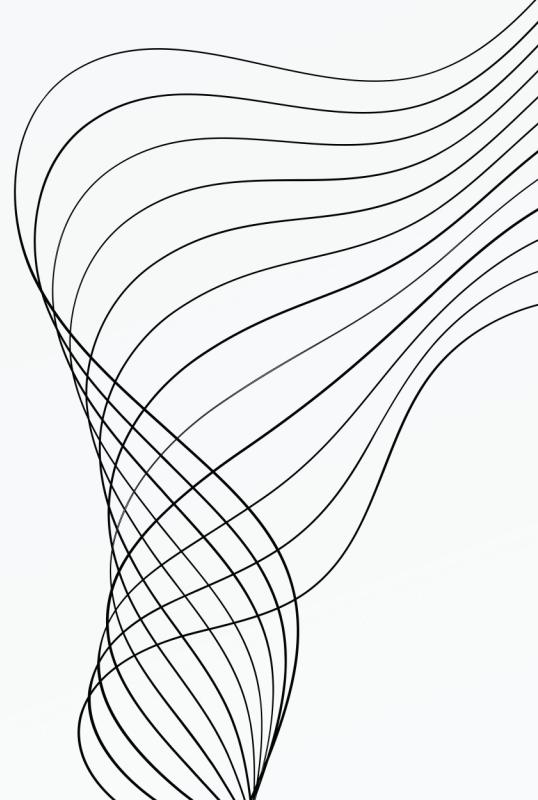




F.C.A.



WHAT AN EXPENSIVE TIME TO BE ALIVE



AUSTIN - CAITLYN - PASCALE - WILLIAM

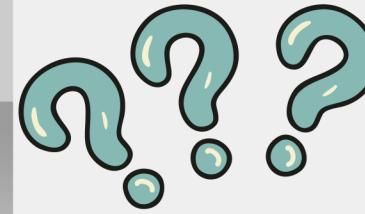
AGENDA

- 01 BACKGROUND AND WHAT WE SEEK TO ANSWER
- 02 POPULATION
- 03 HOUSING
- 04 MORTGAGE RATES
- 05 BASKET OF GOODS
- 06 WHAT THIS MEANS FOR US
- 07 LASTING EFFECTS

