## NY MORTGAGE TAX STUDY



TEAM 2 PROJECT #1: ANDREA CEREATI, SARAH DEMMON, KAT MCELDOWNEY, CHANTAL THOMAS,

### **AGENDA**

- I. Mortgage Tax Definitions
- II. [Current] Low Income vs High Income vs Investor Scenarios
- III. Hypothesis
- IV. Data + Method
- V. Insights
- VI. Proposal
- VII. [Revised] Low Income vs High Income vs Investor Scenarios
- VIII. New Hypothetical Total Estimated Revenue
- IX. Conclusion

## MORTGAGE TAXES

## ONLY 7 STATES HAVE A MORTGAGE TAX

Alabama, Florida, Kansas, Minnesota, New York, Oklahoma and Tennessee

#### WHAT ARE THE HOME PURCHASE TAXES IN NY?

When buying a home, New York imposes a mortgage tax and Mansion Tax which is paid upfront at Closing



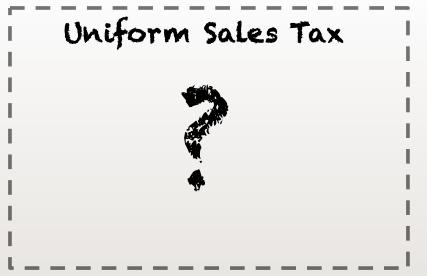
The tax rate in NY is 1.8% on mortgaged amounts <\$500,000 and 1.95% on mortgages >\$500,000

\*Paid upfront at closing

#### Mansion Tax \$\$

There is only a sales tax on homes > \$1,000,000 and this amount is only 1%

\*Paid upfront at closing



### **HOW DO THESE TAXES WORK?**

Investors + Corporations



John, 50 yrs old, kingpin investor

Home Purchase Price: \$625,000

**Down Payment:** \$625,000 (100%)

**Mortgaged Amount:** \$0

Mortgage Tax: \$-

Lower Incomes



Susan, 30 yrs old, earns \$55K

**Home Purchase Price**: \$625,000

**Down Payment:** \$18,750 (3%)

Mortgaged Amount: \$606,250 (above \$500K)

Mortgage Tax (1.95%): \$11,821.87

Higher Incomes



Matthew, 37 yrs old, earns \$200K

**Home Purchase Price:** \$625,000

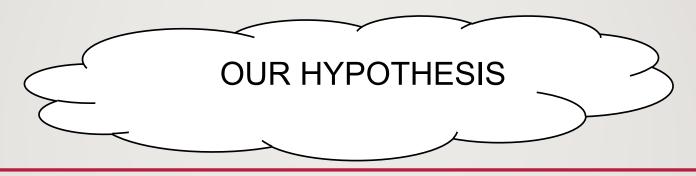
**Down Payment**: \$156,000 (25%)

Mortgaged Amount: \$468,000 (under \$500K

Mortgage Tax (1.8%): \$8,424



## **HYPOTHESIS**



- We believe that if the
  - based on property price not mortgage amount
  - mortgage tax was lowered and applied across the board to all home purchases
  - with a higher tax rate applied to investment property purchases
  - the policy would not only be more equitable, but also RAISE MORE REVENUE for the government
- We also believe that the mortgage tax may have a disproportionate impact on people with lower incomes (essentially those that borrow large sums to purchase a home).

#### 2022 Estimated Home Purchase Tax Revenues Raised in Brooklyn

	Residential	Investors	
Mortgage Tax	\$20,431,958	\$16,638,799	\$37,070,757
Mansion Tax	\$14,760,917	\$9,044,858	\$23,805,775

\$ 60,876,532

## THE DATA

### **OUR DATASET**

#### **Property Radar API**

2022 real estate sales transactional data for Brooklyn NY (secondary source)

#### Home Sales broken down by:

Zip, Home Type, Address, Purchase Amount, Purchase Down %, CLTV%, Owner Occupy (Y/N), Listed for Sale, Purchase Date, Mortgage Tax Paid, Mansion Tax Paid

#### Census Bureau API

#### Census data fields:

Zip, Population, Median Age, Household Income, Per Capita Income, Median Gross Rent, Poverty Count, Poverty Rate

