

Gentrification and Ideology:
How Gentrification Impacts Democratic Incumbent Mayors Re-election



By
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Introduction

Gentrification can be seen through a shift in property value, a rise in Starbucks locations, or even the establishment of parks. This social process has affected urban neighborhoods across the country for decades. The harsh effects of gentrification lie within the displacement of minority residents. Within these gentrifying urban neighborhoods those who hold a political position at the city level are typically Democrat. It's also known that the Democratic platform supports minorities. While both statements are true, it's odd that the same people that support minority groups are the same ones displacing them from their homes (Troustine 2018). With the Democratic party actively displacing their own voters (Pew Research Center, 2024), I plan to research why Democratic Mayors are replacing their minority voter base if there is a shift in the new resident's voting behavior.

Considering the removal process and trend towards gentrification in the once African American neighborhoods, the new residents are of a different class. Are these new voters, Democrat or Republican? If they are Democrat, it follows along with the trend of the Democratic Mayors replacing their old voters with voters that can economically improve the municipality (Peterson 1981). However, if the new voters are Republican, why would the Democratic Mayors actively support and enact policy that removes constituents that vote for them, with residents who now vote against them. Therefore, putting them at risk of not being reelected. How does the partisan composition of urban residents due to gentrification affect the ability of Democrats to be reelected?

With an economic shift in the Democratic party to appeal to middle and upper-class voters the likelihood for gentrification in urban neighborhoods with a Democratic Mayor is high. This shift is the result of the Democratic Mayors wanting to create greater economic revenue

from higher tax profits from the higher income class. Gentrification is affecting low-income voters who are typically minority groups that vote Democratically. I argue that the new residents who are replacing the old low-income minority residents are Republicans. This is because they are a part of the new income demographic that Democrats are catering towards (Pew Research Center 2024). Furthermore, I believe this even though the Democratic Mayors will stay in office because of non-partisan elections. A majority of states' Mayor elections are nonpartisan which in turn reduces some important signals available to voters about selecting a candidate that is most aligned, therefore the new residents will vote based on observable signals like property values.

Literature review:

Contextualization of Gentrification & the Left's Shift in Appealing Certain Voters

The emergence of housing concentrated based on race and income status began in the early 20th century and persisted into the 1930s with the creation of low-income public housing (Cutler et al. 1999; Massey and Denton 1998). The concentration was supported by land-use and zoning regulation policy was implemented by city governments. In the 90's, gentrification began to take form in urban cities with the federal program, HOPE VI (Goetz 2011). The program led to the demolition of public housing within cities. This demolition was caused by the decline of the public housing conditions which in turn led to disinvestment in these economically fragile areas (Schill 1997). The gentrification process of demolition was characterized as urban renewal in the form of redeveloping housing or building a completely new public site (eg. parks) (Goetz 2011). While renewal was a part of the process, the goal of gentrification was greater economic growth in cities (Friedland 1980) by removing low-income residents and replacing them with middle to high-income residents (Peterson 1981). The concentration of people within the same

economic status is reported by Peterson 1981, where: economic circumstances and objectives determine most of the city's political agenda.

The enhancement of a city's economic productivity is described as implementing policies such as the zoning laws to attract skilled and white-collar workers, as well as middle- and upper-class residents (Peterson 1981). The reason government officials want to attract middle- and upper-class residents is because the city would then receive more in tax money. Also, by moving away from policies that benefit low-income residents, the city no longer must focus on redistributive services like low-cost housing or free medical care. By not focusing on low-cost housing the government officials could instead divert their attention onto education and park development. Dancygier and Chou (2021) explain that at the local level the Democratic party has shifted away from appealing to low-income residents and have begun focusing on middle- and upper-class residents. This distance from low-income voters explains the lack of care toward those who were driven into low-income housing. With removal, the likelihood of the same residents returning to their neighborhood is slim to none because large numbers of residents do not wish to move in the first place or private property management and tenant screening criteria make it impossible for most displaced tenants to return to the redeveloped site (Wilén et. al., 2006; Goetz & Chapple, 2010). The screening process usually accounts for income, which is the sole purpose of the original tenant's displacement, therefore returning is no longer a financial option.

What is Unknown About the Effects of Middle- and Upper-Income Voters

The Democratic party's shift from focusing on low-income residents to middle- and upper-income residents, took action in the form of gentrification. Gentrification is best described as: The socioeconomic and physical upgrading of a previously low-income neighborhood,

characterized by the influx of higher socioeconomic status residents and an increase in housing prices (Ding, Hwang, Divringi 2015). As of 2024 urban areas based on registered voters, 60% identify with or lean to the Democratic Party, while 37% identify as or lean Republican (Pew Research Center). With a larger voter base residing in the urban areas, this helps secure the elections for the left. It also demonstrates the left's ability to win elections even though there is a considerable number of Republicans in urban areas. However, as Ding et. al explains, gentrification is the upgrading of resident's income status in neighborhoods. By displacing low-income voters, whom 58% associate with the Democratic Party, the Democrats in office in urban areas are displacing their own voters for economic growth. With the removal process in place and the new trend towards gentrification, the once African American neighborhoods were now residents to a different class. On the other hand, if these new voters are Republican, then why would the Democratic Mayors actively support and enact policy that harms them? If they perpetuate action that removes the constituents that vote for them, then they will be replaced with those who will vote against them, therefore putting them at risk of losing reelection. In the majority of states Mayoral elections are nonpartisan—which reduces some important signals usually available to voters about selecting a candidate that is most aligned with their own preference for political party (Connolly & Mason, 2016). Arguably, incumbency is the most important factor of reelection, so this removal of party affiliation means that voters must base their vote on policies that are already in place. These changes and application of gentrification have occurred as seen previously with the shift in the Democrats voter base from low-income voters to middle-and-high income voters. Since the policies that are in place within the cities accommodate the middle-and upper-class, I expect that incumbents will remain in office regardless of resident ideology. This introduces the concept of retrospective voting, which is

based on expectations about future welfare guided by evaluations of past policy end-states (Fiorina 1981). This type of voting is surrounded by voters intrinsically relying on outcomes of policies enacted by incumbents during reelection. Fiorina's study focused on retrospective voting association with how the voters perceive their economic situation as remaining constant or changing. However, the results were non-significant, they only focused on national elections. As for Hopkins and Pettingill (2018), they found that Mayors appear to be evaluated primarily based on local economic performance. Considering that the Democratic party is shifting toward a higher income voter base to further improve the economic conditions of the region, Hopkins and Pettingill's findings of retrospective voting improve understanding of city level voters.

Research Design:

With my thesis of the effect of voting behavior on urban cities that were gentrified with a Democrat Mayor, my design for research follows:

Questions that need to be answered:

Within urban cities, the areas that are being gentrified are low-income neighborhoods. These neighborhoods are often occupied by Democrats. If they are being gentrified and displaced, who is replacing these Democrat voters? I hypothesize that they are being replaced by Republicans. I further hypothesize that within these urban cities the Democrats that are in office will be reelected regardless of change in the voter's partisanship. This is because the Republicans will still vote for the Democratic officials due the elections being non-partisan. Therefore, residents are basing their decision off of policy enacted by the Mayor in office.

Data Collection:

For my research question I plan on addressing it with two different research designs. The first design will focus on the periods of 2012 and 2016. I chose these two periods because there

is data available to run my design. For my data I will be using California census data places. While other research has focused on different datasets, I believe that conducting my research with census place level data is best. This is because the place level has data available on the property value of cities within the United States during the time frame, which works for my design. I will then find if there is a change in ideology because of gentrification between the two periods. I decided to use ideology as one of my variables, rather than partisanship because there was data available regarding place level voter's ideology. The data derived from Adam Bonica's, Database on Ideology, Money in Politics, and Elections. This data frame estimates the ideology for a given city by collecting data on over 850 million itemized political contributions made by individuals and organizations to local, state, and federal elections. The researcher then connected these political contributions to the city in which the contributor resided in.

