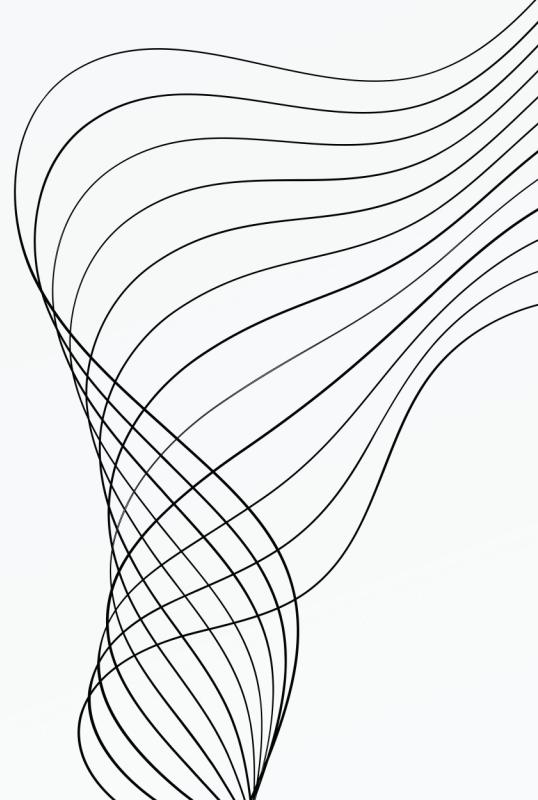




F.C.A.



# WHAT AN EXPENSIVE TIME TO BE ALIVE



AUSTIN - CAITLYN - PASCALE - WILLIAM

# AGENDA

**01**

BACKGROUND AND WHAT WE SEEK TO ANSWER

**02**

POPULATION

**03**

HOUSING

**04**

RENT & INCOME

**05**

BASKET OF GOODS

**06**

WHAT THIS MEANS FOR US

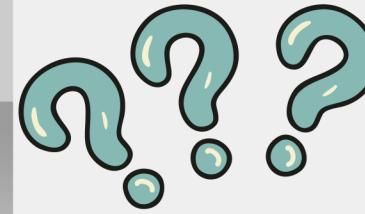
**07**

LASTING EFFECTS

# POPULATION AND INCOME

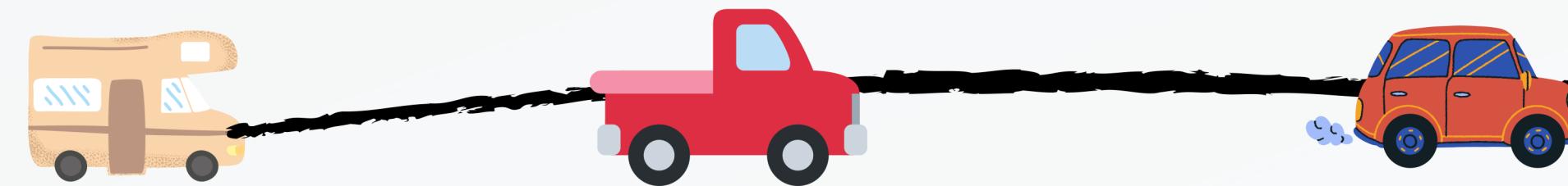
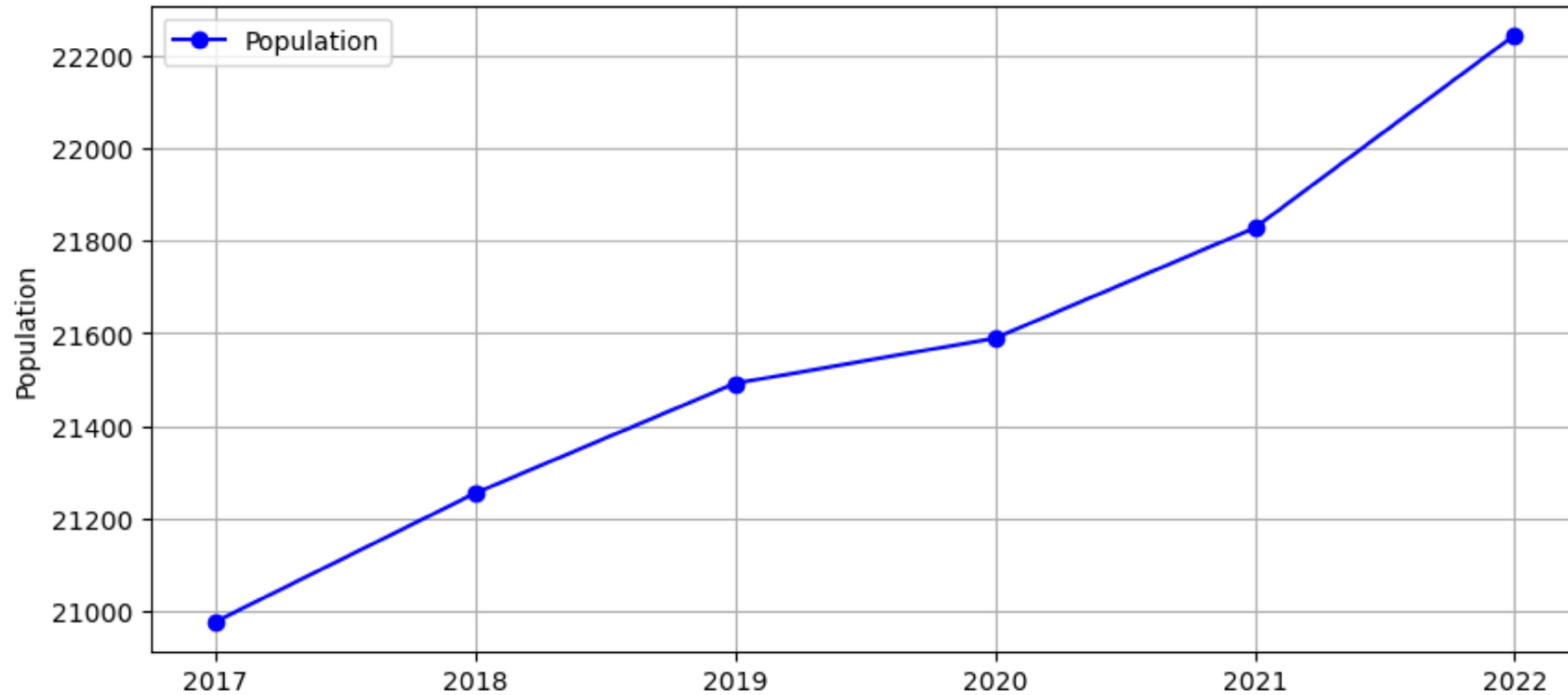