	Count	ZIP	Туре	Owner Occ?	Purchase Down %	Purchase Amt	Amount Mortgaged	Mtg Tx Pd	Mansion Tax Pd	New Sales Tax Amount
0	1	11201.0	CND	0.0	33.0	4600000.0	3062500.0	59718.75	46000.0	41400.0
1	1	11201.0	CND	0.0	30.0	4550000.0	3185000.0	62107.5	45500.0	40950.
2	1	11201.0	CND	0.0	69.0	2620000.0	825084.0	16089.138	26200.0	23580
4	1	11201.0	CND	0.0	100.0	4740000.0	0.0	0.0	47400.0	42660
8	1	11201.0	CND	0.0	81.0	4200000.0	787743.0	15360.9885	42000.0	37800
9	1	11201.0	CND	0.0	30.0	4395000.0	3076500.0	59991.75	43950.0	39555
0	1	11201.0	CND	0.0	100.0	5050000.0	750000.0	14625.0	50500.0	45450
1	1	11201.0	CND	0.0	100.0	5700000.0	0.0	0.0	57000.0	51300.000000000
2	1	11201.0	CND	0.0	38.0	2100000.0	1300000.0	25350.0	21000.0	18900

Zipcode	Population	Median Age	Household Income	Per Capita Income	Median Gross Rent	<b>Poverty Count</b>	Poverty Rate
10007	7506.0	34.7	250001.0	191709.0	3501.0	152.0	2.025046629363180
10013	29453.0	40.2	150675.0	157378.0	2113.0	2762.0	9.377652531151330
10282	6450.0	38.7	250001.0	190521.0	3501.0	373.0	5.782945736434110
10453	80385.0	33.8	34800.0	19016.0	1362.0	27796.0	34.57859053305970
10457	79817.0	30.8	41145.0	20187.0	1381.0	27317.0	34.224538632121000
11201	69755.0	35.1	163310.0	108933.0	3110.0	7004.0	10.040857286216000
11203	78506.0	42.3	68006.0	34492.0	1495.0	11030.0	14.049881537716900
11204	80575.0	34.7	64172.0	25404.0	1677.0	15434.0	19.154824697486800
11205	50319.0	29.7	74839.0	46352.0	2107.0	14408.0	28.633319422087100

## THE METHOD

#### **APPROACH**

Step 1

We analyzed the sales data of **3,012** homes sold in Brooklyn, NY in 2022. We then segmented the data by owner occupied and investors.

Step 2

We calculated how much Mortgage tax was raised in Brooklyn. We calculated how much Mansion tax was raised in Brooklyn

Step 3

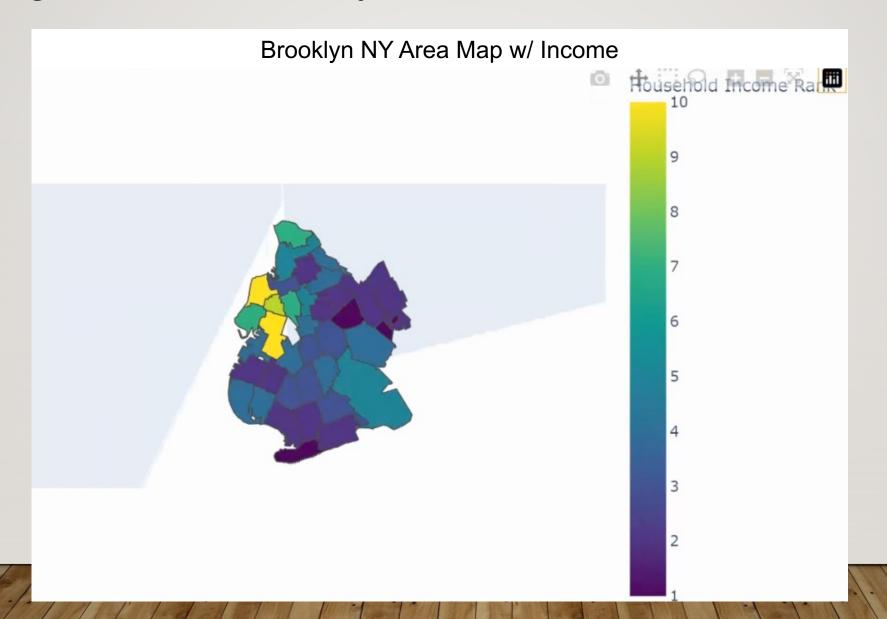
We calculated how much would be raised if there was a sales tax that was only 50% of the current Mortgage tax rate and if the Mansion tax was cut in half at 0.5% instead of the current 1%

