

# Nantucket STR Analysis

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Rod Motamedi, MBA  
Senior Research Manager

Michael McNally, Research Analyst  
Kazmiera Breest, Research Analyst  
Ian Dinnie, Research Analyst

UMassAmherst

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Donahue Institute

# Purpose

This study set out to achieve three goals:

- Evaluate the impacts of short-term rentals (STRs) in Nantucket on the island's home prices and rents.
- Estimate any changes to visitation from the proposed regulation of STRs.
- Measure any economic impacts deriving from visitation changes.

# Literature

- Previous studies have found a small, positive effect on housing and rental prices from growth in short term rentals.
- In a 5-year nationwide study of Airbnb and VRBO rentals, Oxford Economics (2019) estimated that rental costs had increased 4.3% during that time. STR density (STRs per 1,000 Housing Units) accounted for 4.7% of that change (or a 0.002% increase in rental costs).
- Housing prices were slightly more impacted. Home prices rose 14.9% across the study period and STR density accounted for 6.7% of that change (or a 0.01% increase in housing costs).
- Factors other than STRs had more influence on prices. For rents, median income of local residents was most impactful, accounting for 90.7% of the change. For home prices, the unemployment level accounted for 45.6% of the change and local average income accounted for another 37.6%.

## Literature, cont.

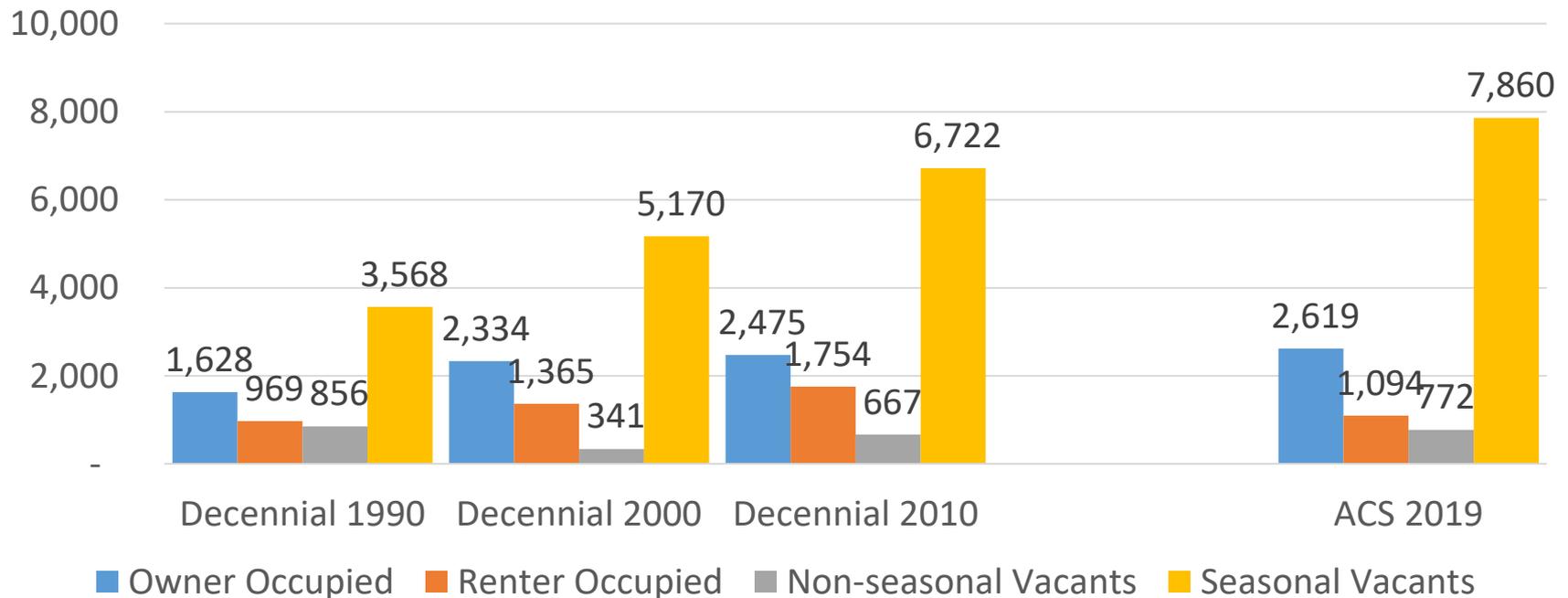
- The Oxford Economics study built on the work of Barron et al. (2018) which used 5 years of Airbnb data nationwide.
- Barron estimated that in a ZIP code with 72% owner occupancy, a 1% increase in STR listings corresponded to a 0.018% increase in rental prices and a 0.026% increase in housing prices.
- Higher owner-occupancy regions are less sensitive to an increase in the number of STRs. Nantucket has higher owner occupancy than the state (70.5% vs. 62.4%)