How much has Floridas population grown?

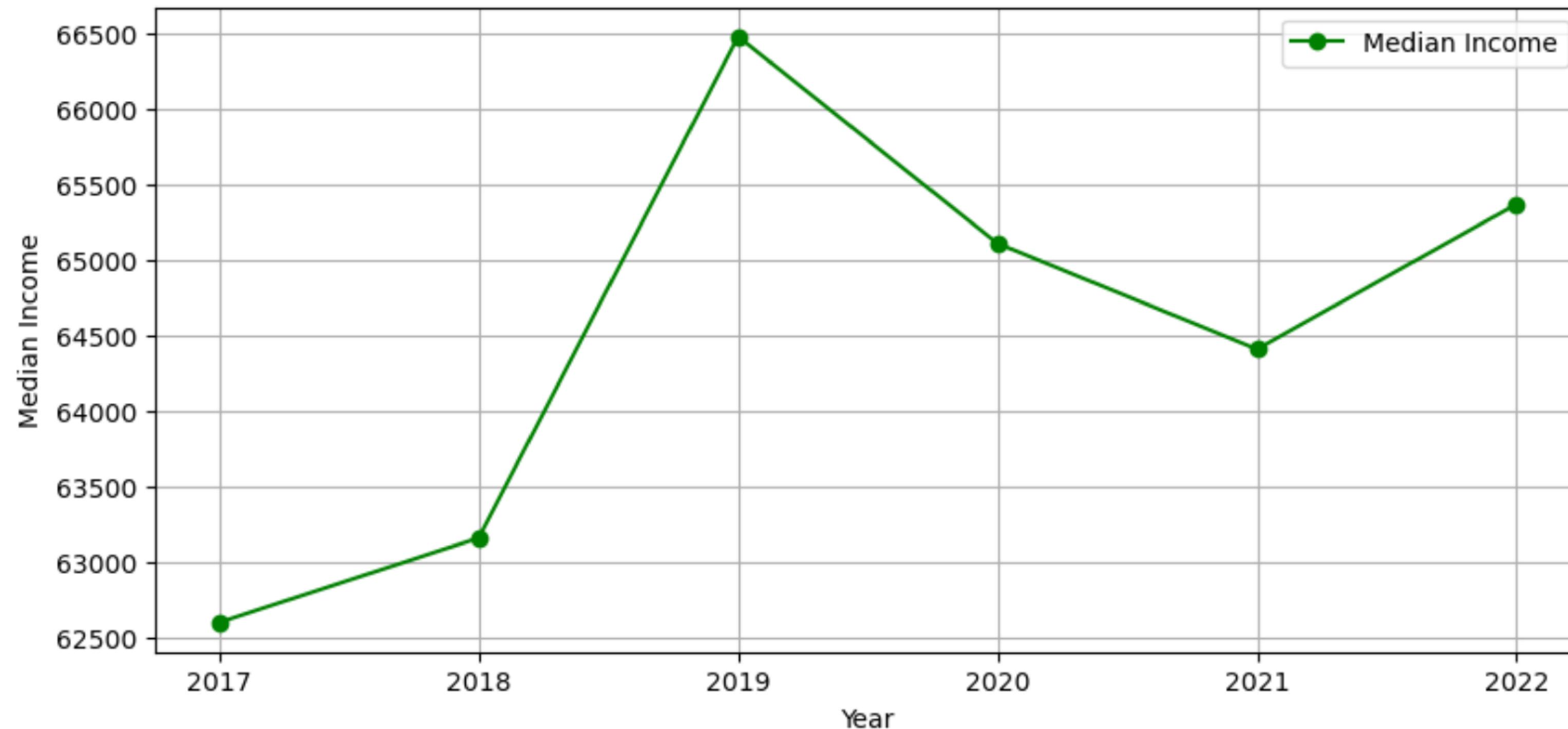


What does this mean?

