. This trend changes considerably by 1920, which can be understood as the result of the passage of the Nineteenth Amendment requiring all states to allow women to vote (with the exception of Arkansas, Georgia, Mississippi and South Carolina which did not implement the women’s suffrage law in time for the 1920 election). Although many states, especially those in the West, had implemented women’s suffrage laws prior to 1920, about half did not do so until the Nineteenth Amendment to the U.S. Constitution passed forbidding states to use gender as a means of disqualifying voters. The complete dataset the suffrage percentages by year and state can be found in Appendix A.

An examination of the individual trajectories shows that in addition to the minimum and maximum values noted above, there is also quite a bit of variation for the starting points for many of the states in the analysis as well as the trajectories over the time period (see Figure 1). This can also be seen by looking at the standard deviations in Table 1 for the first 3 time points and comparing them to the remaining time points - a large amount of variation in scores is apparent for the first half of this time frame.
Table 1. Summary Statistics of Suffrage Levels in the U.S., 1900-1950

<table>
<thead>
<tr>
<th>Year</th>
<th>Mean</th>
<th>S.D.</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>1900</td>
<td>49.2%</td>
<td>0.14</td>
<td>28.0%</td>
<td>92.1%</td>
</tr>
<tr>
<td>1910</td>
<td>53.7%</td>
<td>0.16</td>
<td>33.5%</td>
<td>97.0%</td>
</tr>
<tr>
<td>1920</td>
<td>89.4%</td>
<td>0.16</td>
<td>36.3%</td>
<td>98.2%</td>
</tr>
<tr>
<td>1930</td>
<td>93.2%</td>
<td>0.06</td>
<td>75.8%</td>
<td>97.4%</td>
</tr>
<tr>
<td>1940</td>
<td>94.2%</td>
<td>0.04</td>
<td>81.9%</td>
<td>97.4%</td>
</tr>
<tr>
<td>1950</td>
<td>95.4%</td>
<td>0.03</td>
<td>87.1%</td>
<td>97.9%</td>
</tr>
</tbody>
</table>

In looking at just a few select states (Figure 2) some regional variation can be seen in which Southern states, such as Louisiana and Mississippi, have a low starting point and slower trajectory compared with Western, states such as Idaho and Wyoming, which start higher and quickly reach an even higher level of suffrage. Therefore the overall trends are similar across the 48 states in the sample; however the intercepts and slopes vary quite a bit. Figure 3 below visually illustrates the mean suffrage level over all states for each time period, showing the average longitudinal trajectory.

Figure 1. Trajectories of Suffrage for the 48 States, 1900-1950
Voter Turnout Rates Using Suffrage Measure

As discussed in the above literature review, another important application for state level suffrage data is in the computation of voter turnout rates. State level voter turnout measures for the presidential elections were therefore be calculated using the numerator of this new suffrage measure, the voting eligible population, which in turn
becomes the denominator for a turnout measure. The numerator for this voter turnout rate is the number of votes cast in the state for the specified (presidential) election. McDonald and Popkin (2001) presented a similar method for calculating more exact figures for voter turnout in elections during the 1948-2000 period. Figures 4 and 5 below graphically present some of the findings in regards to these voter turnout rates. In looking at the overall U.S. turnout rate we see that in 1900 turnout was at a high of around 74% of the eligible electorate. However, contrary to what McDonald and Popkin (2001) observed for the 1948-2000 time period, as time went on during the first half of the twentieth century the size of the eligible electorate increased while the number of votes cast did not rise at the same rate thereby resulting in a decline in the voter turnout rate. The turnout rate reaches its lowest point in the election in 1920 (52%) when the eligible electorate had just increased substantially due to multiple states passing women’s suffrage laws.