# Housing Units on Nantucket

- Nantucket is unusual for a Massachusetts town in that it has far more homes than year-round residents. In 2019, there were over 12,000 units for a year-round population of just over 11,000 people, who comprise about 3,700 households.
- In other words, there are three times as many homes on the island as there are households. In a normal housing market, in such a circumstance homes would be inexpensive.
- In Nantucket, housing demand is divorced from local population levels and local economic conditions because it is driven by the demand for vacation homes.
- Nearly 2/3 of all homes on the island are designated “for seasonal, recreational, or occasional use” by the US Census Bureau.

# Nantucket Housing Units, Counts by Type

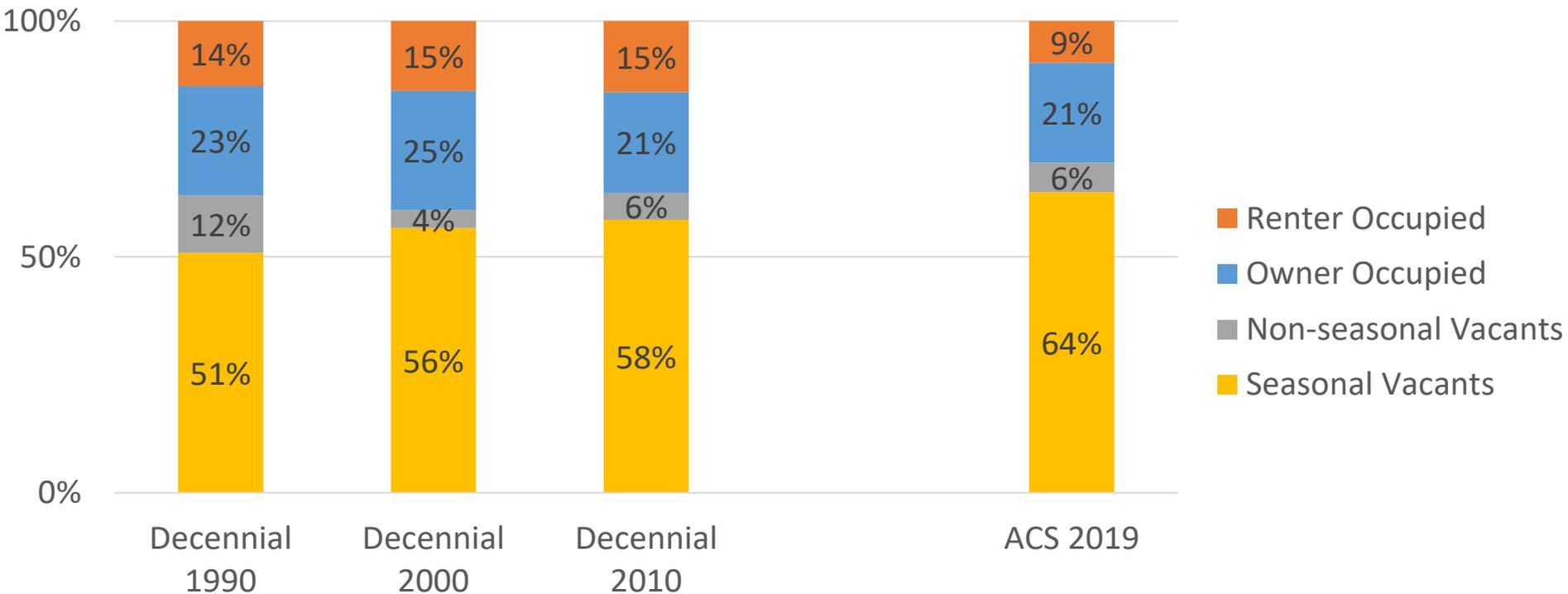
Since 2010, the number of rental units has fallen while seasonal use homes have increased. There is no direct data on how these homes are being used. Some are new vacation homes, some are people converting rentals to vacation homes for personal use, some may be renting long term (but less than year round), and some others could be STRs.



Source: U.S. Decennial Census 1990-2010 and 2019 ACS 5YR

# Nantucket Housing Units, Shares by Type

The change in the composition of housing on Nantucket is easier to see when looking at proportions of each use. This data shows that seasonal use homes have been steadily increasing as a share of all homes since at least 1990. It also shows that rental units have declined as a share of all homes since 2010.

