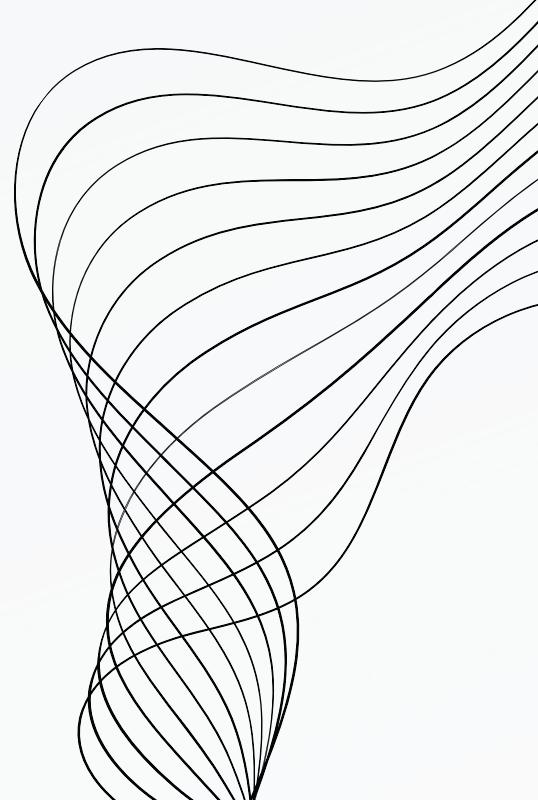


F.C.A.

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

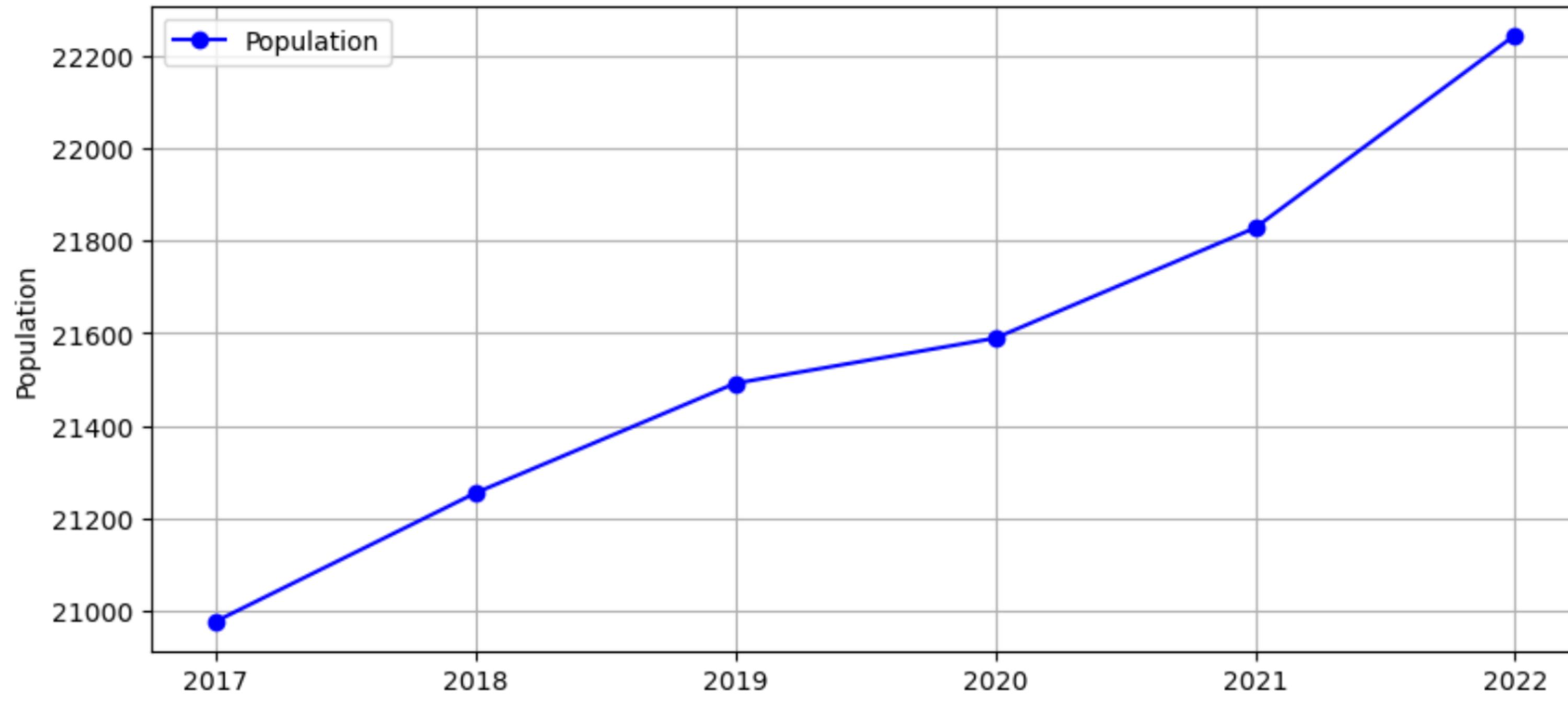


How much has Floridas population grown?