POPULATION AND INCOME

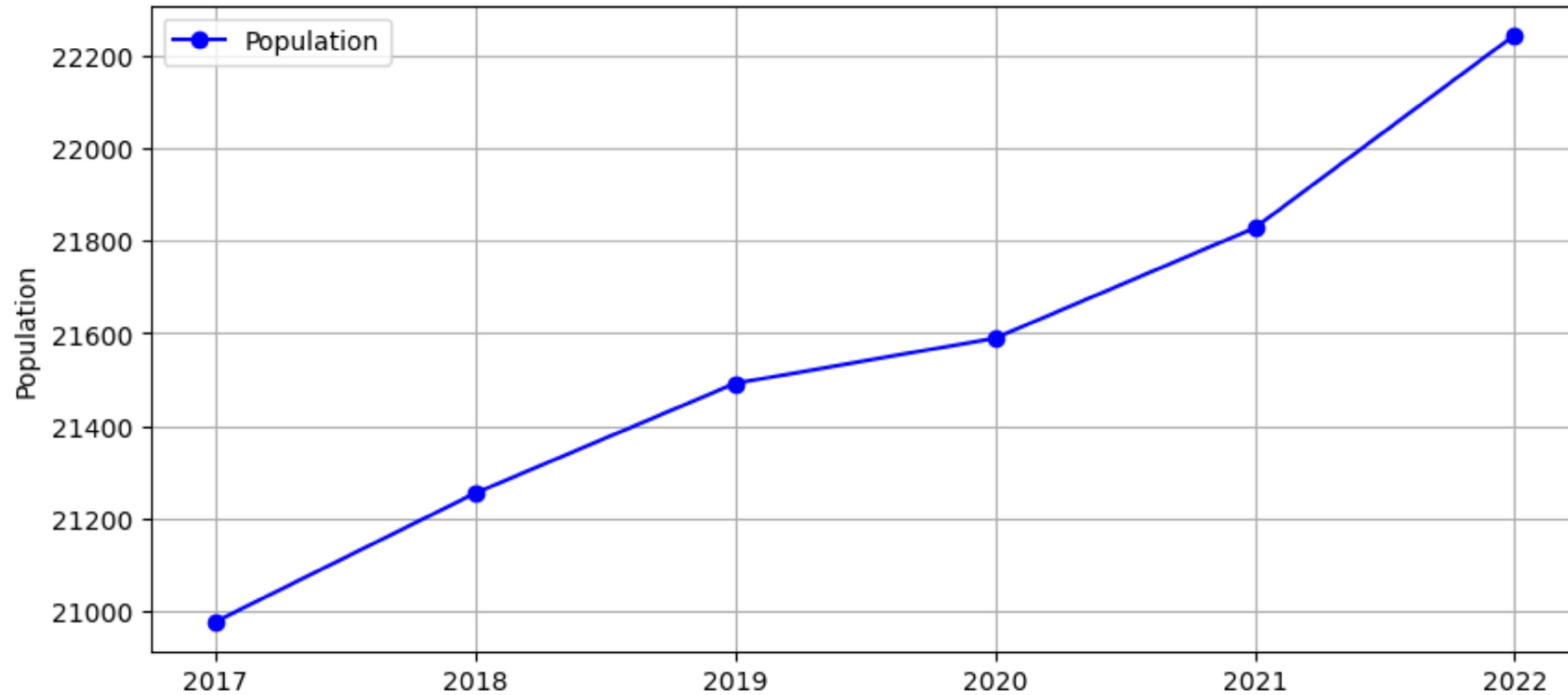


How much has Floridas population grown?

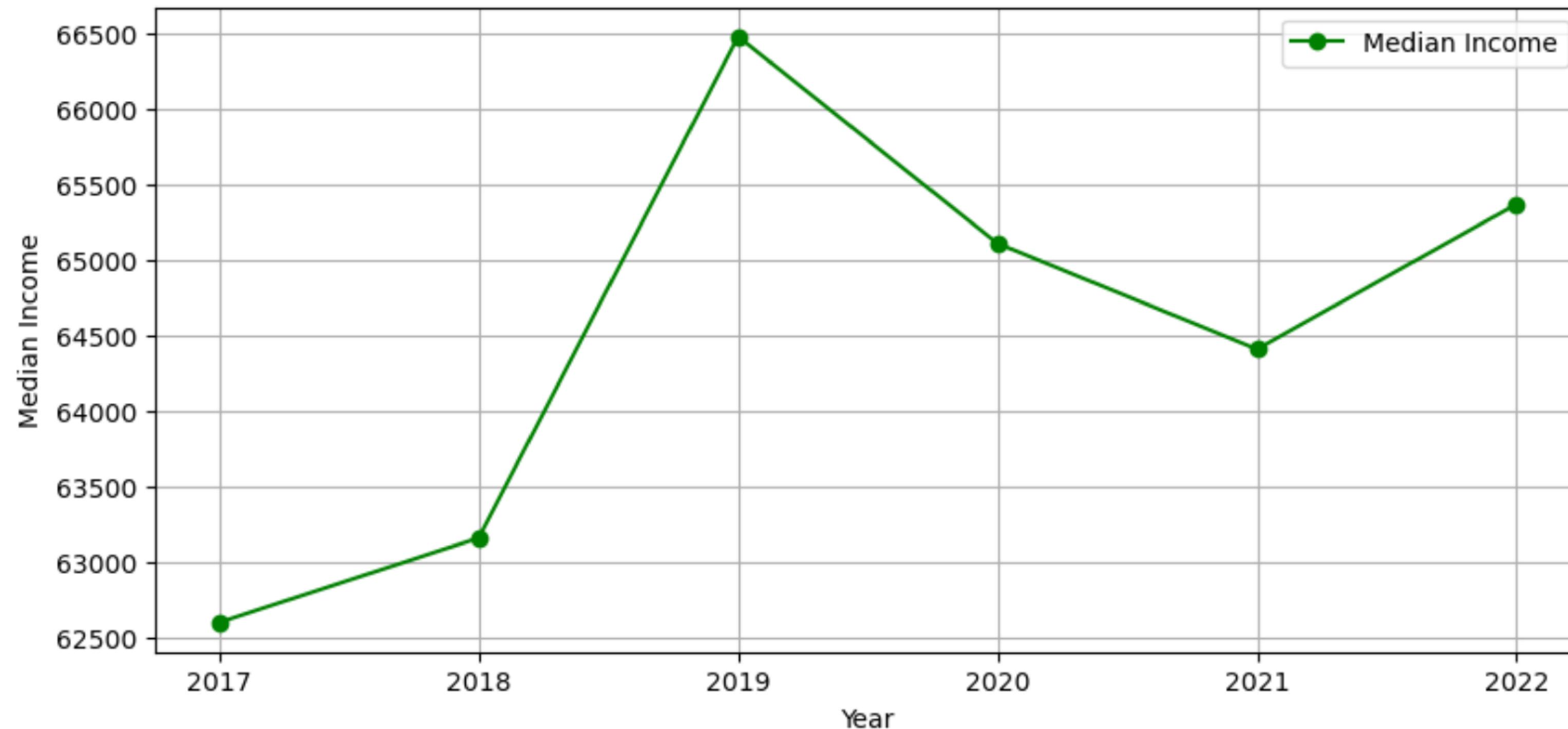


What does this mean?

