

ARIZONA  
AND  
THE INFLUENCE  
BEHIND  
RISING PROPERTY VALUES

By

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For my wife, Angelica.

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## LIST OF ABBREVIATIONS

CDO	Collateralized Debt Obligation (CDO): structured financial investment product that is backed by a pool of assets. These assets are essentially debt obligations which includes mortgages, loans, or bonds.
MBS	Mortgage Back Securities (MBS) owns parts of the individual mortgage bonds of the CDO.

## ABSTRACT

### **RISING PROPERTY VALUES**

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#### **Keywords:**

Arizona Population, California Population, Property Value, Cost of Living, Inflation

#### **Abstract:**

Over the past decade, Arizona has seen an increase in property values, which in turn has increased the cost of living. Housing unit reports have shown a steady rise of new construction in the most populated cities in Arizona. This study should allow potential homeowners or investors to become aware of the best time to purchase homes or property as the market continues to rise and fall. The study also sheds light on potential root causes for the rising costs of living. Climate change has been a major issue in California, as there have been increases in wildfires over the last decade. Data is used to show the amount of damage caused by wildfires throughout the state. Assessing Arizona and California's population disparity over the last decade provides fidelity of population to housing unit growth. This data is then compared to the average cost of the housing in the respective counties. The implications of this study, for future homeowners or investors, would be an anticipation in equity losses if the said property is purchased during inflation. Since 2016, the study depicts a steady 1% increase in housing units every year. This may not seem like a significant amount; however, for one county in Arizona it was an increase of 100,000 housing units (as well as a 200,000-population increase) in just five years. The analysis implies a strong correlation between the areas in California affected by wildfires also being the areas with the most population loss. The reported number of Californians leaving these affected areas also correlates to the amount of realty purchased in Arizona. Cities in Arizona share climate similarities as well as boast a lower cost of living, making Arizona an ideal spot for relocating. The total number of population increases are a direct reflection of the most populated counties in Arizona. As the study focuses on the root causes of the inflated prices, the outside influences that are migrating people to Arizona will cause a housing crisis when the economy bounces back.

## ETHICS STATEMENT

Ethics in Geographic Information Systems and Technology (GIS&T) is a challenge for map or data production as creators have different levels of creativity. Issues with plagiarism are just as prevalent in map creating as they are in any thesis writing, where citing originating data is essential. One of the biggest ethical challenges in GIS today is replicating the maps that have already been created and not giving credit to the originator. This is resolved by ensuring the data has reference to the originator in data properties or documents written referencing the results. Another concern that comes with map data is collecting data that could correlate to privacy issues. The way a creator can resolve this issue is to ensure all data is screened of personal identifiable information (PII), located within the attribute table. Most data sources may be used for personal reasons in a project; however, if made public it will result in sharing sensitive information. Screening through data and exporting relatable information to the creation of a map can mitigate any privacy issues.

The concerns of the study in rising property values and the data produced in this project is due to the fluctuating open-source data. To ensure the accuracy of the information gathered, it is pertinent that the data be collected from open-source sites. Researchers may take data from this study and make additions to the study's results. This study references all data sources to ensure the readers can correlate the results with the references. All the data used within this project was cross referenced with other sources to ensure the information is accurate. As most of this data is updated daily, generalizing the data is important; as the moment it is published it can be dated. Consequently, this may also result in the delegitimization of the study's results and appear as false.

## CHAPTER 1

### INTRODUCTION

The great recession was due to many global causes, but perhaps one of the most triggering events in the United States was the 2008 housing bubble. The majority of opinions as to why the housing bubble was caused points toward financial institutions giving middle to lower class households loans that were higher than their incomes. These financial institutions assumed risk by issuing out loans that the borrower may not be able to repay (SAMCO n.d.). The institutions had to find a way to protect their investments by creating what is called a collateralized debt obligation (CDO). CDOs are a “structured financial investment product that is backed by a pool of assets. These assets are essentially debt obligations which includes mortgages, loans, or bonds” (SAMCO n.d.). The financial institutions took these CDOs and sold them to investors in order to reduce their risk of the loans they issued to borrowers (SAMCO n.d.).

At the beginning of the housing bubble the default rate was 4% and eventually rose to 8% (SAMCO n.d.). This is the rate of borrower’s inability to pay their debt. “The crisis started with the fall of housing prices and due to the fear of the continued fall of housing prices resulted in the increase of the default rate” (SAMCO n.d.). As the value of homes began to decrease, it resulted in homeowners having negative equity as the purchased property no longer held the same value. If homeowners were to sell their house, they were left with the negative equity to either add to their new mortgage or continue paying on individually.

A mortgage backed CDO, called Mortgage Back Securities (MBS), owns part of the individual mortgage bonds (SAMCO n.d.). Major banks like American International

Group (AIG), Lehman Brothers, Merrill Lynch, and Bear Stearns were filled with CDOs and MBS (SAMCO n.d.). As the decline got too severe the federal reserve began to acquire large portions of the major banks (for example, 79% of stakes in AIG). These were the four largest banks at the time of the recession. Not only were the effects seen on these larger institutions, but the smaller banks catering toward the middle to lower income areas as well.

Due to the current climate change, as well as the global pandemic, a rising trend in property values (much like the great recession) is being seen again. It can be identified quite distinctly in the rising costs in Arizona (SOFI n.d.). Along with these events, population increase is another leading cause for property to rise. Economically, this drive-up will result in future homeowners purchasing property that is at a higher cost than it should. If the current housing bubble trend is anything like the 2008 housing crisis, it is expected that the current homebuyers will experience the same financial burdens as the homeowners of the great recession.

As the economy began to recover from the recession, property values were on the rise nationwide beginning in 2011. At the time, Arizona's housing market was lower than the nation's value, but it has steadily increased over the last decade. The residential change in the most populated areas of Arizona is a factor in the rising demand of new home construction. This in turn will raise costs on existing homes. Currently, Arizona's housing market has two main factors affecting their market, a housing bubble similar to the recession and an increase in population. It is only a matter of time when the housing bubble will burst.

The goal of this project is to provide a visual and statistical analysis of what caused the rise of cost and property values in Arizona. The results may help predict what can happen in the next decade if the housing market inflation and population continue to rise. The objective of this study is to correlate the appreciation of property values with climate change, the pandemic, or natural causes to the cost of living. The results should help to identify how much of the population has been affected by the housing market in the last decade.

## CHAPTER 2 METHODS AND DATA

The study area of this project is focused on the state of Arizona and the causes behind rising property values. Some effects have been reported with Californians migrating to areas of similar environments and lower costs of living. According to the Federal Housing Finance Agency (FHFA), Phoenix-Mesa-Chandler, Arizona has had a 28.9% increase in housing prices. For comparison, the national average increase is 18.5% (NORAD, Real Estate Market n.d.).



Figure 2-1. Study Area – Arizona and California

According to the real estate costs for major cities in Arizona, figure 2-2 identifies the average cost if purchasing property in 2022. Since 2011, there has been an over 57% increase for costs of homes in each city (NORAD, Phoenix Real Estate Market n.d.).

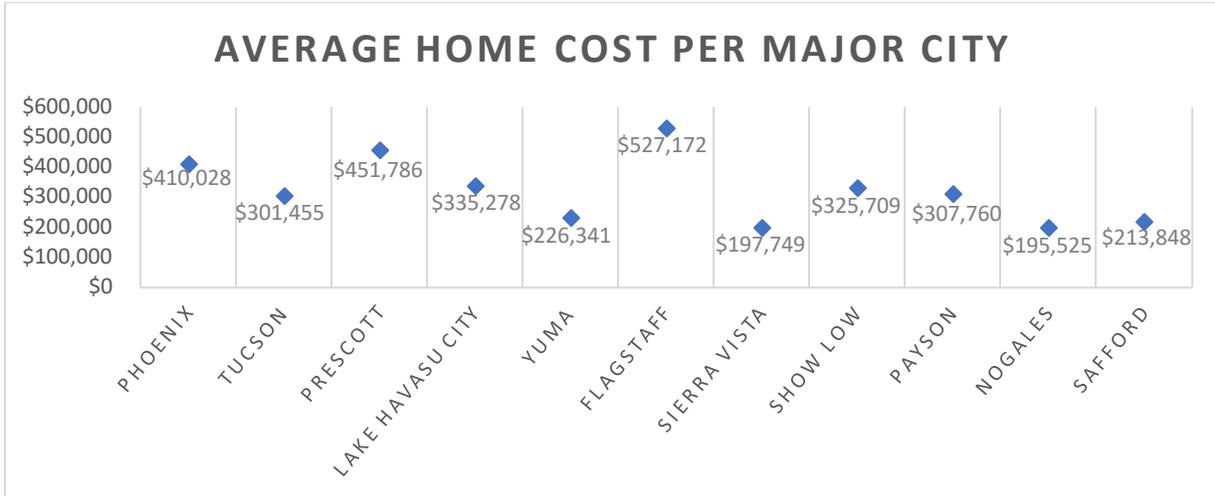


Figure 2-2. Average Home Cost

The major cities in figure 2-2 have a lower average cost than the counties in which they are located as observed in figure 2-3. These counties consider all levels of income which inflates the average cost per housing unit. Due to these rising costs, over 65% of renters or homeowners in Phoenix fall within or below moderate income; resulting in the need of subsidy to afford housing (NORAD, Phoenix Real Estate Market n.d.).