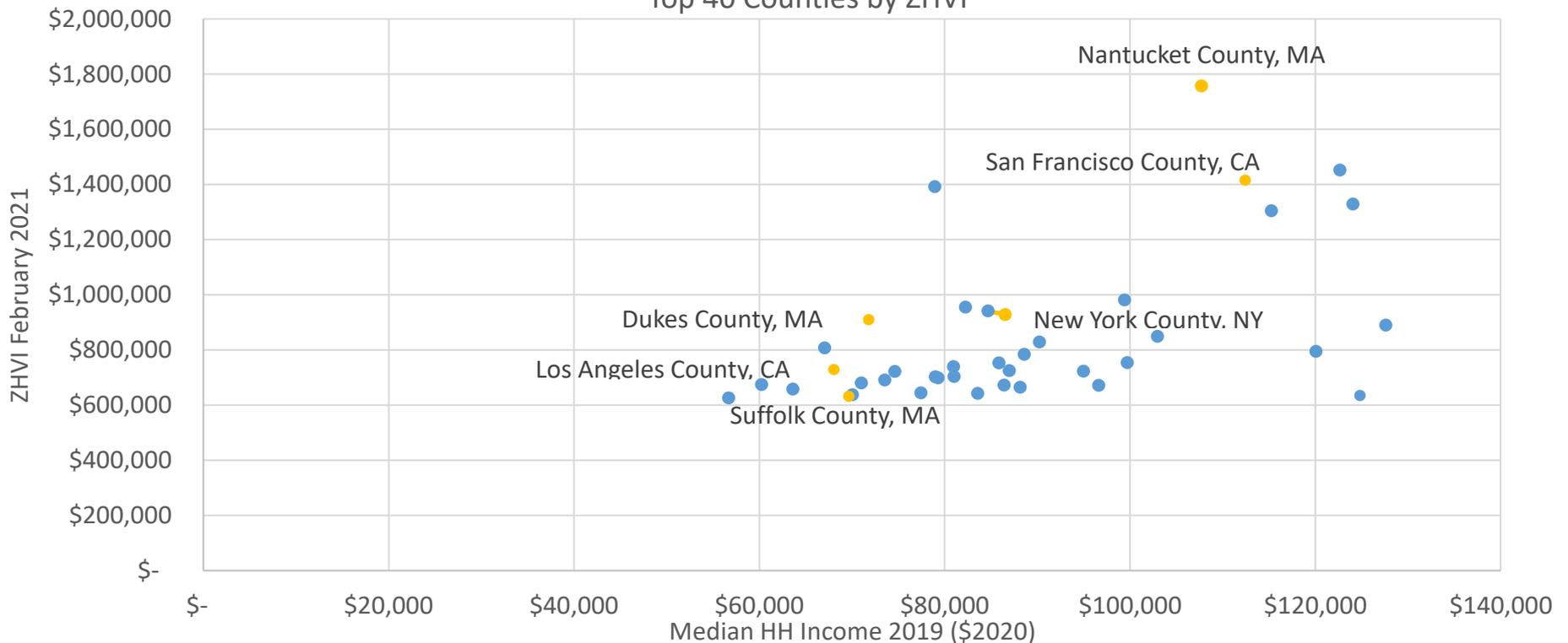


Source: U.S. Decennial Census 1990-2010 and 2019 ACS 5YR

# Housing Prices on Nantucket Compared to Other Counties

Nantucket is an extremely high price, high income home market. It is the most expensive county in the country and is among the top half of one percent of all ZIP codes.