Population Trend Over the Years

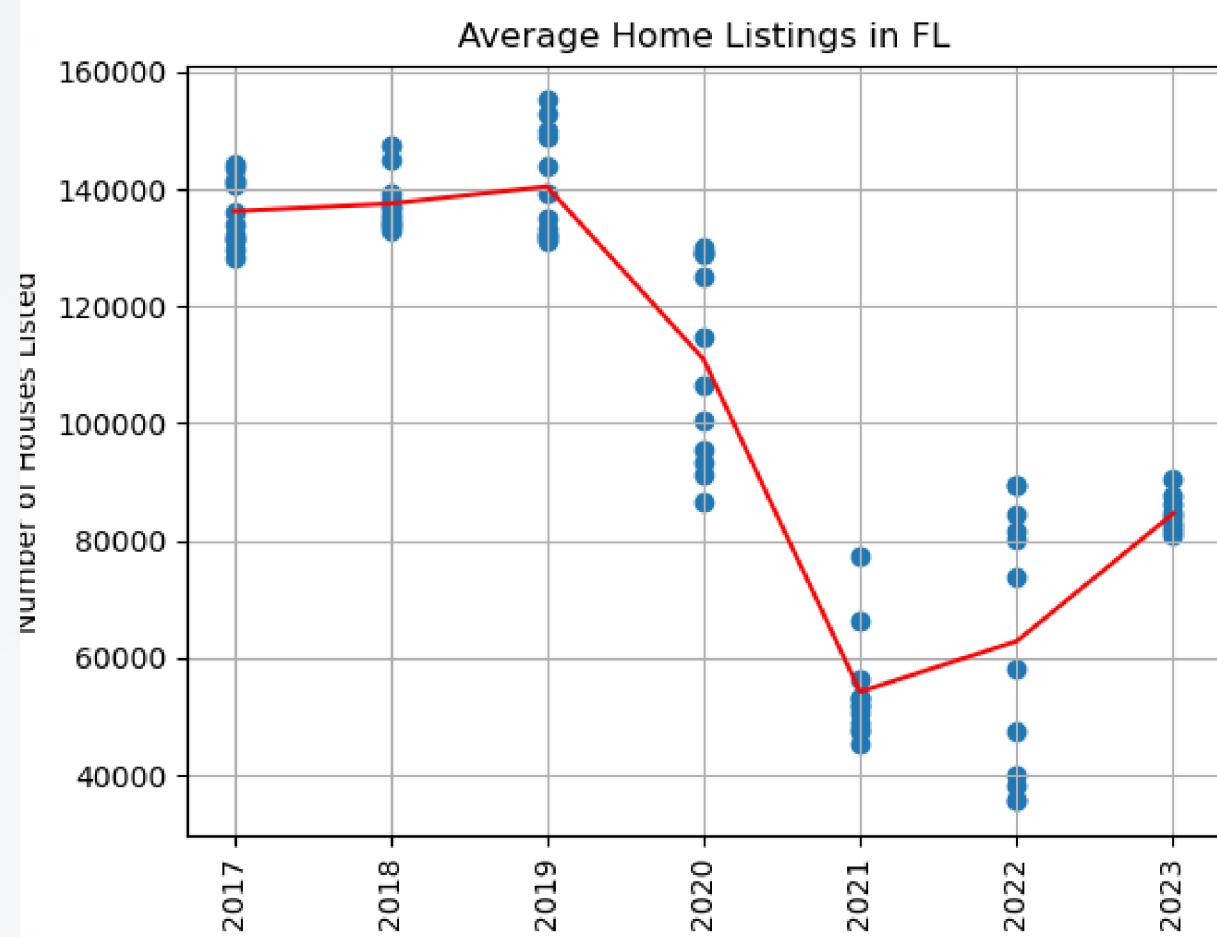


