A Review of Short-Term Rental Regulations and Implications for Provincetown

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Executive Summary

While the Cape and Islands have been popular vacation destinations for generations, the advent of app-based short-term rental (STR) platforms like Airbnb and VRBO have created concerns that STRs will increase pressure on limited housing stocks. Throughout Cape Cod, owners have rented out their vacation homes on a short-term basis since the early 1900s. In the late 2000s and early 2010s, the app-based rental service Airbnb emerged and grew quickly, fueled by its convenience and reach.

As a desirable place to live, work and play, Provincetown is experiencing incredible demand for housing of all kinds and consequently increasing prices. As a seasonal tourist destination, Provincetown experiences three distinct and mutually exclusive demands on its housing stock: year-round residences, vacation homes, and summer workforce housing. This study will examine current practices nationwide around short-term rental regulation and identify what lessons these regulations offer to Provincetown.

In a strict sense, Provincetown has plenty of housing. In fact, it has considerably more housing units than households. In 2021, there were approximately 2,000 households for nearly 5,000 housing units. However, most of these housing units were vacant for seasonal use. The primary driver of local demand for housing is for vacation homes.

Between the 2010 and 2020 decennial censuses, Provincetown experienced 25 percent growth in its population, while its housing stock only grew 11 percent. During that time, there was no statistically meaningful change in the share of total housing that is owner occupied or renter occupied. Of special note, the population growth measured between the decennial snapshots occurred primarily in 2020, followed by small increases in 2021 and 2022. The COVID-era population growth was also accompanied by a notable jump in housing values with prices increasing by 55 percent from July 2019 to July 2023, according to data from Zillow. This one-year 25 percent jump in population and recent rapid home price appreciation are perhaps two reasons why housing issues have felt especially acute.

This increase in the year-round population also corresponds with the simultaneous decrease in the number of active STRs, suggesting some out-of-town owners have switched the use of their homes from something occasional to something more permanent, making renting no longer practical. Compared to 2019, active STRs have dropped about 260 units (or 20%). As with the population change, nearly all the change from 2019 to today happened in 2020.

As a vacation and retirement destination, the housing market in Provincetown, as with much of the Cape, is heavily influenced by the preferences and wealth of homebuyers from major Northeast cities. Furthermore, since 2020 the increase in remote work has also increased the ability of those employed by firms off-Cape to live in Provincetown. Thus, locally employed residents are competing with buyers from New York City, Boston, Cambridge, and Washington, D.C. for a limited supply of housing, which leads to a lack of naturally occurring affordable housing for workers and other long-term residents looking to purchase a home. This shortage is particularly acute in the summer when the demands on the existing housing stock increases with the summer workforce. In 2021, between January and July,

employment in Provincetown more than doubled from roughly 1,600 jobs to 3,800 jobs. The implication of this jump in employment is that seasonal workers create temporary demand for housing that rivals that of the year-round workforce.

The third key use of housing in Provincetown is for second homes, some of which are also used as short-term rentals. According to data from AirDNA, the median average daily rate for a two-bedroom rental was \$425 in Provincetown in 2022, though this rate increases in peak summer months and drops over the winter. In the peak month of July, STRs provide just under 1,600 bedrooms of accommodations, which is more than the 1,435 rooms provided in traditional guest lodgings, which includes guest houses, camps, cabins, motels, and inns.

The difference between the possible income flows between renting short term versus long term illustrates the central difficulty in inducing owners of rentable properties to change the use to year-round rentals. They could earn as much as they would get from a long-term rental in the space of two or three months. In addition, they would retain the ability to occupy the unit themselves any time they chose during the year and, especially, the summer season. Owners could also share the unit with friends or family. Finally, by not having long-term renters, the property becomes a tremendously flexible asset. If owners decide they no longer wish to manage a rental property, they can stop at any time or, if they need the rental income to afford the mortgage, cash out on the house, where it will likely sell quickly in a low-inventory, high-demand market.

There is a concern that homes are being bought solely for use as short-term rental units. However, the high cost of Provincetown homes may discourage buying housing for solely commercial reasons, which can include use as either an STR or for regular residential rentals. Furthermore, in the Cape Cod New Homeowners Survey conducted by UMDI in 2021, respondents were asked about their planned use for the property over the next 20 years. Overall, 90 percent of respondents reported that their new home would be used as, or converted to, a primary residence within that period and 68 percent planned to do so in less than 20 years. Only one-third have plans to offer the property as a short-term rental (not necessarily exclusively so) during the time it is not used as a primary residence.

Economic logic would suggest that the potential income flows from STRs are capitalized into the price of homes in areas where such uses are prevalent. Studies on the app-based rental market generally confirm the theory, though they typically find small positive effects on home prices and rents in areas where these units are abundant. Note that in these studies, the properties in question are mostly homes being converted from year-round residences to full-time STRs. This case is less observed in Provincetown where the transition is more likely from residences to vacation homes, with STRs as an ancillary use. As a result, the more salient policy question in Provincetown is whether STR regulation would reduce the number of seasonally vacant homes rather than simply reduce the number of full-time STRs.

Though there is a growing body of work on the impacts of the introduction of STRs into a region, there are still few studies of the direct impacts of STR regulation. Most studies are based in large cities and/or abroad. The experience of regulation in these places is likely different from the experience in a small vacation town in a rural region. Nevertheless, all current STR regulations can be summarized into the following types:

- Quantitative caps on the number of units
- Zoning restrictions
- Limits on total rental nights or rental instances
- Restricting to only owner-occupied homes
- Restricting to only single-family homes
- Related: incentives to rent to workers or year-round residents

Adding to the difficulty of measuring the impact of STR regulations is the fact that many policies are still new and have not been fully evaluated. As a result, there are few studies that have evaluated the impact of STR policies and regulations on home prices. One 2017 study looked at a group of neighboring Florida coastal communities. One community had implemented a regulation on short-term rentals, requiring that renters stay a minimum of 30 days, while the neighboring cities were prevented from adopting similar plans by a state regulation. The study found that this STR restriction reduced average property values in the restricting city, but that the change varied by the density of the residential zone. The largest decrease was of 15 percent in low-density zones. In high density zones, prices actually increased. Another study from 2021 looked at the Los Angeles short-term rental market. Los Angeles started to regulate STRs as if they were hotels. These restrictions halved the short-term rental market in the area which caused house prices and rents to fall two percent.

Based on existing work and current experiences, the predicted impact of any STR regulation on the affordability of housing in Provincetown is likely small. Literature suggests that in many places the growth in STRs only caused small increases in home prices so reducing their supply will likely only undo that small change. While most of these studies focused on urban areas that are very different from Provincetown, one of the biggest differences applicable to this study is the level of demand for homes as something other than a primary residence. As mentioned above, in the case of Provincetown, the core policy question is whether restricting STRs would reduce the number of second homes. Demand for these kinds of units has thus far proven to be inelastic, meaning if STRs are restricted and some owners are forced to sell, the property could still be used as a vacation home by the new owner. The growth in seasonally vacant homes between 1990 and 2010 suggests a vacation home market that did not need the innovation of app-based rentals to grow. Ultimately, much of the answer to the extent of changes in the composition of the housing market in the face of STR restrictions relies on information regarding how many owners of second homes, and potential buyers of second homes, need STR income to afford their homes and would therefore be dissuaded from buying in Provincetown in the face of restrictions on short-term renting. This data is currently unavailable to the research team.