Figure 4. Presidential Voter Turnout Rates in the U.S., 1900-1952
This downward trend ends however after 1920 wherein we see a slow increase in voter turnout rates for the subsequent elections, however they fail to return to the highpoint of 74%. Figure 5 below presents state level turnout rates for the same select states that were examined above in Figure 2. Similar to the examination of suffrage in Figure 2, we see a regional variation in the longitudinal trajectory of voter turnout rates for the same time period. Specifically, states in the Southern region of the U.S. (Alabama, Louisiana, Mississippi, and South Carolina) have much lower turnout rates compared to those in the West (Idaho and Wyoming) and Midwest (Kentucky and North Dakota) as well as the average U.S. turnout rate (Figure 4). This may be at least in part related to voter intimidation tactics that were being used in the South during this time period to discourage black voters from participating in the political process (Griffin, 1997). In regards to the directions of the trajectories for these turnout rates there is not a clear regional distinction with some states having decreasing turnout rates for most of the period (Kentucky for the entire period) while others decreased for the first few elections but then increased in subsequent elections similar to the national average.

**Figure 5. Presidential Voter Turnout Rates of Select States, 1900-1952**
Analysis of Longitudinal State Suffrage Trajectories

The descriptive statistics and bivariate correlations for the independent variables used in the analysis of the longitudinal trajectories are below in Table 2. The mean for the log of per capita manufacturing output, averaged across all states, is 3.95 with a standard deviation of 0.57. The mean for the proportion of the population that was female for all states is 0.48 with a standard deviation of 0.033. The mean for political party domination was 0.59 with a standard deviation of 0.093 indicating that on average, states did have one political party dominating slightly in the presidential election of 1900. Finally, for the variable of the proportion of black belt counties the mean is 0.078 with a standard deviation of 0.17 indicating that on average states only had around 8% of counties with a majority African American population in 1900.

In regards to the bivariate correlations for these variables also shown in Table 2, the log of the per capita manufacturing output has a slight negative correlation with both the proportion of females in the state’s population (-0.32) and the proportion of black belt counties in a state (-0.44), while being slightly positively correlated with political party domination (0.24). Political domination is very slightly positively correlated with the proportion of the population that is female, and is strongly and positively correlated with the proportion of black belt counties in a state. This indicates that states which had higher levels of political domination also had larger numbers of counties with majority of African Americans. Finally, the proportion of females in the state was found to have a moderate, positive correlation with black belt counties in the state (0.30).

The descriptive statistics for the estimates of the first stage OLS are also below in Table 2, listed under “Dependent Variables”. These are the overall statistics for the
estimates of a linear growth model of suffrage on year for each state individually. The estimates therefore include an intercept (starting point) for each state, a growth factor (coefficient for the impact of time) for each state, and a coefficient for a dummy variable that accounts for the presence or absence of women’s suffrage for each state in each year. The mean intercept is -4.23 with a standard deviation of 3.53. The mean for the growth factor is 0.0025 with a standard deviation of 0.0018, and the mean coefficient for the women’s suffrage dummy variable is 0.37 with a standard deviation of 0.061.

The second stage regression model results which examine the impact of the independent variables on predicting each of the dependent variables are listed in Table 3. For the first model, the independent variable for the log of per capita manufacturing output was used to predict the intercepts for the state trajectories of suffrage. The results show the coefficient associated with this variable is -1.67 and it is significant at the p ≤ .01 level, showing some initial support for the hypothesis that economic development is related to suffrage, however the direction of this relationship is the opposite of what would be expected, higher levels of manufacturing output are related to lower initial levels of suffrage. In the second model predicting the intercept, the variable for political party domination is added as an explanatory variable. It is important to note that the sample size for this model, and all subsequent models that include the political domination variable, is 45 instead of 48 because 3 states did not have data for this variable (Arizona, New Mexico, and Oklahoma) due to the fact that they were not yet part of the Union in 1900 and thus could not vote for president.
Table 2. Descriptive Statistics of Variables and Bivariate Correlations