## Population Trend Over the Years

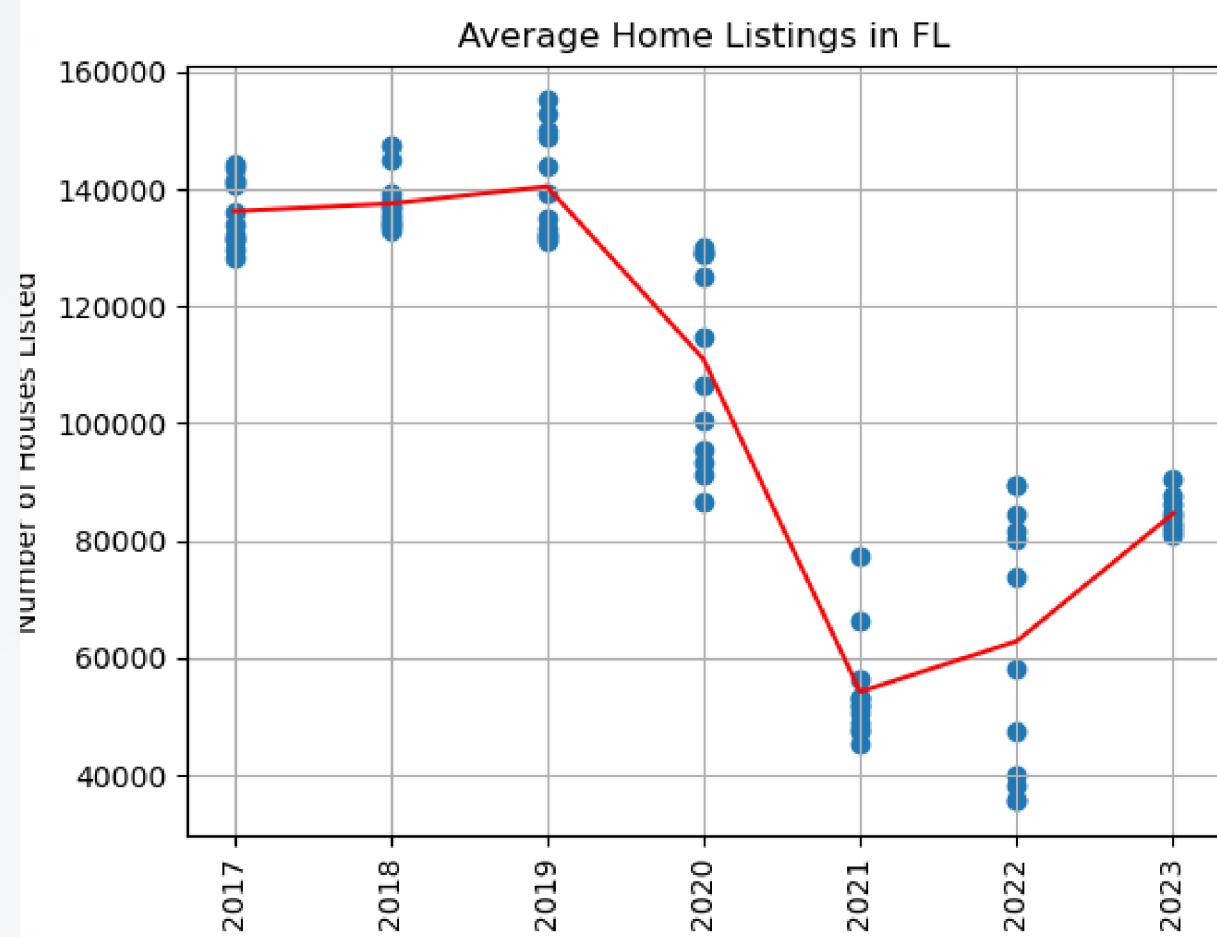