Though current data suggests regulating STRs will likely not make a material difference in the availability and affordability of year-round housing, Provincetown may still wish to restrict this use to encourage homeowners to have a connection to the community, whether as a resident or seasonal visitor. That can be done through restricting the number of STR licenses available to any single owner or banning certain types of corporate ownership. Other options could include room-night restrictions to limit particularly high intensity uses. An alternate path also worth exploring are various incentives to encourage residential uses among owners of rentable properties.

Introduction

Provincetown is the most populous of the four Outer Cape towns. Sitting at the tip of Cape Cod with water on each side, the town also has some of the most intense development constraints of any Massachusetts town. The town encompasses a land area of about ten square miles. However, only a quarter of that land is under local ownership with the rest part of the National Seashore operated by the National Parks Service. The town must balance competing demands for its limited land between various uses. Local residential properties in Provincetown are divided between three competing uses: year-round residential; seasonal and occasional use homes including vacation homes and short-term rentals (STRs); and summer workforce housing.

While the Cape and Islands have been popular vacation destinations for generations, the advent of app-based STR platforms like Airbnb and VRBO have created concerns that STRs will increase pressure on limited housing stocks. Throughout Cape Cod, owners have rented out their vacation homes on a short-term basis since the early 1900s. In the late 2000s and early 2010s, the app-based rental service Airbnb emerged and grew quickly allowing owners to manage the short-term renting of their properties from a phone or computer on a widely accessible platform with international visibility.

By making it easier to list a property for rent, Airbnb and other apps exploded in popularity. These apps achieved saturation in the early 2010s, while the economy was still recovering from the 2008 financial crisis, which was then followed by a new affordability crisis felt acutely in desirable locales. As demand grew, housing production did not keep up which led to increased scrutiny of how existing housing was used, especially as short-term rentals. A wave of communities nationwide began to implement policies to regulate them. Most initial regulations revolved around registration and ensuring basic health and safety protocols were in place. Some communities banned STRs outright. Since these early days, short-term rentals have remained under heavy scrutiny nationwide, and since the start of the 2020s, communities have been trying to find ways to balance demand for these units with local needs for adequate housing for workers and for residents. Towns also consider the impact these short-term rentals have on quality of life where they may increase noise, traffic, or otherwise lead to over-tourism.

As a very desirable place to live, work and play, Provincetown is experiencing incredible demand for housing of all kinds. There is a pressing demand for more housing that is affordable to the town's permanent residents and workforce. This study will examine current practices nationwide around short-term rental regulation and identify whether these regulations have had any effects on the supply and affordability of local housing for existing residents and new arrivals. The literature and data analysis are supplemented with interviews. All interviewee names used in this report are pseudonyms, for participant confidentiality.

¹ The app grew with incredible speed. Airbnb launched in 2008, achieving its one millionth booking in 2011. A year later, in 2012, the app had reached five million bookings, and in June of that same year, the app surpassed ten million.

An Overview of Provincetown

Chapter Summary

- From 2010 to 2019, the population of Provincetown shrank by 14 percent and subsequently grew by a quarter from 2019 to 2020, with small additions thereafter. During this time, housing stock increased by 11 percent.
- This change in population was driven in part by the expansion of remote work.
- Provincetown has more housing units than year-round residents; there are approximately 2,000
 households but nearly 5,000 housing units. Most of these housing units are vacant for seasonal
 use.
- The share of total housing that is owner occupied or renter occupied is not statistically different from its 2010 level.
- Available data on housing cost burden suggests that burden is high and has been high since the start of ACS data collection in 2010 but it is unclear if it has risen or fallen in that time due to the high margin of error on the data.
- The lack of local attainable housing was brought up in all the team's interviews with residents and shareholders. The affordability challenges apply to both renters and those seeking homeownership.
- The median condo sold in Provincetown YTD in May 2023 was \$780,000. For such a housing unit to be affordable under HUD's definition, the buyer would need an income of \$244,771. This assumes a five percent down payment and typical housing costs for the area and state.
- While incomes and home prices have grown, home price growth has outpaced income growth
 of residents. This may reflect the place of residence of homeowners. Property record data for
 2023 shows owners with out-of-town mailing addresses most frequently come from cities like
 Boston, New York, Cambridge, Washington D.C., and San Francisco.
- While there is a perception that all owners of vacation homes in Provincetown are wealthy, some pointed out that the ability to use a vacation home as a short-term rental is a primary factor in making owning a vacation home affordable.
- The 2022 Point in Time Count of Cape and Islands Homeless identified around 400 people
 experiencing homelessness in February of that year, a 16 percent increase from 2021 and an 18
 percent increase from right before the pandemic in January of 2020. Of those, 35 people were
 unsheltered at the time of the count. This count is performed in the winter months so the

population during the summer may differ. Detailed data on the number of unhoused individuals in Provincetown is unavailable.

- Provincetown has a highly seasonal economy with employment more than doubling between
 January and July of 2021, the latest full year for which data is available. Nearly 3,800 employees
 worked in town in July of 2021 compared to just under 1,600 in January of that year.
- Using average household size as a guide, January employment implies the housing demand from the year-round workforce to be 880 units. Using a higher estimate of 3.00 per household for seasonal workers implies demand from this cohort for another 735 units, assuming the seasonal workforce primarily represents net new workers rather than large numbers of residents taking second jobs.
- While the housing shortage is a serious problem in town, it is worth noting that the town has
 taken steps towards addressing this issue. Of all Cape and Island towns, Provincetown has the
 highest share of its housing counting towards the Low-Income Housing Inventory. Provincetown
 is very close to the 10 percent threshold required by Chapter 40B.
- Provincetown has several planned housing projects: 65 units at the former VFW, 108-bed seasonal worker dormitory with an additional 16 year-round units at the Barracks, and a year-round market-rate rental project with 40 units at the current site of the town's police station.
- Currently the town also operates Harbor Hill, which contains 28 units of year-round rental
 housing restricted to middle income workers and residents. The town has also worked towards
 inclusionary zoning, by implementing a requirement that one in every six units of housing in a
 new development be affordable or community housing units, with provisions for smaller
 projects.
- Housing has a clear effect on jobs and the local economy in Provincetown and there is concern
 among interviewees about how to attract workers to Provincetown if they cannot afford to live
 there.

Population Shifts

Recent increases in prices and a corresponding shortage of rental units have likely driven some of the increased interest in the impacts of short-term rentals on the housing market. However, some of these effects are due in part to a population shift tied to the pandemic. Between the 2010 and 2020 Census, Provincetown experienced 25 percent growth in its population while its housing stock only grew 11 percent. These annual snapshots obscure a more pronounced trend. Since 2000, the population in the community had been trending downward, like much of the Cape. Population estimates for Provincetown showed an annually declining population through 2019. The last decennial census, however, came in significantly higher. Taken together, the data shows that the 25 percent growth over the last decade is really 25 percent growth in a single year. From 2010 to 2019, the population shrank by 14 percent and subsequently grew by a quarter from 2019 to 2020, with small additions thereafter.

