

An Exploration of the Effects of Freedmen's Bureau and Union Troop Presence on City/Town-Level African-American Office-Holdings During Reconstruction

Juan Andrés Medina

Faculty Sponsor: Professor Richard Grossman

Introduction

For approximately ten to fifteen years following the American Civil War, the Federal government employed tactics aimed at facilitating and enforcing the freedom of African-Americans, including, most prominently, the institution of freedmen's bureaus and the installment of Union troops throughout the formerly-confederate southern states. This project explores the potential effects of Freedmen's Bureau and Union troop establishment (fort) presence on African-American office-holdings at the city/town-level, both through a visual exploration of office-holder locations in relation to the location of forts and freedmen's bureaus, and through statistical testing of the effect of freedmen's bureau and fort presence at the counties with office-holders on the number of times each office-holder held office at the local level.

Methodology

For this analysis, data of local African-American office-holders (647 total, 131 in North Carolina) was gathered from Eric Foner's *Freedmen's Bureau*. The data was further narrowed to the states of Alabama, Arkansas, Florida, Georgia, Louisiana, Mississippi, North Carolina, South Carolina and Tennessee, as there were perceived differences in the Reconstruction tactics employed in the remaining formerly-confederate states.

Three maps were created in ArcGIS Pro using the geocoded locations of the cities/towns where African-Americans held office at the local-level during this period. The US counties (1880) shapefile was obtained from NHGIS and was modified to only include the counties in the selected southern states. The first (top) map shows the African-American office-holding locations at the city/town-level alone with a notation of the counties where they are present (blue). The second (middle) map shows African-American office-holding location and the location of Freedmen's Bureaus, with a notation for the counties with both (green). The third (bottom) map shows African-American office-holding locations and Union troop establishments (forts), with a notation for the counties with both (purple).

The African-American office-holder data available contains repeated observations for each instance an individual held office at the local-level. Data of the number of forts and the number of freedmen's bureaus was gathered at the state and county levels (for North Carolina) from the Forts and Freedmen's Bureaus shapefiles previously created and were stored in respective count variables in the dataset. To test the potential impact of freedmen's bureau and fort presence on African-American office-holdings at the local-level, two zero-truncated Poisson regression models were created using the VGAM package in R, where a variable with the total number of times each office-holder held office at the local-level (with a range of 1 (min) to 6 (max) times) was used as the dependent variable. Each of the models includes either a variable with the number of forts in each county or a variable with the number of freedmen's bureaus in each county, as these variables were found to be significantly correlated at the 5% level. Both models include a dummy variable that takes the value of 1 if the race of the office-holder is black (as opposed to mulatto), a variable with the colored population in each county (extracted from 1870 Census papers to control for the colored population), and a variable containing the average term in office length for each office-holder (created by from a variable capturing the difference between the start and end period of each position +1 (under the assumption that an office-holder spent the whole year in the position) and creating a variable of the mean of those differences for each office-holder. Due to time constraint, the model was tested only for office-holders within counties in North Carolina.

Acknowledgements & References

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Foner, E. (1993). *Freedmen's Bureau: A Directory of Black Officeholders During Reconstruction*. New York, NY: Oxford University Press.