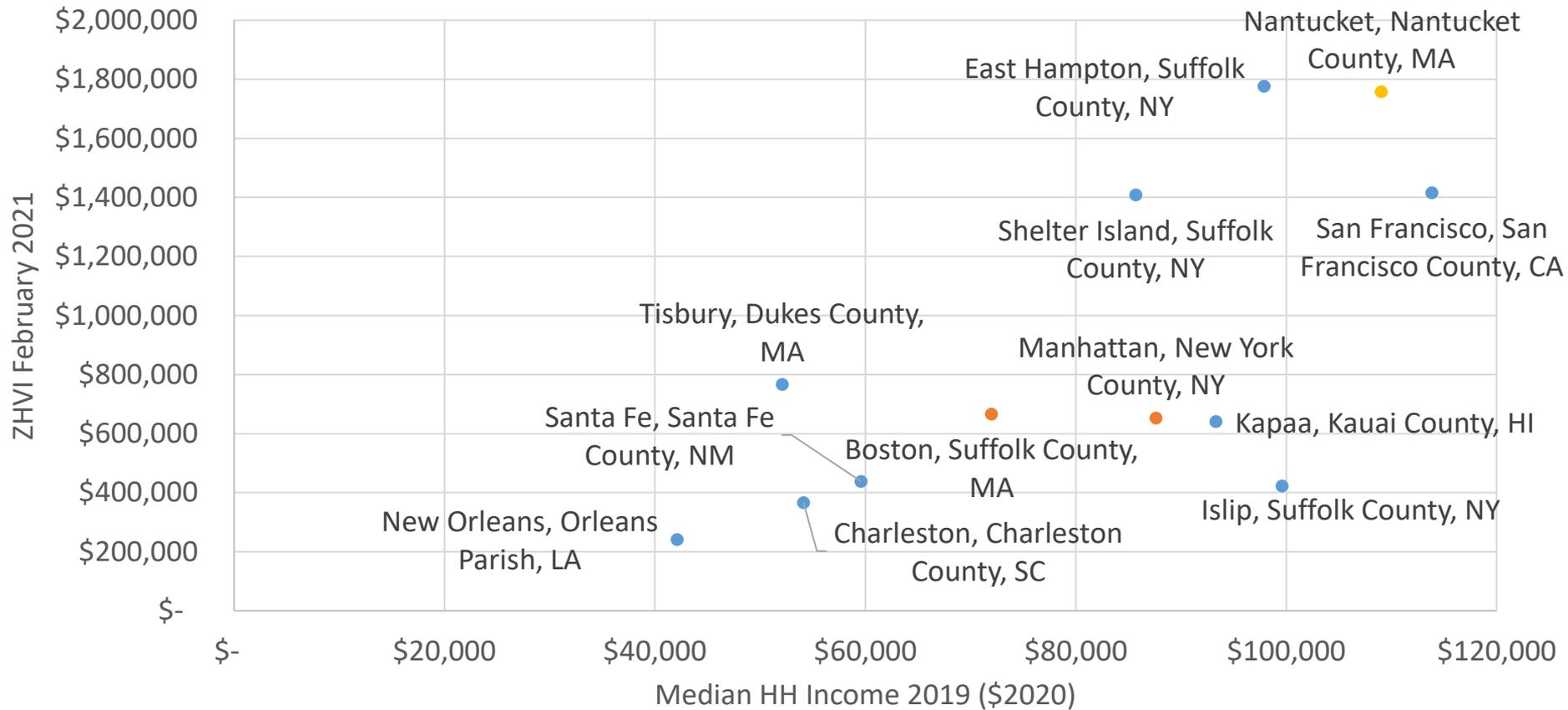
Top 40 Counties by ZHVI



Source: Zillow Home Value Index January 1996 – February 2021, 2019 ACS 5YR Median HH Income