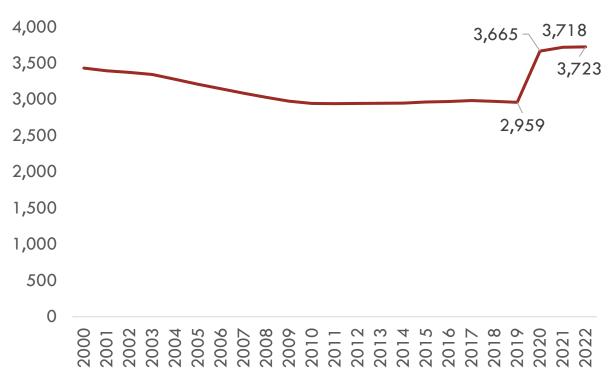


Figure 1: Historical Population Growth, Provincetown 2000-2022

Source: U.S. Census Population Estimates 2010-2022 Note: Includes April 1st Decennial Census Estimates base

This change in population was driven in part by the expansion of remote work. In 2010, Provincetown had an above-average share of people working from home, at 14 percent of working persons staying at home each day, compared to six percent at the county level and four percent statewide. But in 2021, 33 percent of working residents worked from home. The pandemic sent many people home, which allowed them to reconsider where they might live without the need to commute.

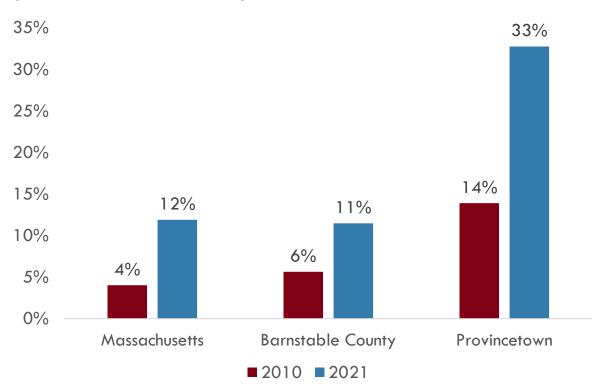


Figure 2: Share of Workers 16+ Working from Home

Source: U.S. Census ACS 5YR 2010, 2021

USPS data confirm this trend. In 2019 there was a net of 41 changes of address into Provincetown. In 2020, there were over 400. Some moved to the area simply to escape COVID. The existence of second homes likely made that transition easier. An analysis of property record data suggests a large share of Provincetown homeowners live in places like New York City and Boston, where high urban densities may have been especially unappealing during pandemic conditions. The Cape Cod Homeowners Survey found that 46 percent of respondents who changed the use of their Cape Cod home in response to the pandemic, did so because of higher rates of viral transmission at home than on the Cape.

The increase in population is observed by residents who view this as being directly caused by the increase in people who work from home. One member of the Provincetown Part-Time Resident Taxpayers Association noted, "Remote working has changed the dynamics of it a little bit. It allows people to be there even more often in the offseason." This post-pandemic increase was discussed with local resident and realtor Jason, who observed, "there's more people working from home or remotely now than there was before."

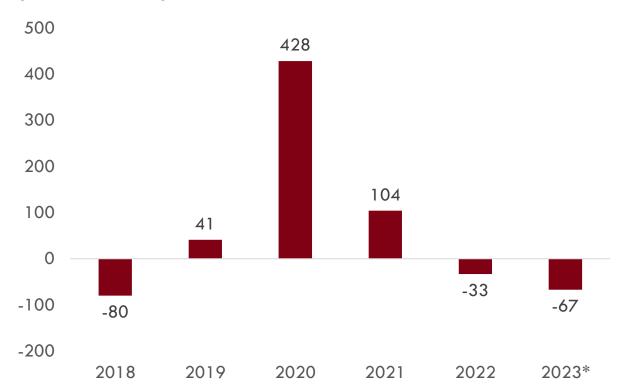


Figure 3: USPS: Net Changes of Address into Provincetown

Source: USPS FOIA Change of Address Stats, Families and Individuals Note: 2023 is an incomplete year of data.

Looking more closely at changes in the property records between 2019 and 2023 suggests that changes of address filed with the USPS were not coupled with changes in property records. In the 2019 residential assessor's records, 36 percent of properties were owned by entities with a Provincetown mailing address while in 2023 that share had risen to 38 percent. This change is the result of 354 properties which gained an owner with a Provincetown mailing address, and 264 properties which lost a Provincetown mailing address yielding a net change of only 90. There were no instances where the owner of a property remained the same while the address changed into or out of Provincetown. One hypothesis for this discrepancy is that at the height of the pandemic, people did not know how long they would stay in Provincetown, nor did they get rid of their other home. Taken together, these two factors would cause some reluctance to change any information on property records. Furthermore, this analysis assumes the mailing address of the owner on the property record is also the primary residence of that owner (where the registered owner is a trust or LLC the primary residence of the ultimate beneficial owner is unknown). This assumption may be less valid in vacation destinations post-COVID. In general, monitoring population, change of address statistics, and property records over the next few years is important to confirm whether the COVID jump in population lasts further into the future.

Housing Overview

Provincetown has more housing units than year-round residents; there are approximately 2,000 households but nearly 5,000 housing units. Most of these housing units are vacant for seasonal use. This means there are nearly three housing units for every year-round household in the town. This ratio is comparable to other places in the Cape and Islands region like Nantucket. The result is that the primary driver of local demand for housing is for vacation homes.

In Provincetown, 57 percent of housing is seasonally vacant, a Census term for units that are largely unoccupied except for recreational use such as with a summer vacation home. This is an increase from 2010 when 53 percent of all housing units were vacant for seasonal use. The share of homes that are seasonally vacant has grown steadily since at least 1990.

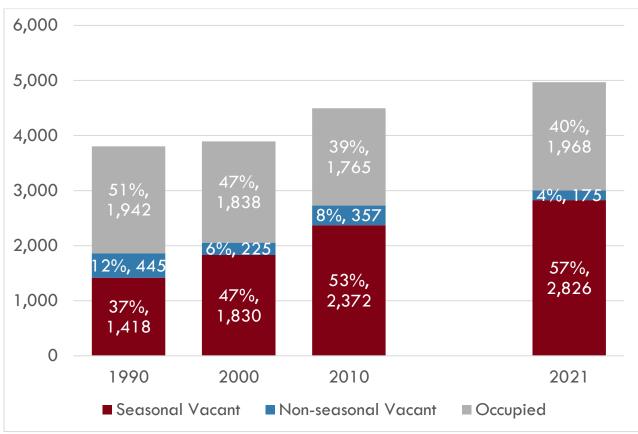


Figure 4: Share of Housing by Type in Provincetown

Source: U.S. Census Decennial Census 1990, 2000 and 2010 and ACS 5YR 2021

² ACS 2021 5YR

The share of total housing that is owner occupied is around 30 percent, not statistically different from its 2010 level.³ Similarly, the share that is renter occupied is around 10 percent and has also not changed significantly from its 2010 level.