Income Trend Over the Years



HOUSING

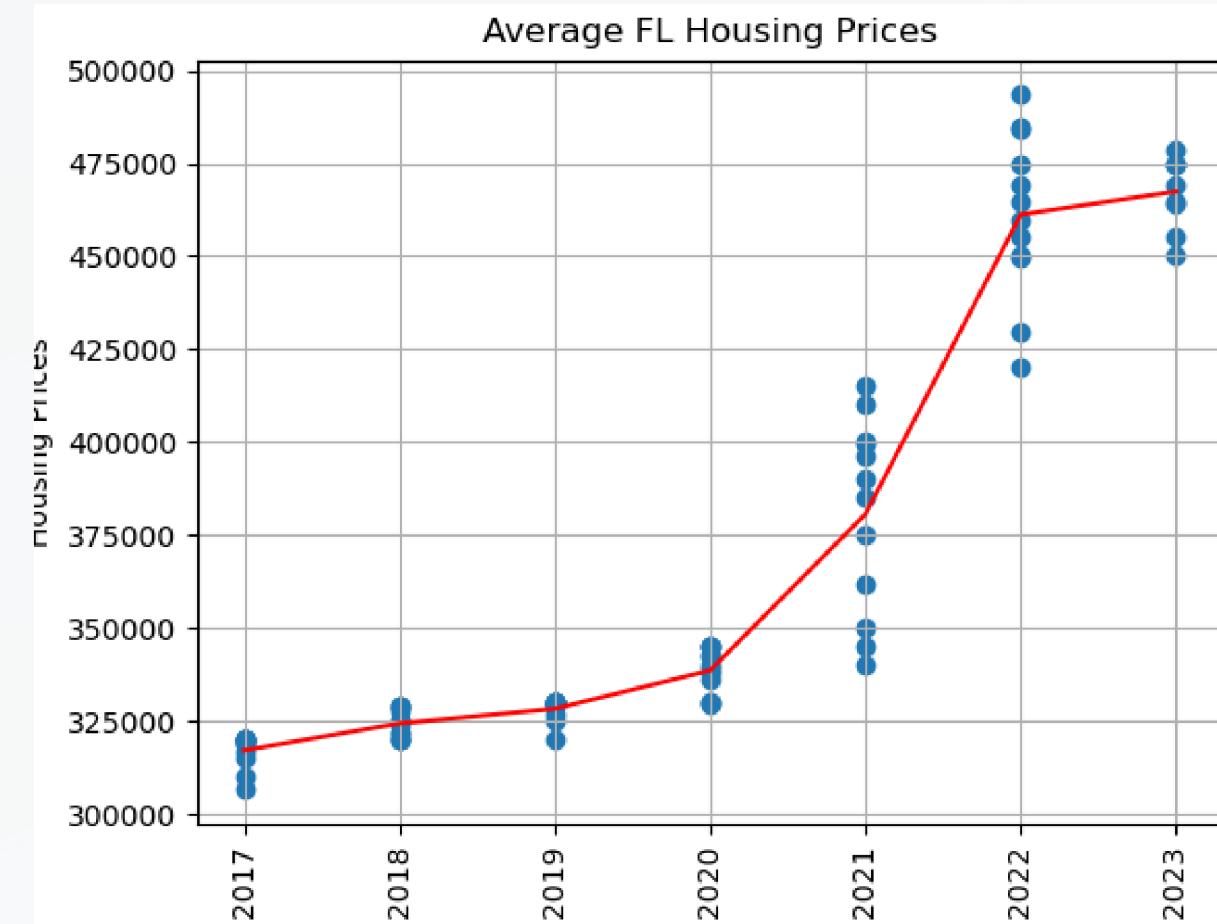
Our Assumption

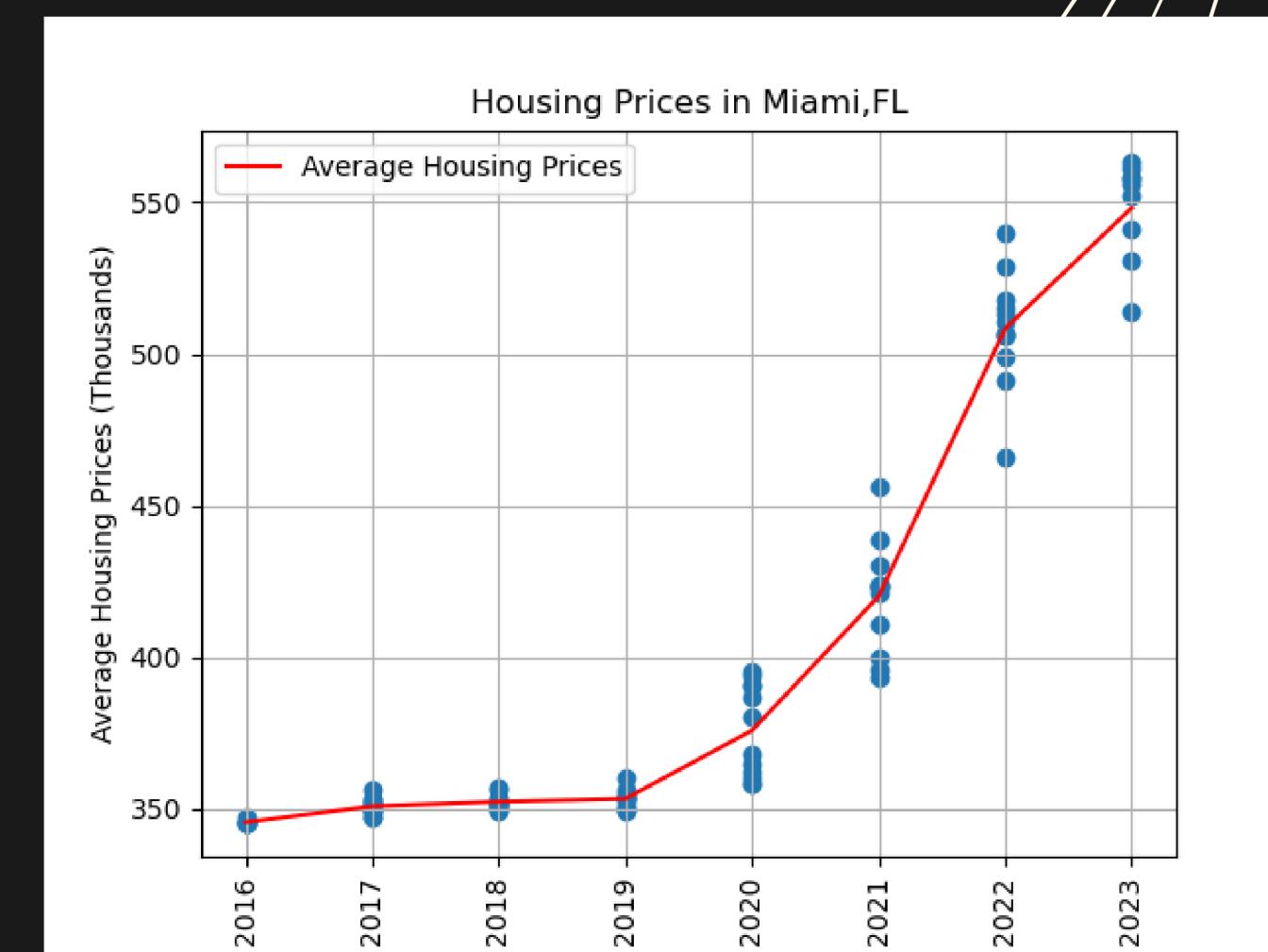