## Income Trend Over the Years



# HOUSING

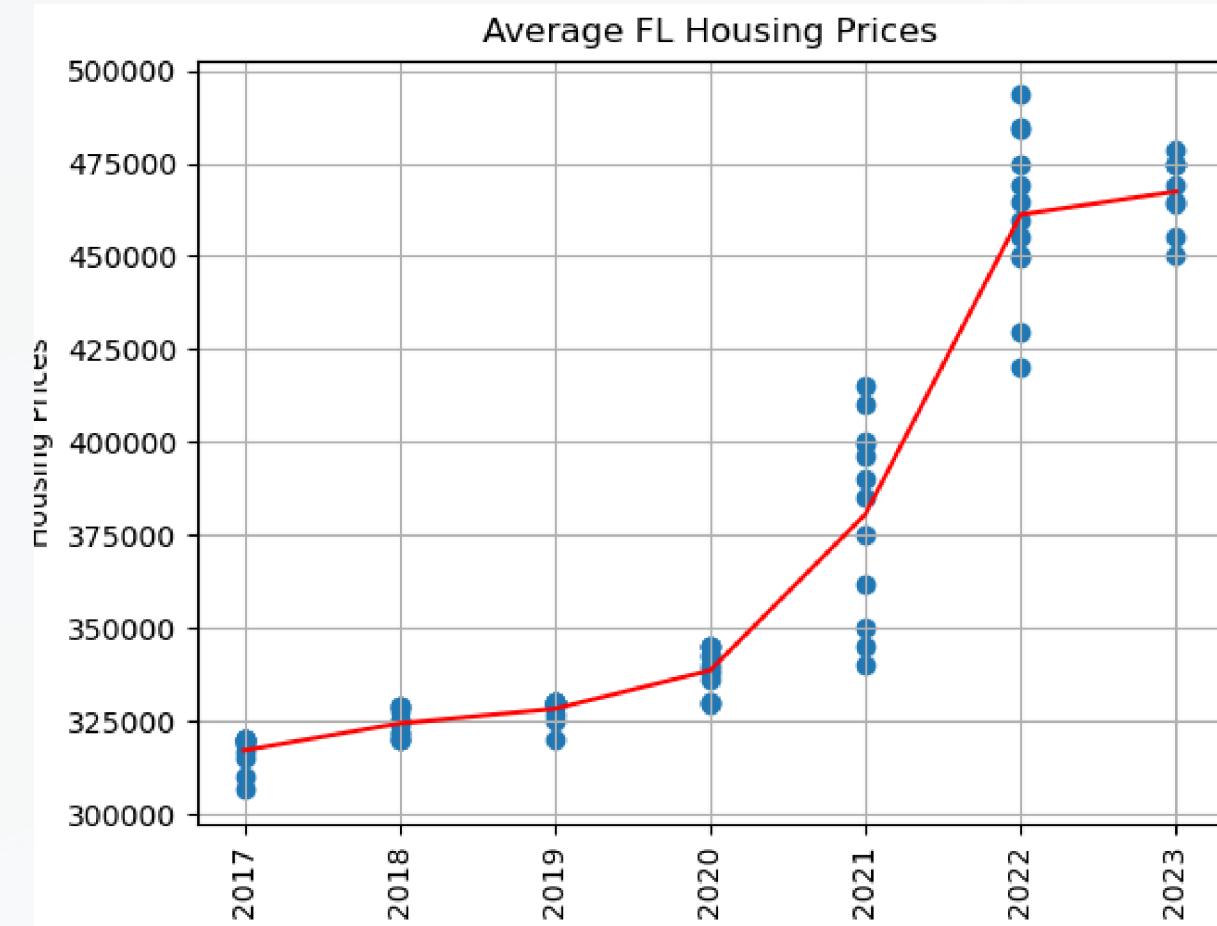