# Housing Prices on Nantucket and in Comparable Municipalities

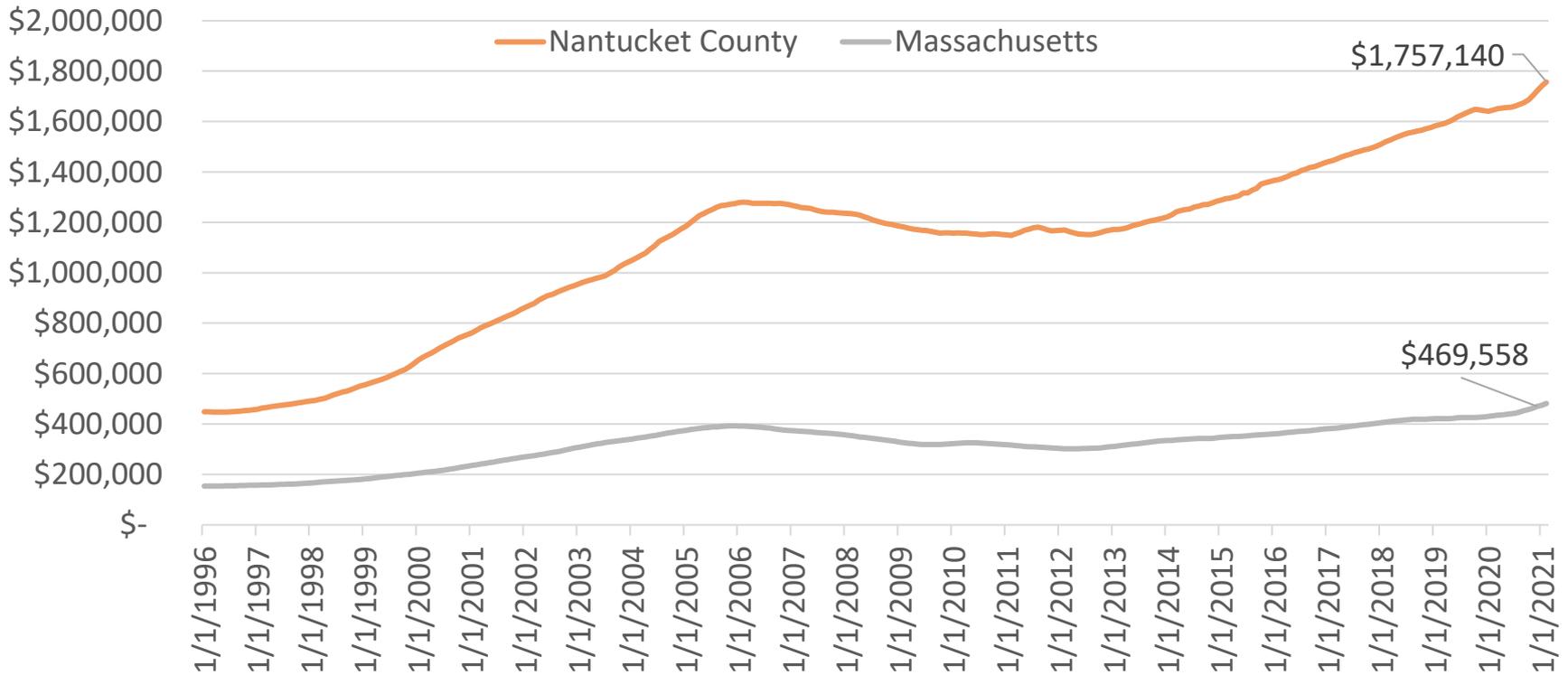
Select Cities by ZHVI and Median Income



Source: Zillow Home Value Index January 1996 – February 2021, 2019 ACS 5YR Median HH Income

# Historical Housing Prices on Nantucket

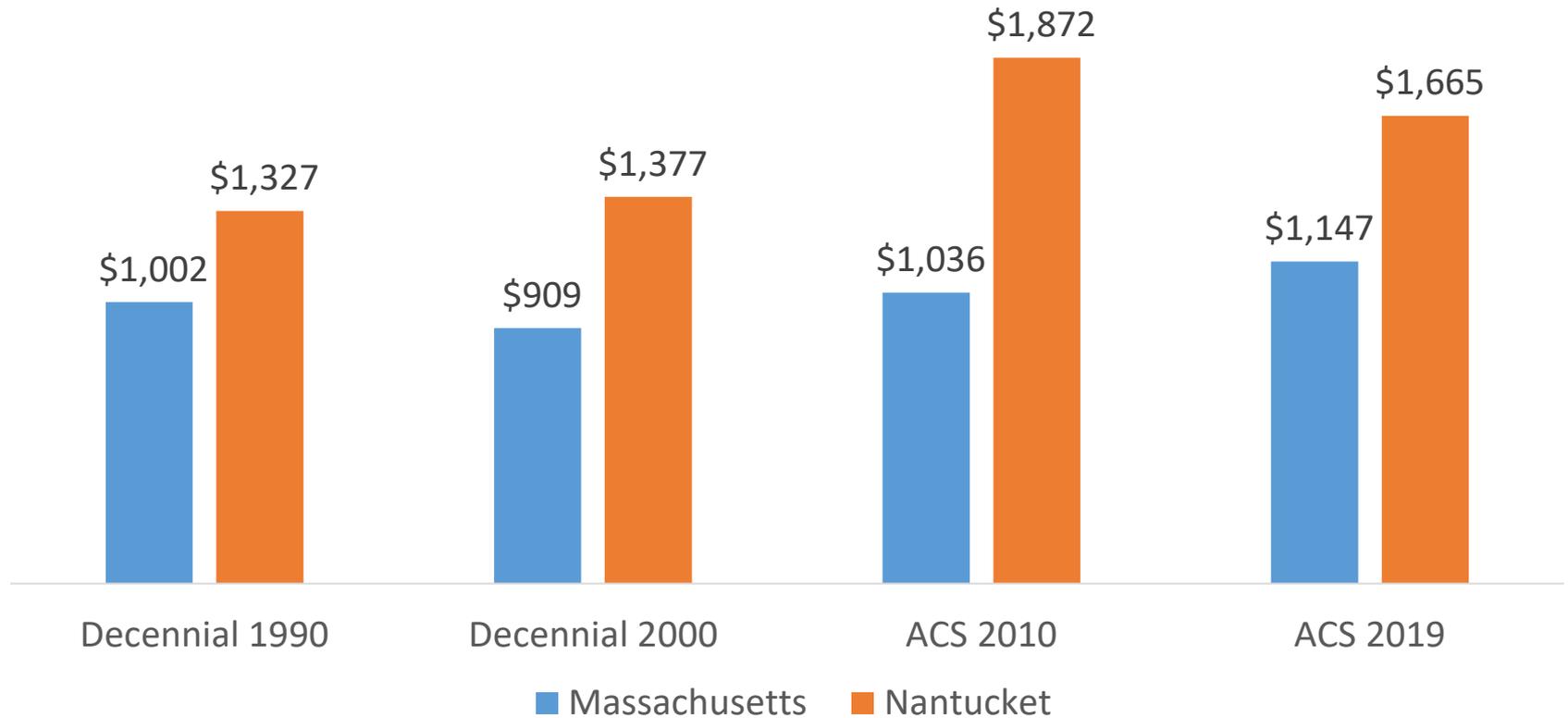
Nantucket has long been the most expensive housing market in the state by a substantial margin. It is likely that over the past 25 years housing costs on Nantucket have not been affordable to the average year-round resident. Since 2010, home prices in Boston metro have grown faster than Nantucket.