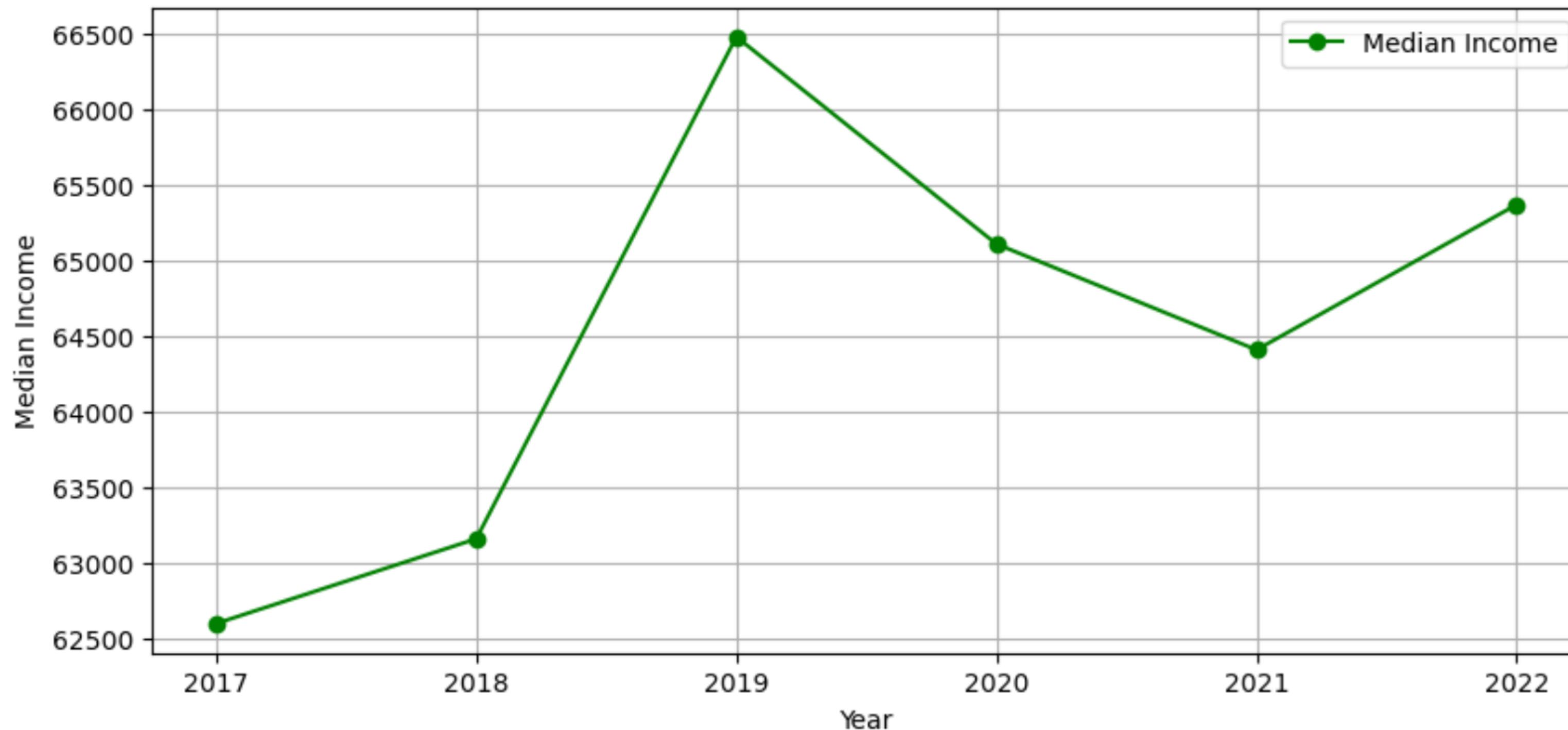


What does this mean?