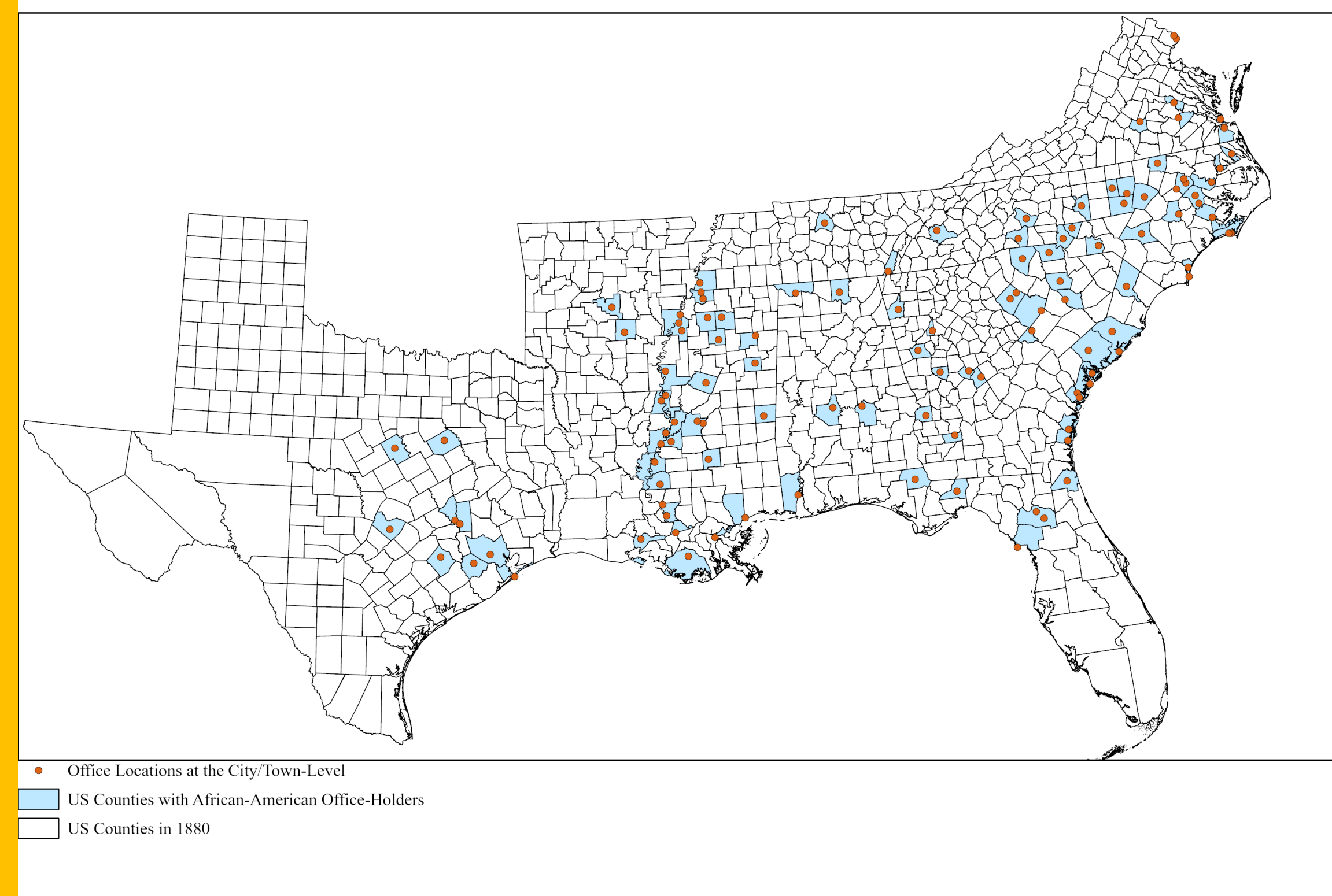
U.S. Census Bureau (1872). *1870 Census: A Compendium of the Ninth Census (June 1, 1870)*. Retrieved from <https://www.census.gov/library/publications/1872/dec/1870e.html>

Gregory P. Downs and Scott Nesbit, *Mapping Occupation: Force, Freedom, and the Army in Reconstruction*, <http://mappingoccupation.org>, published March 2015.