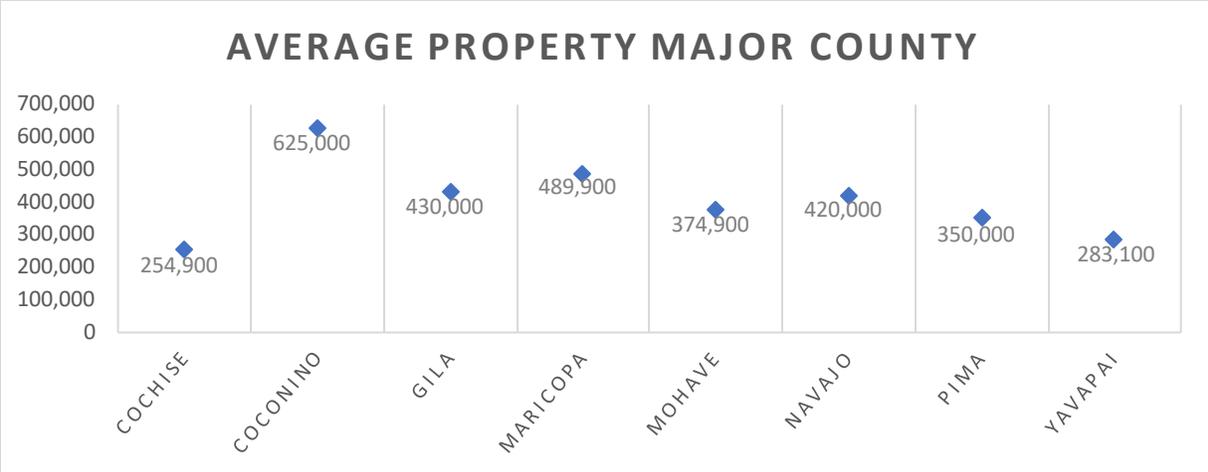


Figure 2-3. Average Property Cost

As a homeowner, it is more than just the cost of the mortgage, but the taxes paid on that property. Figure 2-4 shows the average costs per county that a homeowner pays. Average costs fluctuate depending on the value of the home.

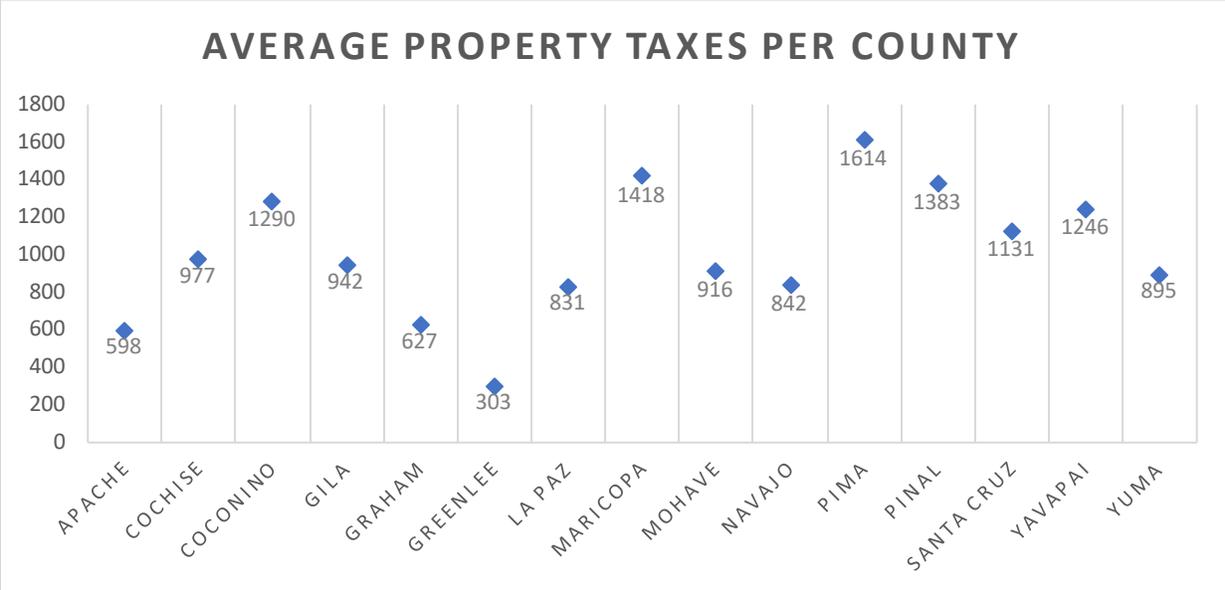


Figure 2-4. Average Property Taxes

Table 2-1. Real Estate Data

Data Information	Description
Official name of dataset	Real Estate Data
Year of Publication	2022
Author and/or owner	NORADA Real Estate
URL address of the repository	<a href="https://www.noradarealestate.com/blog/phoenix-real-estate-market/?msclkid=b112052fb38b11ecab149ca284d3e686#Arizona_Housing_Market_Trends_2022">https://www.noradarealestate.com/blog/phoenix-real-estate-market/?msclkid=b112052fb38b11ecab149ca284d3e686#Arizona_Housing_Market_Trends_2022</a>
Coordinate system, including geodesic model, horizontal datum, vertical datum, and EPSG code	WGS 1984
Projection system (if any)	WGS 1984 Web Mercator

Table 2-2. Arizona Tax Rates

Data Information	Description
Official name of dataset	State Tax Rates
Year of Publication	2022
Author and/or owner	Arizona Tax Rates
URL address of the repository	<a href="https://www.tax-rates.org/arizona/property-tax?msclkid=b110b43ab38b11eca10ddeefc0342f76">https://www.tax-rates.org/arizona/property-tax?msclkid=b110b43ab38b11eca10ddeefc0342f76</a>
Coordinate system, including geodesic model, horizontal datum, vertical datum, and EPSG code	WGS 1984
Projection system (if any)	WGS 1984 Web Mercator

### Arizona Housing Units

The data shows that since 2011, the national and Phoenix area housing numbers were steadily narrowing. In a recent 2022 study done by Real Estate forecasts, Phoenix is shown to be one of the top real estate markets in the United States, second only to

Austin, Texas. Austin has a faster appreciation in the market with 44.8%. The study also found the new residence to be drawn to the Phoenix area due to “the low cost of living, high quality of life, economic opportunity, and cultural attractions” (NORAD, Real Estate Market n.d.). A density product on Arizona housing units along with statistical analysis is conducted to identify a possible trend that will occur in the next decade. A graph is produced across the state to identify highly populated counties and how many units were reported over the last 10 years.

In figure 2-5, the housing data shows growth over the study timeframe. Viewing the statistical trend increases for the past decade allows growth rate predictions for the future decade.