Step 4

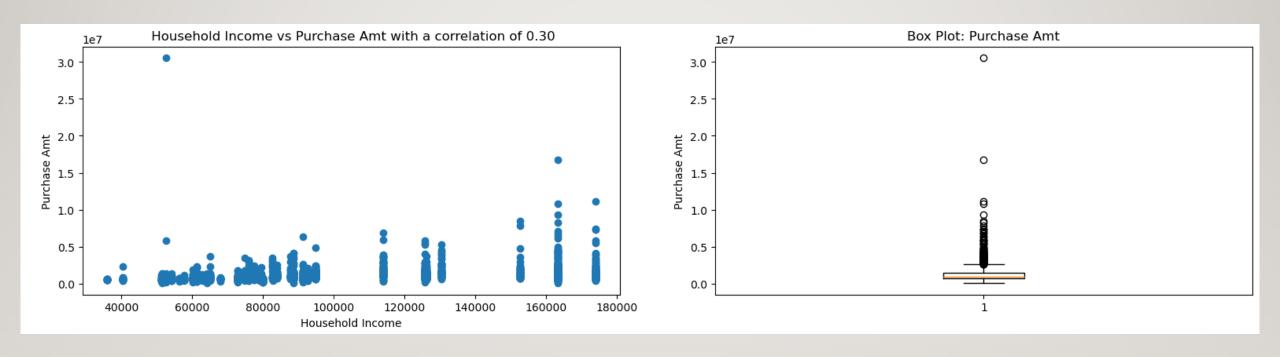
We used Census data to examine the differences in demographics of the different zip codes to see if people with lower incomes are paying a large portion of this tax than people living in zip codes with higher average incomes.

## DATA & INSIGHTS

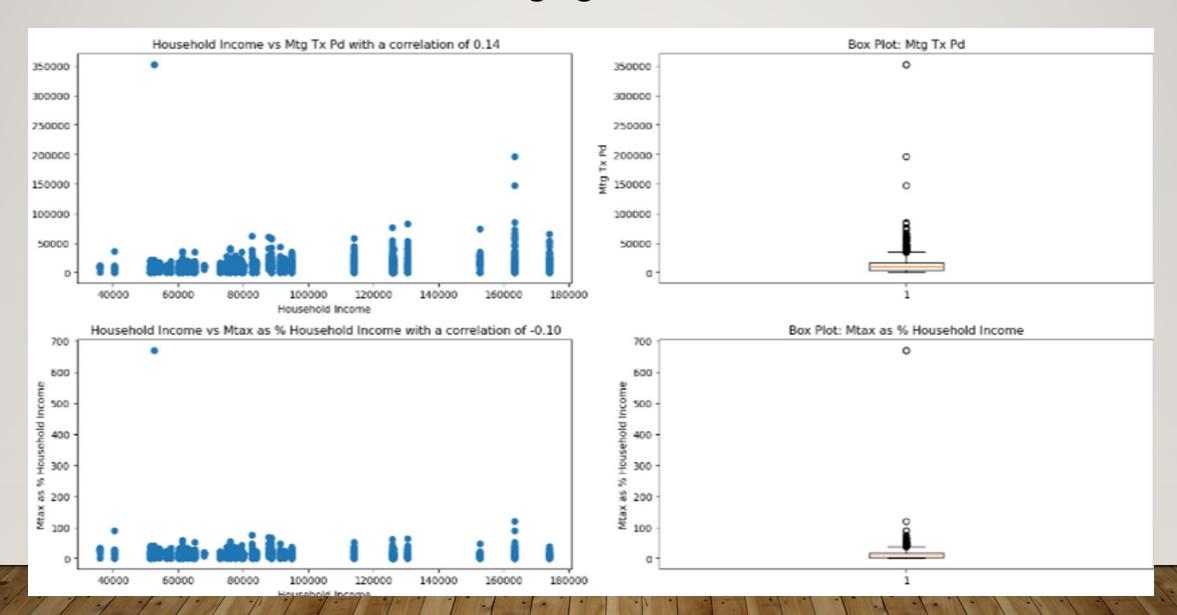
### Coverage Area Shown By Household Income Rank