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Mean</th>
<th>SD</th>
<th>Log of Per Capita Mfg Output</th>
<th>Bivariate Correlations</th>
<th>Dependent Variables</th>
</tr>
</thead>
<tbody>
<tr>
<td>Log of Per Capita Mfg Output, 1900</td>
<td>3.95</td>
<td>0.57</td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Political Party Domination, 1900</td>
<td>0.59</td>
<td>0.093</td>
<td>-0.32</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>Proportion of Population Female, 1900</td>
<td>0.48</td>
<td>0.033</td>
<td>0.24</td>
<td>0.14</td>
<td>1.00</td>
</tr>
</tbody>
</table>
| Proportion of Black Belt Counties, 1900       | 0.078| 0.17 | -0.44                        | 0.77                   | 0.30                | 1.00

**Dependent Variables**
- Intercept (Starting Point): -4.23, 3.53
- Slope (Growth Factor): 0.0025, 0.0018
- Women’s Suffrage Coefficient: 0.37, 0.061

Table 3. Model Results - Coefficients and Standard Errors

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Intercept (Suffrage Level 1900)</th>
<th>Slope (Growth Factor)</th>
<th>Impact of Women’s Suffrage</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1  2  3  4</td>
<td>1  2  3  4</td>
<td>1  2  3  4</td>
</tr>
<tr>
<td>Log of Per Capita Mfg</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Output, 1900</td>
<td>-1.67*** -2.14*** -2.08*** -2.26***</td>
<td>0.00085** 0.0011*** 0.0011*** 0.0012***</td>
<td>-0.24* -0.033** -0.038** -0.044**</td>
</tr>
<tr>
<td></td>
<td>(0.55) (0.49) (0.52) (0.59)</td>
<td>(0.00028) (0.00025) (0.0023) (0.00031)</td>
<td>(0.011) (0.012) (0.012) (0.013)</td>
</tr>
<tr>
<td>Political Party</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Domination, 1900</td>
<td>-18.21*** -17.83*** -14.68*</td>
<td>0.0092*** 0.0090*** 0.0075*</td>
<td>-0.19 -0.23* -0.12</td>
</tr>
<tr>
<td></td>
<td>(4.33) (4.51) (6.64)</td>
<td>(0.0023) (0.0023) (0.0035)</td>
<td>(0.10) (0.10) (0.14)</td>
</tr>
<tr>
<td>Proportion of Pop</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female, 1900</td>
<td>-4.32 -0.37</td>
<td>0.0012 -0.00076</td>
<td>0.64* 0.79*</td>
</tr>
<tr>
<td></td>
<td>(12.16) (13.67)</td>
<td>(0.0063) (0.0071)</td>
<td>(0.30) (0.33)</td>
</tr>
<tr>
<td>Proportion Black Belt</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Counties, 1900</td>
<td>-2.64</td>
<td>0.0013</td>
<td>-0.096</td>
</tr>
<tr>
<td></td>
<td>(4.06)</td>
<td>(0.0021)</td>
<td>(0.086)</td>
</tr>
<tr>
<td>Adj R-Squared</td>
<td>0.15 0.37 0.36 0.35</td>
<td>0.15 0.36 0.34 0.33</td>
<td>0.09 0.13 0.20 0.21</td>
</tr>
<tr>
<td>N</td>
<td>48 45 45 45</td>
<td>48 45 45 45</td>
<td>42 41 41 41</td>
</tr>
</tbody>
</table>

*p ≤ .05.  **p ≤ .01.  ***p ≤ .001.
In the results for this model, the log of per capita manufacturing output is still found to significantly predict the intercept (starting level) of suffrage in this model, with a coefficient of -2.14. The level of political party domination is also found to significantly predict (at the p ≤ .01 level) the intercept with a coefficient of -18.21 which also suggests some initial support for the hypothesis of Munshi (2010) which predicts that higher levels of political domination would be negatively associated with suffrage.