Measure of gentrification:

While there are several models of measurement of gentrification that are applicable to my research, I find that Wilhelmsson's measurement is best. The researchers use Getis-Ord statistics G_i^* as a measure of a gentrified residential area to estimate the concentration of gentrified areas, they also use house value for their unit of measurement. They found statistical significance in gentrification being linked to an increase in 6%-8% in property values. I found that their measurement of gentrification is best to apply for my research because it includes the same unit of measurement I plan on working with. Therefore, I will apply Wilhelmsson's measure of gentrification during the time frame of 2012 and 2016, and 2016 and 2020, to test if gentrification occurred in (Wilhelmsson et. al 2022).

I plan on finding from my first equation that gentrification is present and led to a shift in partisanship from 2012 to 2016. Then for the design of my second study I will focus on 2016 and

2020. This period will be used to assess the effect of the shift of partisanship on Democratic incumbent Mayors being reelected. This time frame is suitable because there is data available for it at the place level for census tracts. For this equation I will be using the census data tracts I used in the previous model. I will then find if between the two time frames if there was a shift in partisanship that gentrification was found. I will then find if there is an association between the shift in ideology and if Democrat Incumbents from 2016 are reelected in 2020 considering the shift in ideology for a given city. I will find that the Mayors are reelected through the American local government elections database (Benedictis-Kessner, Da In Lee, Velez, Warshaw 2023). I believe that this is the most up to date dataset regarding Mayoral elections and contains a plethora of variables (vote share, year, county, etc.) which will prove helpful for my design.

Different cities across the state of the United States have clear differences, such as Los Angeles County will have higher property values than Phoenix County. I plan on using place level within-city differences for my equations. I decided to use this method because it was clearer to construct my datasets with within-city differences, rather than fixed effects. Further, within city differences allowed me to better construct my regression analysis for my two equations.

Testing:

I plan on measuring gentrification through a binary variable. I will first collect my data for all census tracts in the U.S.. I will then determine if a municipality has gentrified based on an increase in property value. I will assign the municipality a 1 if the property value has increased the gentrified area increases housing value by around 6%–8% (Wilhelmsson et. al 2022). I will then use ideology in all municipalities (including the ones that changed) as my dependent variable.

Outcome:

I argue that residents in an urban municipality after gentrification will still reelect Democratic Incumbent Mayors, despite the shift in ideology. For this aspect of my research, I will look for a continuous change in ideology in the urban city, then see if the Democrat incumbent Mayors are reelected. Peterson (1981) explains how an increase in property value is associated with the increase of middle to upper class residents. I will specifically look at the years of 2016 and 2020. I hypothesize that with a shift in ideology from liberal to conservative and increasing home values. I will then argue through quantitative data that there is a positive relationship surrounding the Mayor's policy regardless of party affiliation and the Mayors being reelected.

Summary of findings:

From the research, I found parts of my hypothesis to be true. I first found when measuring for gentrification within the urban cities that most of the cities experienced the 6-8% increase in property value. Within those neighborhoods I then followed my research with my first equation.

Regarding the first equation that approached my research question, the periods of 2012 and 2016 did reflect a change in ideology. The shift was characterized as an increase in liberal voters.

With the second equation I found that between the period of 2016 and 2020 within the gentrified areas, as ideology within a given city became increasingly more conservative, Democrat incumbent Mayors are more likely to be reelected.

Importance:

This research is important in understanding gentrification's effect on ideology within urban cities. Gentrification has been studied to have impacted low-income residents as well as

targeting certain races at the local level. However, the ideology of those who are replacing the displaced hasn't been studied. This research will uncover if local government's attitudes toward appealing to the new residents influences the partisanship of the government. It will also introduce if local governments that gentrify are able to remain Democratic. If it's true that Republicans are replacing the Democratic voters but there is no change in the reelection of Democratic Mayors, it will open the door for future research surrounding whether the ideological shift impacts larger elections, like Congressional or Presidential.

Data

To test whether my hypothesis is correct or not, I gathered multiple datasets that would provide an answer to the question at hand. I first gathered the "American Local Government Elections Database" constructed by Justin de Benedictus-Kessner, whose aim was to "- provide partisan and demographic information about candidates in these races as well as electoral outcomes" (de Benedictis-Kessner, Da In Lee, Velez, Warshaw 2023). Since this provides electoral data ranging from County Supervisor to Sheriff dataset, I focused primarily on filtering for Mayoral elections and the candidates that won the position. The dataset also includes a variety of variables most notable to my research are political party and a binary representation of incumbent. From that point I filtered specifically for the years 2020 because this is what I'm basing my study off. I decided to use these three years because I wanted to gauge the impact of recent gentrification and the ideology within a city level. This is because of the vast polarization that has occurred since the 2016 Presidential Election. This is because parties expressed *very* unfavorable views of the other party. In 2016, sizable shares of both Democrats and Republicans say the other party stirs feelings of not just frustration, but fear and anger (Pew Research Center

2016). I also didn't want to test lower than 2012 because it would have included the 2008 Housing Crisis which would have resulted in skewed data for median house value. I plan on using this year to first find the Mayors that were reelected within a given city within the time frame, along with the change in median house value and city ideology as well. This will allow a gauge to form on whether there is correlation between a shift in ideology due to gentrification and if it impacts the reelection of Mayors.

To better understand the cities that I was going to be researching with, I decided that it was important to include the partisanship of the given area. The other data frame that I worked with was city ideology data. I collected this data from the Database on Ideology, Money in Politics, and Elections, which was conducted by Adam Bonica. This data frame represents the ideology of each city within a given year. Bonica was able to arrive at these ideology estimates for a given city by collecting data on over 850 million itemized political contributions made by individuals and organizations to local, state, and federal elections. The researcher then connected these political contributions to the city in which the contributor resided in. For this data frame I filtered for 2012, 2016, and 2020.¹ Then with the data cleaned I was able to merge this dataset into the local election dataset. The importance of the inclusion of ideology within my research stems further than defining the partisanship of a given city. It also goes to represent the partisan shift with gentrification. While a shift might occur, the removal of Democratic Mayors wouldn't result in reelection.