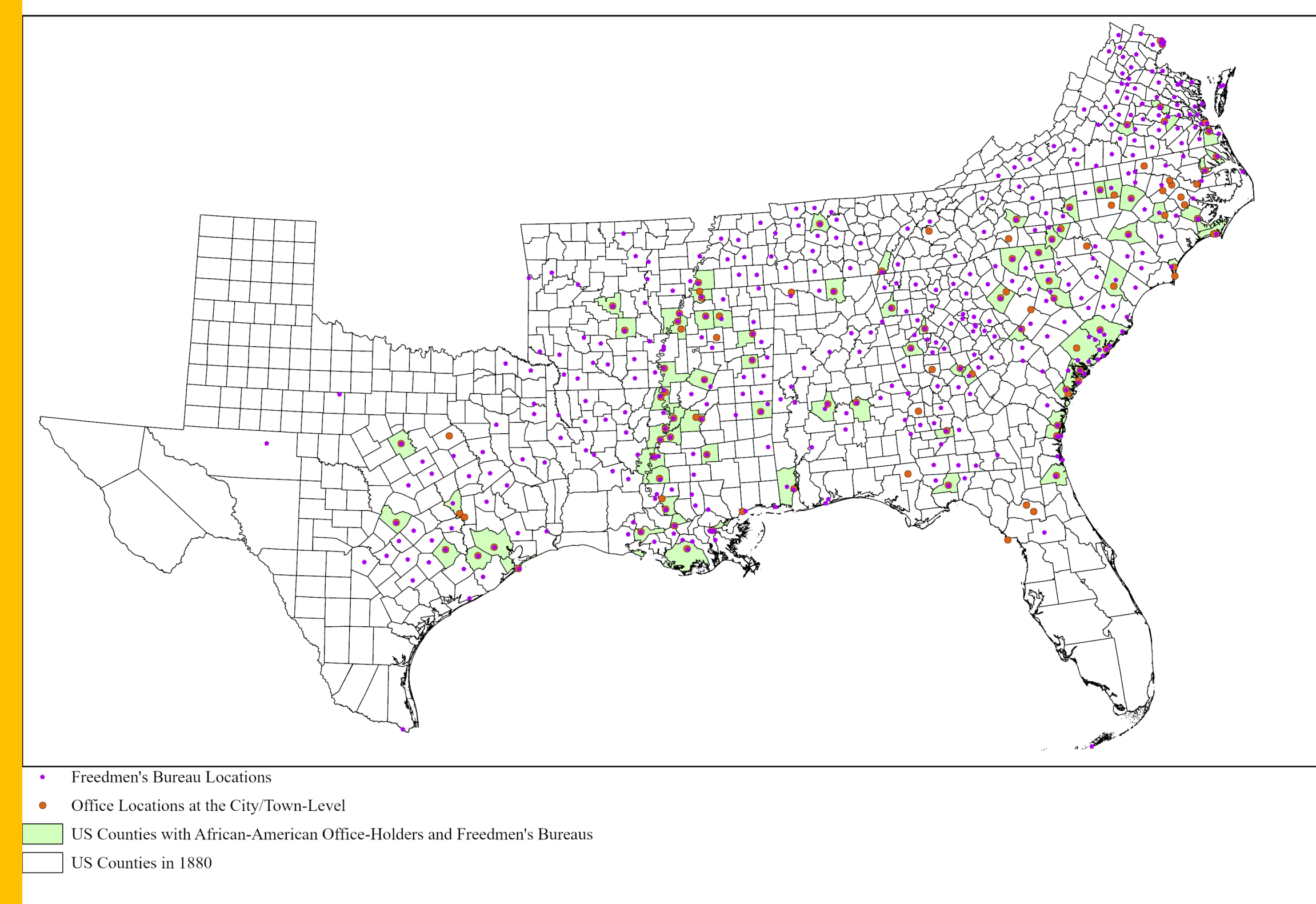
Steven Manson, Jonathan Schroeder, David Van Riper, Tracy Kugler, and Steven Ruggles. IPUMS National Historical Geographic Information System: Version 16.0. Minneapolis, MN: IPUMS. 2021. <http://doi.org/10.18128/D050.V16.0>