Population Trend Over the Years

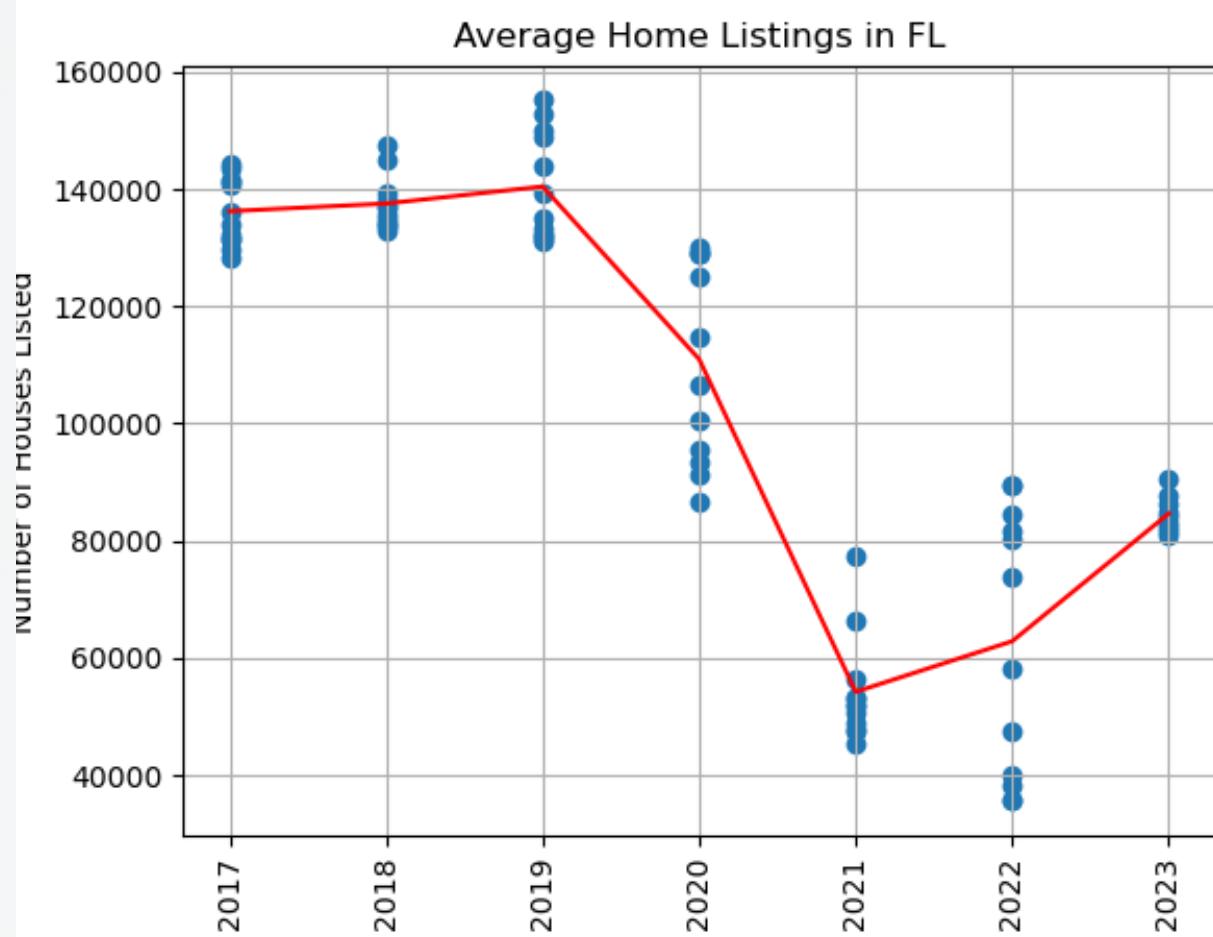