Then for my measurement of gentrification I look specifically for house values and test whether they increased over the given period. As explained earlier the measure for gentrification is an increase of 8 percent within the median house value. This is why I also collected data from

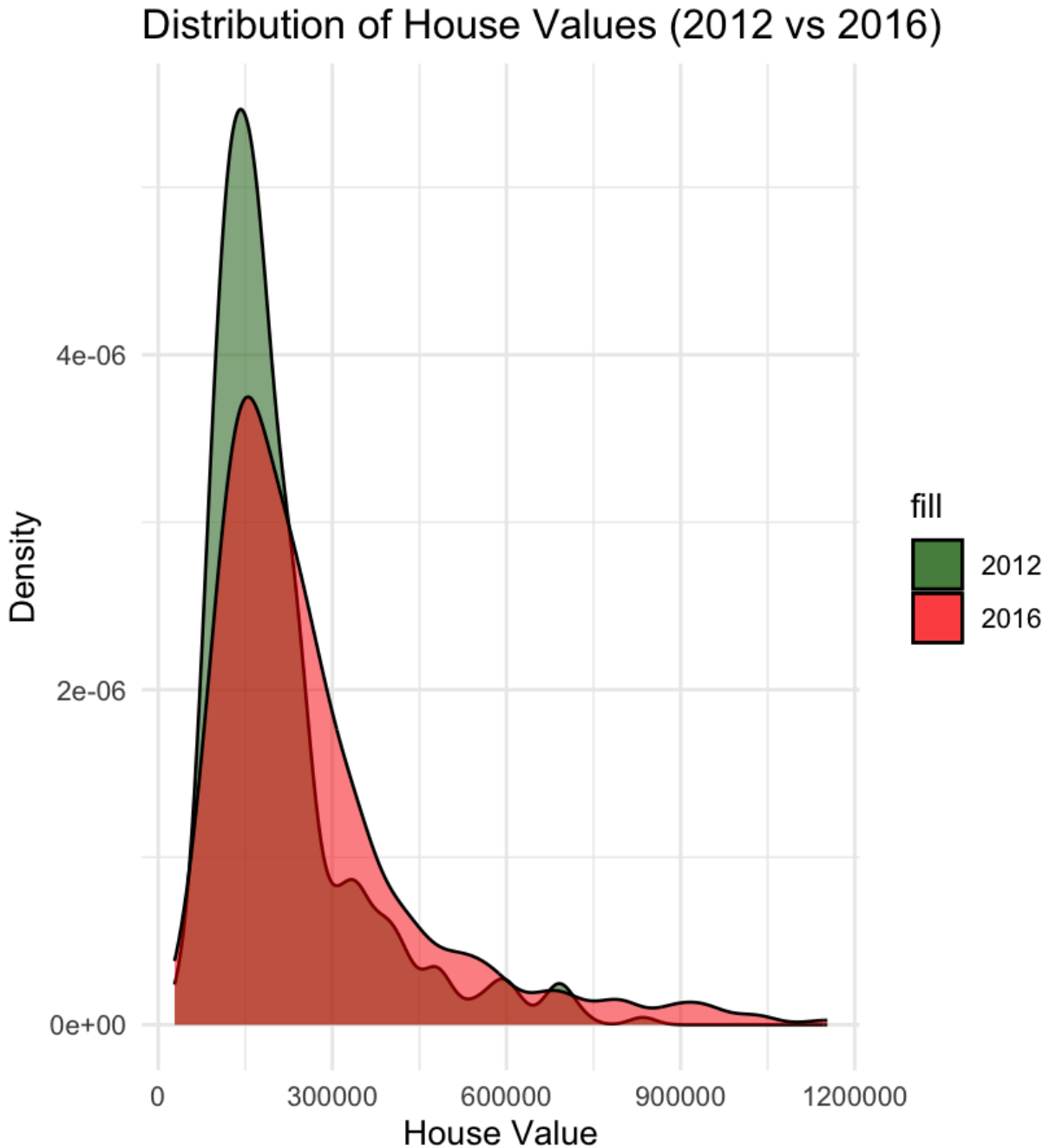
¹Within this dataset there were many misspellings which resulted in a single city having multiple observations due to the incorrect spelling. I resolved this challenge by having to subset the data to the correct spelling, which in turn resulted in the loss of a small amount of observations

2012 to provide context for whether there was a shift in housing value from 2012 to 2016. The datasets that I collected for measurement of gentrification were from Social Explorer. I decided to use 1-year estimates of American Community Surveys, as they were the best representation for the given year and provided the unit of measure I wanted to use. I first collected data based on place level. I choose this route because for house value on a larger level such as a city, the level of gentrification would be harder to find. I also reasoned with this data because it was the level at which Mayoral data was available. From this point it's important to note that since the data is collected on the place level, the area of house value collection is at a broader level. This doesn't discount the research, however this is the lowest level of Mayoral data available. I had to choose 2019 in lieu of 2020 due to complications of data collection from COVID-19. The census did not collect census information for 2020 and I didn't want my study to be impacted by post-COVID effects for housing prices. Furthermore, I filtered the datasets by median house price. This was best because it allowed for a generalized basis of housing prices within the given city.

Regression Analysis:

I found visualizations to be supplementary to my analysis. Throughout the following Figures, they each take apart a certain aspect of my research and provide clearer interpretations. The graph below represents the Distribution of House Values (Figure 1).

Figure 1

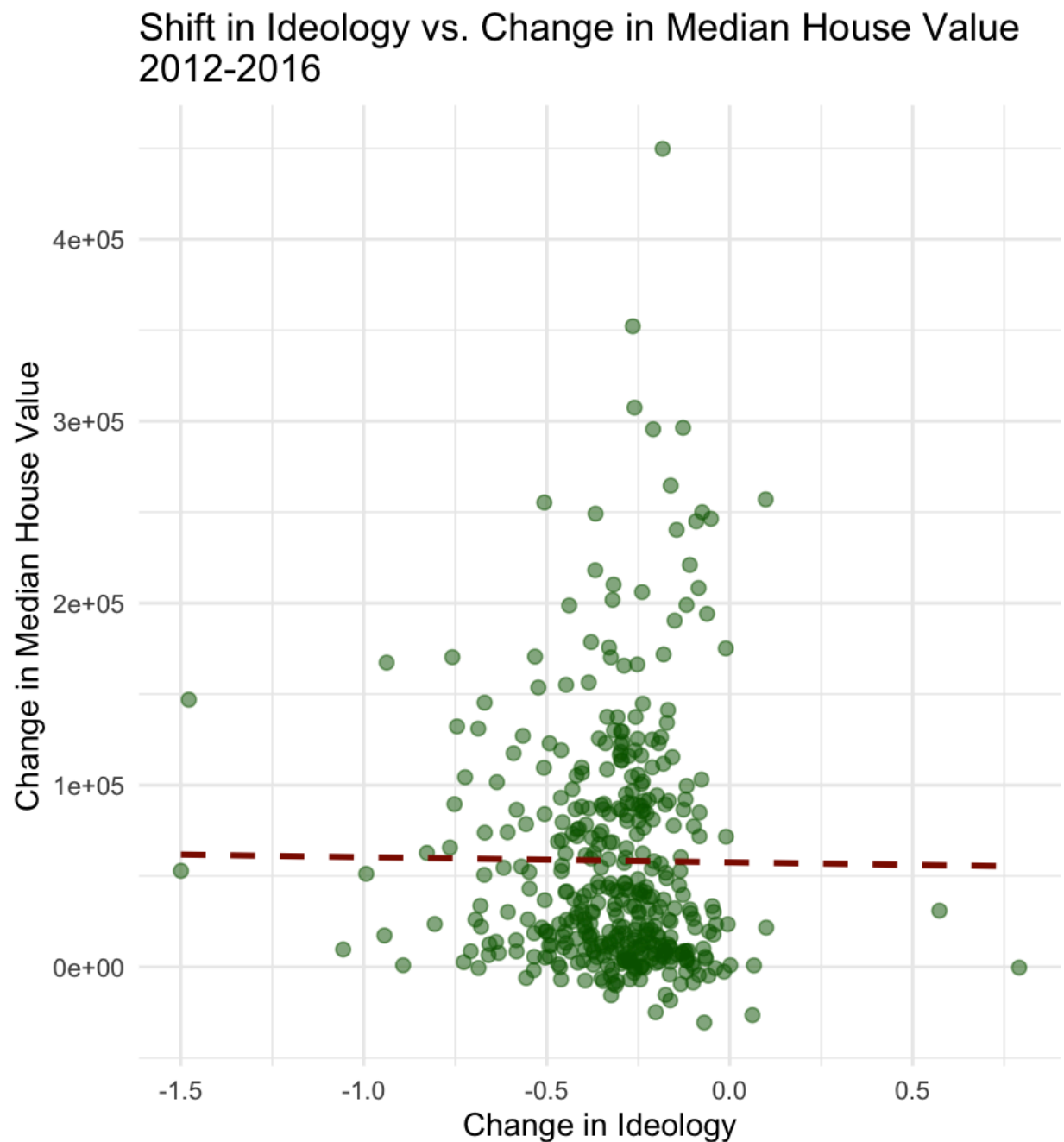


The graph indicates the decrease in median house value over the 2012 and 2016 period. The home values for 2012 and 2016 both exhibit a long right tail. However 2016 demonstrates the larger number of homes that became increasingly more expensive compared to 2012. Figure 1, implies the increased nature of house values is representative of gentrification and as shown in

Figure 3, this continuous trend. While the graph represents a visual aid, it's further supported by the regression results (Table 1).