Mappings of Office-Holders

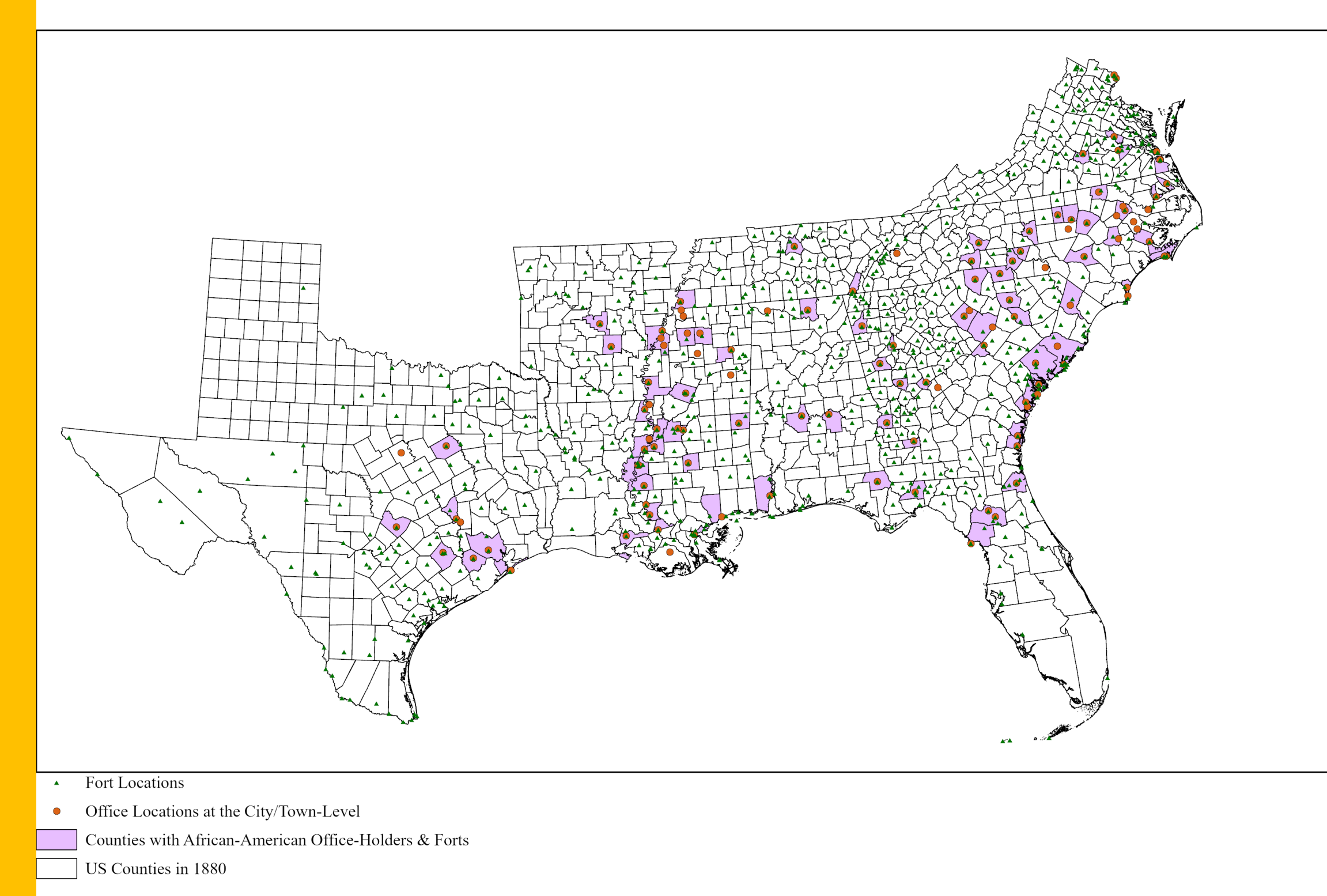
African-American Office-Holding Locations During Reconstruction



African-American Office-Holding Locations & Freedmen's Bureau Locations During Reconstruction