Income Trend Over the Years



HOUSING

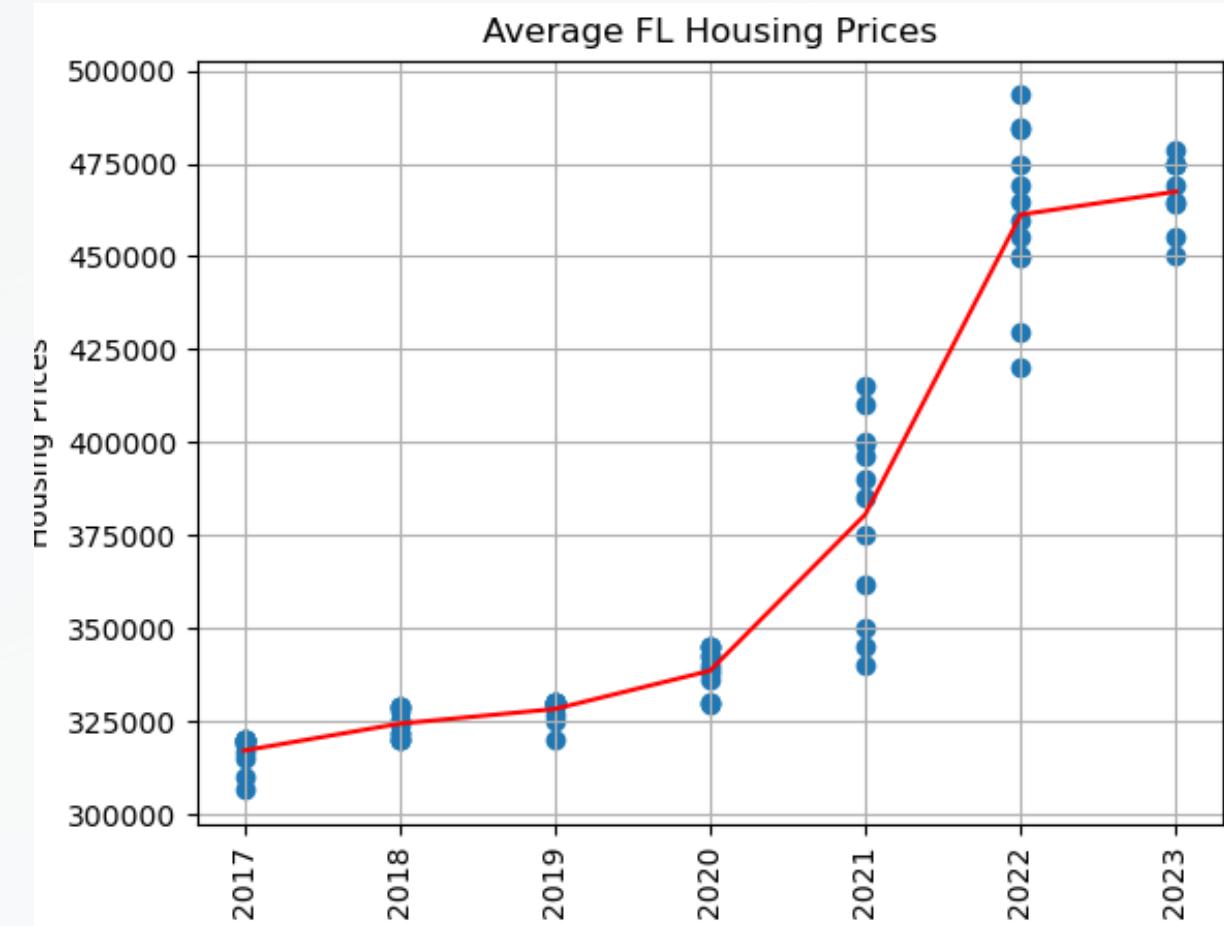
Our Assumption