With the implication of gentrification occurring from 2012 to 2016, I decided to visualize the association between the changes in ideology and house value, as shown in Figure 2.

Figure 2



This graph is associated with the first regression model (Table 1). Each dot represents a different city within the data frame that is used in the regression model. The figure depicts the gradual decreasing shift between change in median house value and ideology. Correlated with the findings of the model, while gentrification occurs within the city, the ideology decreases. This decrease in ideology is associated with the shift in ideology becoming more liberal.

Within my analysis of the data I decided to conduct a linear regression for the first part of my study. The goal of this regression was to see if there was correlation between gentrification housing within a given city from the dataset and a shift in the cities' ideology from 2012 to 2016. The way I would measure gentrification was to calculate the percentage increase in median home value for the given city. If the house value increased by more than 8% then it would be noted that gentrification occurred within that city. I gave this variable the name: 8% Housing Increase. For differences in ideology, I set up a simple equation that calculated the difference between the given cities' ideologies from 2012 and 2016. For this variable I assigned it the name: Ideological Change 2012-2016. For my regression I regress Ideological Change 2012-2016 on the binary variables of 8% Housing Increase and House Value Change 2012-2016. I include House Value Change 2012-2016, which is the difference in house value from 2012 to 2016. The purpose of the variable within the regression equation is to control for the difference in house values and economic conditions that could alter results from the regression.

As for the results of the regression in Table 1, I found that 8% Housing Increase is negative and statistically significant. As for the first independent variable within the regression, the statistical significance is relevant to my research. The regression states that with a one unit increase in gentrification occurring within a given city it's associated with a .108 decrease in difference of ideology from 2012 and 2016. This means that as gentrification happens within the

city, over the years 2012 and 2016 the city's ideology became more liberal. While this finding itself doesn't coincide with my hypothesis, gentrification would be associated with a conservative ideology within a given city, it remains a point that should be looked into further within local government research for political science. Contextual reasoning as to why this could be happening based off of Pew Research Center's economic indicators of partisanship. The center explains how among upper-income voters, 53% identify themselves as Democrat or Democrat leaning. However, Republicans make up 52% of upper-middle-income and 51% of middle-income voters all as of 2024. While, it was noted that the Democratic political party was shifting away from its voter base being low-income voters, and instead changing to middle-to-upper income voters. It could be that in 2020 the income and partisanship had different compositions. These compositions could have represented Democrats as upper-middle and middle-income voters. Which is different from my hypothesis, which placed Republicans as upper-middle and middle-income voters, which is why the coefficient is negative.

As for the last coefficient in the regression, while the estimate is close to a p-value of 0.05, there is no statistical significance for difference in house value being associated with difference in ideology between the years 2012 and 2016. I think that there isn't any significance for this coefficient because there are other variables that likely impact the relationship of change in housing values and ideology. These exogenous variables could vary from unemployment, media coverage and crime (Arnold and Carnes 2012, Hopkins and Pettingill 2018)

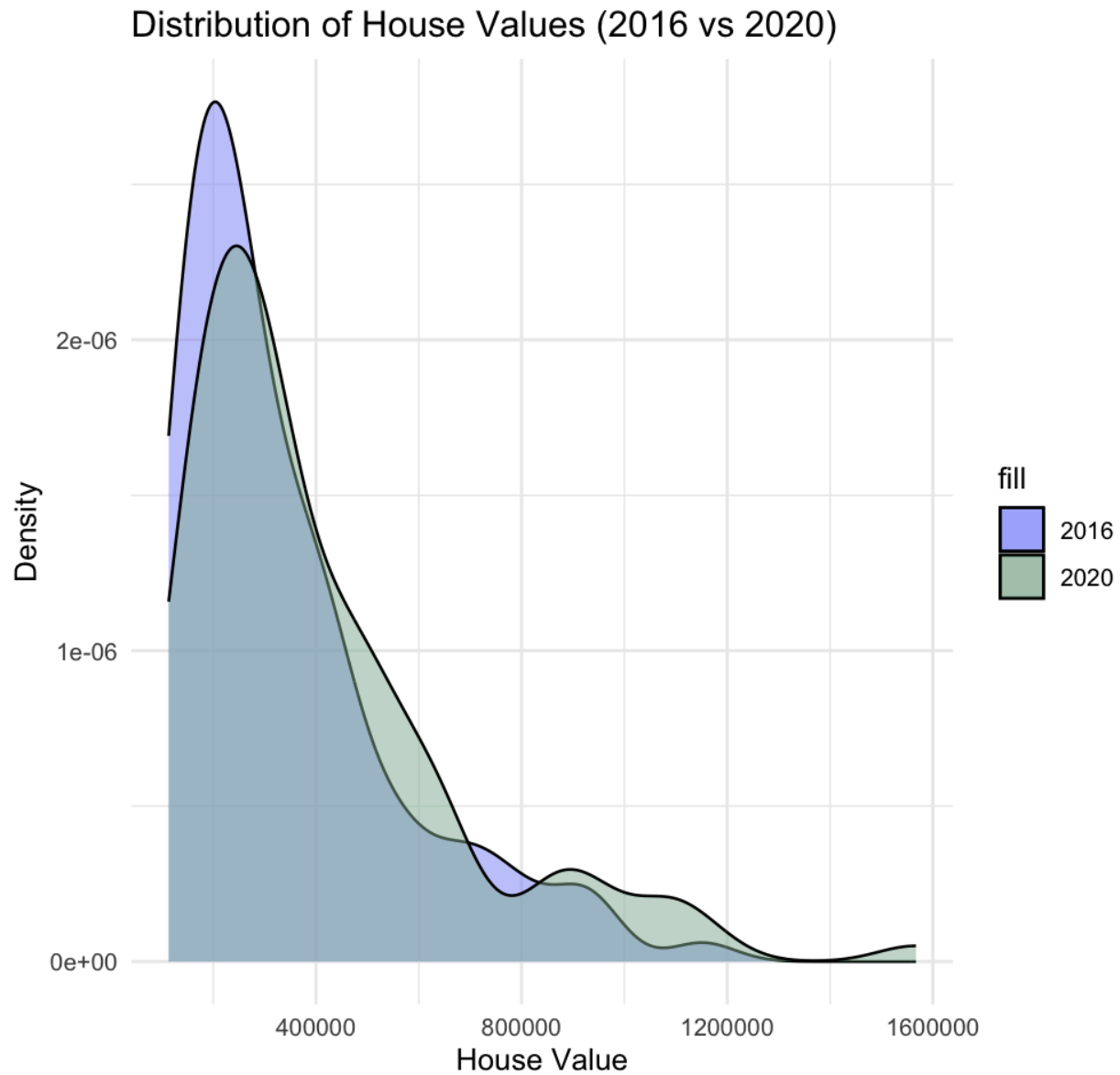
Table 1

	(1)
(Intercept)	-0.260*** (0.020)
8% Housing Increase	-0.102*** (0.027)
House Value Change 2012-2016	0.000+ (0.000)
Num.Obs.	403
R2	0.035
R2 Adj.	0.030
AIC	-125.3
BIC	-109.3
Log.Lik.	66.666
RMSE	0.21