African-American Office-Holding Locations & Fort Locations During Reconstruction

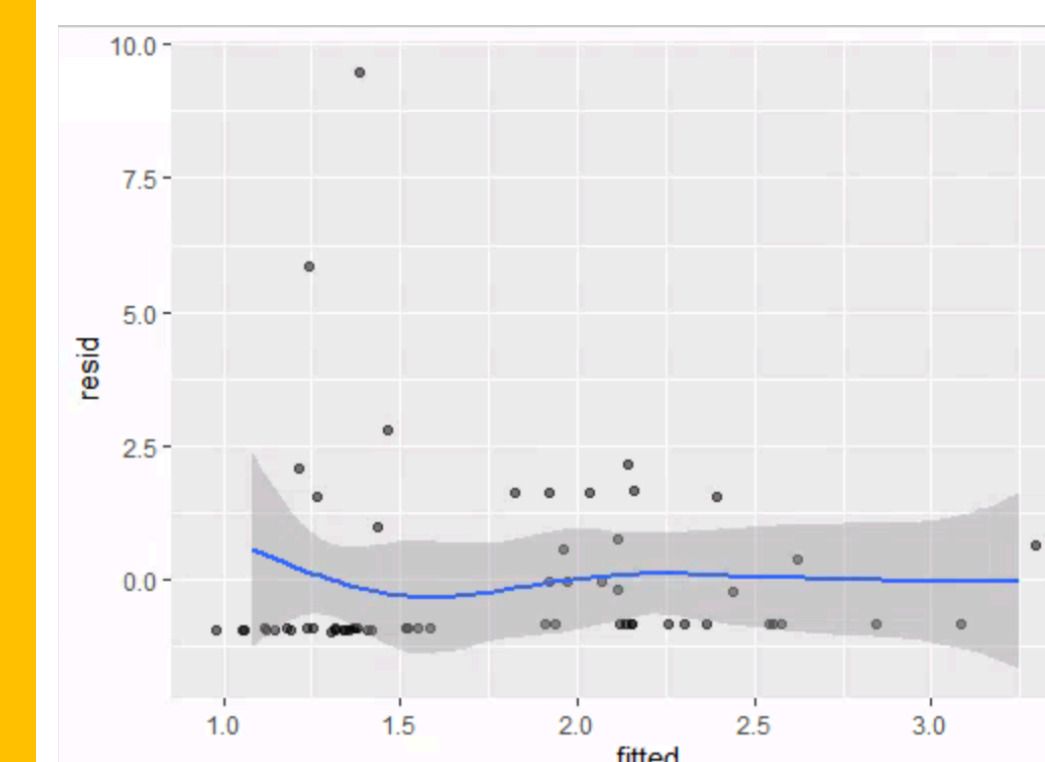
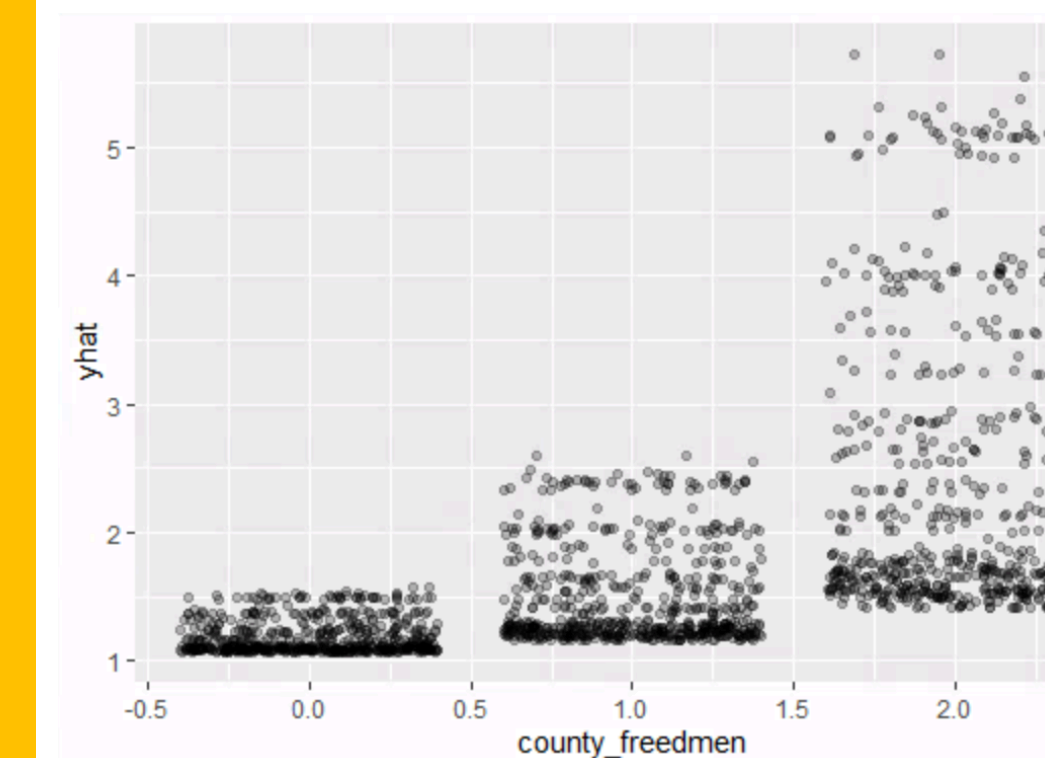


Zero-Truncated Poisson Regressions: Case Study of North Carolina

Model 1

```
Coefficients:
(Intercept)      -2.332e+00  8.287e-01  NA      NA
county_freedmen  8.838e-01  2.212e-01  3.995  6.47e-05 ***
race_black      2.522e-01  2.635e-01  0.957  0.33842
average_term_length  9.265e-03  3.880e-02  0.269  0.80542
county_colored_pop1870  1.222e-04  4.588e-05  2.665  0.00711 ***
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
Name of linear predictor: loglink(lambda)
Log-likelihood: -75.617 on 58 degrees of freedom
Number of Fisher scoring iterations: 6
```