The Census does not have a statistically robust estimate of cost-burdened households in Provincetown, which is defined by the U.S. Department of Housing and Urban Development (HUD) as households spending 30 percent or more of their income on housing. Households are severely cost burdened if they are spending 50 percent or more of their income on housing. Available data on cost burden from the American Community Survey suggests that burden is high and has been high since the start of ACS data collection in 2010 but it is unclear if it has risen or fallen in that time due to the high margin of error.

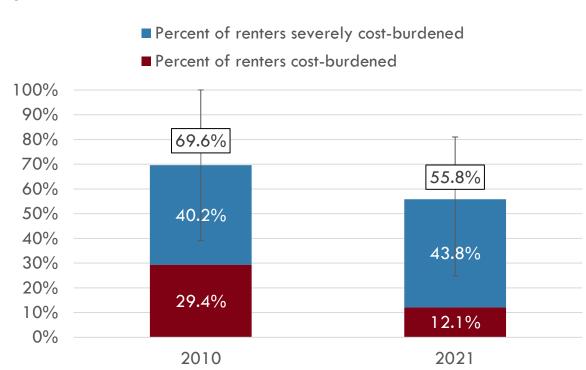


Figure 5: Severe Cost Burden of Renters in Provincetown

Source: U.S. Census ACS 5YR 2010, 2021

Note: Error bars indicate the margin of error on the percentage estimate for all renters who are cost burdened.

Estimates for Barnstable County have lower margins of error. The county typically has a higher share of cost-burdened renters and owners than the state. In 2021 the county estimate was 52 percent of renter households and 29 percent of owner households were cost burdened, compared to 47 percent and 26 percent statewide, respectively. Again, the difference between the 2010 and 2021 estimates are not

³ At 90% confidence.

statistically significant so it cannot be said for sure if burden has increased, decreased, or remained the same.

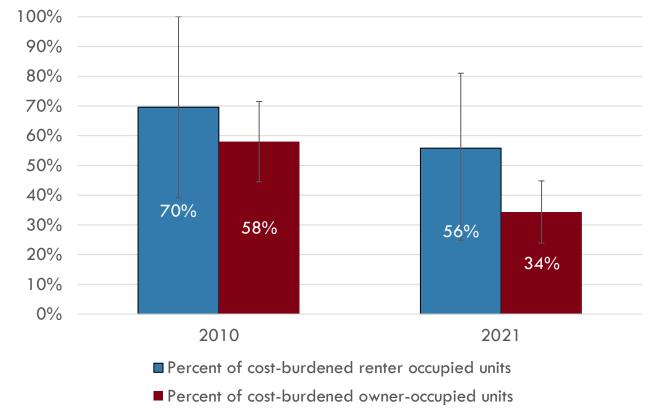


Figure 6: Provincetown Cost Burden by Ownership

Source: U.S. Census ACS 5YR 2010, 2021

Note: Error bars indicate the margin of error on the percentage estimate for all renters who are cost burdened.

Owners may have a lower cost burden than renters in Provincetown, but the margins of error make it difficult to say definitively. Regardless, burden is high. On the low end of the estimates, nearly a quarter of owners and a quarter of renters are cost burdened. On the high end, as much as 45 percent of owners and over 80 percent of renters may be cost-burdened.

Provincetown residents and stakeholders agree that there is a crisis of housing affordability and availability. When asked about his thoughts on the current state of Provincetown housing and affordability, Spencer (a Provincetown Select board member), immediately replied, "I would say that we're in an acute crisis of housing supply and affordability." This sentiment illustrates the perspective many interviewed Provincetown residents have towards the state of local housing. In another interview, resident Matthew, who works in Cape community development, describes the compounding issue of affordability and availability: "[Housing] is not available – like it doesn't exist. And when it does exist, it's not affordable." There is an issue with housing supply in Provincetown, but the issue is even more acute

for those needing year-round and/or attainable housing in Provincetown. 4

The high demand for housing and limited supply only increases prices. There is concern among many of the interviewed residents and stakeholders that the demand for short-term rentals, and high profit from them, is further restricting the year-round housing supply. John, an active member of the Provincetown Chamber of Commerce, described his concern:

"Housing, whatever level of housing you're looking for, is very scarce. And if it does become available, then it's either being sold at over market value or rented out seasonally, or by the week, or by the month or by the summer at a very high cost."

The housing unit count in **Figure 4** suggests steady growth since at least 1990 in the share of local housing that is for seasonal use. Regardless of whether those units are used for short-term rentals or for the owner's personal use, if that trend continues, there will be more pressure on the existing year-round housing stock in Provincetown in the future.

Housing Affordability

While it is difficult to obtain high-quality estimates on current asking rents, it is clear that renters in Provincetown face major hurdles to securing affordable year-round housing. Renters are more likely to be lower-income, housing cost burdened, and people of color. The American Community Survey (ACS) estimates a median rent for Provincetown in 2021 of \$1,167 with a margin of error of \$159. The Census estimates are hamstrung by Provincetown's small population. This median contract rent is also not statistically different from its 2010 level or from median rent in the county overall. In addition, it is important to note that Census rent estimates reflect the rents that are paid by renters regardless of how long they have been in their unit. Thus, the asking rents faced by someone searching for a new rental unit are likely higher.

⁴ Attainable housing can include subsidized affordable housing, housing that is only available to individuals at specific income brackets, and naturally occurring affordable housing (NOAH).

⁵ We evaluate potential revenue from STRs later in the report.

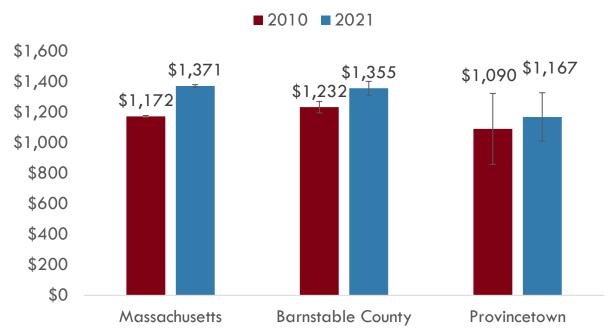


Figure 7: Median Contract Rent

Source: U.S. Census ACS 5YR 2010, 2021 Note: All dollars adjusted to 2022 CPI average.

Other sources of data suggest a more expensive rental market. For example, in June of 2023, the Provincetown Year-Round Market-Rate Rental Housing Trust estimated rent for a market-rate single-bedroom unit at \$1,900, \$2,400 for a two-bedroom unit, and \$3,000 for a three-bedroom unit. These prices are based on comparable rents in the area. The interviews conducted with Provincetown residents and stakeholders further confirm and detail Provincetown's expensive rental market. Matthew, who helps manage a local year-round market-rate rental property, describes the frustratingly high demand for affordable year-round housing:

"Without actively going out and trying to build a waiting list, we've got a waiting list that is twice the number of units that are available. And people are not moving out. We're maybe getting four or five turnovers. I'd need to confirm exactly what that turnover rate is, but it's no more than four or five units a year [that] are turning over."