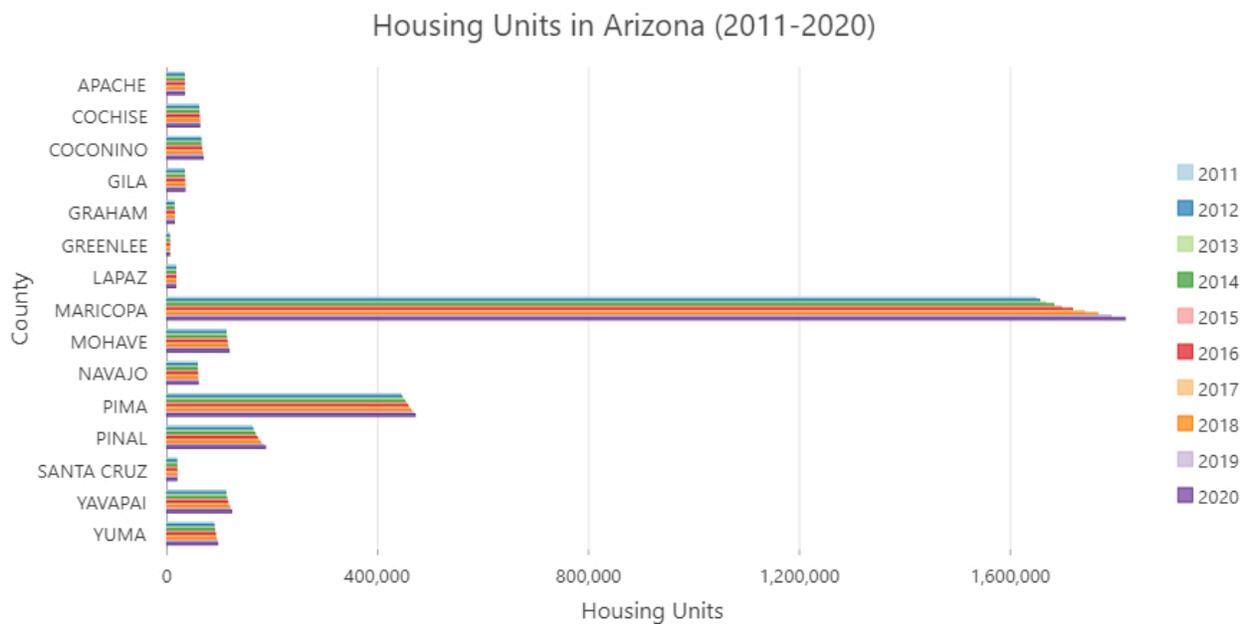


Figure 2-5. Arizona Housing Units Chart



Figure 2-6. Maricopa County Housing Units Chart

Table 2-3. Maricopa County Housing Unit Percentage of Increase (per year)

Year	Housing Units	Percentage of Increase	Difference of Percentage
2011	1,647,452	-----	
2012	1,655,016	0.46%	-----
2013	1,666,682	0.70%	0.24
2014	1,681,882	0.91%	0.21
2015	1,696,064	0.84%	-0.06
2016	1,716,968	1.23%	0.39
2017	1,739,998	1.34%	0.11
2018	1,765,156	1.45%	0.11
2019	1,790,514	1.44%	-0.01
2020	1,817,097	1.49%	0.05

### California Population

For this project a population density is performed on California and Arizona over the last decade to assess a difference over that span. A comparative analysis is conducted to assess the decrease of population in California and an increase of population in Arizona. The 2020 California population data was utilized for this method

to create a density product. Figure 2-4 represents the methodology used by taking the population data to create a visualization with a density product. Due to the table data not having coordinates associated with each county in California, it was joined with a county feature class. Once the data is joined, a new feature class would have to be created to use this data in further processing. A change in symbology for the new feature class will depict the population change in each county by using a graduated symbol method. (Figure 2.8)