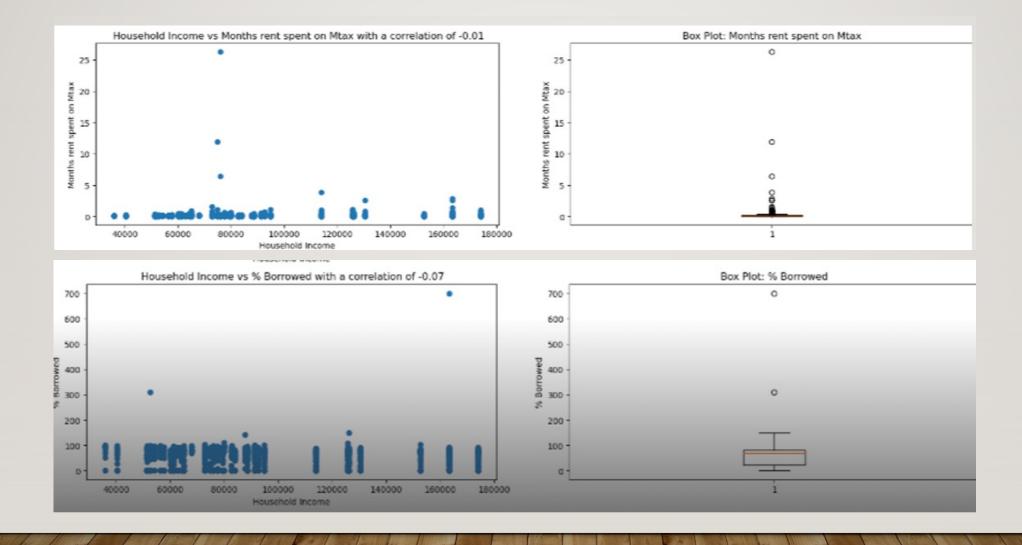
### Household Income vs Purchase Amount



### Household Income vs Mortgage Tax Paid



## Household Income vs Monthly Rent vs Amount Borrowed



## **PROPOSAL**

### PROPOSED NEW TAX SOLUTION

To make taxes on home sales more equitable...

- ❖ We propose the mortgage tax get slashed by 50% and we instate a NEW Sales tax on ALL home sales in lieu of a Mortgage tax.
- ❖ We would do away with the Mansion tax.
- ❖ For the corporation/ investor population, we would create an Investment tax of 4.4357%.



Mortgage Tax = 1.8% < \$500,000, 1.95% > \$500,000

Mansion Tax = 1.0% on amounts > \$1,000,000



Uniform Home Sales Tax = .9% on amounts <\$500,000, 1.4% >\$1,000,000

Sales Tax on Investments = 4.4357%

#### HOW WOULD THE NEW TAX AFFECT BUYERS?

#### Investors/Corporations



John, 50 yrs old, kingpin investor

**Home Purchase Price**: \$625,000

**Down Payment:** \$625,000 (100%)

**Mortgaged Amount:** \$0

Investment Sales Tax (4.4357%): \$27,723

#### Lower Incomes



Susan, 30 yrs old, earns \$55K

**Home Purchase Price**: \$625,000

**Down Payment:** \$18,750 (3%)

**Mortgaged Amount:** \$606,250

Sales Tax (.9%): \$5,625

#### Higher Incomes



Matthew, 37 yrs old, earns \$200K

**Home Purchase Price:** \$625,000

**Down Payment**: \$156,000 (25%)

**Mortgaged Amount:** \$ 468,000

Sales Tax (.9%): \$5,625

#### MORTGAGE TAX vs SALES TAX

DOES THE SALES TAX GENERATE MORE REVENUE FOR NY?

Yes, assuming that home purchase behaviors will remain the same.



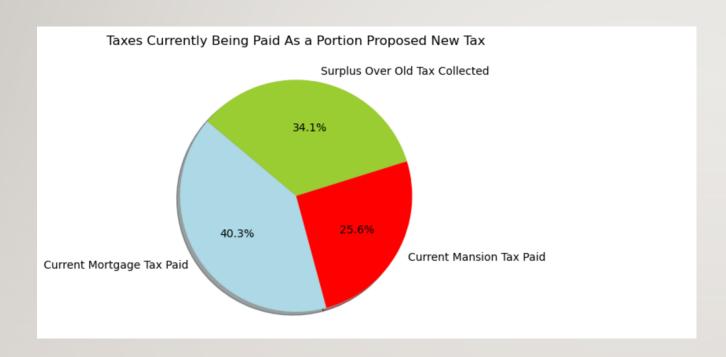
	Residential	Investors	Total
Mortgage Tax	\$20,431,958	\$16,638,799	\$37,070,757
Mansion Tax	\$14,760,917	\$9,044,858	\$23,805,775