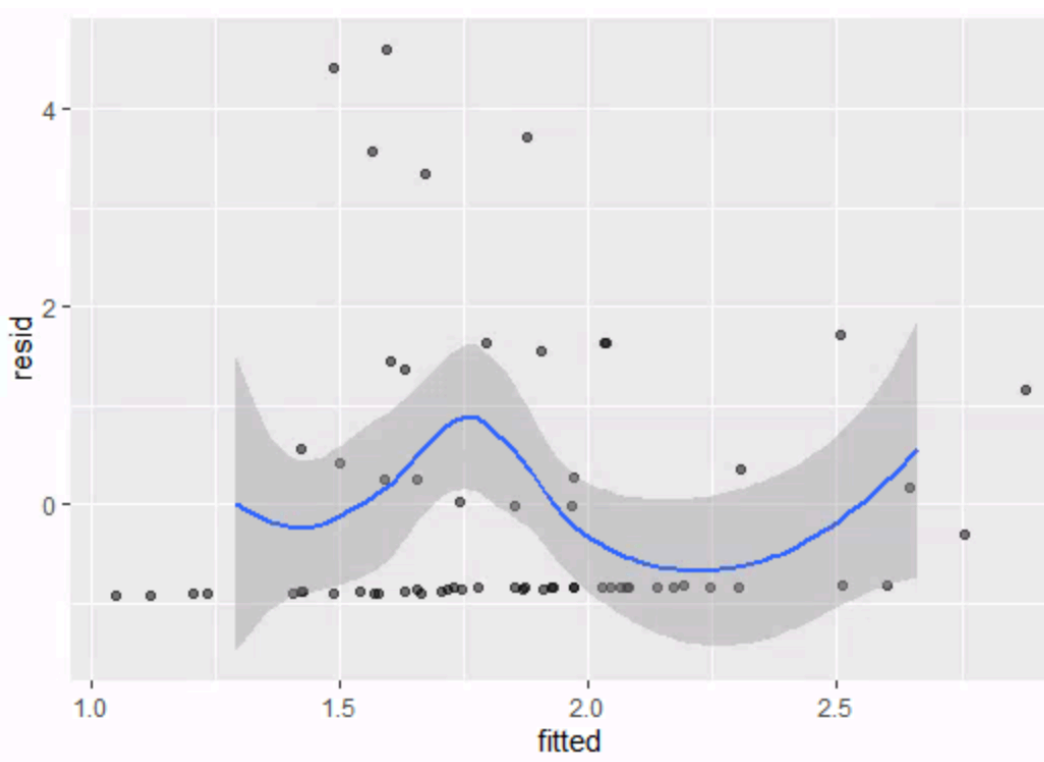
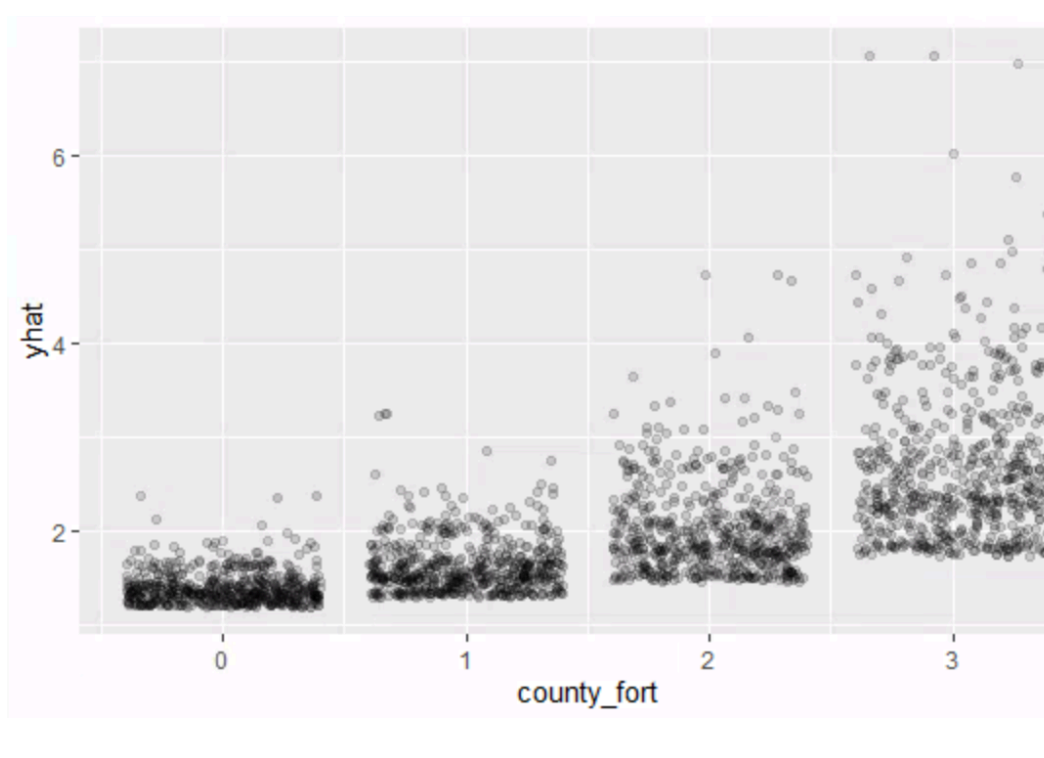
```
exp(coef(mod1))
(Intercept)      county_freedmen      race_black
0.0913266        2.4200180        1.2868880
average_term_length county_colored_pop1870
1.0100132        1.0001222
```