The lack of local attainable housing was brought up in all the research team's interviews with residents and shareholders who noted that housing in Provincetown is noticeably less affordable than other parts of the state. When we asked John, a member of the Provincetown Chamber of Commerce, to describe the state of housing affordability in Provincetown, he asserted that the current state is, "Not affordable at all...Provincetown has managed to reinvent the definition of 'affordable' because even what could be considered affordable [gestures air quotes] here in Provincetown, it's probably above market value in Western Massachusetts or the outskirts of Western [Mass] like Fitchburg, if you will."

The affordability challenges apply to both renters and those seeking homeownership. Real estate data suggests Provincetown has the largest share of homes that are condominiums on the Cape. This is reflected in housing market data which shows the bulk of sales at any given time are condominiums rather than single-family homes. Looking at condominium prices, the median condo sold in Provincetown YTD in May 2023 was \$780,000. For such a housing unit to be affordable under the HUD definition of 30 percent or less of income going towards housing, the buyer would need an income of \$244,771. This assumes a five percent down payment and typical housing costs for the area and state. However, the ACS median income for the town is between \$60,172 and \$97,300. Among Cape towns with more than 20 closed condo sales YTD May 2023, Provincetown has by far the highest income required for the unit to be affordable to the buyer.

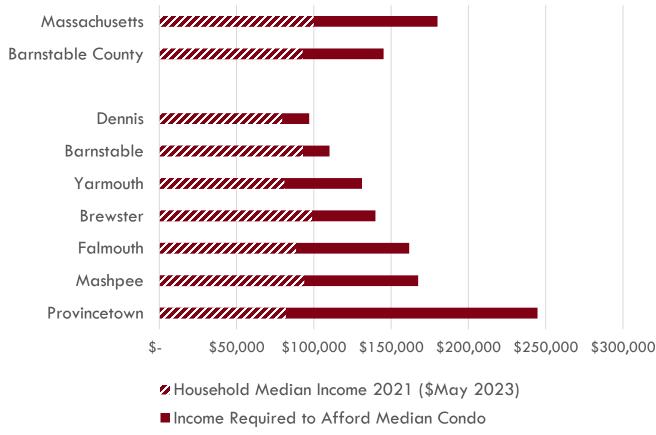


Figure 8: Income Required to Afford the Median Condominium in May of 2023

Source: Cape Cod and MA Realtor's Association, Interest Rate from Freddie Mac survey, Property taxes from MA DLS, estimates of PMI and Home insurance from Nerdwallet, 5% down payment assumed. U.S. Census ACS 5YR 2021.

Note: Only towns with more than 20 closed condo sales in May of 2023 are shown. All dollars adjusted to May 2023 CPI average.

Jason, a local realtor, identified that for single-family homes the median price can be even higher: "The hard part for us is that because home prices are so high out here. We're in between Nantucket and Martha's Vineyard. Our median average price last time I looked for April was \$1.97 million dollars. That's the median." This price is also a function of inventory. In April of 2023 there were only a few closed

single-family home sales but around a dozen condominium sales. Single-family homes with larger footprints may be able to charge a premium in Provincetown where they are fewer in number. A smaller number of sales also means each individual sale may impact the median price substantially.

Historical home value data from Zillow shows a general increase in home prices since 2000 with the curve growing steeper around 2015. When plotted against median incomes locally, the data shows that income growth has not kept up with the prices of housing generally, three-bedroom homes, or condos, though it is close in the case of the latter. However, similar growth rates do not imply affordability because it does not consider starting values. In 2010, the average condo price in July was nearly \$335,800 while median household income was just under \$44,700. In that same year, housing burden data also showed high numbers of cost-burdened households. In 2021, those numbers were roughly \$632,700 and \$72,900, respectively, with cost burden remaining high. Because incomes and home prices did not begin from a place of affordability, equal growth rates should not be interpreted as a continuation or achievement of affordability.

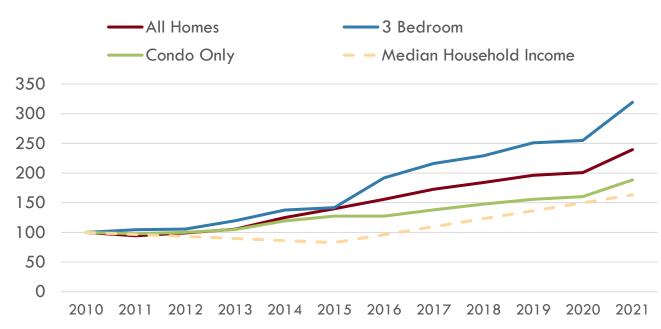


Figure 9: Home Price and Income Indexes (Nominal), 2010 = 100

Source: Zillow Home Value Index and U.S Census ACS 5YR 2010, 2015 and 2021 Note: Median incomes are averaged between ACS 5YR datasets

While incomes and home prices have both grown, one explanation for why home price growth has outpaced income growth may reflect the place of residence of homeowners. Looking at property record data for 2023, owners with out-of-town mailing addresses most frequently come from cities like Boston, New York, and Cambridge. Over 140 properties in the 2023 assessor's records have a New York City mailing address. Various Boston neighborhoods are some of the most common owner locations, followed by Washington D.C. and San Francisco. This reinforces the idea that the housing market in Provincetown, as with much of the Cape, is heavily influenced by the incomes of residents in higher

income areas like big cities. Communities outside the Cape, that are similar in size and density to Provincetown, do not usually see the same level of demand from out-of-towners from high income areas. This non-local demand contributes to a disparity between year-round resident incomes and home prices.

Several part-time resident homeowners expressed frustration during their interview, asserting there is a false and negative local perception of individuals who own a vacation home in Provincetown. One of the group members interviewed described this perception as framing vacation homeowners as, "that rich person that comes in, hangs out for like a few weeks in the summer, and then shutters their house." While this may occasionally be the case for those owning vacation homes in Provincetown, the Part Time Resident Taxpayers Association group described the demographic as "not that big in our group." A member of the group describes their frustration over the impact of these perceptions:

"You know, so there's a stereotyping that happens that you can afford it. So, one of the things our group has argued for a while now is there are a lot of year-rounders that take advantage of the tax exemption that probably make more money than some of our part-timers that are picking up the tab. You know, that again, creates this [sense] like 'I feel like I'm not being treated the same as everybody else."

While there is perception that *all* owners of vacation homes in Provincetown are wealthy, some pointed out that the ability to rent a vacation home as a short-term rental is a primary factor in making owning a vacation home affordable. Beth, a part time resident homeowner who rents their Provincetown home during much of the summer season, describes renting their home as a means to afford that home:

"...[S]econd homeowners want to use a property for themselves somewhat and also rent it so that the income from those rentals offset the mortgage. Either they do it because it's a good way for them to be here and make money just to sustain that. Or they're only doing it temporarily because eventually they want to move here themselves."