The third intercept model adds in the explanatory variable of the proportion of the population that was female in each state which was motivated by the work of Braun and Kvasnicka (2011). The model results show the coefficient to be -4.32 which fits the directionality of the hypothesis (that it would be negatively related to initial suffrage levels), however it was not a significant result so there this does not provide sufficient evidence supporting it in this model. Both the log of per capita manufacturing output and political dominance however still remained significant in this model. Finally, the fourth model for the intercept adds in the variable for proportion of ‘black belt’ counties in each state, again referring to counties that have a majority of African Americans in the population as described by Griffin (1997). The model results show this variable to have a coefficient of -2.64 which also fits the directionality of the hypothesis (that the proportion of black belt counties would be negatively related to the initial suffrage level), however, like the proportion of the population of women, it was also not a significant result, indicating there is not sufficient support for this theory in the data as it is modeled. The adjusted r-squared value for this final model is 0.35 indicating that about 35% of the variance in the estimated intercept values is being explained by these independent variables.
In looking at the results in the middle column in Table 3, the models predicting the slope of the longitudinal suffrage trajectories (growth factor) show a very similar pattern to the first set of models in regards to significance, however the directionality of these relationships has changed. In the first model which just looks at the log of per capita manufacturing output with predicting the growth factor the coefficient is 0.00085, again is significant at the at the $p \leq .01$ level. This relationship, unlike the intercept model, is positive indicating that higher levels of manufacturing output are predictive of higher levels of suffrage growth, which coincides with the hypothesis presented by Llavador and Oxoby (2005) linking suffrage levels to economic development. In the second model, political party dominance is added and it is again found to be a significant predictor of suffrage, this time predicting growth instead of the initial level. The coefficient for this variable is 0.0092 indicating a positive relationship with suffrage unlike the previous models where it had a negative relationship to the intercept dependent variable. The log of per capita manufacturing output also remains significantly predictive of the growth factor in this model.

In the third model predicting the growth factor, the proportion of the population that is female is added and again not found to be a significant predictor. The log of the per capita manufacturing output and the political dominance variables however are still found to be significant and positively related to the growth factor. Finally, in the fourth model predicting the growth factor, the proportion of black belt counties is added and is again not found to be significantly predictive of the dependent variable suggesting there is not support for its associated hypothesis. The adjusted $r$-squared value for this final
model is 0.33 indicating that about 33% of the variance in the growth factor values is being explained by these independent variables.

The last 4 models presented in Table 3 show how the independent variables are related to the final aspect of the suffrage growth models, the dummy variable for the impact of women’s suffrage. It is important to note that these models have a smaller sample size of 42 and 41 due to the fact that the Western states which legalized women’s suffrage prior to 1900 (Utah, Idaho, Wyoming, and Colorado) did not have estimates for the impact since women’s suffrage was not enacted during the time period for these trajectories. Similarly, Arizona and New Mexico also had women’s suffrage when they joined the Union so there is no factor for this in their trajectories either.

In looking at the results for the first model, we find that similar to the first set of models predicting the intercept, the log of per capita manufacturing is significant and is negatively related to the impact of women’s suffrage with a coefficient of -0.24. In the second model political party domination is added but it is not found to be significantly predictive of the women’s suffrage impact. The log of the per capita manufacturing output still remains to be significant in this model. In the third model the proportion of the population that was female is added to the model and this time it is found to be significantly related to the impact of women’s suffrage in the growth model and has a positive relationship with a coefficient of 0.64. This supports the hypothesis of Braun and Kvasnicka (2011) that the amount of women in a state was related to women’s suffrage laws. Also in this model the log of the per capita of manufacturing output remains significant and the political party dominance variable also is now significant with a coefficient of -0.23.
Finally in the last model the proportion of black belt counties is added as an explanatory variable however it is not found to be significant. The proportion of women in the population and log of per capita manufacturing however remain significant in this model providing some evidence for these theories. The adjusted r-squared value for this final model is 0.21 indicating that about 21% of the variance in the impact of the women’s suffrage coefficient is being explained by these independent variables.
V. Discussion and Conclusion

This paper has created a new measure of suffrage for each state in the U.S. from 1900 to 1950 that may be used in future quantitative analyses concerned with incorporating the concept of suffrage. One such analysis was also presented to show how this new measure might be utilized. The two step OLS regression results incorporated several variables motivated by past research on suffrage extensions and restrictions in order to examine if these explanations of the mechanisms for changes in voting rights were related to the observed longitudinal trajectories of suffrage. The results of this analysis provide mixed support for the theories examined. Llavador and Oxoby (2005) argue that suffrage extensions are positively related to the level of economic development in the region. While the variable used to operationalize this theory (the log of per capita manufacturing output) was consistently significant in all models, the direction of the relationship was not entirely consistent with what the theory would predict.