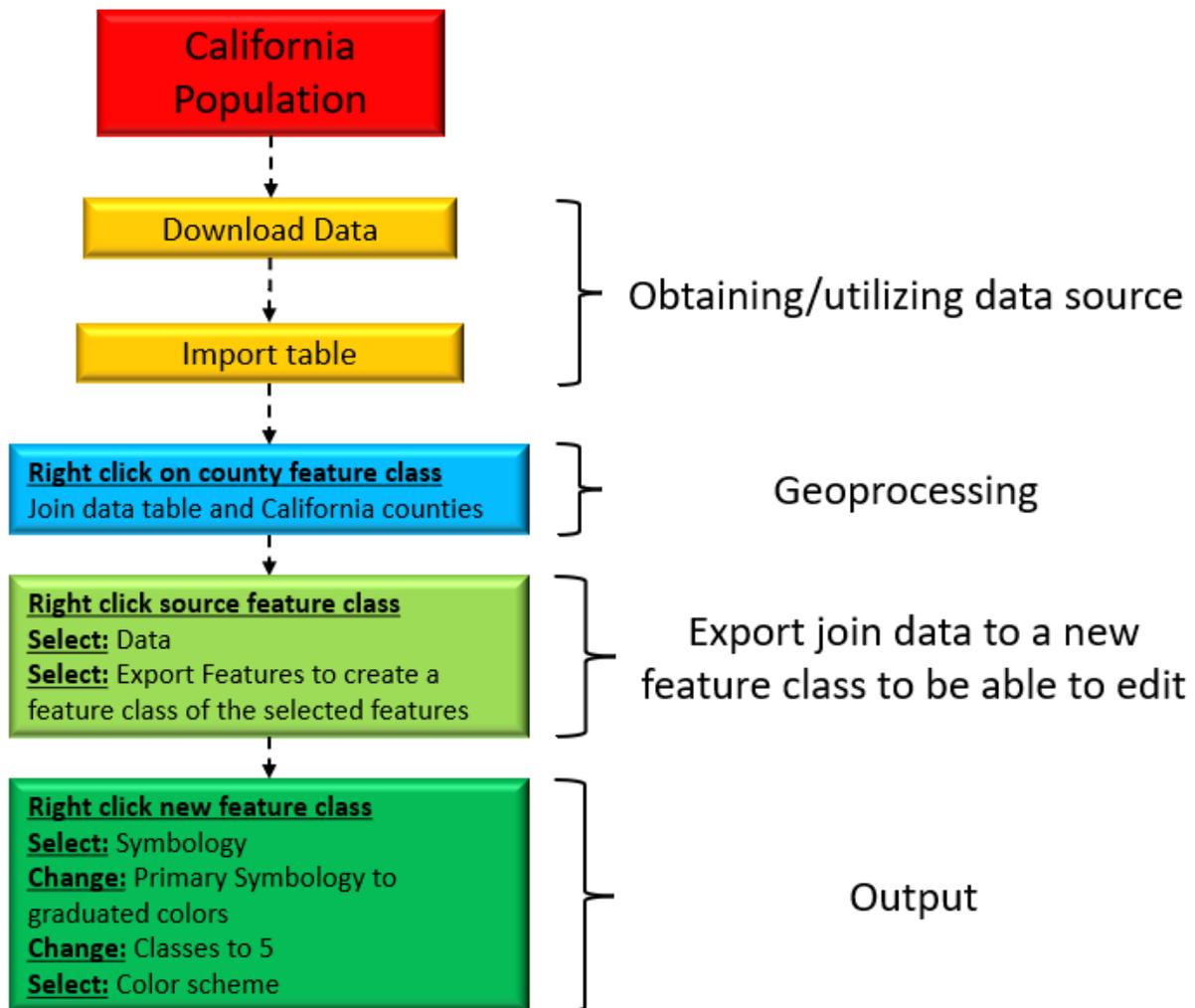


Figure 2-7. California Population Methodology

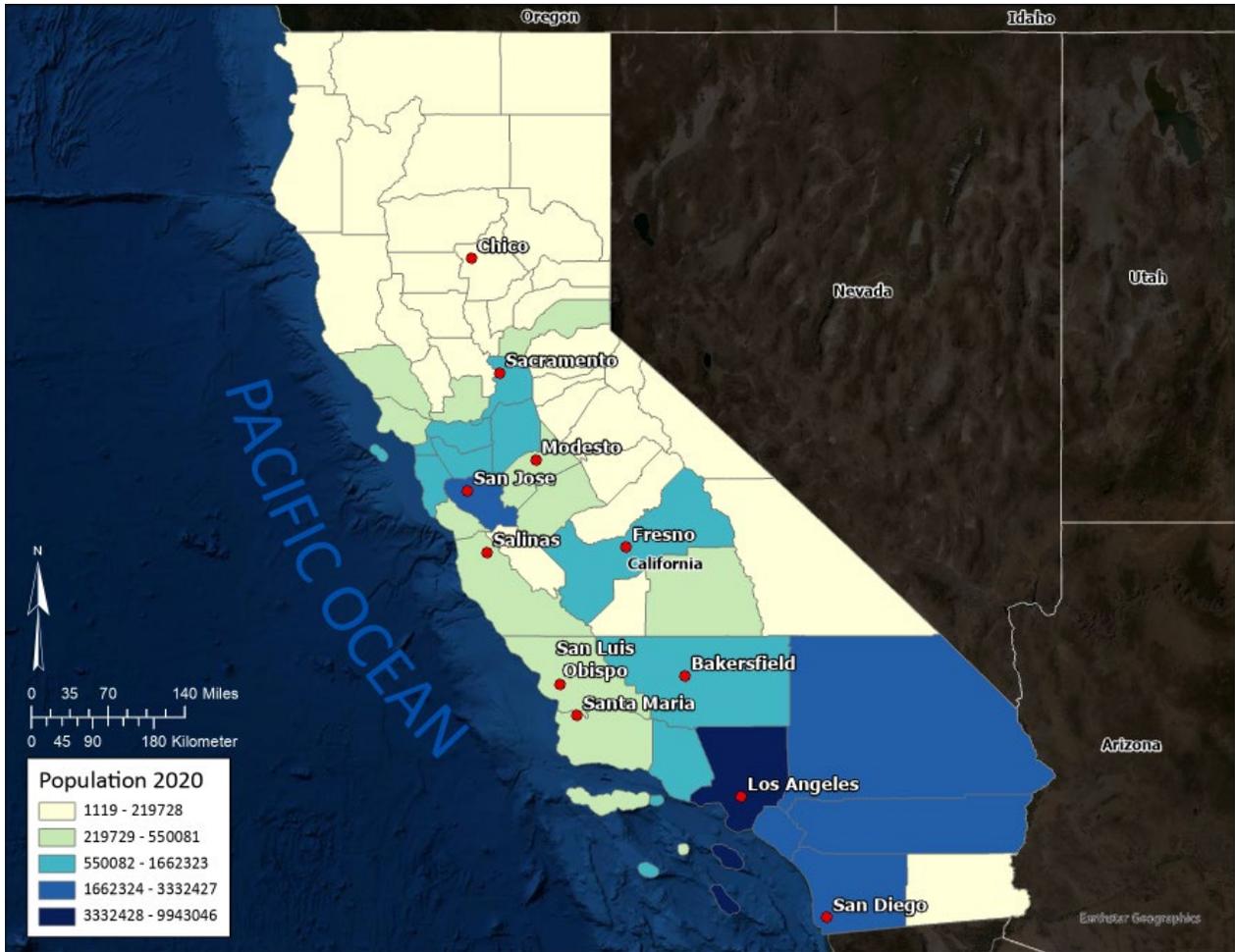


Figure 2-8. California Population

Population changes over the last years identified multiple reports of migration from the highest populated cities in California to the highest populated cities in Arizona. Figure 2-9 depicts that movement from the data used from a real estate agency. The larger number in migration has a higher density visualized around the annotated cities. This method is called a kernel density which provides a visualization of the high migration numbers in the populated cities. Figure 2-10 depicts the methodology taken to create a kernel density. Table 2-4 data was utilized to identify how many reports per city migrated to various counties in Arizona. The table also provides the percentage of population that departed California to the associated county.

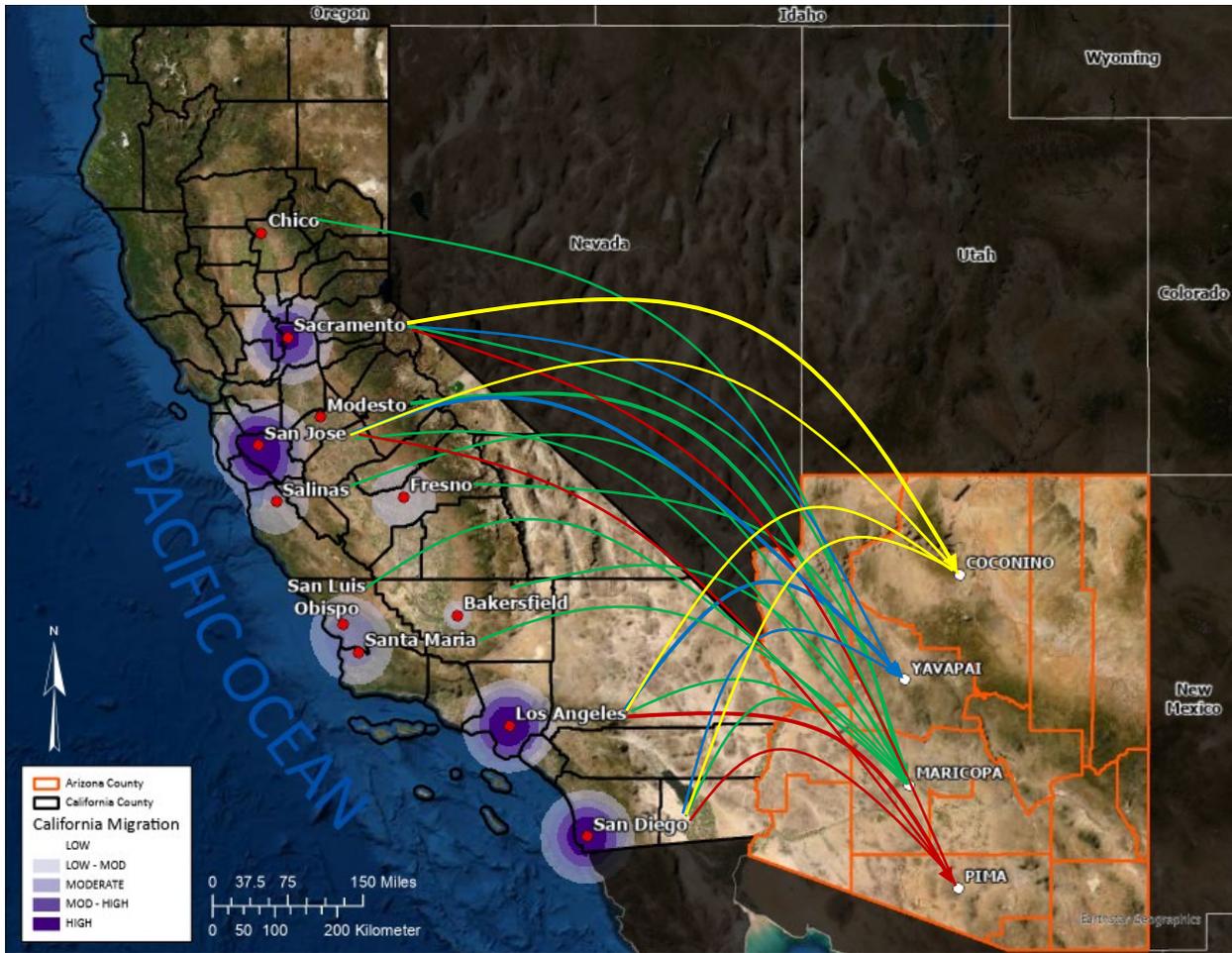


Figure 2-9. California Migration (Redfin – 2018 to 2020)

Table 2-4. Migration Report from California to Arizona (Redfin – 2018 to 2020)

City/State	Reported per City	County (%)	City/Town
Bakersfield, CA	11	Maricopa (1.7)	Phoenix
Chico, CA	6	Maricopa (<1)	Phoenix
Fresno, CA	18	Maricopa (2.0)	Phoenix
Los Angeles, CA	49	Coconino, Maricopa (8.4), Pima (1.1), Yavapai	Flagstaff, Phoenix, Tucson, Prescott
Modesto, CA	5	Maricopa	Phoenix
Sacramento, CA	43	Coconino, Maricopa (2.0), Pima (0.3), Yavapai	Flagstaff, Phoenix, Tucson, Prescott

Salinas, CA	18	Maricopa	Phoenix
San Diego, CA	49	Coconino, Maricopa (3.3), Pima (0.8), Yavapai	Flagstaff, Phoenix, Tucson, Prescott
San Jose, CA	49	Coconino, Maricopa (2.2), Pima (0.4), Yavapai	Flagstaff, Phoenix, Tucson, Prescott
San Luis Obispo, CA	15	Maricopa (1.5)	Phoenix
Santa Maria, CA	18	Maricopa (1.6)	Phoenix