+ p < 0.1, * p < 0.05, ** p < 0.01, *** p < 0.001

Relationship between Gentrification and
Median House Values

Figure 3



Similar to the graph that illustrates the distribution of house values across 2012 and 2016, Figure 3 represents the difference from 2016 and 2020. The graph shows the continued increase in house value within the given cities in 2020. Furthermore, it details how in 2016 there was a larger amount of lower house values as compared to 2020. Similarly, it also exhibits from both 2016 and 2020 a long right-tail likely from outliers within the dataset. The graph itself represents the continuation of gentrification occurring within the cities due to an increase by 8% in house

values. This graph poses how cities can continue to gentrify, as seen with an increase in median home values from 2016 to 2020.

Figure 4

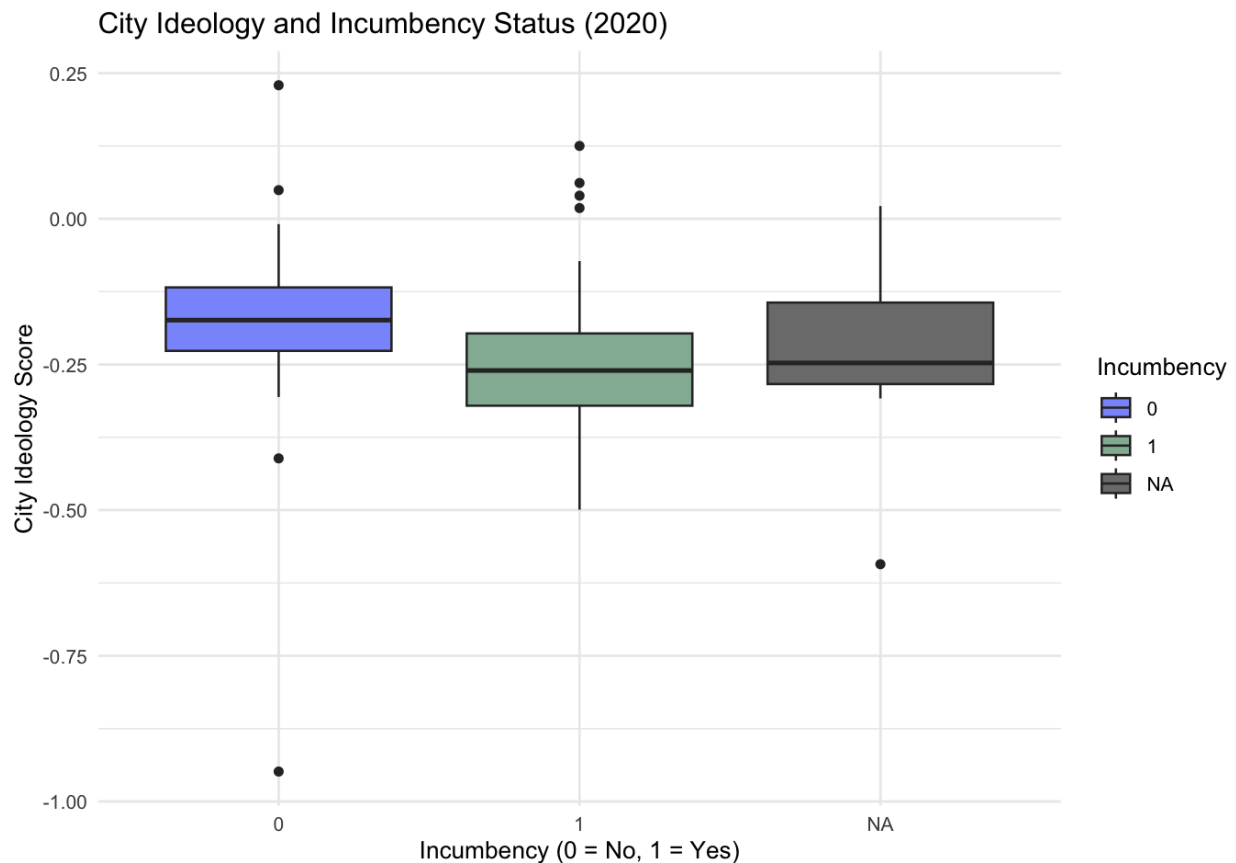
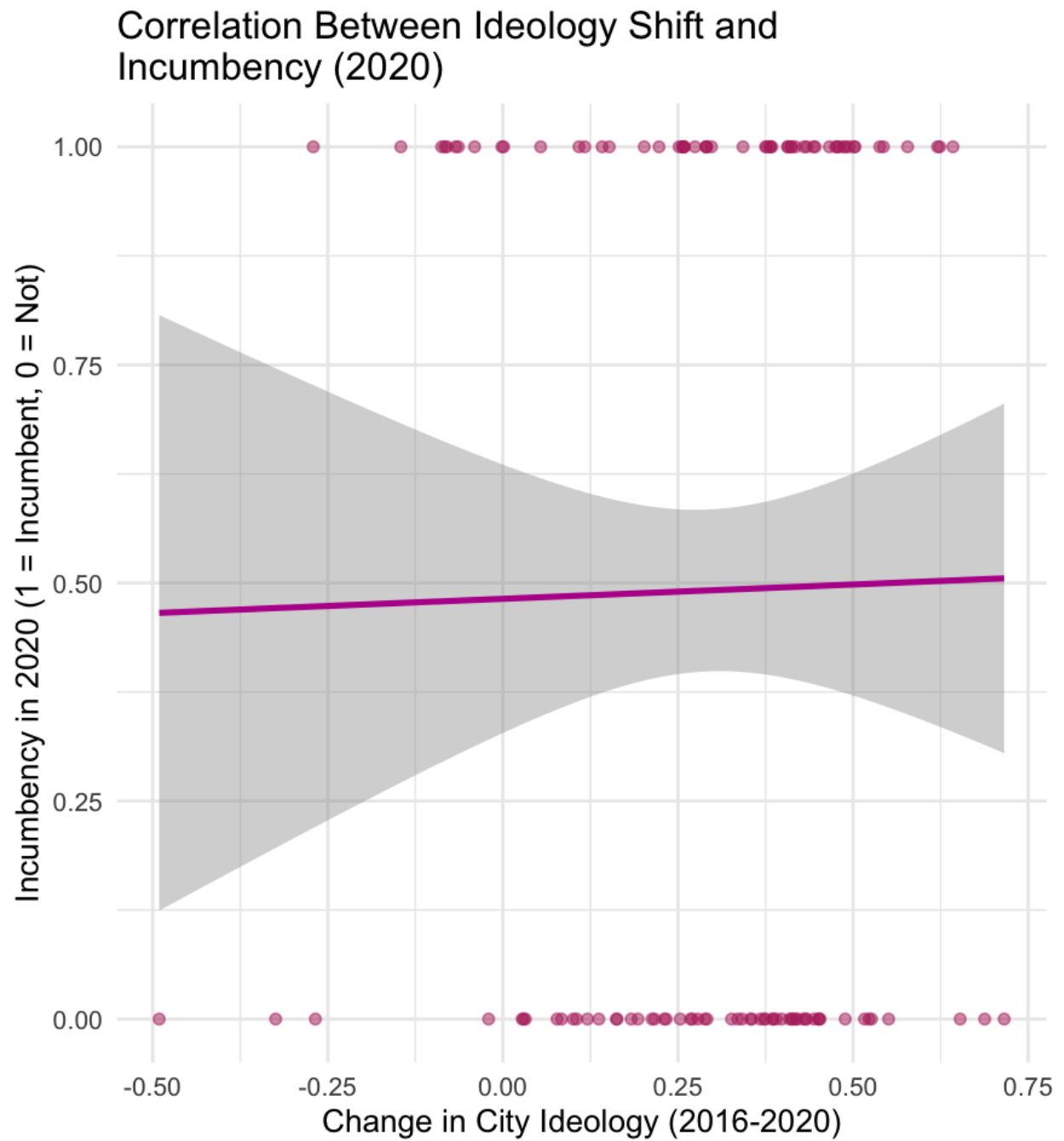