Specifically, the coefficient for this variable in the intercept model was negative, indicating that higher levels of per capita manufacturing output (logged) predicted lower levels of initial suffrage in 1900. The theory presented by Llavador and Oxoby (2005) however would suggest the opposite relationship, that higher levels of per capita manufacturing output would be related to higher levels of suffrage. One explanation of this might be that since this theory focuses on the importance of economic development in suffrage extensions, we might expect that the relationship of the variable with respect
to the growth factor may be a better test of this theory; in fact when we look at how the log of per capita manufacturing output relates to the growth factor we do see a significant positive relationship just as the theory would predict. Also, lower levels of initial suffrage in 1900 in turn mean there would more opportunity for future suffrage extensions; therefore it might be the case that there is a certain threshold for economic development and only once this threshold is reached will higher levels of output result in higher levels of suffrage.

In regards to the theory of suffrage extensions suggested by Munshi (2010) which predicted that higher levels of party competition are positively related to suffrage extensions, and thus party dominance would be negatively related to such extensions, results from this analysis were also mixed. While political party domination was found to be significantly related to both the intercept and the slope for the suffrage trajectories, the direction of the relationship was not as was predicted for both cases. Specifically, while the findings were consistent with the theory for the intercept models (higher levels of political domination were associated with lower levels of starting points for suffrage), for the growth factor models the direction of the relationship was found to be the opposite of what was initially predicted by the theory. Higher levels of political domination actually predicted higher growth of suffrage. This again might suggest that the connection between political dominance and suffrage extensions, while significant, might be more complex than the simple negative relationship predicted; it may be the case that states with lower levels of initial suffrage could be impacted differently by political domination than states with higher initial levels of suffrage.
For the variable of the proportion of the population that was female which was used to test the theory of the sex ratio being related to suffrage extensions, suggested by Braun and Kvasnicka (2011), this analysis did not show any evidence supporting it for the intercept models or the growth factor models. The models which examined the impact of women’s suffrage on the trajectories did show this variable to be significant however, and it was found to be positively related as was predicted. This does suggest that having a higher proportion of women in a state was predictive of women’s suffrage having a larger impact on the overall trajectory of suffrage, although this would be expected given a state with a larger percentage of women would by definition benefit more from women’s suffrage being enacted so it is not an incredibly reliable test for this theory. Finally, in regards to the theoretical explanation for the suffrage retraction hypothesis of Griffin (1997) and Beherens et al. (2003), which postulated that higher concentrations of African Americans are related to higher suffrage retractions (and thus lower suffrage rates), no statistical evidence in this analysis was found.

In conclusion, this preliminary analysis shows some support for several of the theories reviewed which attempt to provide explanations for the mechanisms behind suffrage extensions. While certain limitations, such as the lack of time varying independent variables in the second step regression, may have prevented this analysis from providing a more complex tests of these theoretical explanations for suffrage, this work nonetheless does provide an important first step in utilizing this new suffrage measure to further understand what forces might be at play in the important process of extending and retracting the right to vote in the United States during the first half of the twentieth century. In addition, this new measure of state level suffrage and the data
created from it can be employed in other analyses of democracy, voting, and inequality wherein the right to vote is an important component, thus providing a useful contribution to the study of political rights.
Appendix A: U.S. Suffrage Percentages, 1900-1950