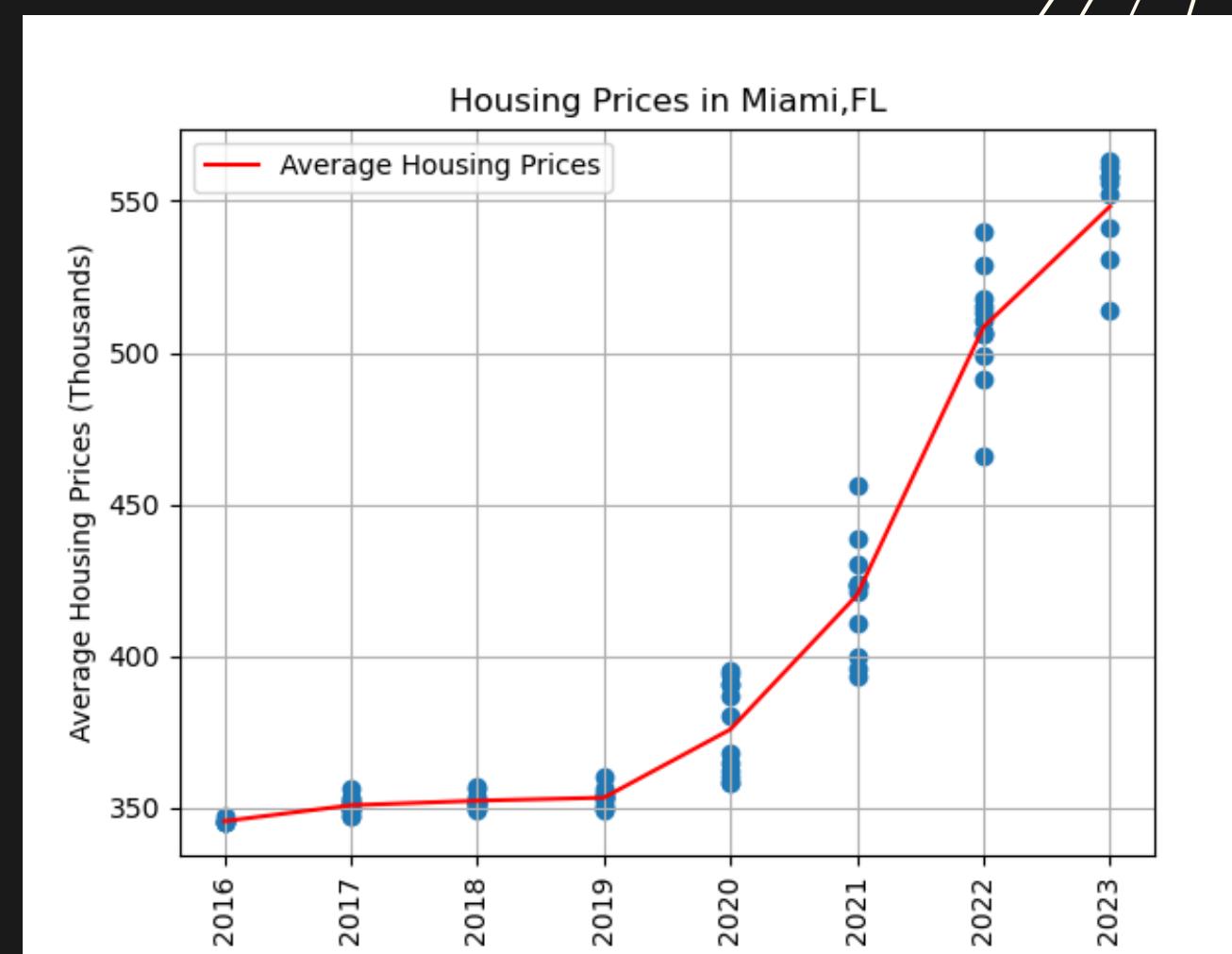
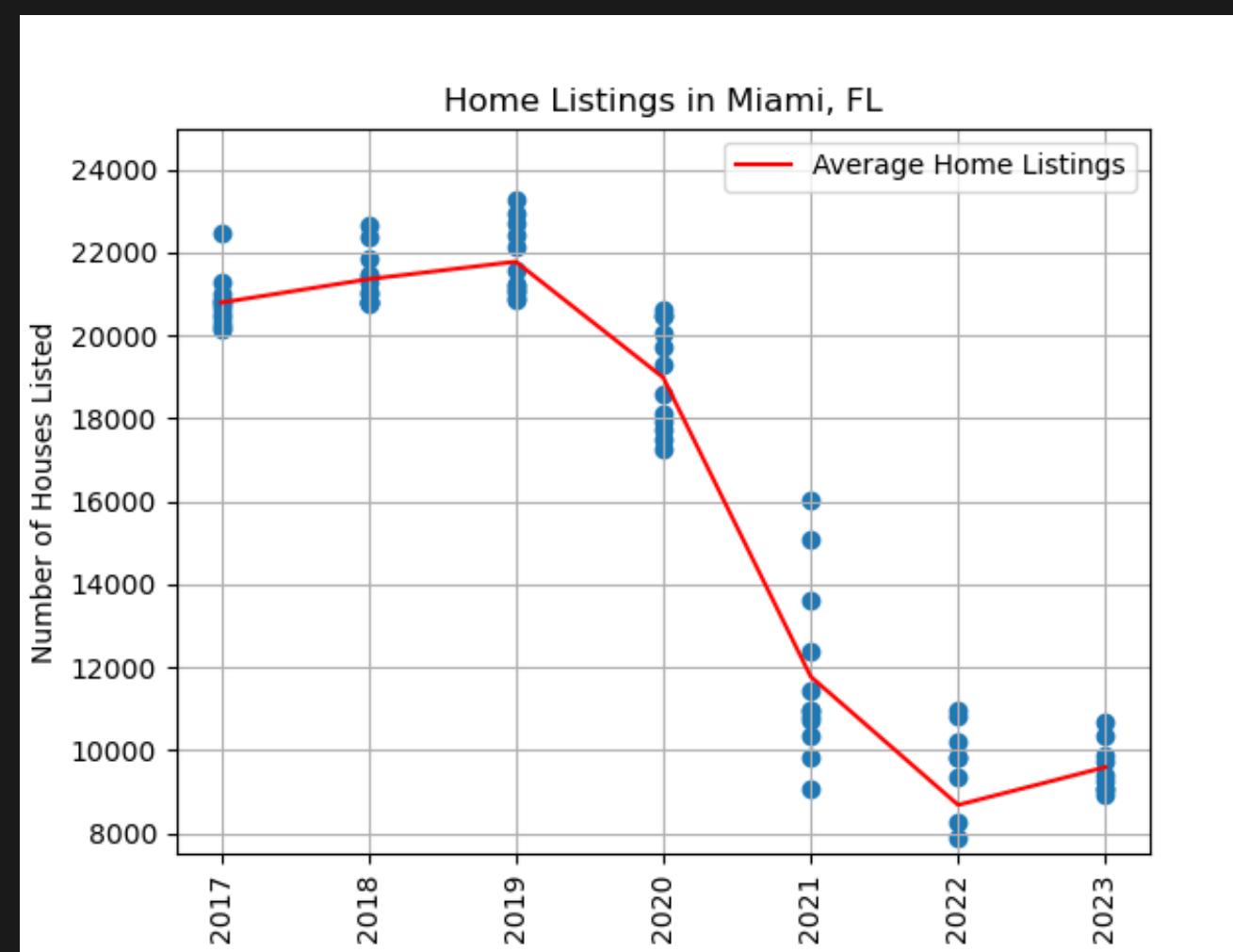