## *Our Assumption*

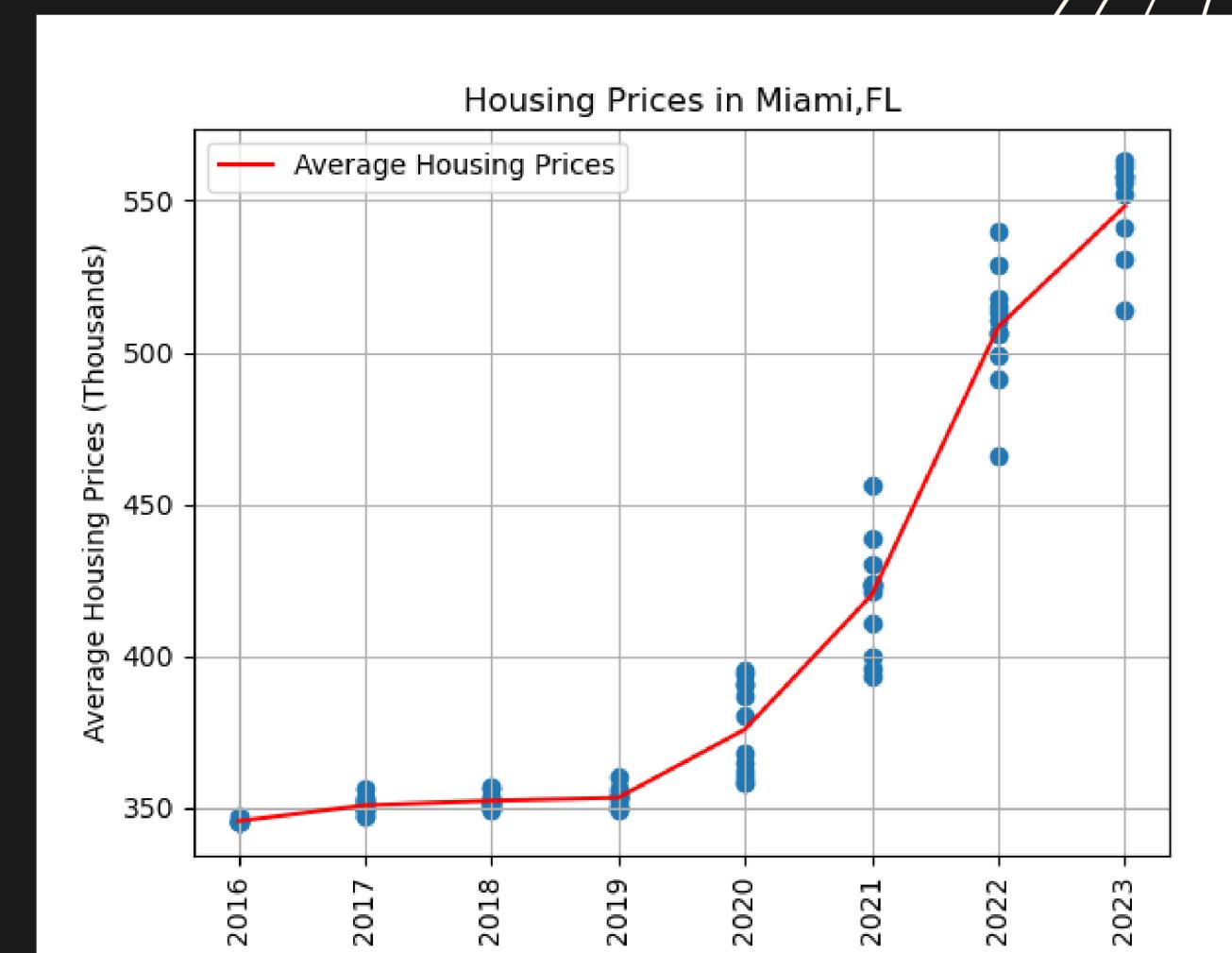
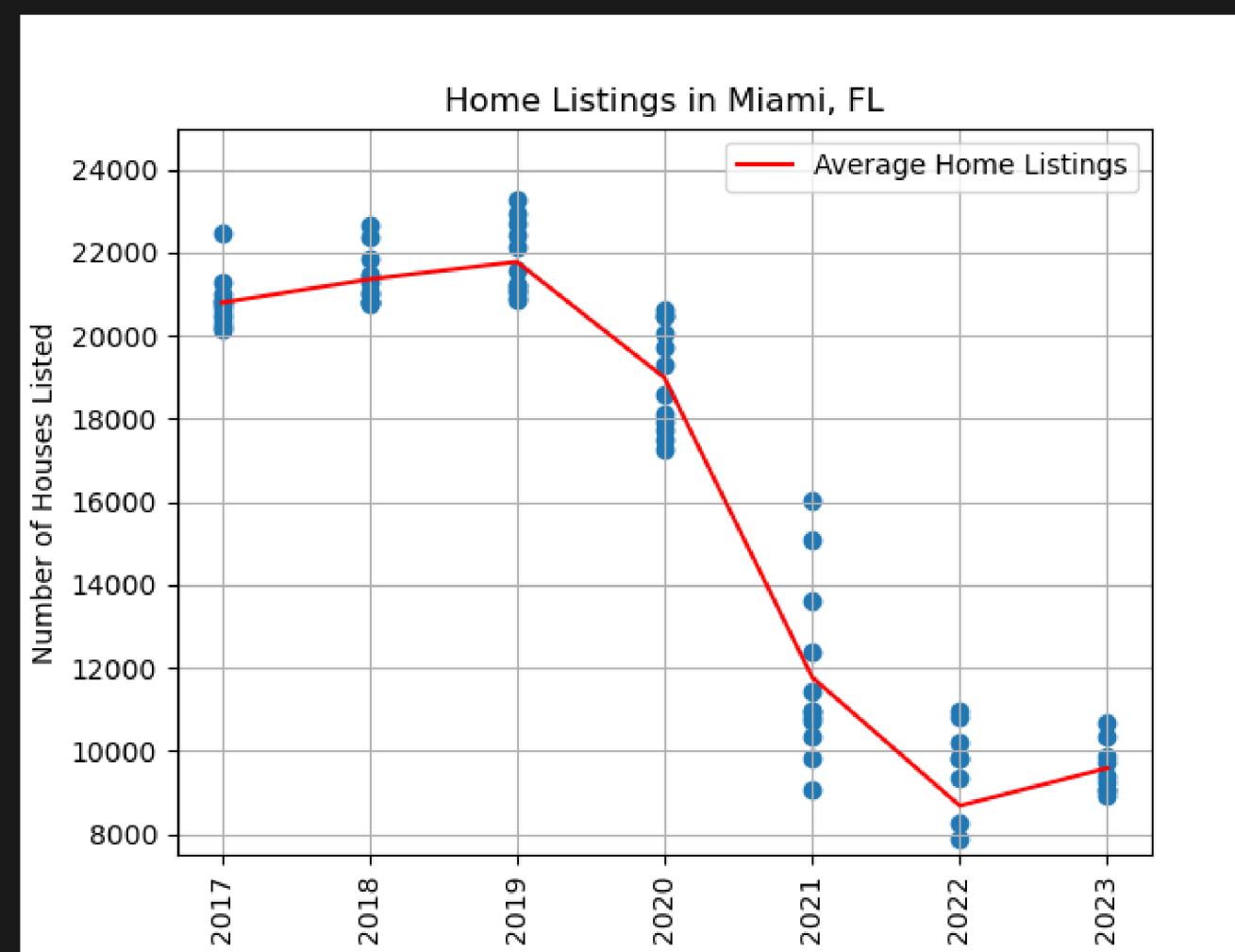