There is concern among this group that restrictions on short-term rentals would make owning a second home unaffordable for many. More broadly, there are concerns among all interviewees—residents and stakeholders alike—about affordability in Provincetown, whether it is for renters or buyers.

Homelessness

When considering the housing market of any region it is also important to consider those left out of the market entirely, particularly in a region with such a high level of seasonal vacancies. Annually, the Cape and Islands Regional Network on Homelessness conducts a count of persons experiencing homelessness in emergency shelters, transitional housing, on the street, in cars, abandoned buildings, and in other places not meant for human habitation. This is a count based on the HUD definitions of sheltered and unsheltered persons. Unsheltered persons reside in places not intended for human habitation, while sheltered persons are those in dedicated emergency shelters or in housing supported by funding from an organization. This count is performed in the winter months so the population during the summer

may differ. Additionally, these counts do not include people staying with family or friends or in temporary, non-shelter lodging like hotels.

The 2022 count, conducted in February of that year, identified around 400 people experiencing homelessness in the Cape and Islands, a 16 percent increase from 2021 and an 18 percent increase from before the pandemic in January of 2020. Of those, 35 people were unsheltered at the time of the count. This is the highest count in eight years, though the network points out that the increase may be attributable to increased collaboration with, and surveying of, Martha's Vineyard. Of that 400-person total, over 90 were children. There were a total of 55 families in shelter during the count as well as one family unsheltered. The count includes another 90 people in transitional housing. These individuals receive support and services in order to move into permanent housing, though this service is only funded for up to 24 months.

Detailed data on the number of unhoused individuals in Provincetown is unavailable but a recent news article highlighting homelessness in town reported that the local branch of the Homeless Prevention Council (HPC) works with 35 to 40 clients per month who are struggling with housing insecurity. These individuals are at risk of losing their housing while others are already unhoused, and many are residents who grew up in the area.

Residents and stakeholders alike hold concerns that conversion of properties to short-term rentals creates additional housing insecurity. Spencer, a Provincetown Select board member, argues that as properties are converted to short-term rentals it "creates additional housing insecurity for people who would otherwise potentially be housing secure." He highlights this in his description of how housing insecurity has had an impact on local residents due to property conversions to short-term rentals:

"I have heard anecdotally of many individuals who've been affected by housing insecurity, because they might live in a unit over a season, whether it be like a winter season or a summer season and have to shift to live elsewhere, or find housing elsewhere, because that unit is being converted into a short-term rental either for the season, or, you know, in perpetuity thereafter. And it might be a unit that they've lived in for many years."

Prior work by UMDI on the Cape and Islands echoes this story. Some households have had to move so that a unit can be rented for the season. In some cases, the household can return after the season but in others the unit permanently leaves the year-round housing market.

⁶Egger, Oliver. "Sleeping in the Elements in Provincetown." The Provincetown Independent, July 26, 2023. https://provincetownindependent.org/local-journalism-project/next-generation/2023/07/26/sleeping-in-the-elements-in-provincetown/.

Employment

Provincetown has a highly seasonal economy with employment more than doubling between January and July of 2021, the latest full year for which data is available. The largest industries are accommodation and food services, and retail trade. Nearly 3,800 employees worked in town in July of 2021 compared to just under 1,600 in January. According to the ACS 2021 5YR data, household size in Provincetown is 1.81. Using that as a guide, January employment implies demand for 880 units of housing from the year-round workforce. Using a higher estimate of 3.00 per household for seasonal workers implies demand for another 735 units, assuming the summer workforce is primarily comprised of net new workers rather than large numbers of residents taking a second job. Together, these roughly 1,600 units are less than the 2,000 units that are currently occupied by year-round residents though it does not imply that this housing demand is necessarily well-matched to available supply.

Table 1: Provincetown Employment by Industry, January and July 2021

NAICS Code	NAICS Description	January Employment	July Employment	Establishments	Average Employment	Average Hourly Wage
10	Total, All Industries	1593	3,796	420	2,608	\$25
	Agriculture, Forestry, Fishing					
11	and Hunting	8	9	4	7	\$47
23	Construction	44	51	10	51	\$28
31-33	Manufacturing	21	50	6	35	\$16
	Non-Durable Goods					
NONDUR	Manufacturing	20	50	5	34	\$16
42	Wholesale Trade	15	34	6	22	\$50
44-45	Retail Trade	440	787	114	577	\$22
48-49	Transportation and Warehousing	26	45	6	34	\$25
51	Information	23	32	11	29	\$32
52	Finance and Insurance	31	31	9	31	\$33
53	Real Estate and Rental and Leasing	54	98	15	75	\$24
54	Professional and Technical Services	87	102	30	99	\$30
56	Administrative and Waste Services	35	96	15	66	\$23
62	Health Care and Social Assistance	213	219	19	216	\$28

 $^{^{7}}$ 3,796 July jobs - 1,593 January job = 2,203 additional, high season jobs. 2,203 / 3 = 734.33.

NAICS Code	NAICS Description	January Employment	July Employment	Establishments	Average Employment	Average Hourly Wage
	Arts,					
	Entertainment, and					
71	Recreation	38	82	16	57	\$28
	Accommodation					
72	and Food Services	282	1,828	127	999	\$23
	Other Services,					
	Except Public					
81	Administration	52	84	20	69	\$27

Source: MA Executive Office of Labor and Workforce Development ES202

Note: Data on all industries is not available due to suppression, so 2-digit industries may not add to the total.

Using data from the Census On the Map tool, 53 percent of jobs in town were worked by non-residents in 2019 (latest available, non-2020 year of data), which equates to around 911 primary jobs, i.e., jobs that provide most of a worker's earnings. The workers in these jobs most often come from Truro (6%), Wellfleet (5.9%), Eastham (3.9%), and Barnstable (3.5%), which account for 20 percent of the total out-of-town workforce.

Provincetown residents are most likely to work locally, but a small group of residents go elsewhere, the two most popular destinations being Truro and Boston. This group accounts for the 560 primary jobs going elsewhere. These jobs include remote jobs as the dataset used counts jobs based on employer/firm location and not commute type.



Figure 10: Inflow and Outflow of Primary Jobs, 2019

Source: U.S. Census On The Map Tool

The housing supply has a clear effect on jobs and the local economy in Provincetown and there is concern among interviewees about how to attract workers to Provincetown if they cannot afford to live there. One interviewee said, "If people can't afford to live here, they will most likely not look for a job here. We see signs up all the time, like all the open job openings throughout the town and with the town, as a municipality. The town itself is struggling to hire staff to fill their positions that are open, it's an issue and it affects everyone. It affects the town. It affects our businesses community altogether. It's a catch-22."

The interviewees describe a situation where businesses are struggling to recruit workers because of housing issues. The lack of attainable housing and housing for workers is limiting businesses' ability to grow and the economy in Provincetown more generally. Matthew, a Provincetown resident who specializes in housing policy, describes this barrier: "If you ask any business owner what the number one barrier to business growth is, it is the lack of housing for workers. Businesses have an opportunity to grow—but they can't grow because there aren't enough employees."