Source: Zillow Home Value Index January 1996 – February 2021, nominal dollars

# Median Contract Rent (\$2020)

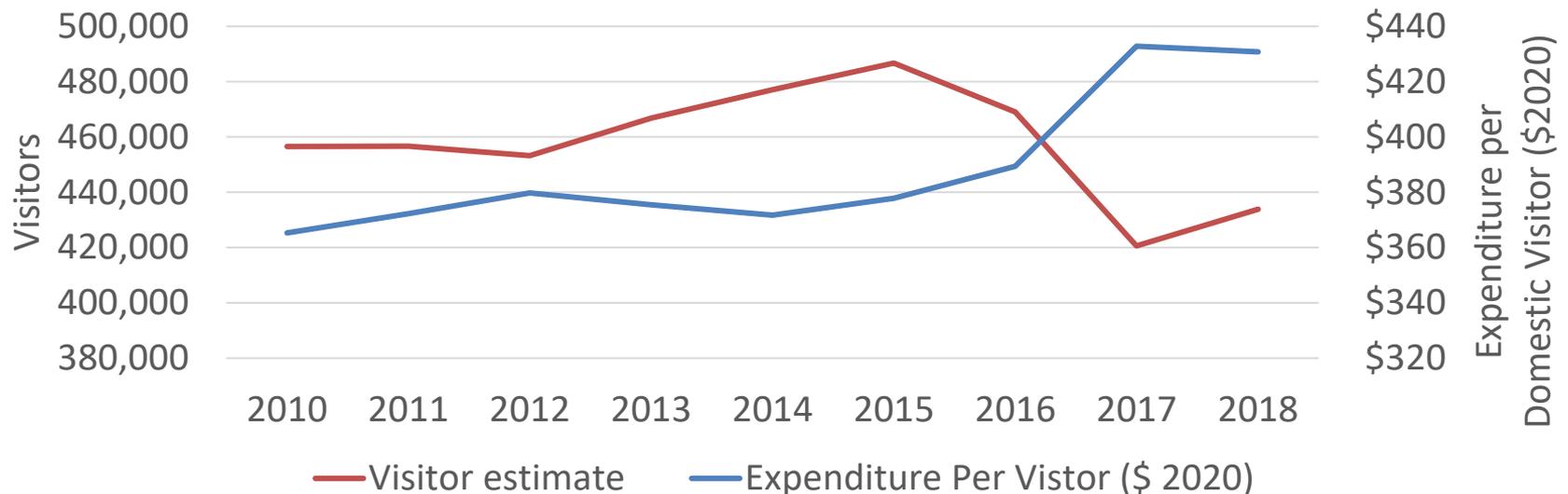
Nantucket has historically had a substantially higher median rent than the rest of the state. But median rent on the island has actually fallen in real terms since 2010 while median rents have risen statewide since 2000.



Source: U.S. Decennial Census 1990-2000 and 2010, 2019 ACS 5YR, \$2020 dollars

# Visitation and Spending

- An analysis of ferry and airport statistics reveals a slight downward trend in visitation to the island, even before the 2020 pandemic. This trend is driven by a decrease in traffic at the Nantucket Airport.
- Although visitation is down, the tourism expenditure per visitor has risen between 2010 and 2018.



Source: Steamship Authority “Traffic Report 1996 – 2021”, Nantucket Memorial Airport “Passenger Enplanements” 1990 through FY2021 and Mass. MOTT “Economic Impact Of Tourism” 2010-2018, calculations by UMass Donahue Institute

Note: Ferry report is full count of passengers travelling to and from Nantucket, full count is halved to approximate unique trips to the island.