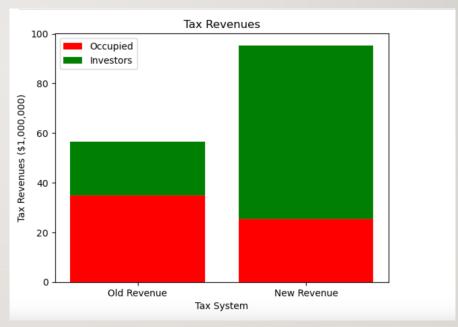
\$ 60,876,532



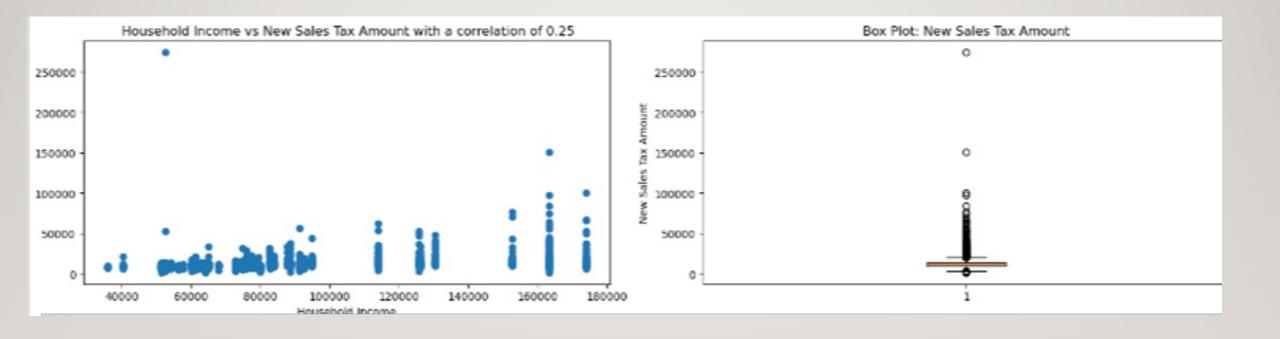
	Residential	Investors	Total
Sales Tax	\$21,902,851	\$70,280,519	\$ 92,183,370

### **NEW SALES TAX GROWS TAX REVENUE 34%**





#### New Sales Tax vs Household Income Correlation



## CONCLUSION

### CONCLUSION

### Did we prove our hypothesis?

We can't prove that the current Mortgage tax has a more severe impact on lower income individuals, due to certain limitations

With our solution, however, we do generate more money through introducing a new uniform sales tax... A lot more!

### CONCLUSION (The limitations explained)

#### **Secondary Source Data**

After thorough data hygiene, we found that our data set was flawed and not as extensive as we initially thought. If we had more time, we believe we might have been able to track down a primary source of data instead of relying on the secondary source that we obtained.

#### **Limited Data Set**

If given more time, would have liked to expand the data to instead be comprised of a random samples of zips codes in all five boroughs and to span different years (as early as 1985).

The exploration of the data we did procure uncovered information previously unconsidered and lead us to desire further examination.

### CONCLUSION (The limitations explained)

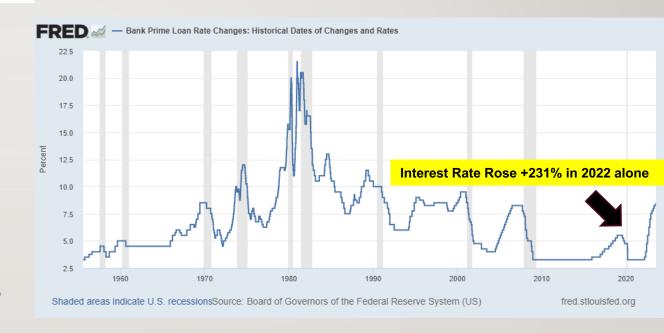
#### **Mortgage Rate Fluctuations**

Mortgage rates change from year to year and upon examining historical interest rates, we realize that 2022 was far from a typical year.

In 2010, the prime rate dropped to 3.25%, the lowest it had been in 55 years. It went up and back down and was again 3.25% in March of 2020 where it stayed until March of 2022.

Over the course of 2022, the rate continued to climb, reaching 7.5% by the end of 2022.

This has a big impact on the types of sales that were completed over the course of that year as the higher interest rates changes individual's ability to qualify for higher purchase amounts.



### CONCLUSION (The limitations explained)

#### **Census Data Household Income Lacked Individual Buyer Specificity**

The data is aggregated by zip and the highest median household income was \$173,899 and the biggest purchase amount in the study was \$30,563,714. We believe there are many households in Brooklyn with far above \$173,899 household income, and no household with that amount of income is purchasing property for over \$30 million.

Another problem with the data is we were not able to obtain a primary data source of the household income for the specific transactions that we studied, we instead relied on the census data for median household income.

# THANK YOU! QUESTIONS?