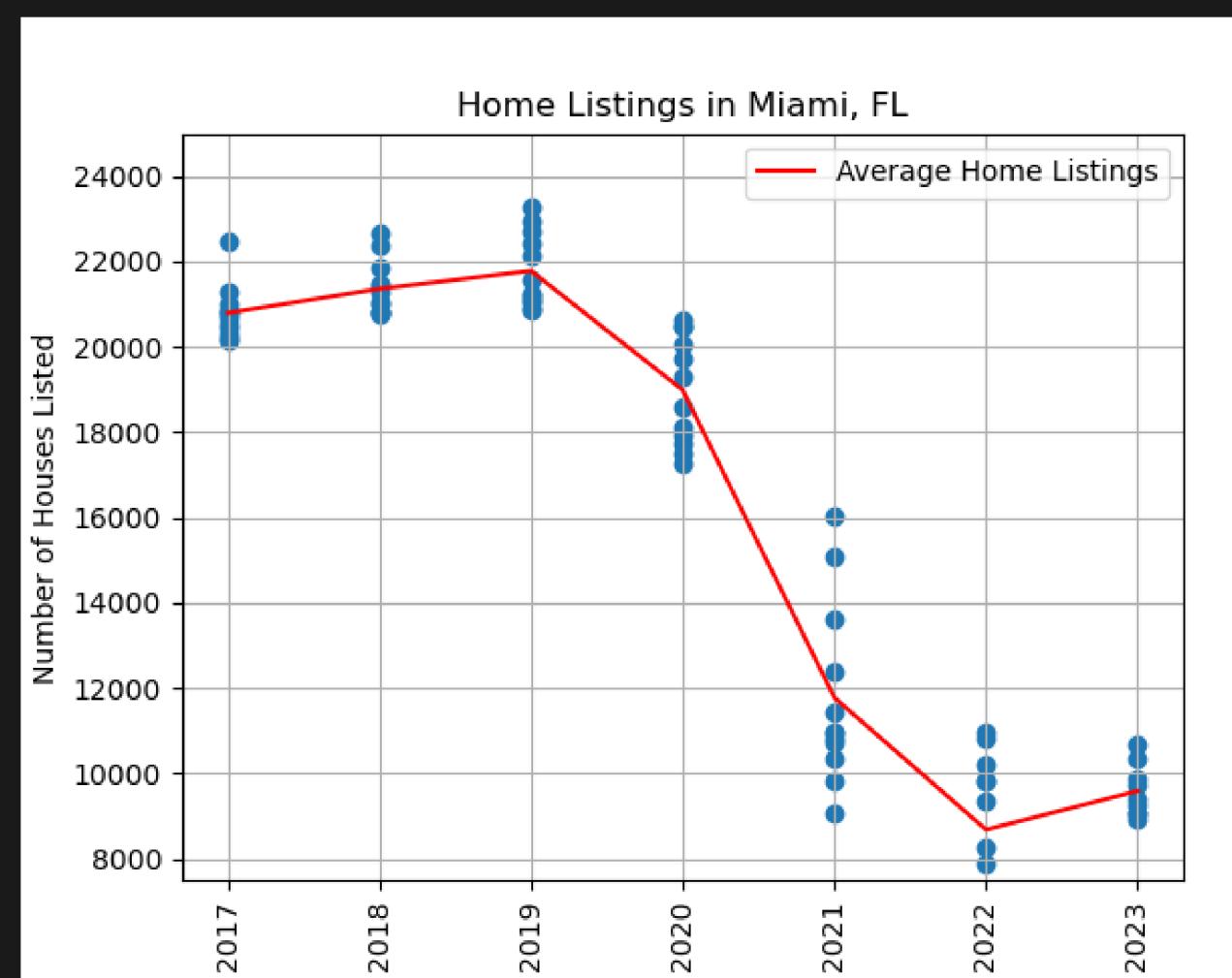