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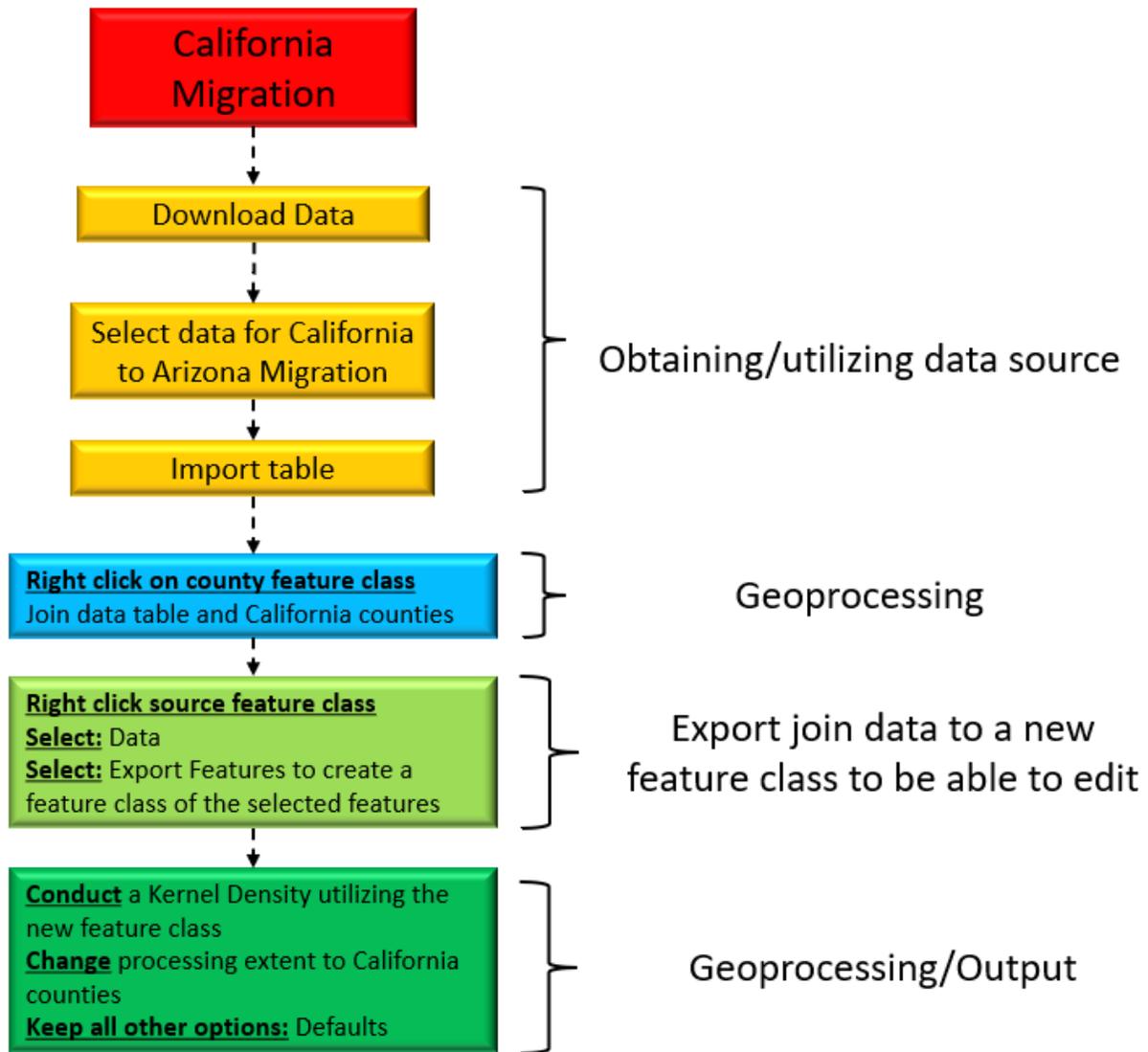


Figure 2-10. California Migration Methodology

Table 2-5. California County Boundaries

Data Information	Description
Official name of dataset	California County Boundaries
Year of Publication	2020
Author and/or owner	California Open Data Portal
URL address of the repository	<a href="https://data.ca.gov/dataset/ca-geographic-boundaries">https://data.ca.gov/dataset/ca-geographic-boundaries</a>
Coordinate system, including geodesic model, horizontal datum, vertical datum, and EPSG code	WGS 1984
Projection system (if any)	WGS 1984 Web Mercator

Table 2-6. California Resident Migration

Data Information	Description
Official name of dataset	California Resident Migration
Year of Publication	2022
Author and/or owner	Redfin
URL address of the repository	<a href="https://www.redfin.com/news/data-center/migration/">https://www.redfin.com/news/data-center/migration/</a>
Coordinate system, including geodesic model, horizontal datum, vertical datum, and EPSG code	WGS 1984
Projection system (if any)	WGS 1984 Web Mercator

### Arizona Population

Similar to the California population, data from the Census was utilized to create the Arizona population density. Figure 2-11 represents the methodology used by taking

the population data to create a visualization with a density product. Due to the table data not having coordinates associated with each county in Arizona, it was joined with a county feature class. Once the data is joined, a new feature class would have to be created to use this data in further processing. A change in symbology for the new feature class will depict the population and housing unit change for each county by using a graduated symbol method. (Figure 2.12 and 2.13)