# Assessor's Records

- **We obtained data for 1,726 registered short-term rentals on the island**

This represents a very large majority of 2,017 registered STRs on the island

- **Of the 930 properties that have been purchased since 2010, the median sale price was \$1,575,215 after adjusting for inflation**
- **The median assessed property value in FY21 was \$1,656,900**

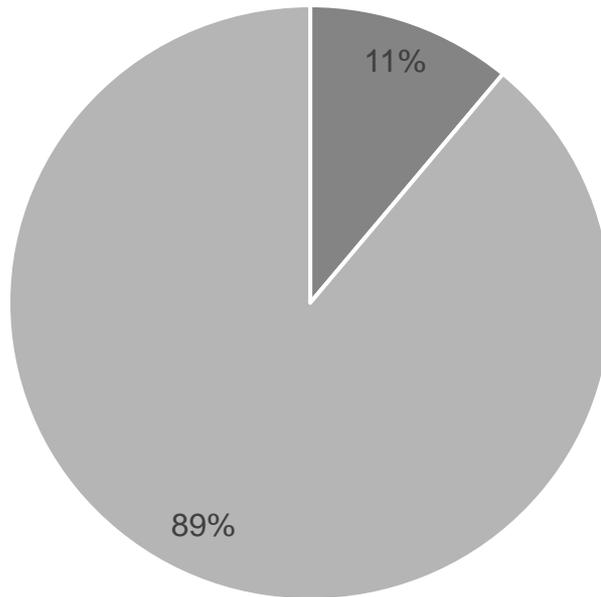
According to 2019 US census data, the median home value of owner-occupied houses on Nantucket is likely to be somewhere between \$1,030,000 and \$1,166,000; **Short Term Rentals tend to be valued higher than owner-occupied housing, and are unlikely to affect the amount of affordable housing available for on-island residents**

# Assessor's Records, cont.

- **Of the properties we obtained data for:**
- **82% are owned by off-Island residents**
  - We identified 58 entities (individuals or companies) that own multiple STRs, who collectively own 157 properties.
  - The proposed regulations would apply to the vast majority of registered STRs.
- **The average number of bedrooms in properties owned by nonresidents was 3.6**
  - The proposed regulation would limit the average nonresident STR to 7 renters (2 per bedroom). Resident owners, whose homes average slightly fewer bedrooms at 3.3, are exempt from capacity restrictions.

# Lodging Inventory

Lodging Inventory by Rooms



■ All other Lodging Establishments ■ Short-Term Rentals

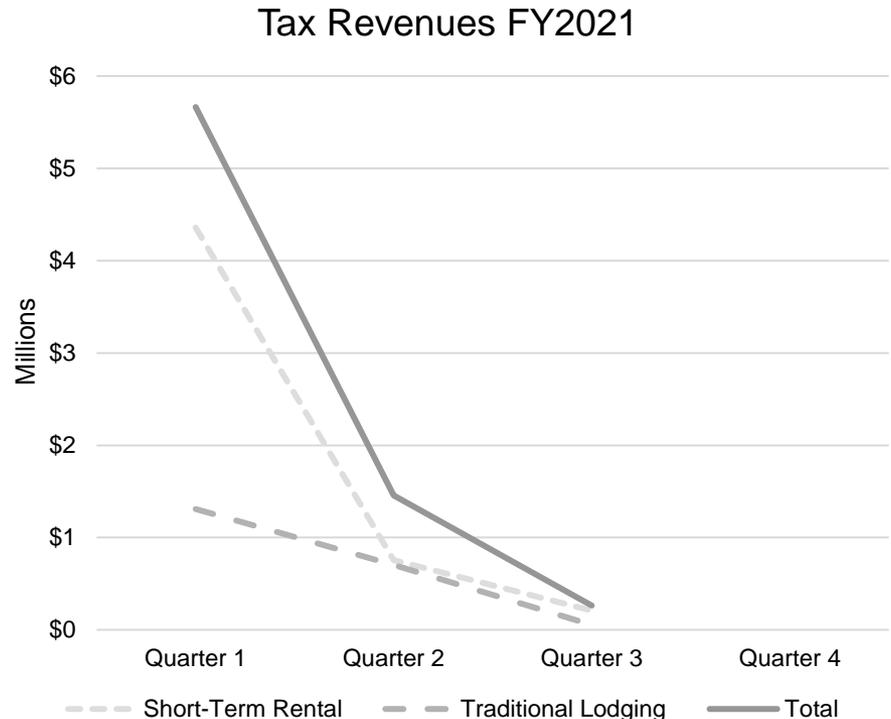
- **Short-term rentals account for 9 of every 10 lodging rooms on Nantucket**
- Between resident and nonresident properties, STRs offer about **7,100** rooms to Nantucket visitors.
- The remaining 11% of lodging establishments (hotels, inns, etc.) provide about **900** rooms for visitors to stay in.
- **Without STRs, lodging establishments would not be able to support in-season visitation.**

# Tax Revenues

So far, STRs have generated about \$5.3 million of revenue in the first three quarters of FY 2021. They are on-track for about \$7 million in this fiscal year.