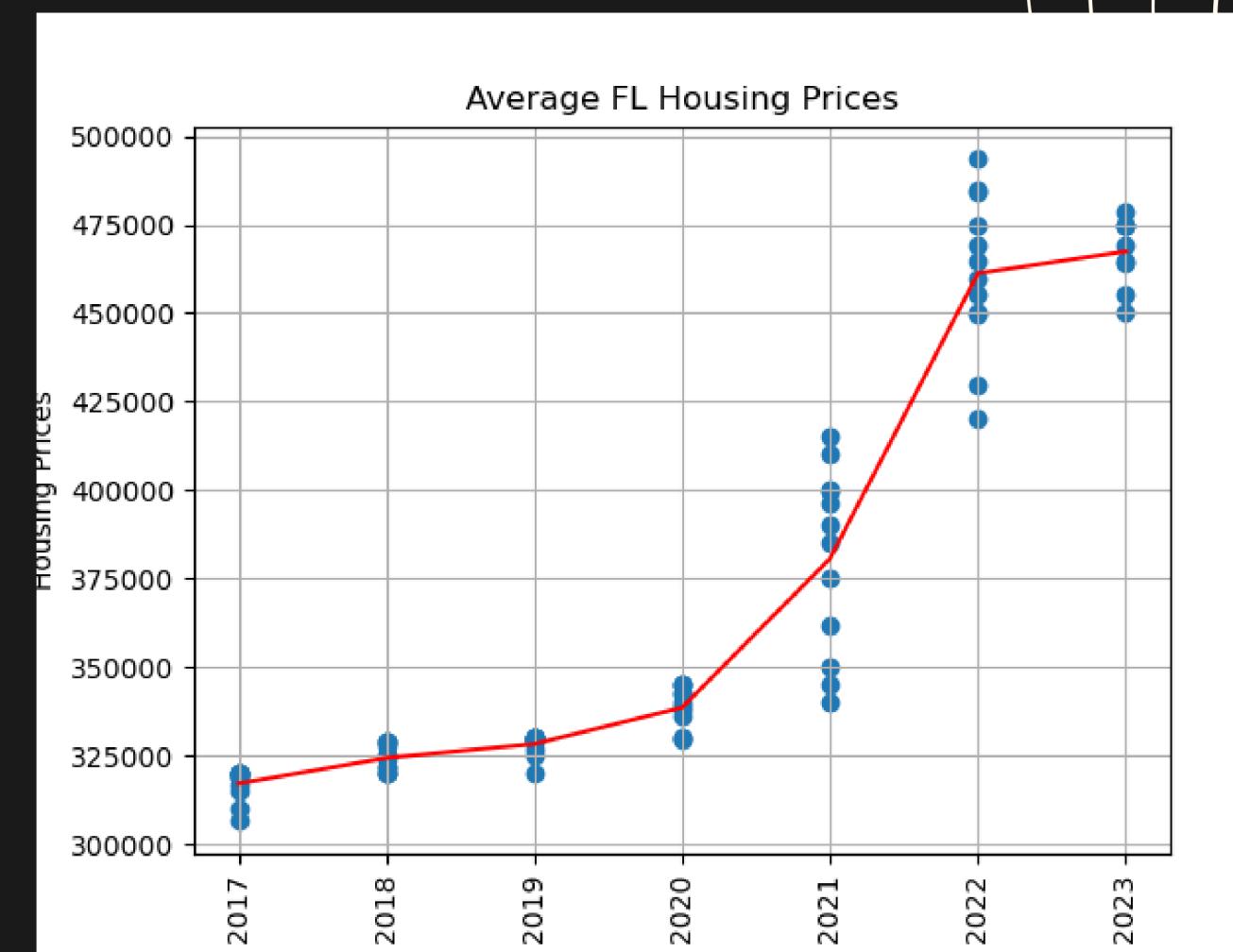
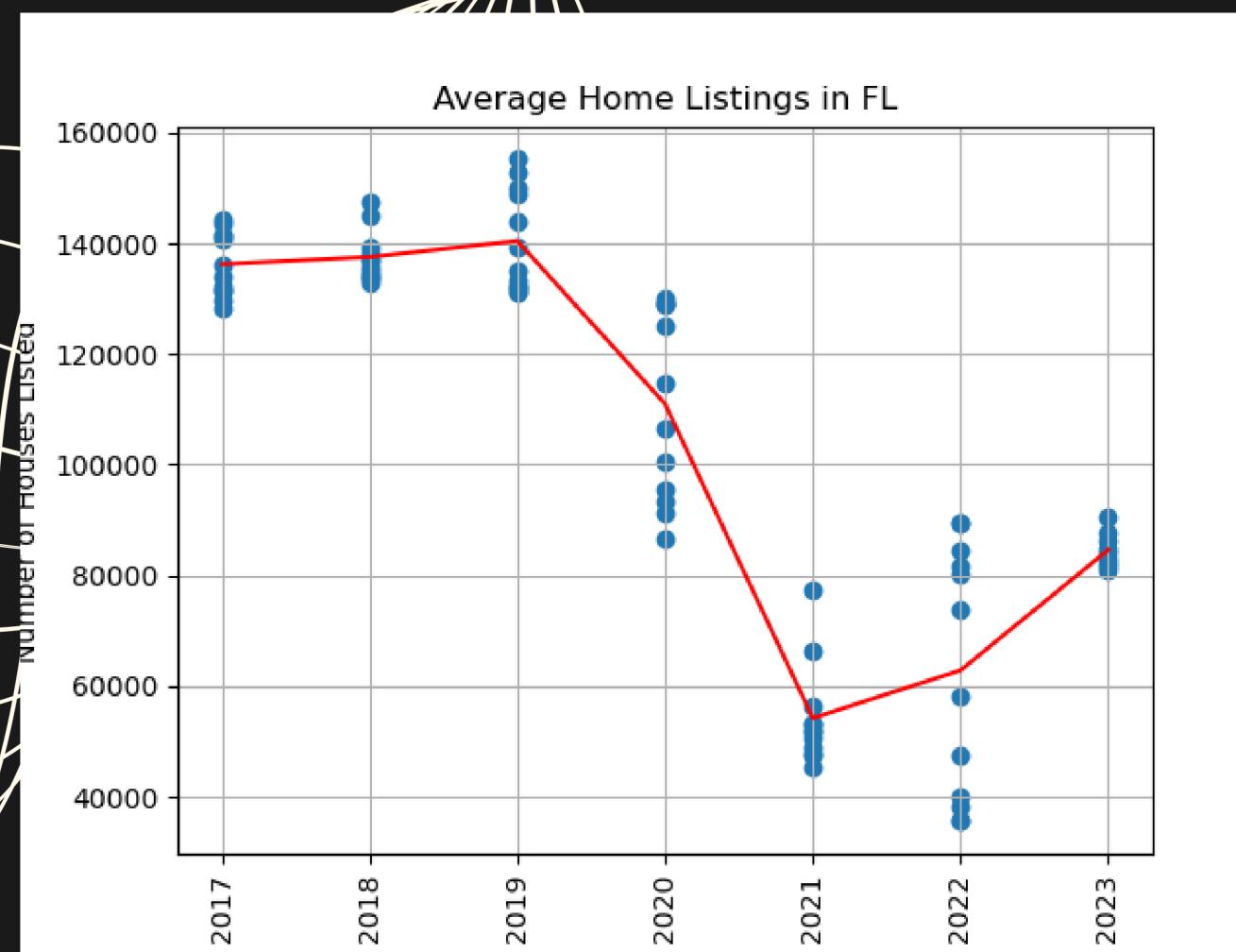