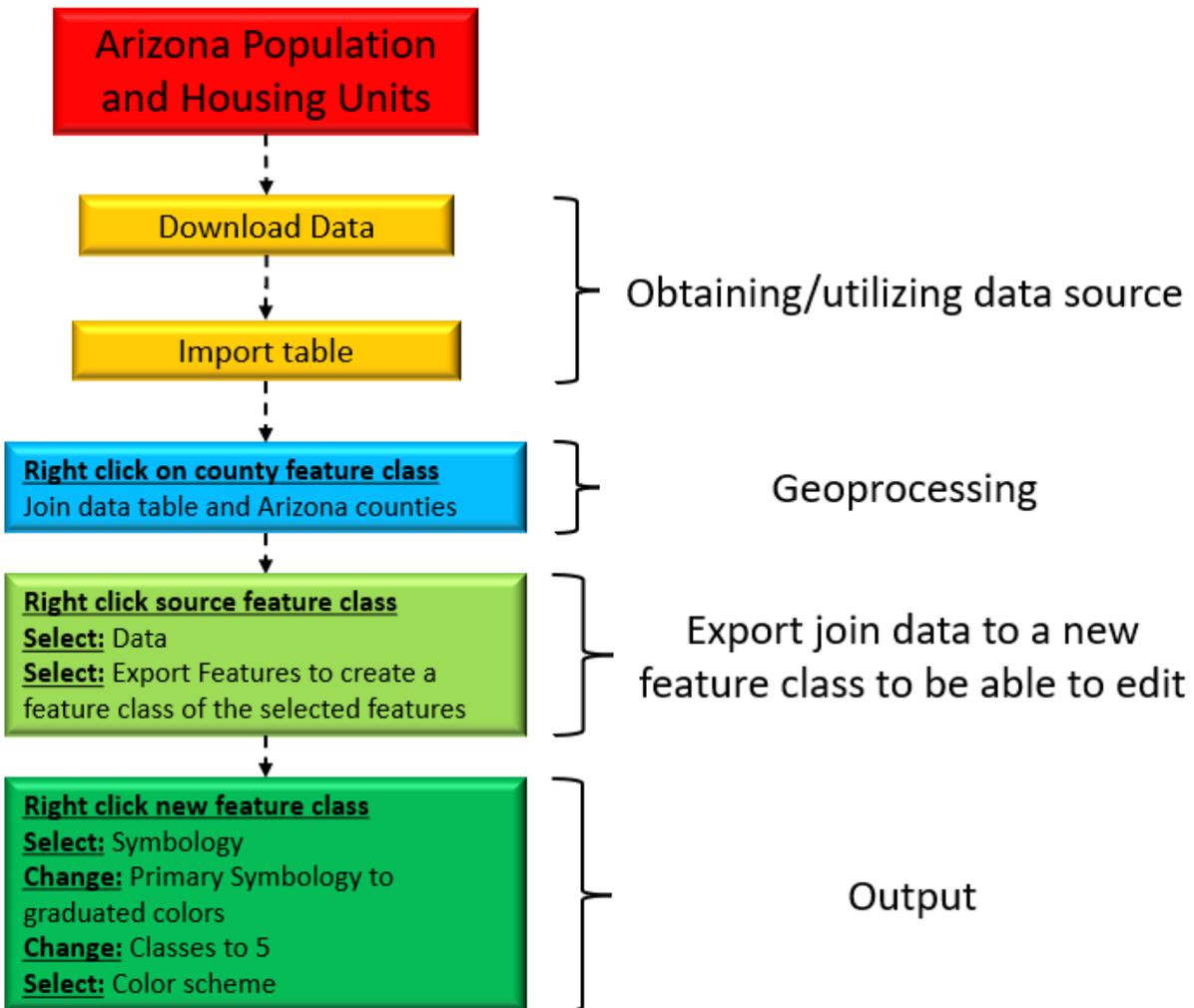


Figure 2-11. Arizona Population and Housing Units Methodology

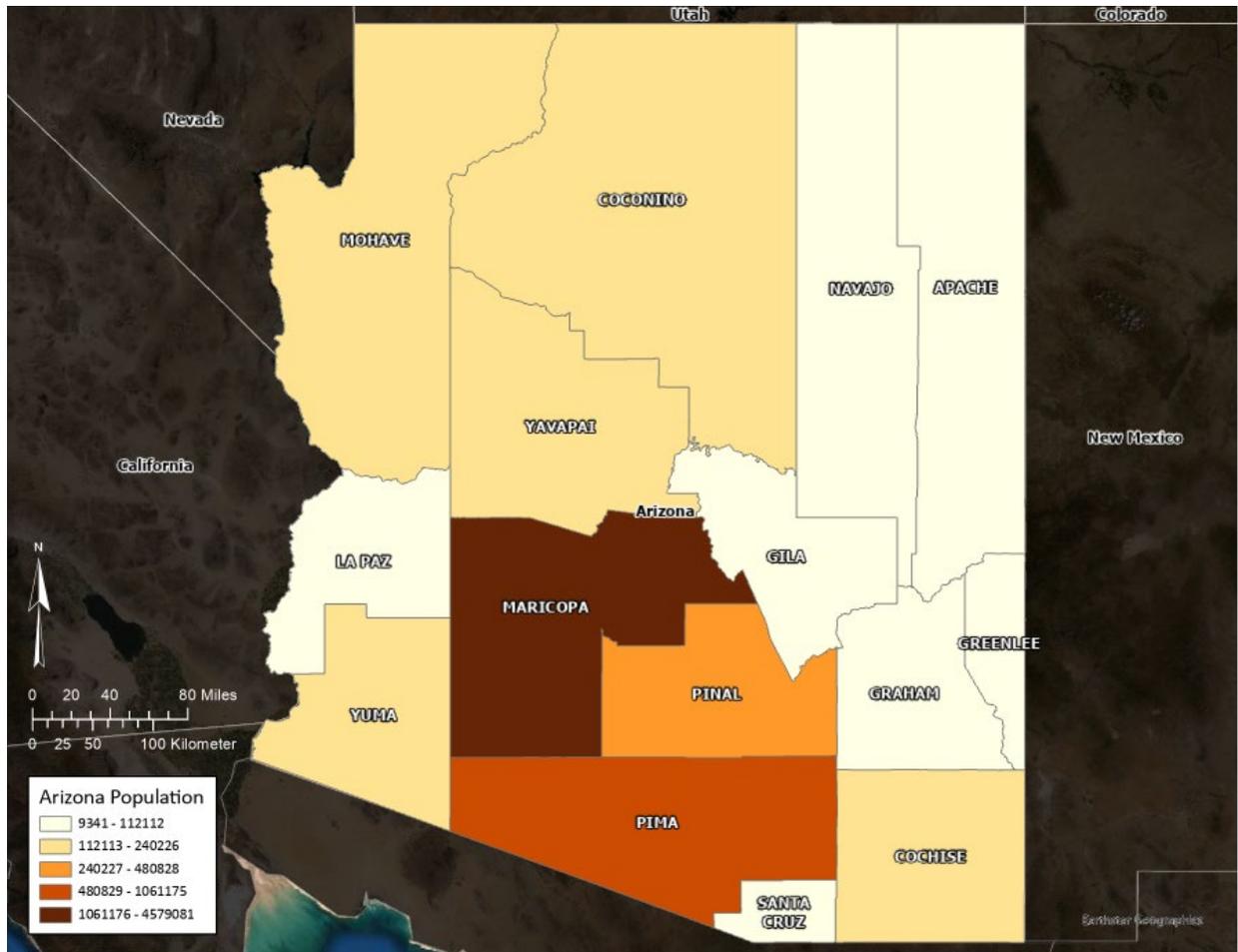


Figure 2-12. Arizona Population

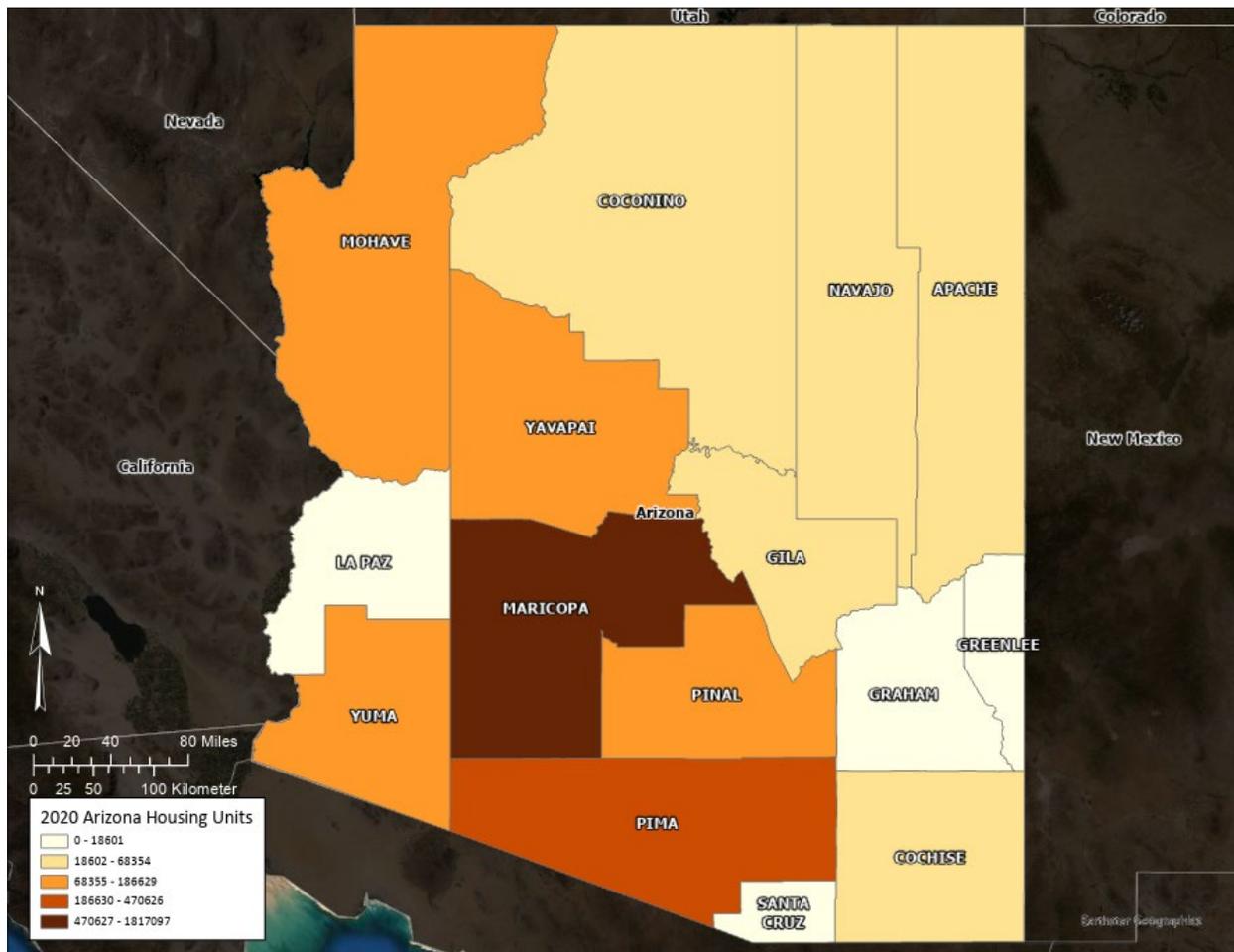


Figure 2-13. Arizona Housing Units

Table 2-7. Population and Housing Units

Data Information	Description
Official name of dataset	Population and Housing Units per state
Year of Publication	2010-2021
Author and/or owner	Census.gov
URL address of the repository	<a href="https://www2.census.gov/programs-surveys/popest/datasets/">https://www2.census.gov/programs-surveys/popest/datasets/</a>
Coordinate system, including geodesic model, horizontal datum, vertical datum, and EPSG code	WGS 1984
Projection system (if any)	WGS 1984 Web Mercator