Figure 4 details the interquartile ranges for incumbents in 2020. The graph includes a y-axis of city ideology, which is negative with a more liberal ideology and positive with a conservative ideology. For incumbents in 2020, there was a higher median within ideology, which means more conservative, as compared to those elected in 2020 not as an incumbent. This could be the result of the new voter population after gentrification occurred within the city, shifting to a conservative ideology. However the interquartile range and outliers that are represented in those who elected for the first time is greater than the incumbents. This graph demonstrates that there wasn't too much of a difference between incumbents and first-time

elected Mayors, however there is a larger distribution of first-time elected Mayors detailed in the graph.

Figure 5



The graph details the relationship between the shift in ideology from 2016 and 2020 and incumbency in 2020. It illustrates a slight shift in ideology to becoming more conservative while the Mayor is an incumbent. This could be a result from gentrification occurring within the urban cities. As explained in Table 2, these coefficients aren't statistically significant with each other. However it is important to note that there is a slight, but non-significant shift that is occurring within the model that is illustrated within the graph.

As Table 2 shows I conducted another linear regression for the second part of my research. For this regression the goal was to code a regression to see if there was an association between who was an incumbent in 2020 within a given city from the a new dataset and a shift in the cities' ideology from 2016 to 2020. The new dataset focuses primarily on the years 2016 and 2020 and incorporates similarities from the dataset used in the last regression, but instead uses the Mayor's dataset by de Benedictis-Kessner. For my dependent variable, 2020 Incumbent, it's a binary variable associated with the PID estimate (political party) of each Mayor that won their election only in 2020 and was an incumbent. For the following two dependent variables, they are similar to the variables used in Table 1, however they take the difference between the years 2016 and 2020. For the regression in Table 2, I decided to regress 2020 Incumbent on Ideological Change 2016-2020 and House Value Change 2016-2020. Again, I decided to include House Value Change 2016-2020 within the regression model in order to control for the difference in house values and economic conditions that could alter results from the regression. Furthermore, I figured this coefficient would be important to include because it continues to account for economic factors that might have an impact on whether or not an incumbent was reelected or not in 2020.

The regression models' results state only the intercept is statistically significant. As for the other coefficients in the model, they both don't hold any significance to be reported for my research. These variables lack of significance leave room for discussion. Since there is no statistically significant association with incumbents in 2020 and a shift in ideology, this would mean that there was a minor shift of ideology which would leave incumbents in office. This would be interesting to look into for further research because it could suggest that during this time period political parties became more polarized due to the start of the Trump administration in 2016. I found this administration to have struck the nation with polarization in political parties, and could be associated with voters not shifting in ideology after 2016. As for the last coefficient, House Value Change 2016-2020, it also holds no statistical significance. I think the reasoning behind this result is that gentrification might have already occurred in the cities during the 2012 and 2016 analysis or earlier, for gentrification to be noted in this regression.

Table 2

	(1)
(Intercept)	0.576*** (0.097)
Ideological Change 2016-2020	0.034 (0.234)
House Value Change 2016-2020	-0.000 (0.000)
Num.Obs.	101
R2	0.011
R2 Adj.	-0.009
AIC	153.4
BIC	163.9
Log.Lik.	-72.700
RMSE	0.50

+ p < 0.1, * p < 0.05, ** p < 0.01, *** p < 0.001

Relationship between Incumbent (2020) and
Difference in Ideology

Figure 6

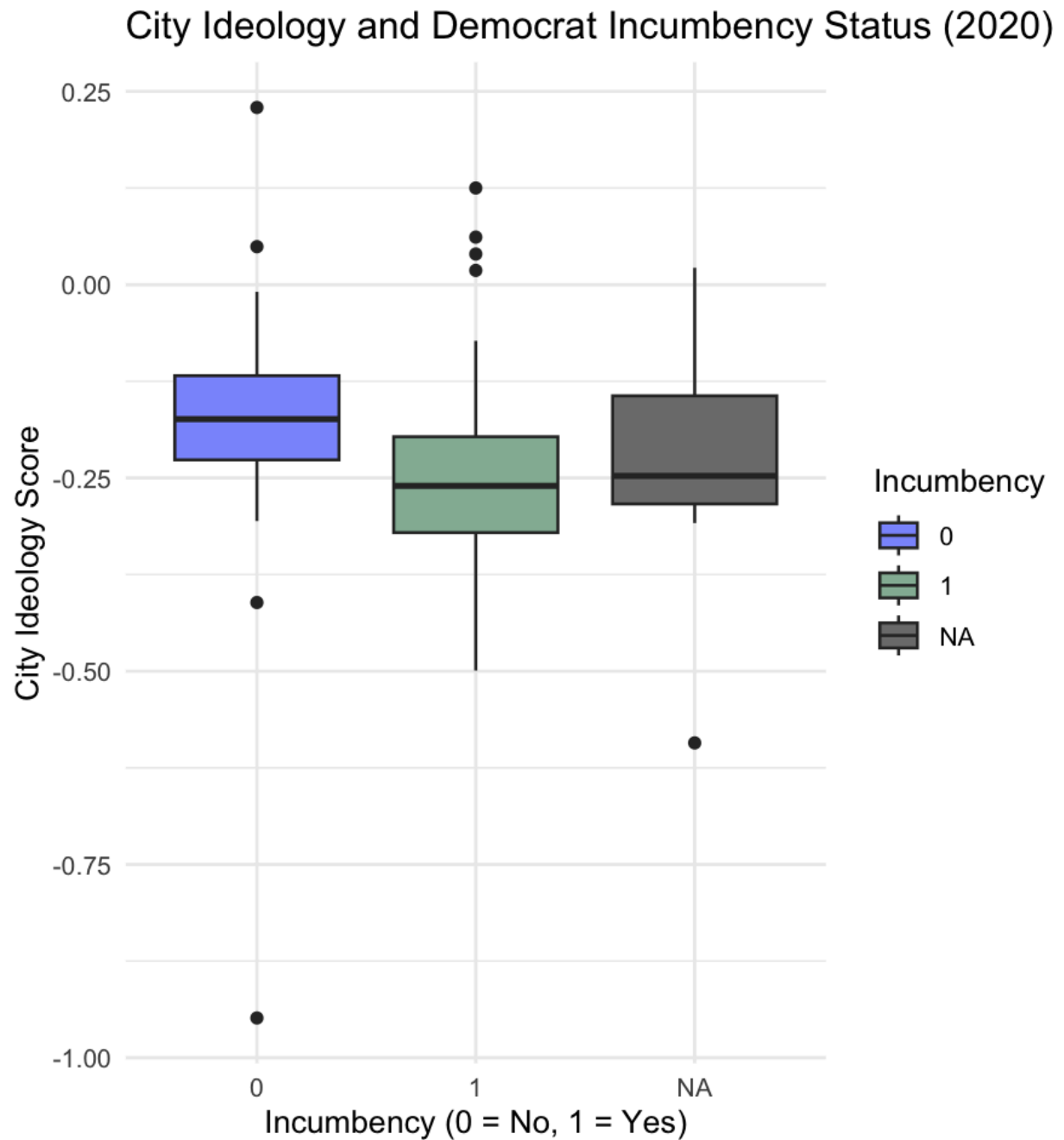


Figure 6 is specifically for Democrat incumbents. As expected the median and the interquartile range of incumbents were largely liberal for ideology. Whereas the conservative incumbents seemingly had lower city ideological scores, corresponding with liberal ideology. This could be the reason because cities themselves are typically more liberal, as compared to