Model 2

```
Coefficients:
(Intercept)      -1.213e+00  6.289e-01  -1.936  0.0229
county_fort      4.058e-01  2.395e-01  1.708  0.0874
race_black      2.830e-01  2.936e-01  1.305  0.1921
average_term_length  5.258e-02  3.720e-02  0.937  0.3489
county_colored_pop1870  5.090e-05  3.305e-05  1.540  0.1236
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
Name of linear predictor: loglink(lambda)
Log-likelihood: -83.2866 on 58 degrees of freedom
Number of Fisher scoring iterations: 5
```

```
exp(coef(mod2))
(Intercept)      county_fort      race_black
0.2917614        1.5054266        1.4666423
average_term_length county_colored_pop1870
1.0503396        1.0000309
```



Observations

The map of African-American office-holding locations with Freedmen's Bureaus visually suggests a potential positive relationship between the two variables, such that office-holding locations are commonly found in areas with a high concentration of Freedmen's Bureaus. The map of local African-American office-holding locations with forts portrays the presence of office-holding locations near forts, however, there is not a clear visual relationship between the two variables.

The zero-truncated poisson regression models (above) employed on the counties of North Carolina suggest a positive relationship of fort and freedmen's bureau presence, respectively, on the number of times African-American office-holders held office at the local level (count_all_office).

Model 1 (top left), which includes the number of freedmen's bureau in each county (county_freedmen) as an explanatory variable, suggests a positive and highly significant (p-value close to 0) coefficient for county_freedmen, where, based on its exponentiated value, a 1 unit increase in the number of freedmen's bureaus is expected to result in an increase in count_all_office by a factor of 2.42 for an untruncated model, and by a factor between 0 and 2.42 for a truncated model. This relationship can be observed on the graph of predicted values for the number of times African-American office-holders held office at the city/town-level (yhat) with county_freedmen (above). The residual vs. fitted plot shows moderate heteroskedasticity. Lastly, a matter of further analysis in the model is the presence of a Hauck-Donner effect on the intercept term.

Model 2 (top right), which includes the number of forts in each county (county_fort) as an explanatory variable, suggests a positive yet not statistically significant [at the 5% level] coefficient for county_fort, where, based on its exponentiated value, a 1 unit increase in county_fort would lead to an increase in count_all_office by a factor of 1.505 for an untruncated model, and by a factor between 0 and 1.505 for a truncated model. This relationship can be observed on the graph of predicted values for the number of times African-American office-holders held office at the city/town-level (yhat) with county_fort (above). The residual vs. fitted plot shows some heteroskedasticity. There are no found Hauck-Donner effects on this model.

Opportunities for Future Work

Opportunities for future work on this project include testing alternative models, extracting county-level data of forts, freedmen's bureaus and colored population for the remaining southern states for a more comprehensive analysis, and testing the effects of freedmen's bureau and Union fort presence on the number of times African-Americans held office at the federal or state-level in addition to the number of times they held office at the local-level.