Table 2-8. Arizona County Boundaries

Data Information	Description
Official name of dataset	Arizona County Boundaries
Year of Publication	2020
Author and/or owner	ASU Geodata
URL address of the repository	<a href="https://geodata-asu.hub.arcgis.com/datasets/county-boundaries-arizona/explore?location=34.202480%2C-111.930582%2C8.08">https://geodata-asu.hub.arcgis.com/datasets/county-boundaries-arizona/explore?location=34.202480%2C-111.930582%2C8.08</a>
Coordinate system, including geodesic model, horizontal datum, vertical datum, and EPSG code	WGS 1984
Projection system (if any)	WGS 1984 Web Mercator

### California Climate

A major part of this project is to identify causes of increase in population in Arizona. Analysis is performed on climate effects in California that may cause the population to migrate to areas with similar climates and lower cost of living. In figure 2-

15, the historical data collected from California Department of Forestry and Fire Protection's Fire and Assessment Program (FRAP) is layered over the population data (2020) to show the affected areas across all counties. It allows assessments to be made for the most impacted areas (correlating to the most populated areas as well). Comparative analysis is conducted from the population density and increase of climate effects across the state. Figure 2-14 shows the methodology used to create this product. Data is downloaded from the FRAP to create the kernel density of wildfire locations across each county. Layering the results over the population density shows what areas are most affected in California. As a basis of comparison, a comparative analysis was chosen as this would allow for the possibility of showing an existing negative correlation between wildfires and population density.