rural areas. This could be the case because of Black's Median Voter Theorem. Derived from Duncan Black in 1948, the theory describes an ideological shift in candidates' platforms. The shift is a convergence to the middle of the ideological spectrum. The purpose is to gain more voters and win the election. This could be seen in Figure 6, as conservative candidates shifting their platform policies to being more democratic or centered to win over voters during elections.

Figure 7

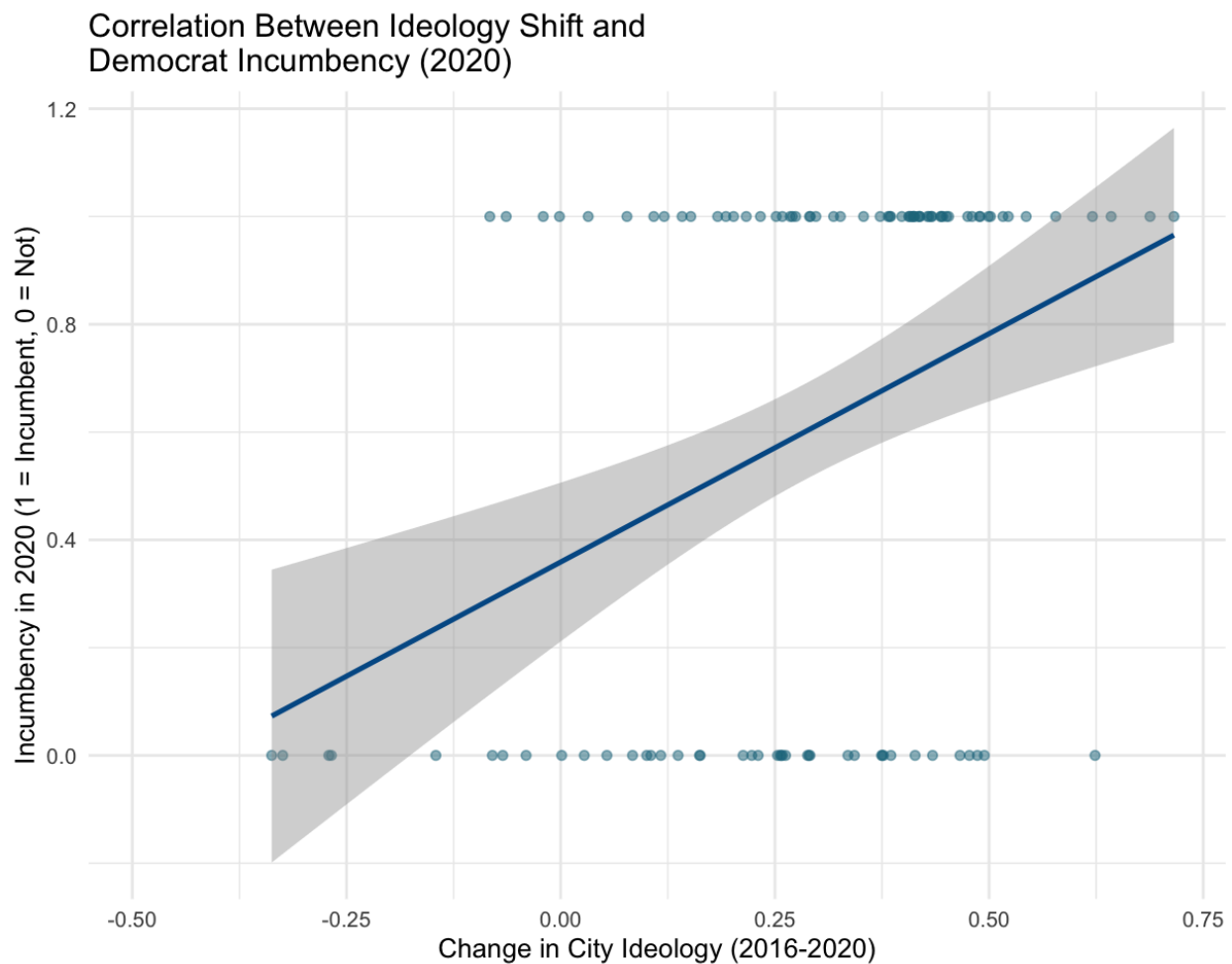


Figure 7 details the relationship between Democratic incumbents in 2020 and the rise in ideology within a given city. This association is a root finding for my research because it denotes the significance of Democratic incumbent Mayors who hold office within a city that is increasingly becoming more conservative. This finding also goes hand in hand with what was

described earlier, where Democratic Mayors are allowing gentrification to occur within the time frame 2012 and 2016. Then in 2016 from 2020 the cities are met with an influx of Republican voters. It's also bringing in more conservative voters because they can economically improve the city (Peterson 1981). However, since these Democratic Mayors are being reelected the Mayors don't have to shift their own political ideology to fit their growing conservative population. It could also be related to Hopkins and Pettingill's (2018) findings of retrospective voters. Research found that constituents vote retrospectively based on their surrounding economic conditions. Therefore, Democratic incumbents are largely unaffected by the shift in partisanship due to gentrification that is occurring within their given cities.

For my last regression analysis, I decided to take a step further from the last regression and specifically account for Democratic incumbents who were elected in 2020. This regression's purpose was to find an association between Democratic incumbents elected in 2020 within a given city and a shift in the cities' ideology from 2016 to 2020. Narrowing in on a specific party conversely allowed the data to be narrowed down too. The dataset is the same that was used for the last regression shown in Table 2. For the dependent variable, `incumbent_demcrat`, is another binary variable that pulls from the PID estimates of each Mayor but is filtered only to include Democrats within the column of incumbents that won reelection in 2020. The two dependent variables are the same that were used in Table 2. For the regression in Table 3, I regress Democratic Incumbent on Ideological Change 2016-2020 and House Value Change 2016-2020. Similar to the following regressions, I include House Value Change 2016-2020 for the same reasons as the last model (Table 2).

Table 3's results have a couple of statistically significant variables, both the intercept and ideology coefficient. The statistical significance for the Ideological Change 2016-2020

coefficient that was run in the model. This result notes that there is a one unit increase in an Ideological Change 2016-2020, it's associated with a 0.875 increase in democratic incumbent reelected in 2020. Furthermore as a given city's ideology becomes more conservative, the likelihood of a Democratic incumbent being reelected for Mayor increases. This finding is highly relevant to my hypothesis that notes that when Democrat Mayors are incumbents and are reelected, the city that they are elected for becomes more conservative. This result is quite interesting, not only for my research but for future research as well, where data can be collected for future research on 2020 and 2024 models for reelection. Meanwhile the other coefficient in the model doesn't hold any significance to be reported for my research. The lack of statistical significance for House Value Change 2016-2020 could be for the same reasoning as explained in Table 2, where the rise in gentrification already happened so it wouldn't impact the results of the Mayoral election. Furthermore, as I discussed in Table 2, the lack of findings could be interesting for House Value Change 2016-2020 due to polarization between political parties. I think it could be interesting how even though these cities are increasingly becoming more conservative, there isn't an association with house value. It could be that voters aren't connecting house value to incumbents but instead the economy at a greater level than city. This offers the implication that reelection of state level politicians are impacted rather than Mayors.