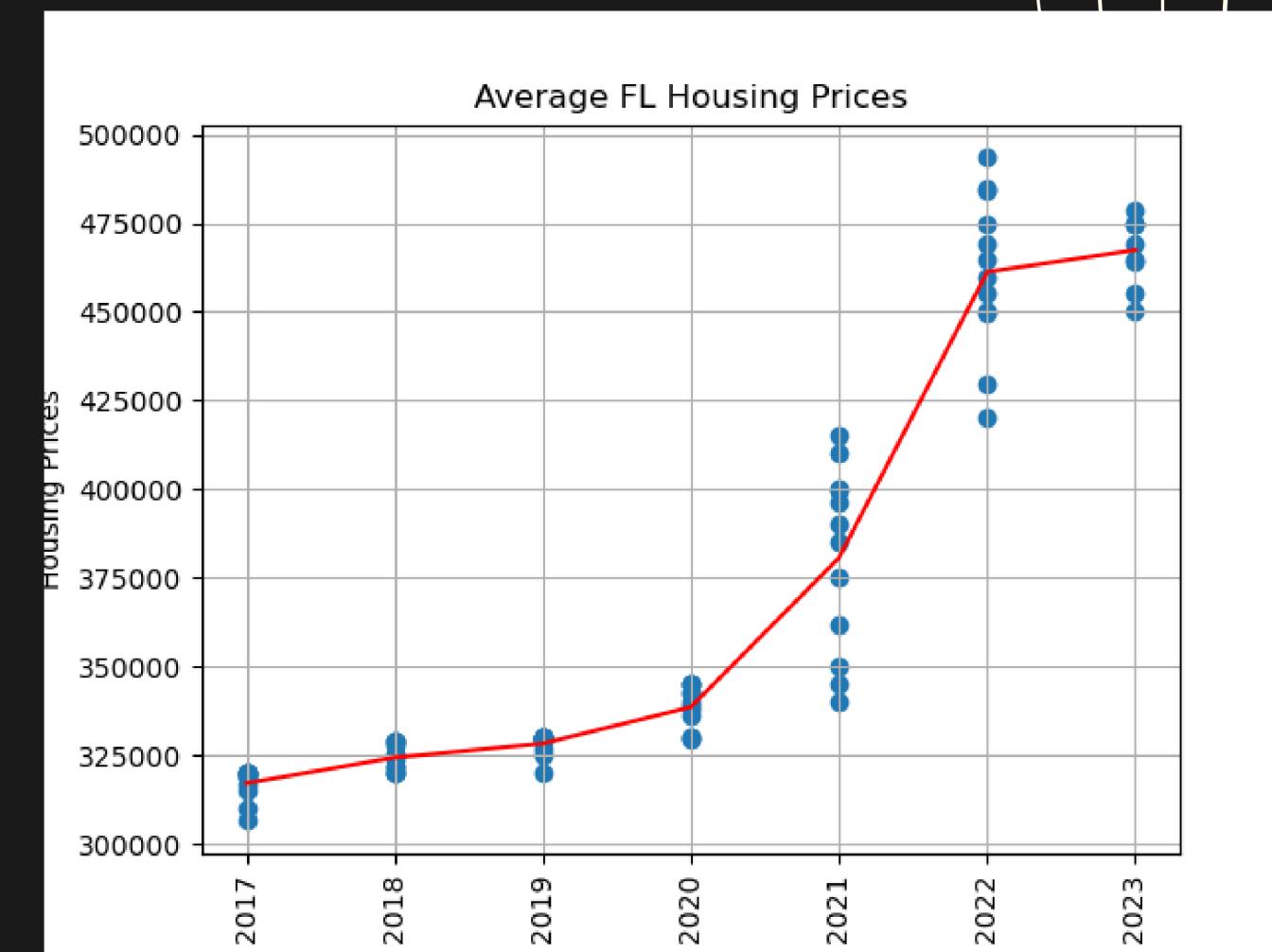
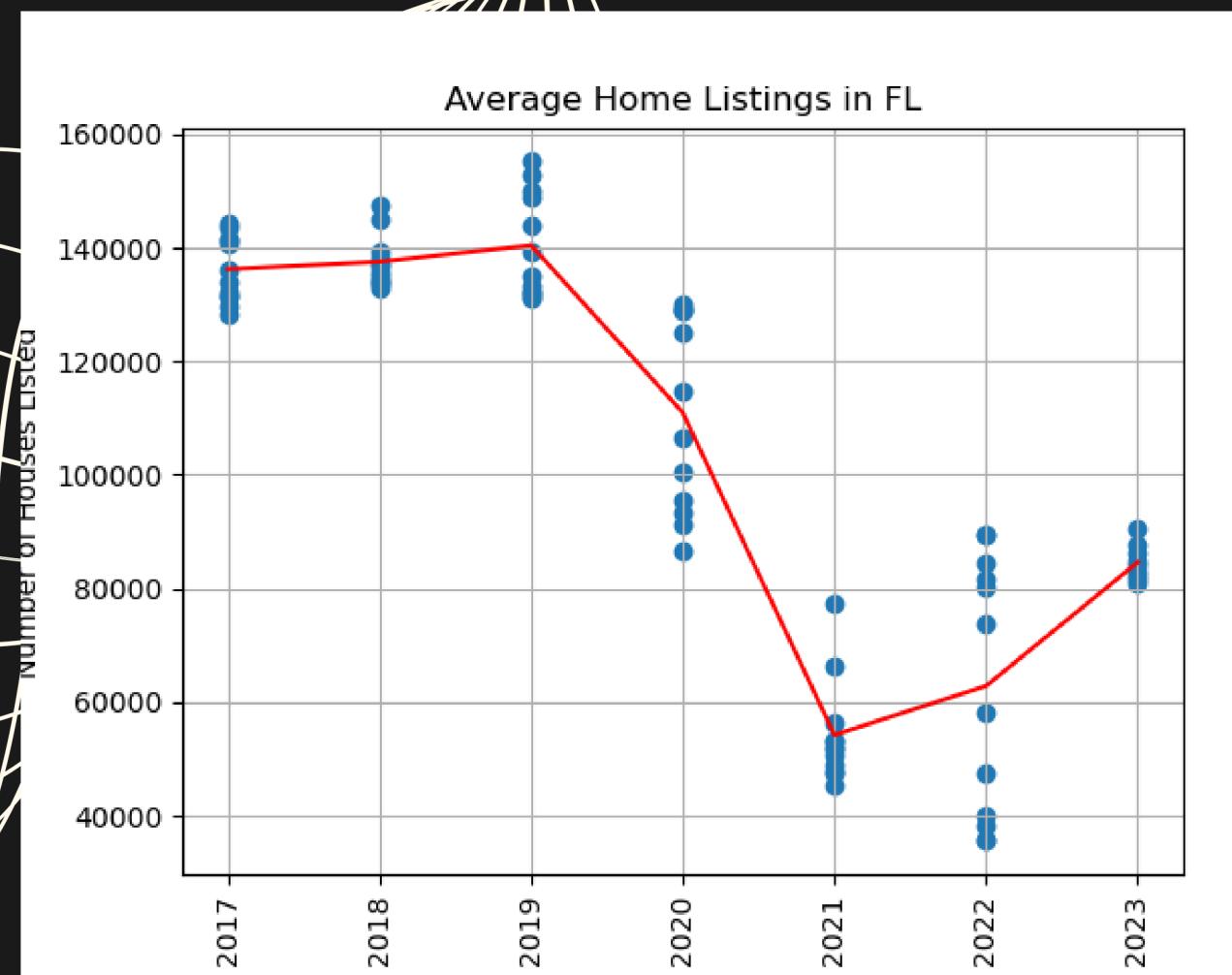