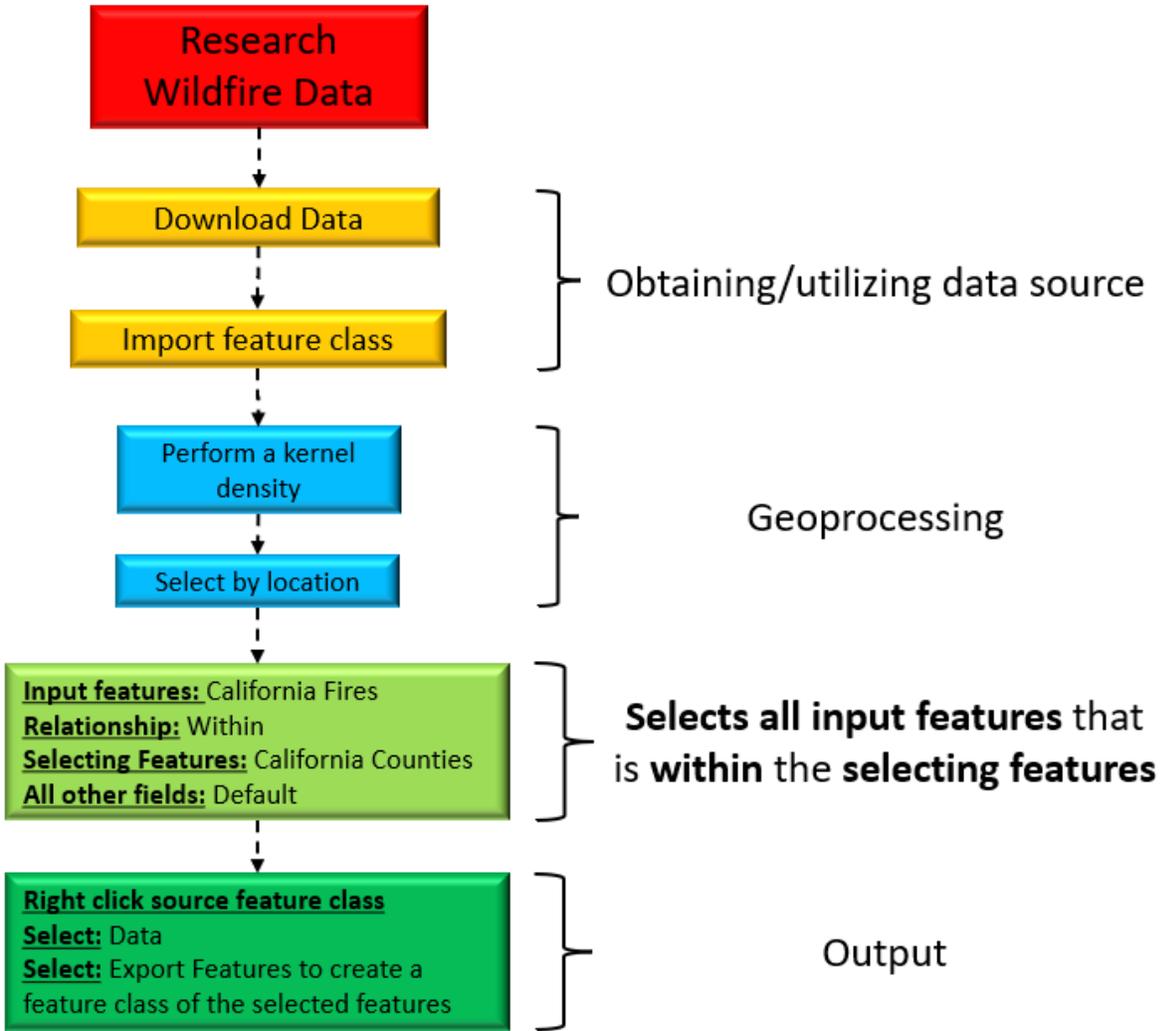


Figure 2-14. California Fires Methodology

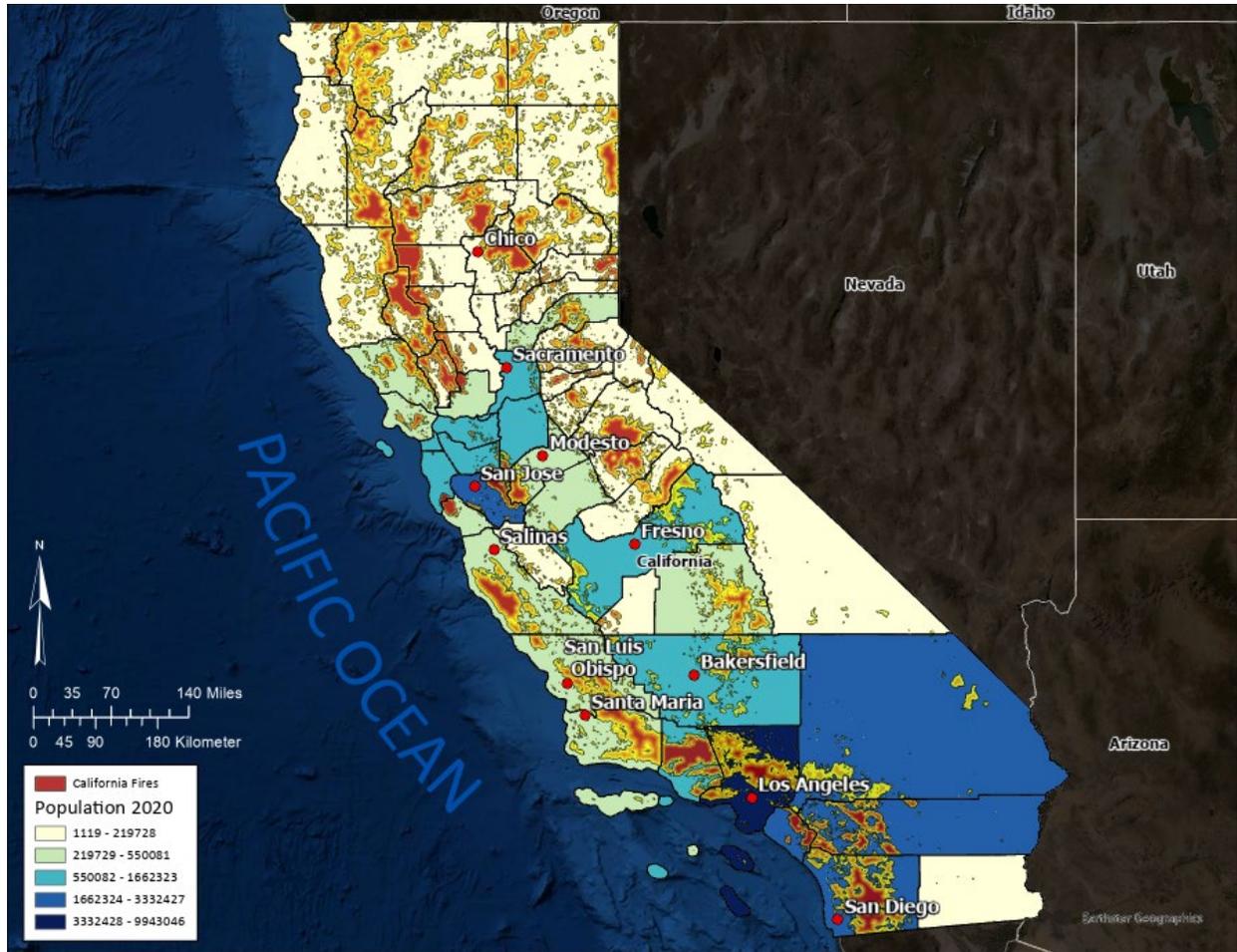


Figure 2-15. California Fires and Population

Table 2-9. Fire Perimeters

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Data Information	Description
Official name of dataset	Fire Perimeters
Year of Publication	2021
Author and/or owner	California Department of Forestry and Fire Protection's Fire and Assessment Program (FRAP)
URL address of the repository	<a href="https://frap.fire.ca.gov/">https://frap.fire.ca.gov/</a>
Coordinate system, including geodesic model, horizontal datum, vertical datum, and EPSG code	NAD 1983
Projection system (if any)	NAD 1983 California (Teale) Albers (Meters)

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## CHAPTER 3

### RESULTS

When focusing on Maricopa County, the largest populated county in Arizona, figure 2-6 shows a 10% increase in housing units since 2011. The largest increase of housing units (1.49%) occurred from 2019 to 2020, which was the beginning of the Coronavirus (COVID-19) pandemic. With this presented data and trend, an assessment can be made that there will be a continued increase of at least 1.45% in the coming years. Within table 2-3, the difference in percentage does not accurately depict future housing unit gains, however, it does allow for the understanding that there will be a constant year to year increase. The implication of this trend indicates that the housing market surrounding Phoenix, Arizona will continue to grow over the next decade. This is a direct reflection of the trend over the last 10 years as reported from the census.

In figure 2-8, most of the population in California are from central and southern areas of the state. Analysis in this study has shown a decrease in these areas as climate events become more frequent and cause the population to migrate inland. Studying figure 2-9 shows that the residents of highly populated areas in California are going to similar climates in Arizona. Cost of housing was another area looked at. Despite the cost of housing in these areas starting off low at the beginning of the decade, the housing demand was not meeting the population increase. The implications of the population migrating to similar climates and lower cost of living will result in property values rising in the appropriate areas that receive the relocated population.

In figure 2-12, the population density looks identical to the housing unit data in figure 2-13. This data allows for an assessment to be made that the housing market is a direct reflection of the populated areas in Arizona. The implications of this means that

as the population grows the housing units within the corresponding counties will rise as well. It can be assumed that the cost of living and properties will rise due to the high demand.

The locations in California that are affected by fires are in highly populated areas. The most affected areas are in central and southern California where the populations are the densest. Comparative analysis of the California migration (figure 2.9) and wildfire maps (figure 2.15), shows the population that is migrating to Arizona are from the most affected cities of climate change. Even though this is not a definitive indicator of population migrating to other states, it can be assumed that as wildfires worsen in coming years the population will decrease significantly in these areas. The implications would be a great loss to life and property if the population does not relocate to a less affected areas.

## CHAPTER 4

### CONCLUSION

In conclusion, the objectives of this study were to correlate the appreciation of property values to a key event, identify population changes in California and Arizona, and to be able to predict whether the cost of living to continue to rise over the coming years. Data was collected on populations over the last decade in Arizona and California to see if there was a drastic change in either state. Studies have shown that Arizona has become an enticing lifestyle over the last decade which shows a steady increase that is faster than the national average (NORAD, Real Estate Market n.d.). Another study done in 2022 (REDFIN n.d.), has shown which states California residents moved to with higher percentages choosing Arizona and Texas. A decrease in population in California indicates that the rate of relocation is faster than the rate of new residents.

Along with the reports of population increase in Arizona, housing unit data was taken to assess the increase in housing construction over the last decade. This information is important to see if it correlates with the increase in population. The results show that the counties that saw an influx in residents are also witnessing the same increase in new housing construction. There has been a 10% housing increase in Maricopa County from 2011-2020, the most populated county in Arizona. This information also provides an insight as to how the housing market is going to trend in the coming years if the data shows steady progression. This resulted in researching the cost of housing over the last decade. In highly populated areas, costs increased over \$50,000 in the last two years. Being that correlates to the start of the covid pandemic there is evidence to suggest the pandemic sped up the rising cost of living.

The studies focus was to understand what caused California residents to relocate to Arizona and the long-term reason correlates to climate change. Reports also indicate that Arizona is enticing to Californians due to similar climate and low cost of living (NORAD, Phoenix Real Estate Market n.d.). Utilizing the reported data, the cities and counties that Californians migrated to correlates to the increase of Arizona population and housing units over the last two years. Providing a wildfire map product, it clearly identifies the cities that are most affected and that have the most population migrating to similar cities in Arizona (those being Flagstaff, Phoenix, Prescott, and Tucson).

This study allows for investors and new homeowners to understand the housing market. As Arizona property values increased over the last decade, these results provide fidelity on what may have influenced the price inflations. The implications of population disparities could result in this trend becoming permanent. As the housing market increases expectations could be that the population will increase as well.

Future homeowners and investors need to have situational awareness when making purchases as the housing market could crash. If the housing market were to crash, it would have negative consequences (a negative equity) for those who purchased homes during the inflation. An assessment could be made that this housing inflation could last longer than the 2008 housing crisis. It is possible that the property values could have a steady increase every year until the federal reserve interferes, similar to how they did for the great recession.

As the world combats climate change and the Covid pandemic, the exact end to the housing crisis cannot yet be assessed; this study, however, shows what the market trend is for the coming years. It is important for consumers to pay attention to the

housing market and federal interest rates because once the market drops it will result in loss of equity. The implications of this will be felt by sellers that will be asking for home prices higher than what they are worth. Financial institutions will deny loans as the appraisers will appraise the house lower than the seller.

This project provided an understanding of the financial issue that the nation will be in as inflation prices continue to be a concern. Situational awareness of the housing climate is important for current and future homeowners to help remain financially responsible when investing in properties. Due to the increase population and housing market the job market will be affected too. It can result in more experienced workers and companies to relocate to Arizona for the growing market of goods and services. The next step to this project is maintaining the data and publishing it to real estate sites. This will allow real estate agents and homeowners to understand what trend the future holds for property values. Additional efforts that could surface from this project is expanding on how climate change will affect coastal cities and force population inland.

## REFERENCES

- NORAD. n.d. *Phoenix Real Estate Market*. Accessed APR 04, 2022. [https://www.noradarealestate.com/blog/phoenix-real-estate-market/?msclkid=b112052fb38b11ecab149ca284d3e686#Arizona\\_Housing\\_Market\\_Trends\\_2022](https://www.noradarealestate.com/blog/phoenix-real-estate-market/?msclkid=b112052fb38b11ecab149ca284d3e686#Arizona_Housing_Market_Trends_2022).
- . n.d. *Real Estate Market*. Accessed JAN 24, 2022. <https://www.noradarealestate.com/blog/phoenix-real-estate-market/>.
- REDFIN. n.d. *Migration Data Center*. Accessed APR 01, 2022. <https://www.redfin.com/news/data-center/migration/>.
- SAMCO. n.d. *2008 Financial Crisis*. Accessed APR 4, 2022. <https://www.samco.in/knowledge-center/articles/2008-financial-crisis/?msclkid=e4764ff3b47311ec887b00fe7fece61a>.
- SOFI. n.d. *SOFI*. Accessed APR 01, 2022. <https://www.sofi.com/cost-of-living-in-arizona/?msclkid=6cafb53fb3b311ecba2459605e105345>.