Given the COVID disruptions, we think it is reasonable to assume that normal year revenues from STR taxes will generate \$8.5 to \$9 million per year.

STR revenues reach an annual trough starting in January (Q3). Given the rise in visitation in Q4 (Apr. – Jun.), collections should rise to something resembling Q2.



# Impacts on Visitation of Proposed STR Regulations

The regulation of STRs scheduled for a vote at the June 5 town meeting has a few elements relevant to visitation:

1. It creates two classes of short-term rental depending on the place of residence of the owner.
2. It creates limits on the total number of days in a year a property can be rented depending on ownership.
3. It creates minimum rental periods depending on ownership.

# Impacts on Visitation of Proposed STR Regulations, cont.

We found that the limit on the total number of days has the most clear impact on visitation. This is not to say that the other provisions do not negatively impact overnight capacity but rather they are secondary to the limit on days. Only evaluating impacts based on day limits undercounts the impacts on visitation.

Resident STRs are limited to 90 total days while nonresident STRs are limited to 45. Recall that nonresidents own 82% of all STRs, which means that 3 of every 4 lodging rooms on the island only have six and a half weeks of capacity. 15% of rooms are in resident STRs which have about 13 weeks. STR occupancy in the peak season exceeds 90%. Therefore, all annual STR rental capacity could be exhausted in the three months of summer, with nonresidents targeting the busiest 45 days in July and August.

What would remain for the other nine months would be commercial lodging which only provides 900 rooms and for only part of the year. (Many hotels and inns close in the off-season.)

# Lodging Capacity Relative to Status Quo

Month	Capacity Relative to Status Quo	Notes
January	5%	Off-season, 50% of hotels closed. No STRs.
February	5%	Off-season, 50% of hotels closed. No STRs.
March	5%	Off-season, 50% of hotels closed. No STRs.
April	11%	Hotels open. No STRs.
May	11%	Hotels open. No STRs.
June	26%	Hotels open. Only resident STRs.
July	63%	All capacity available for half the month. Hotels and resident STRs the other half.
August	100%	All capacity available.
September	11%	Hotels open. No STRs.
October	11%	Hotels open. No STRs.
November	5%	Off-season, 50% of hotels closed. No STRs.
December	5%	Off-season, 50% of hotels closed. No STRs.

# Translating Capacity Loss to Visitation Loss

To find whether the reduction in capacity would actually yield a loss in visitation, we first related weekday and weekend visitation to hotel capacity. Assuming generous capacity (half of all hotels and inns stay open all year and visitors pack three to every hotel room every time) then there are no capacity issues from January through April. However, May and September through December yield too few rooms.

The three summer months when STRs are available are also constrained. As shown on the previous slide, June would only have 26% of previous space while July would have 63%. August would have no capacity restrictions. Given that occupancy rates on the island during the summer range from 80% to over 90%, we expect the capacity constraints of the summer to translate directly into less space for visitors.

# Loss in Visitation Due to STR Regulation

Month	Loss in Visitation
January	0
February	0
March	0
April	0
May	2,055
June	44,635
July	43,121
August	0
September	14,826
October	1,231
November	1,478
December	1,380
Total	108,726

# Economic Impacts of Loss in Visitation

Using data from the 2019 annual report of the Massachusetts Office of Travel and Tourism coupled with passenger traffic from the Steamship Authority and ACK, we were able to calculate average expenditure per visitor and the economic impacts of each dollar of visitor spending.

	Impact per Visitor (Foreign and Domestic)
Expenditure	\$523.78
Payroll	\$120.47
Employment ('000)	3.18
State Tax Receipts	\$16.76
Local Tax Receipts	\$18.78

# Economic Impacts of Loss in Visitation, cont.

By combining the ratios from the previous slide and the loss of visitation from the slide before we can estimate economic impacts from visitation. A loss of 108,726 visitors would cause the following impacts:

	Impact
Expenditure	\$56,947,811
Payroll	\$13,098,311
Employment	346
State Tax Receipts	\$1,821,827
Local Tax Receipts	\$2,041,703
STR Tax*	\$5,920,483

\* The impact on STR taxes is based on the capacity relative to status quo. It removes revenues from the nine months where there will no remaining STR capacity and reduces the summer revenues to account for the fewer rental days of nonresident STRs. In total, the regulations reduce STR tax revenues by an estimated two-thirds.