- An increase in the population will cause a decrease in the amount of listings available.

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
```

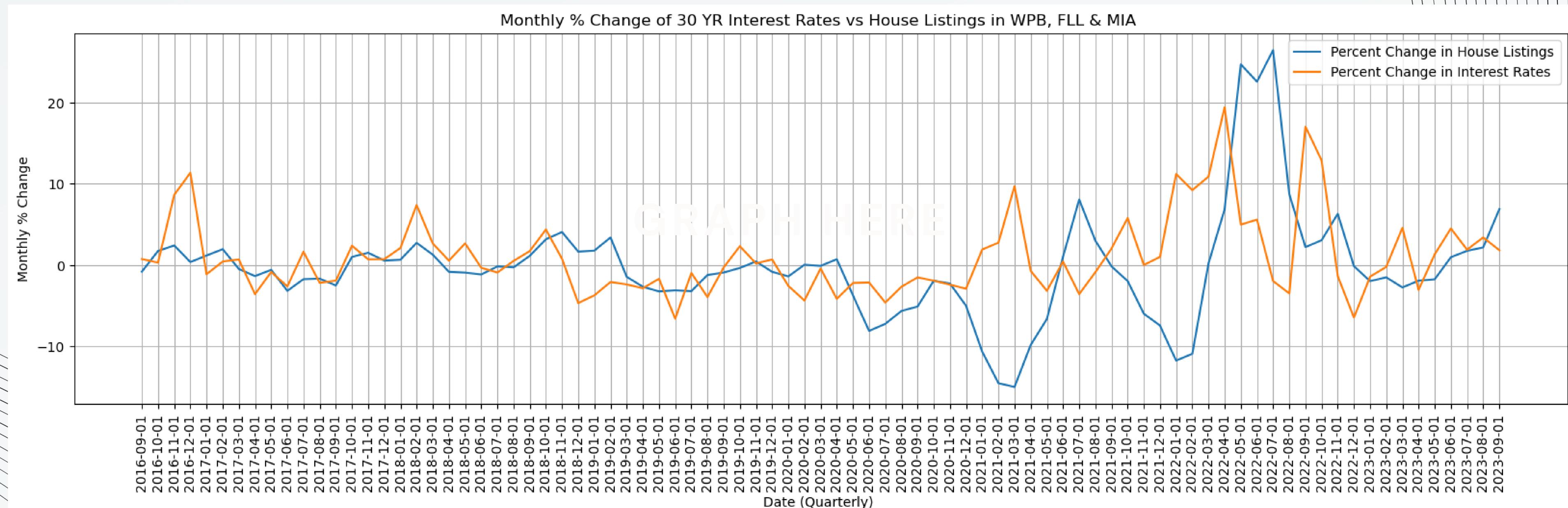
The p-value is less than the threshold ($3.64131216414207e-98 < .05$), so we reject the null hypothesis.
There is a statistically significant relationship between the house lisitngs in miami and Florida

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

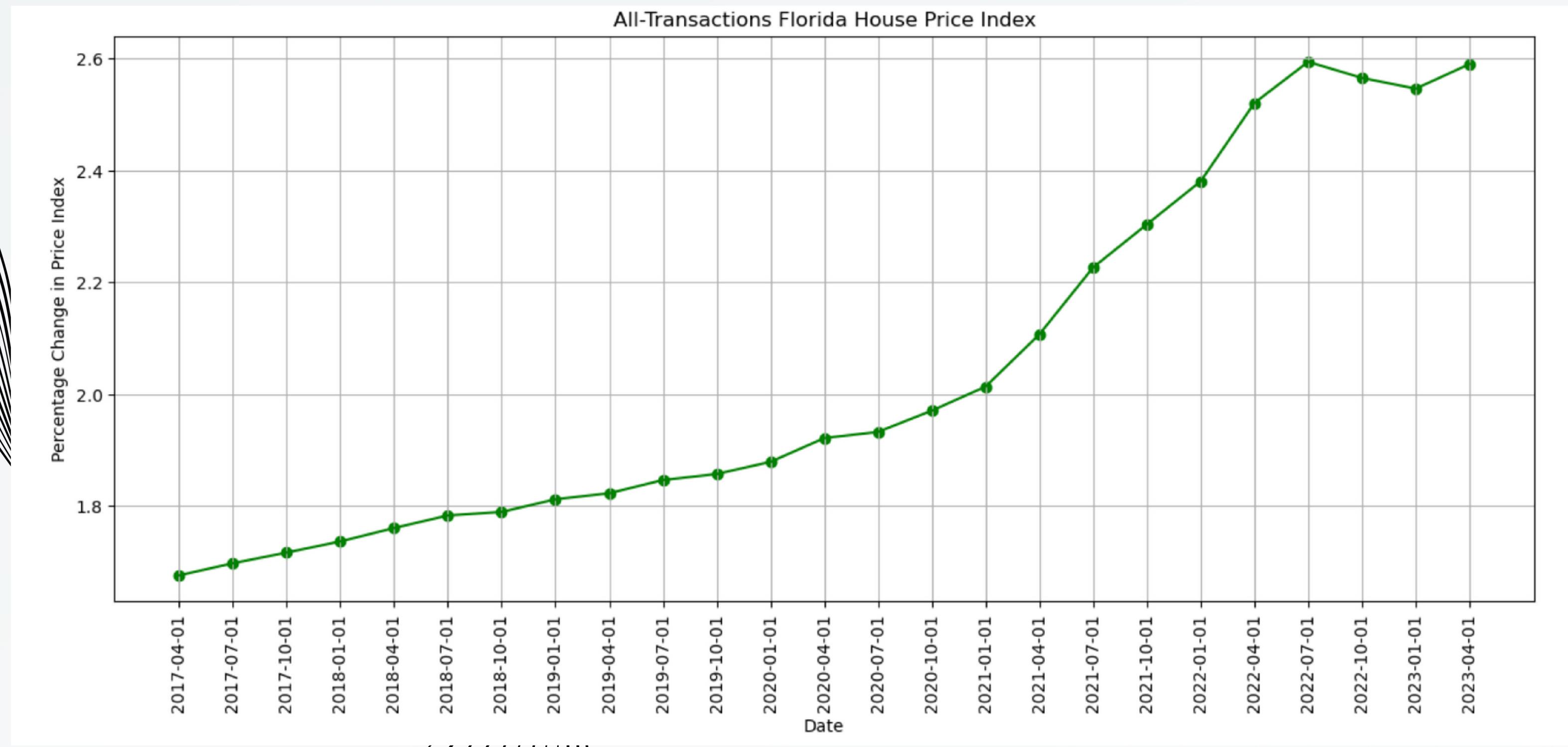
- This is a weak positive correlation, which means that there is a slight tendency for the two variables to move in the same direction

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 !**