# Housing Expenditures by State: Pandemic effects on Consumer Spending on Housing

Grayson Armstrong
Economist
Division of Consumer Expenditure Surveys



### **State Weights**

2016: First test estimates produced for 3 states

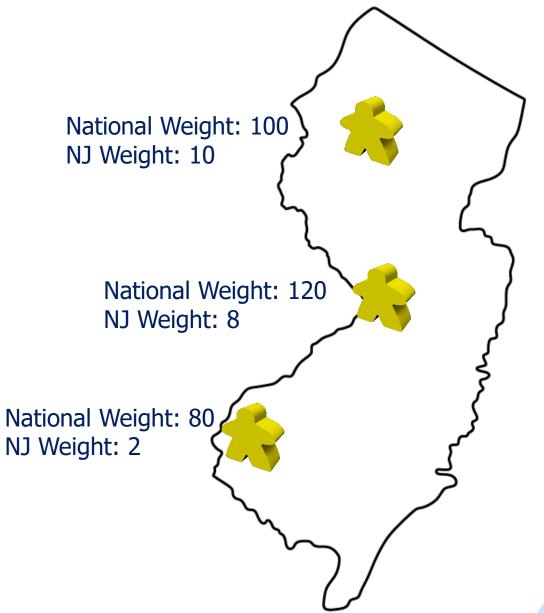
2018: First official weights published using 2016 data

2019: New York and Texas weights added



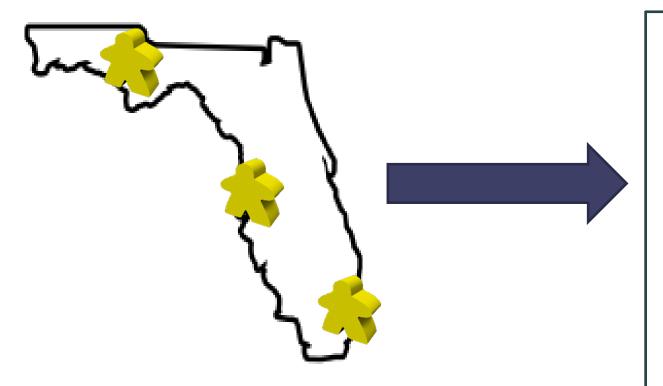
How do they work?

- Suppose the population of New Jersey was 20.
- Each consumer unit in New Jersey is re-weighted to represent the population of New Jersey instead of the national population.



#### How well do they work?

Compare population targets to US Census.



- 1. Add up the weights for Florida from PUMD. ~8.5 Million Consumer Units (CU)
- 2. Compute average number of people per CU with the weight.
- 2.4 people per CU
- 3. Multiply and compare to Census value.
- 8.5 \* 2.4 = 20.4 million people

Approximately equal to the 20.6 million reported Florida population.



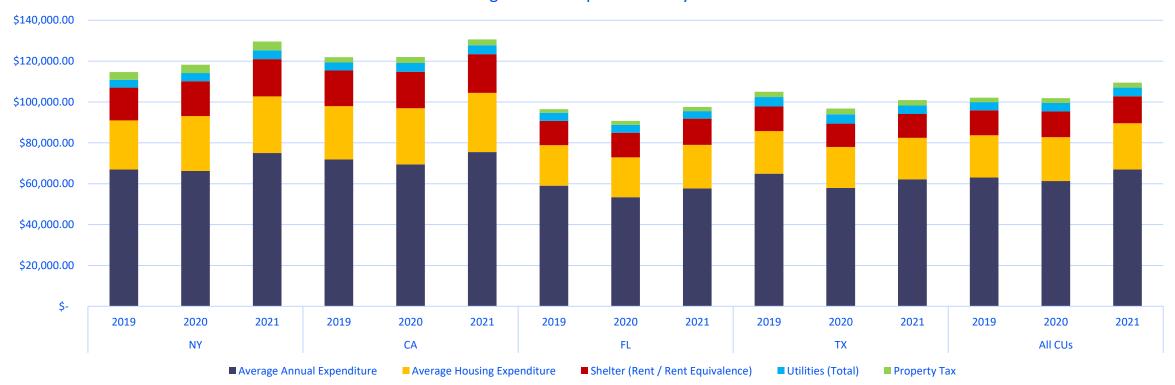
#### Using the weights

- By applying the weights to national expenditures, we can get statistically meaningful estimates across certain states
- Particularly interesting when comparing states to trends across all CUs
- Average shelter costs across the states vs. all CUs 2019 2021
- New Jersey not included due to lack of sample consistency



# **Average Annual Expenditures**

#### Average Annual Expenditures by State





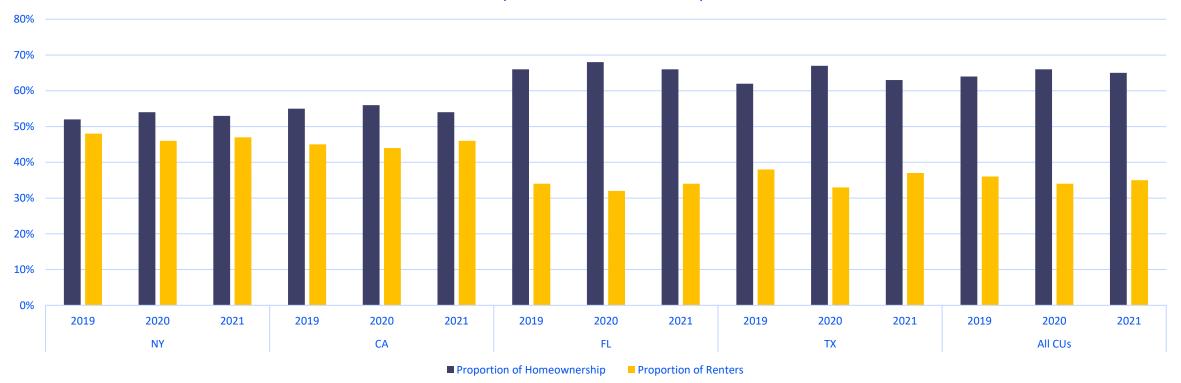
### **State Comparisons**

- Californian CUs have the highest annual expenditures, Floridian CUs the lowest
- COVID dip in expenditures present in all states
  - ► Largest drop from TX CUs \$6,994 between 2019 & 2020
  - ► Smallest drop from NY CUs only \$705
- Expenditure on Housing rose in NY and CA, remained stable in TX and FL



# Homeownership

#### Proportion of Homeownership





## **State Comparisons**

- Florida and Texas have higher proportions of homeownership than New York and California
- All states saw a small decrease in proportion of renters in 2020, and an increase in 2021
- The number of CUs in Florida and Texas increased over the 3 year period, whereas New York and California were steady



## **National Trend Comparison**

- FL and TX have similar homeownership rates to the national average, CA and NY about 10% lower
- NY and CA spend more on housing than the national average, about 4k-5k
- NY spend almost double on property tax than the national average



#### Conclusion

- The state weights can be used to produce estimates of average annual expenditures and shares for selected states. Those examined here are close, but not identical to, national estimates
- The weights can be used to better aggregate and account for geographical patterns in spending where possible
- Our example shows clear patterns by income level that appear across state data as well as at the national level



#### Interested?

- State Tables can be found on our Geographic Tables page
- State Weights are now available on the Public Use Microdata page



# **Contact Information**

Grayson Armstrong
Economist

Division of Consumer Expenditure Survey
(202)-691-6519

Armstrong.Grayson@bls.gov