<table>
<thead>
<tr>
<th>State</th>
<th>1900</th>
<th>1910</th>
<th>1920</th>
<th>1930</th>
<th>1940</th>
<th>1950</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alabama</td>
<td>47.0%</td>
<td>35.6%</td>
<td>75.0%</td>
<td>78.6%</td>
<td>84.9%</td>
<td>88.9%</td>
</tr>
<tr>
<td>Arizona</td>
<td>-</td>
<td>-</td>
<td>59.0%</td>
<td>83.1%</td>
<td>80.6%</td>
<td>87.2%</td>
</tr>
<tr>
<td>Arkansas</td>
<td>49.0%</td>
<td>49.4%</td>
<td>49.1%</td>
<td>93.7%</td>
<td>94.1%</td>
<td>95.0%</td>
</tr>
<tr>
<td>California</td>
<td>43.5%</td>
<td>45.8%</td>
<td>82.3%</td>
<td>86.0%</td>
<td>87.3%</td>
<td>91.4%</td>
</tr>
<tr>
<td>Colorado</td>
<td>91.7%</td>
<td>88.7%</td>
<td>91.7%</td>
<td>93.5%</td>
<td>94.3%</td>
<td>95.7%</td>
</tr>
<tr>
<td>Connecticut</td>
<td>38.2%</td>
<td>34.7%</td>
<td>67.7%</td>
<td>71.8%</td>
<td>82.5%</td>
<td>90.2%</td>
</tr>
<tr>
<td>Delaware</td>
<td>40.9%</td>
<td>41.6%</td>
<td>84.0%</td>
<td>87.8%</td>
<td>91.2%</td>
<td>93.8%</td>
</tr>
<tr>
<td>Florida</td>
<td>49.0%</td>
<td>49.6%</td>
<td>91.7%</td>
<td>92.1%</td>
<td>95.0%</td>
<td>96.1%</td>
</tr>
<tr>
<td>Georgia</td>
<td>46.0%</td>
<td>36.2%</td>
<td>38.2%</td>
<td>82.4%</td>
<td>85.7%</td>
<td>90.0%</td>
</tr>
<tr>
<td>Idaho</td>
<td>89.4%</td>
<td>90.6%</td>
<td>92.6%</td>
<td>93.6%</td>
<td>94.9%</td>
<td>96.3%</td>
</tr>
<tr>
<td>Illinois</td>
<td>47.8%</td>
<td>50.8%</td>
<td>87.1%</td>
<td>89.3%</td>
<td>93.2%</td>
<td>96.0%</td>
</tr>
<tr>
<td>Indiana</td>
<td>48.6%</td>
<td>48.7%</td>
<td>95.2%</td>
<td>94.7%</td>
<td>95.8%</td>
<td>96.8%</td>
</tr>
<tr>
<td>Iowa</td>
<td>49.4%</td>
<td>48.4%</td>
<td>94.1%</td>
<td>95.0%</td>
<td>96.1%</td>
<td>96.9%</td>
</tr>
<tr>
<td>Kansas</td>
<td>50.2%</td>
<td>50.4%</td>
<td>94.0%</td>
<td>95.6%</td>
<td>96.1%</td>
<td>96.9%</td>
</tr>
<tr>
<td>Kentucky</td>
<td>48.5%</td>
<td>48.7%</td>
<td>96.1%</td>
<td>96.3%</td>
<td>96.3%</td>
<td>96.8%</td>
</tr>
<tr>
<td>Louisiana</td>
<td>28.0%</td>
<td>33.2%</td>
<td>68.8%</td>
<td>77.1%</td>
<td>83.4%</td>
<td>87.0%</td>
</tr>
<tr>
<td>Maine</td>
<td>41.8%</td>
<td>41.8%</td>
<td>84.2%</td>
<td>84.1%</td>
<td>89.0%</td>
<td>92.6%</td>
</tr>
<tr>
<td>Maryland</td>
<td>46.3%</td>
<td>45.7%</td>
<td>92.3%</td>
<td>93.8%</td>
<td>94.8%</td>
<td>96.1%</td>
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References