Provincetown businesses often rely on foreign workers for seasonal jobs during the high tourist season. John, a member of the Provincetown Chamber of Commerce, explains how the need for seasonal employee housing affects businesses:

"Like I said, most of our businesses...rely on foreign workers. J-1 students and H2B workers who have to come here from somewhere else from overseas from abroad to work here. So, in order to do that they need to have housing. That puts a lot of stress on our businesses as we could see during the pandemic and its aftermath. Our businesses had to shorten their hours, or they had to close on certain days altogether, just because they were so short staffed, and they couldn't stay open. They wanted to give their existing staff a break, so that affects their bottom line. When you have such a short season from May/June through September/October, then it affects your bottom line. And you either barely make it or you go out of business."

Some businesses have responded to the seasonal demand for worker housing by purchasing housing for their employees. Chris, a member of the Provincetown Select Board, describes this action:

"We have seasonal housing problems in the sense that our businesses need places for their workers. Now, to be fair, a lot of our bigger businesses, Crown and Anchor...

Boatslip, Lobster Pot, they actually have housing. They have housing for their workers... because you also have businesses that have done the right thing, and one of them [referring to businesses] recently purchased a B&B. Now a B&B goes out, but housing for workers comes in. But the thing about it is the second homeowners is a stressor, worker housing is a stressor [on housing supply]."

The issue of seasonal housing for workers was discussed in multiple interviews, as shareholders express concern for housing accessibility on both local businesses needing seasonal staff housing, as well as year-round housing for vital nonseasonal workers. The need for year-round housing is described by Spencer, a member of the Provincetown Select Board:

"And one thing that I think is also true about Provincetown is that if you are contributing to the local economy, it is almost exclusively (from a job's perspective) a seasonal economy, based on our tourist economy and based on our visitor profile, in terms of the numbers of people who come to town and spend money here in the summer versus offseason. And as a result of that, you know, we have a need as much for year-round housing for people who might work say in town hall or who work as EMTs or who work in health care locally, as we do for seasonal workers who might work in hospitality over the summer. And you know, we very much need them to support the local economy, but that in the winter, they may not have made all the money in the summer that they need to live from in the winter and they may need to go elsewhere and work elsewhere, during the winter season."

The Short-term Rental Market

Chapter Summary

- The research team's analysis of short-term rentals focuses on app-based rentals because they
 are the type of short-term rental for which detailed data is readily available. The analysis uses
 short-term rental data from AirDNA which aggregates data on rentals through the Airbnb and
 VRBO services.
- In 2017, the number of active units in Provincetown crossed over 1,000 before peaking in 2019 at nearly 1,300. Active units subsequently dropped back down to roughly 1,000 since then.
- The median daily rate for a two-bedroom rental in the AirDNA dataset was \$425 in Provincetown in 2022. Adjusted for inflation, Provincetown's median rate has increased about five percent since 2019.
- In 2022, peak prices and activity occurred in July. Similarly, both prices and activity reached their nadir in February. Between peak to trough, prices decreased by 58 percent while active units dropped by over 200 percent.
- The median STR was reserved for 93 days (13 weeks) a year in 2022, up from 72 days per year in 2019. Stays are usually a week or less, with 89 percent of properties having an average reservation length of seven days or less in 2022.
- An analysis of data on lodging in Provincetown identified 1,435 units of guest accommodation in traditional lodging in 2022, including guest houses, camps, cabins, motels, and inns. In their peak month, STRs provide an additional 1,600 bedrooms.
- The Provincetown Year-Round Market Rate Rental Housing Trust established a rate of \$2,400 per month for two-bedroom market rate rental units in June of 2023. In a year, a landlord renting out a unit full-time at that rate could expect \$28,800. The median daily rate for a short-term, two-bedroom unit in Provincetown is \$425. At that rate, the breakeven point between renting long and short term is less than three months.
- In addition to the financial incentive, owners with rentable properties benefit from other advantages when short-term renting. Most notably, they retain use of the property for themselves and their friends and family.
- While there is concern from residents about short-term rentals making the Provincetown
 housing market more expensive, there is another perspective from second homeowners who
 find that the ability to rent property as a short-term rental is an important component behind
 what helps make Provincetown homeownership affordable.

- Based on a new homeowner survey, few buyers are seeking properties for use solely as STRs.
 Only seven percent of all respondents are considering short-term renting as a primary use for the property in the next 20 years. A second survey, this time of only second homeowners, also saw only a small share, about eight percent, planning to use their unit as exclusively a short-term rental over the next two decades.
- A possible reason for this reluctance is that purchasing a home in Provincetown to rent, either long or short term, is not self-evidently profitable at current prices. Annual payments for principal, interest, taxes, and insurance for the median condo are approximately \$60,000 per year. These annual costs are double or more the market rent for a two bedroom and would require about four months of renting at peak rates to cover with short-term rental use. These estimates exclude other holding costs like utilities, maintenance, realtor or Airbnb fees, and the opportunity costs of alternate investments.
- When the research team asked multiple members of the Provincetown Part-Time Resident
 Taxpayers Association why one might short-term rent their home, members acknowledged
 financial incentives but asserted that short-term rentals are also a way to ensure their homes do
 not stay empty when they are out of the area. Renting short term allows second homeowners to
 offer their homes to friends, families, and members of the LGBTQIA+ community, in similar ways
 to what many second homeowners experienced before purchasing their Provincetown homes.

AirDNA Data Analysis

The research team's analysis of short-term rentals focuses on app-based rentals because they are the type of short-term rental for which detailed data is readily available. As described earlier, seasonally vacant units, many of which are short-term rented, have been present locally for decades. The primary innovation of apps like Airbnb was convenience and reach. These apps meant owners did not need to find a rental agency to work with and meant that people across the world could shop for vacation rentals globally in a single app. This analysis uses short-term rental data from AirDNA which aggregates data on rentals through the Airbnb and VRBO services. Considerable work would need to be done to gather a database of broker-rented short-term units and would require the cooperation of each brokerage facilitating STRs in Provincetown.

AirDNA collects data going back to 2014, but there is exponential growth in the number of units reported in 2014, 2015, and 2016. It is not clear if that initial increase in units reflects take-up of the app-based model by short-term renters or if it is simply a function of web-scraped data being incomplete in those first three years of the AirDNA service. For context, Airbnb had achieved its ten millionth booking as early as 2012 which suggests it had considerable popularity by the time data started being scraped. In 2017, the number of active units in Provincetown crossed over 1,000 and peaked at nearly 1,300 in 2019. Since COVID-19, active units have dropped by roughly 250 units and remain stable at that level. This decline corresponds to the simultaneous increase in the year-round population suggesting some out-of-town owners have switched the use of their homes from something occasional to something more permanent thereby making renting no longer practical.