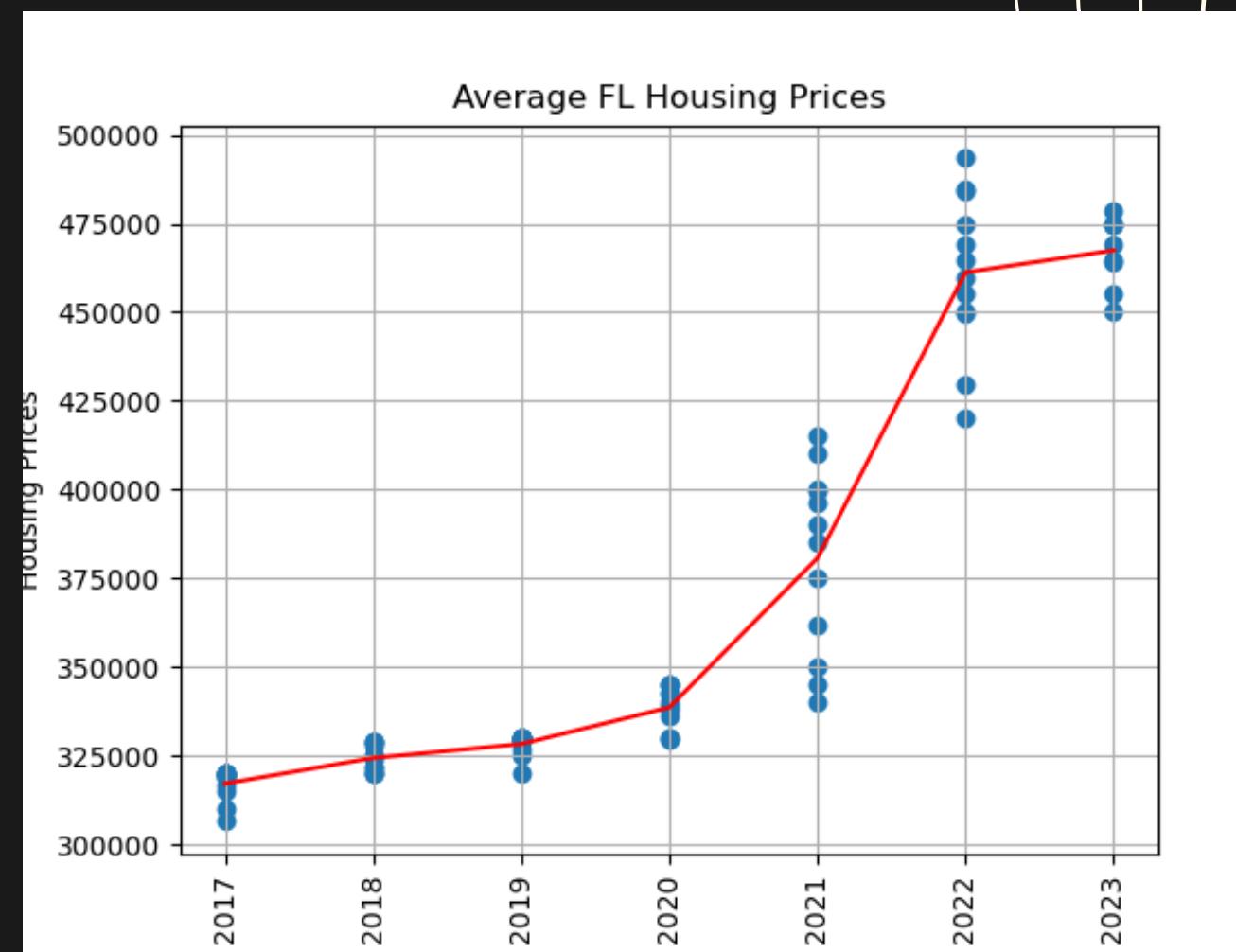
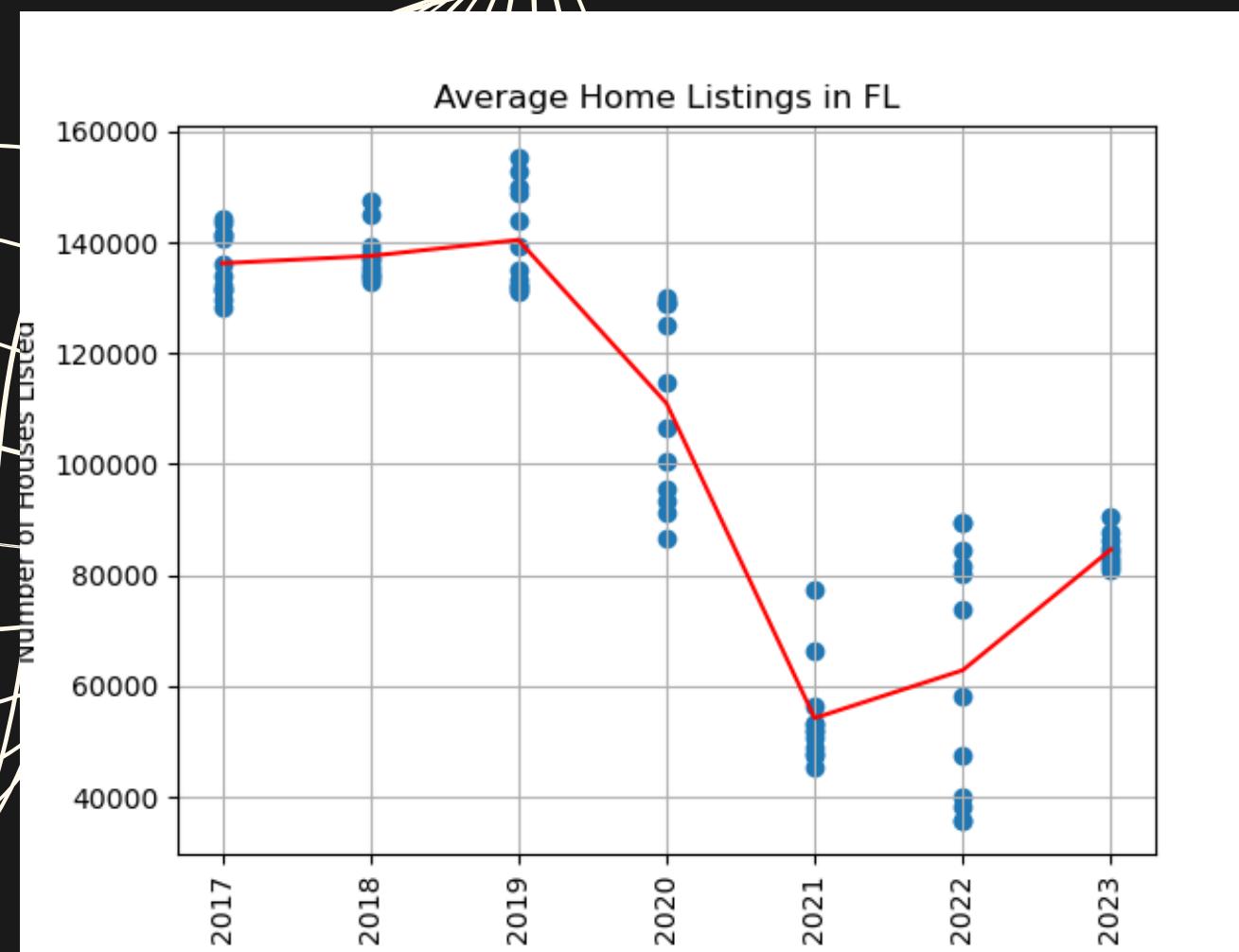