Table 3

	(1)
(Intercept)	0.327*** (0.085)
Ideological Change 2016-2020	0.875*** (0.231)
House Value Change 2016-2020	0.000 (0.000)
Num.Obs.	89
R2	0.187
R2 Adj.	0.169
AIC	112.6
BIC	122.5
Log.Lik.	-52.280
RMSE	0.44

+ p < 0.1, * p < 0.05, ** p < 0.01, *** p < 0.001

Relationship between Democratic Incumbent
(2020) and Difference in Ideology

Conclusion

Throughout the course of my regression analysis, I found my findings to somewhat coincide with my hypothesis. In my first regression model, I hypothesized that gentrification would be associated with an increase in conservative voters, therefore shifting the ideology of a given city. In my regression, my findings were different from my hypothesis. I found that gentrification did occur with an increase in median house value from 2012 and 2016. However, in my model, I found that gentrification within a given city was associated with the city's ideology becoming more liberal. The main question at hand is why, as gentrification occurs which is the increase in home values by 8%, does ideology shift to being more liberal? As explained by Peterson (1981) gentrification would allow a city to improve economically because it would bring in new residents who can afford the increase in home value. Therefore, these new residents would be able to pay higher taxes and contribute to building the economy within a given city. While this isn't the result of the findings, it suggests that gentrification brings in new residents with a liberal ideology. This could be for a number of reasons, ranging from influx of youth to universities, or liberals moving into these cities due to job opportunities. It could also be that conservatives are leaving these gentrified areas because of Democratically led political positions or that they could no longer afford to live in the city. It could also be the shifting of tax brackets among the political parties, which will be discussed later and could be interesting for further research.

As for my second analysis that I ran, I hypothesized that a given city with a conservative ideology will not affect the reelection of Democratic incumbent Mayors. Within my regression model, my findings were correlated with my hypothesis. With these findings remaining consistent with my hypothesis, it raises a significant finding that ideology doesn't correlate with

Mayoral re-election. This could be the case because Mayoral elections are non-partisan, which could lead voters not doing their own research about the candidates' parties. Therefore the voters would instead be voting for the candidates policies, or more likely to reelect the incumbent if the voter didn't have any issues with them.

Changes of research:

If I were to change some of the aspects of my research, I would look towards better datasets surrounding the Mayors that don't contain any missing values. It was during this part of my research that I ran into several challenges with missing values that resulted in significantly less observations to base my research findings off of. These missing values posed a challenge to my regression models as well. It was difficult to filter variables from the dataframe without omitting N/A observations. However, this does seem to be a consistent issue across a lack of local data as compared to national data.

Another dataset that I had trouble with was implementing presidential vote share as a basis of ideology for the city rather than Bonica's study. I think that presidential vote share would be a good use of the resident's partisanship. Whereas within local government elections party labels are nonexistent on the ballot, therefore making it more difficult to track the partisanship of the residents. Also, presidential vote share is an appealing measure because it is 'highly correlated with a voter's partisan identification, senators use it to describe their own marginality, and it avoids the endogeneity of a senator's past election results' (Grimmer 2013).

Future research:

Avenues of possible further research based on my findings would be centered around the topics that I presented earlier. It would be interesting to find exactly what neighborhoods were impacted by gentrification. While this is limited due to the lack of research, it would allow

further research with what demographics were impacted by gentrification. While my study focused primarily on a shift in ideology, it would be interesting to find a shift in age, race, and occupation status as well. This expansion of attributes would provide an intersectional understanding of why these groups were impacted by gentrification and what caused them to leave. Furthermore, it would allow for research not to be confounded with other variables that could play a role in impacts of gentrification. As I mentioned before, it could just be that Republicans didn't care for their local politicians and rise in home values was the only reason that they left. With the introduction of these other variables it can allow for a comprehensive understanding of why the residents left.

Another area of research that could be considered for further research is what is described by Pew Research Center. They detail that 53% of upper-income voters are Democrats or Democratic learners (Pew Research Center 2024). This would provide context as to why those who could afford to live in gentrified areas would have a liberal ideology. Furthermore, Pew Research Center describes how “-Republicans have a modest edge among upper-middle-income voters” (Pew Research Center 2024). With this in mind, it could be the case that home values exceed the budget of upper-middle-income voters, which supports the idea of upper-income voters moving into those areas. Future research connecting these ideas together would be to gather the income of residents who are being displaced because of the gentrification and find if they are either Republican or Democrat. This research could prove itself useful because it can help politicians further understand the impact of gentrification within their city on income and partisanship.

As for the future research considering my second model, it would be an interesting point to look into why these Democratic Mayors are being reelected. I suspect that it is because of

non-partisan elections, but it could also be because of a decrease in crime rates. For this area of research it would be interesting to use crime rates as a proxy of voter's support towards a politician. The design would be similar to the model I created for my research but instead it would find a change in the crime rate within a given city controlling for the change in partisanship, and then see if the Mayors are reelected. Crime rates would be an interesting measure because with gentrification, Peterson (1981) explains how an increase in property value (from the increase of middle to upper class residents) there are lower crime rates. The author notes how an important aspect of the city's political agenda is with action taken against crime and the increasing the value of property. Peterson explains that urban governments policies tend to produce more effective services for the neighborhoods that accrue higher property values. Meaning that action is taken whether that be in better education services, the creation of parks, or dealing with crime. With gentrification in the parts of the city where property is more valuable and owners pay more in taxes, one also characteristically finds lower crime rates...' (Levy, F.; Meltsner, A. J.; and Wildavsky, A. 1974). With more tax money being funneled into the city, it can be allocated for better services. Peterson (1981) explains that allocating the expenditures for police and fire services are common within the higher income neighborhoods. Therefore, within neighborhoods that have higher value property there is more action taken against crime. Furthermore, as described previously with the Democratic shift in appeal to middle-to-upper income voters, this demographic favors Mayors that act against crime rates and raise property value. This shift in an increase in home prices and a decrease in crime rates is also seen with the application of gentrifying neighborhoods. Therefore, I think crime rates would be feasible for the new voter's sentiment regarding the Mayoral election results for incumbents.

The last suggestion towards future research that could prove to be more useful than crime rates as a proxy for voter sentiment towards incumbents, is: to create a survey that gathers data on voter sentiment towards incumbents. This would provide clearer and higher correlation in results because there wouldn't be a proxy. However, this could be difficult to conduct because rating sentiment on a scale would likely require text to data analysis. While this isn't impossible, it would be easier and likely cheaper to use crime rates with data available in local crime rates data banks.

Conclusion:

Within urban cities between 2012 and 2016, there are findings that gentrification did occur synonymously with a shift in partisanship towards becoming more liberal with .108 percentage points. As for 2016 and 2020, knowing that gentrification occurred in the cities within the data frame the prior four years, it was during this time period that the likelihood of Democratic Incumbent Mayors being reelected increased .875 percentage points. This was only seen when Mayors who were both Democrats and incumbents were reelected.

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