- An increase in the population will cause a decrease in the amount of listings available.

## *The Result*

- As a result, housing costs skyrocketed.





## Miami vs FL Housing Prices Statistics using a one sample t-test.

```
TtestResult(statistic=-45085.19922429465, pvalue=5.6223423917649e-298, df=80)
```

```
The stats for the Average Housing Prices are: count      7.000000
mean     415.519841
std      81.565099
min     350.750000
25%     352.750000
50%     375.750000
75%     464.208333
max     548.222222
Name: Average_Listing, dtype: float64
```

```
The stats for the Average Housing Listings are:count      7.000000
mean    373934.555556
std     65118.224885
min     317088.333333
25%     326285.166667
50%     338565.250000
75%     420939.541667
max     467438.888889
Name: Average_FL_Housing_Prices, dtype: float64
```

The p-value is less than the threshold ( $5.6223423917649e-298 < .05$ ), so we reject the null hypothesis.  
There is a statistically significant relationship between the housing prices in miami and Florida

## Miami vs FL House Listing Statistics using a one sample t-test.

```
TtestResult(statistic=-143.07230294752048, pvalue=3.64131216414207e-98, df=80)
```

```
The stats for the Average Housing Listings in Miami are: count      7.000000
mean     16138.876984
std      5864.328174
min     8681.833333
25%     10685.152778
50%     18985.666667
75%     21076.250000
max     21781.833333
Name: Average_Listing, dtype: float64
```

```
The stats for the Average Housing Listings in FL are:count      7.000000
mean    103848.746032
std     36727.440657
min     54203.333333
25%     73738.444444
50%     110986.000000
75%     136904.208333
max     140466.583333
Name: Average_FL_Listing, dtype: float64
```

The p-value is less than the threshold ( $3.64131216414207e-98 < .05$ ), so we reject the null hypothesis.  
There is a statistically significant relationship between the house lisitngs in miami and Florida

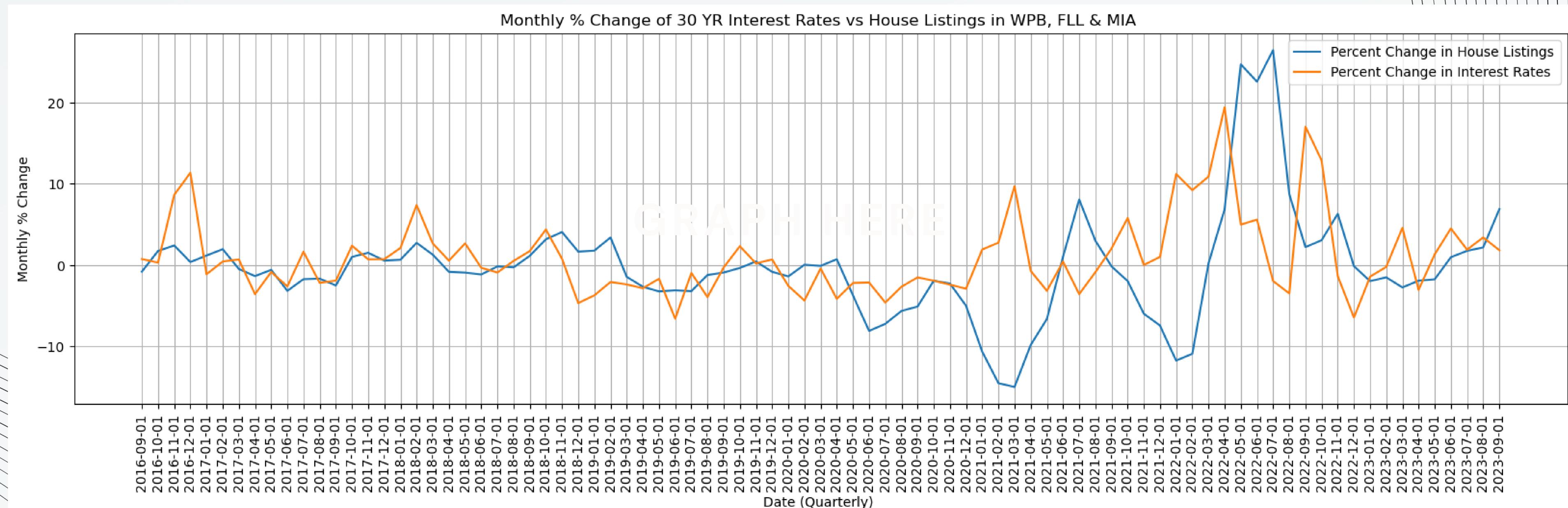
# **So what comes with this scarcity of housing?**

---

How does this impact Florida and it's citizens?