- An increase in the population will cause a decrease in the amount of listings available.

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
```

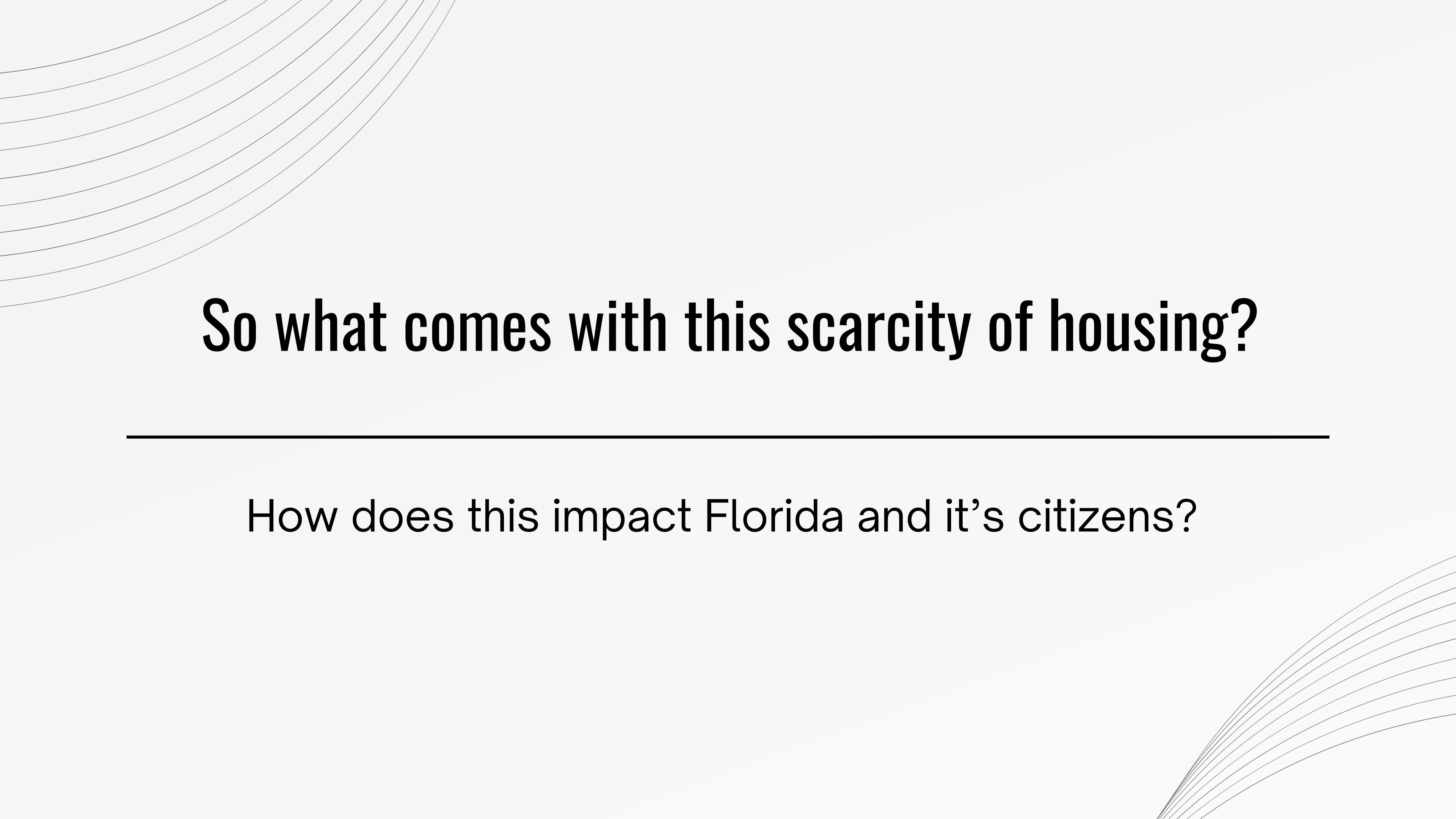
```
Name: Average_Listing, dtype: float64
```

```
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

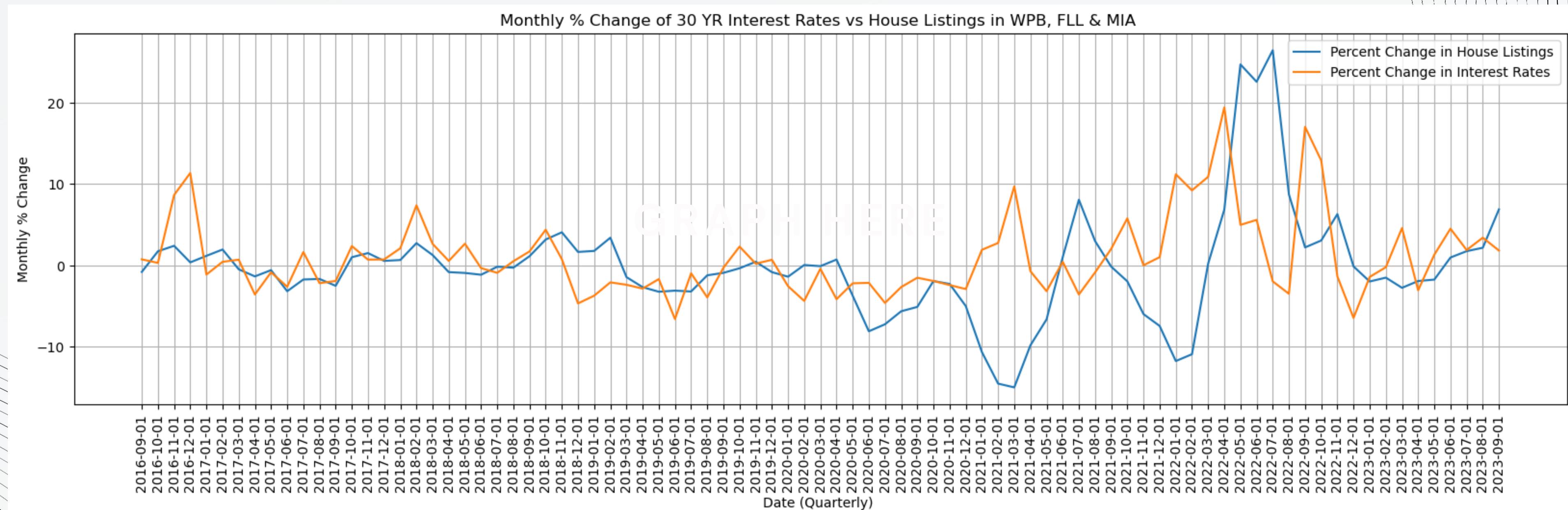


So what comes with this scarcity of housing?

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

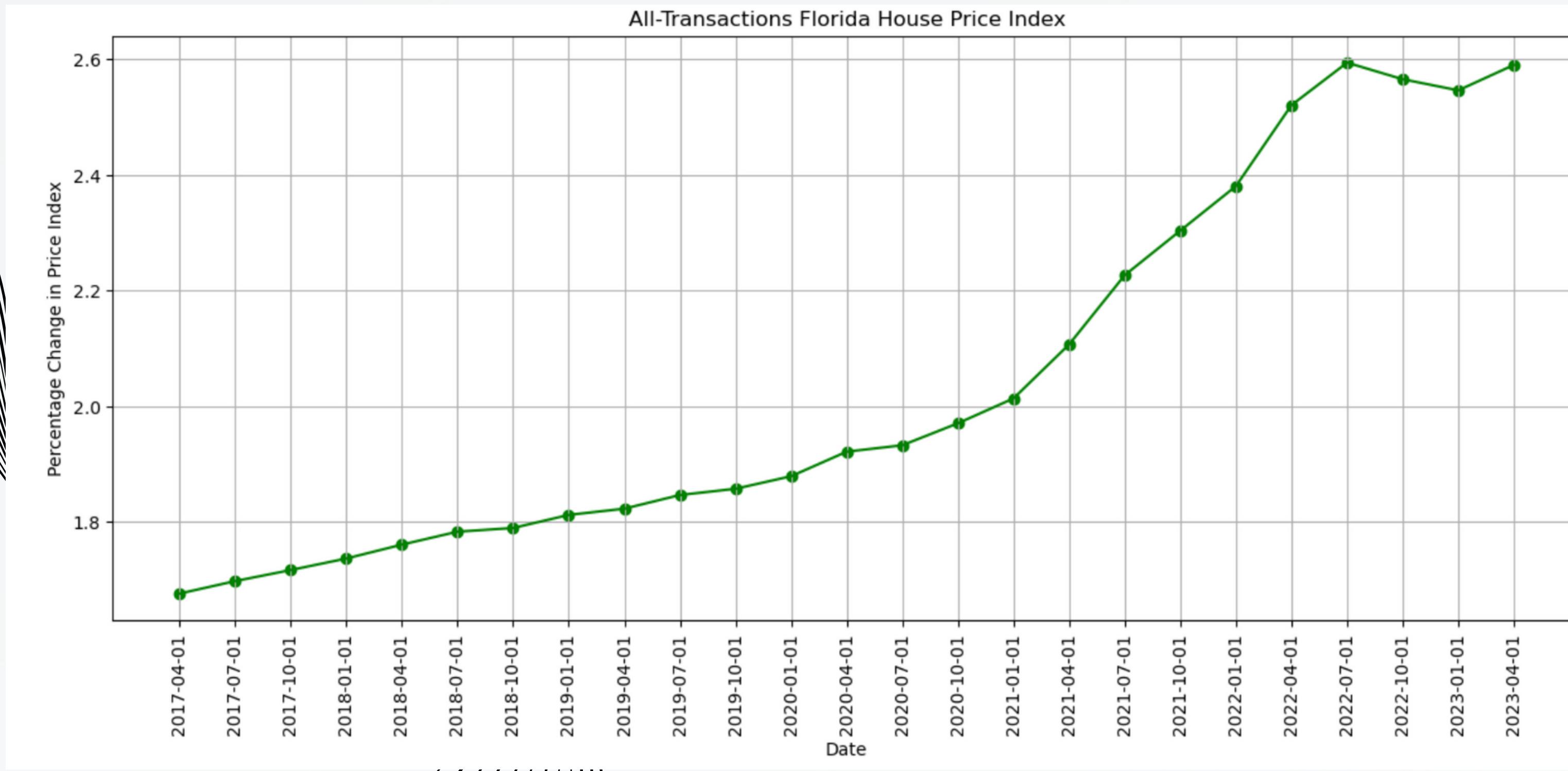
- This is a weak positive correlation, which means that there is a slight tendency for the two variables to move in the same direction

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 !**