## Our Assumption

- The % Change in Housing Inventory is correlated to % Change in the 30-Year Fixed Mortgage Interest Rates



# MORTGAGE RATES & NEW HOUSING LISTINGS

	Percent Change of New House Listings	Percent Change of Interest Rates
count	85.000000	85.000000
mean	-0.267040	0.986171
std	6.513143	4.885182
min	-15.029060	-6.618370
25%	-2.530180	-2.205420
50%	-0.496240	0.189800
75%	1.638430	2.302360
max	26.457760	19.427130

## *The Result*

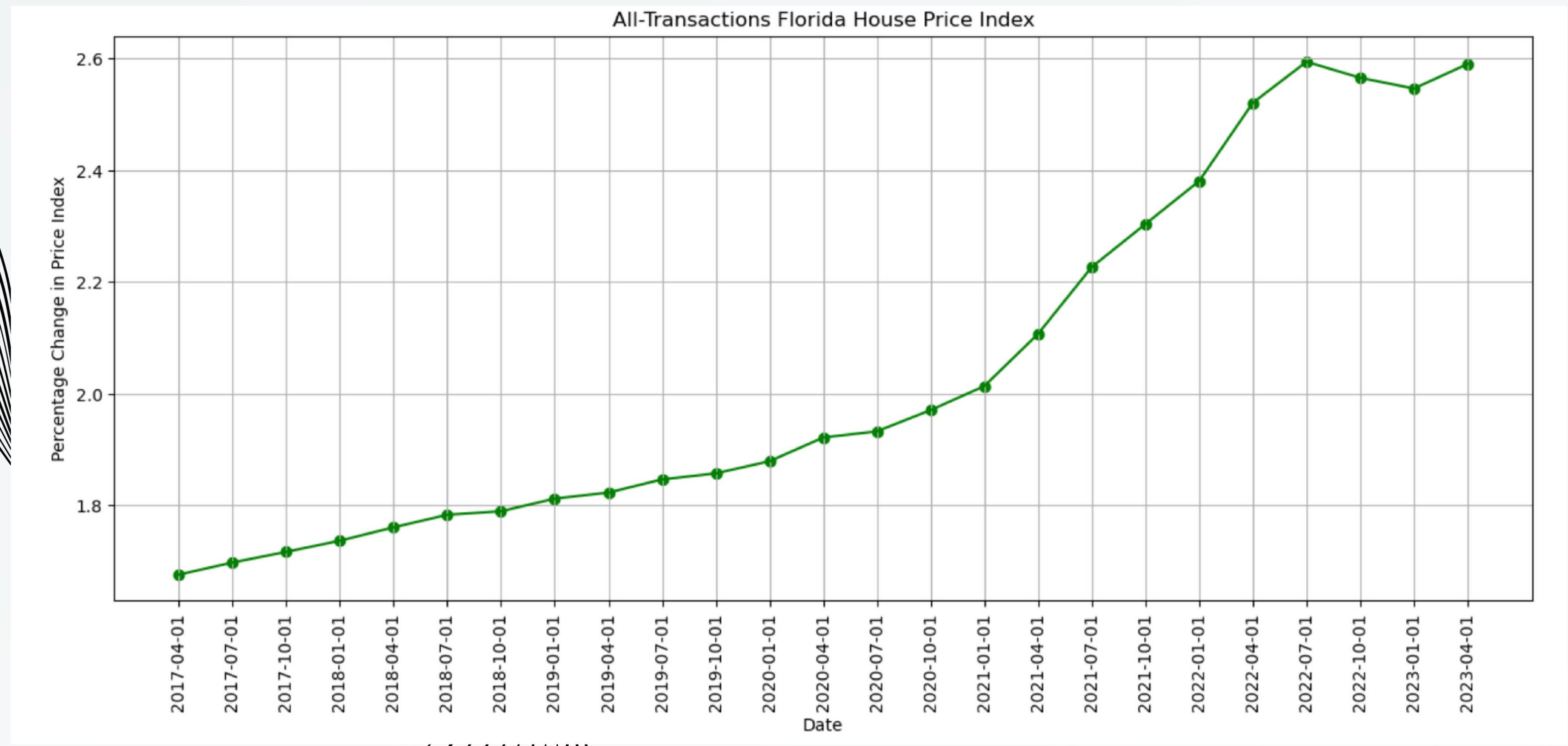
This is a weak positive correlation, which means that there is a slight tendency for the two variables to move in the same direction

All these changes are easy to see on a large scale... but how does it effect the average person?

**What does this mean  
for me?**



# ALL TRANSACTIONS



# **LET'S TALK LONG TERM**

- Less room for luxury

# **LET'S TALK LONG TERM**

- Less room for luxury
- Working harder and longer

# LET'S TALK LONG TERM

- Less room for luxury
- Working harder and longer
- Forever renters

# Why is it so expensive to be alive?

## An increase in population....

- causes a decrease in median salaries
- causes a decrease in housing availability -> increases in pricing

## An increased interest rate...

- reduces purchasing power
- increases the cost of consumer goods

**F.C.A**

# **Q & A**

F.C.A

**THANKS FOR YOUR  
ATTENTION !**