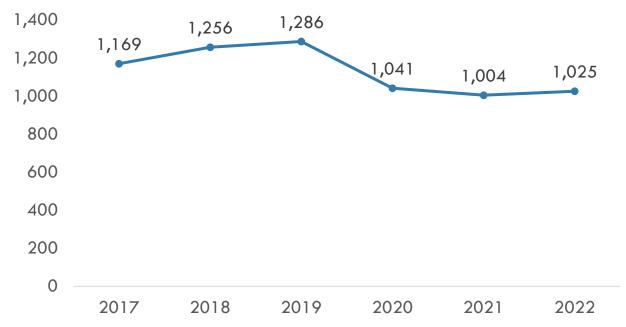


Figure 11: Annual AirDNA Units in Provincetown

Source: AirDNA, UMDI Analysis

The median daily rate for a two-bedroom rental in the AirDNA dataset was \$425 in Provincetown in 2022. This rate is higher than the Barnstable County rate but lower than the rates on the two islands. Provincetown had a much lower rate than Nantucket in 2022 but only a slightly lower rate than Martha's Vineyard (Dukes County). Adjusted for inflation, Provincetown's median rate has increased about five percent since 2019, below Barnstable County's change in the same period.

Table 2: Median Daily Rate for a Two-Bedroom Short-Term Rental

Region	2019	2020	2021	2022	2019-2022 Change
Nantucket County	\$635	\$678	\$658	\$653	3%
Dukes County	\$407	\$407	\$451	\$450	11%
Provincetown	\$405	\$404	\$397	\$425	5%
West Tisbury	\$391	\$392	\$467	\$425	9%
Chatham	\$366	\$351	\$358	\$371	1%

Region	2019	2020	2021	2022	2019-2022 Change
Barnstable County	\$286	\$292	\$304	\$306	7%
Wellfleet	\$288	\$313	\$300	\$291	1%
Great Barrington	\$259	\$251	\$278	\$280	8%
Berkshire County	\$229	\$236	\$248	\$255	11%

Source: AirDNA, UMDI Analysis

The median daily rate and number of active units vary by month. In 2022, peak prices and activity occurred in July. Similarly, both prices and activity reached their nadir in February. Between peak to trough, prices decreased by 58 percent while active units dropped by over 200 percent.

Figure 12: Median Daily Rate for a Two-Bedroom STR by Month, 2022



Source: AirDNA, UMDI Analysis

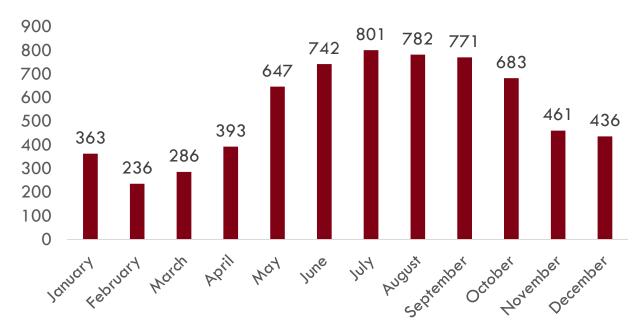


Figure 13: Number of Active Units by Month, 2022

Source: AirDNA, UMDI Analysis

Units in the AirDNA data are being rented more intensively. In 2019, the median number of reservations was 15, but this rose to 22 times per year in 2022. The median STR was reserved for 93 days a year in 2022, up from 72 days per year in 2019. Stays are usually a week or less, with 89 percent of properties having an average reservation length of seven days or less in 2022.

Lodging Overview

Data on app-based short-term rentals is important because of shifts in the traditional accommodation industry. An analysis of data on lodging in Provincetown by the Department of Community Development identified 1,435 units of guest accommodation in traditional lodging, including guest houses, camps, cabins, motels, and inns. However, several lodging establishments have closed over the past two decades. Since 2000, 27 establishments have closed, representing over 200 units of guest accommodation. In some cases, these buildings are converted to other lodging uses such as worker housing or residences, but sometimes their capacity is lost. Community Development also counted active lodging units in May of 2023, and found that the number had fallen farther to 1,380, a four percent decline from the 2022 annual value.

Short-term rentals in the AirDNA dataset offered 2,055 bedrooms worth of lodging in 2022. Combined, traditional and short-term lodging provide 3,490 units of total, but not simultaneous, guest

accommodation for the town.⁸ Across all types of lodging, the actual availability on the ground varies seasonally, with some traditional lodging being seasonal and STRs also being highly seasonal. Because not all STRs are active at the same time, peak availability for STRs is around 1,600 bedrooms in July. Based on historical data on traditional lodging combined with counts of AirDNA bedrooms, the total accommodation units available annually across town has declined 13 percent over the period of 2019 to 2022. STR bedrooms declined 19 percent in the period. Closures in the traditional lodging industry led to traditional lodging units declining four percent in the period. The decline in guest accommodation coincides with the population increase described earlier.

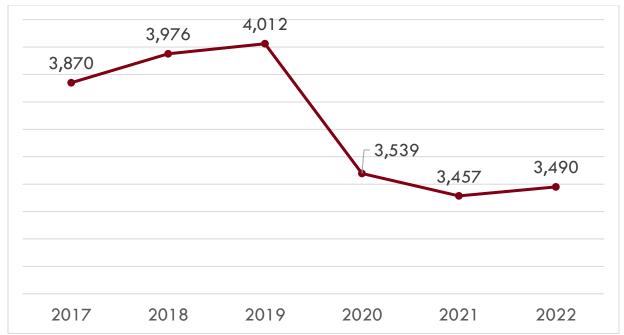


Figure 14: Total Units of Guest Accommodation, Traditional and Short-term Rentals

Source: AirDNA and Provincetown Department of Community Development

Note: Traditional lodging count for 2018 was unavailable so an average of 2017 and 2019 was used.

The occupancy rate measures the percentage of time that a unit (a room in a commercial establishment or a bedroom in an STR) is occupied as a share of days available. For example, an STR room active for 90 days in the summer and occupied for 60 of those days results in an occupancy rate of 67 percent. Note that a 67 percent occupancy rate does not mean a home or hotel room is occupied by visitors for fully two-thirds of the year. In many cases, homes and hotel rooms are not on the market year-round so they may actually be vacant for considerably more time than the occupancy rate suggests or, in the case of homes, occupied by the owner or other non-paying guests like friends and family. In the AirDNA data for 2022, STRs had a summer occupancy rate between 69 percent in June and 91 percent in August. The

⁸ This assumes that a STR bedroom is equivalent to a unit of traditional lodging. This is not always true, a hotel suite may encompass multiple bedrooms, so this estimate should be considered slightly conservative.

lowest occupancy rate in the year was in January at 31 percent. Data on occupancy for traditional lodging was unavailable.

Separate but related to occupancy rates is lodging capacity. Assuming two visitors per lodging unit, in total the town has capacity for nearly 7,000 guests per night. Provincetown received nearly three million visitors in 2022. This number of visitors, if spread evenly across all days of the year, implies roughly 8,200 visitors per day, which exceeds the daily capacity of in-town lodging, though not all these visitors stay overnight. Adding to capacity constraints is the fact that visitors are not spread evenly across all days but rather concentrated in the warmer months of the year and around weekends. Any restriction of STRs would further constrain the supply of lodging, likely leading to increased prices for the remaining options. Currently, occupancy taxes from traditional lodging and short-term rentals were more than \$5 million dollars in 2022, increasing from around \$3.5 million in 2021. In FY2022, visitors spent nearly \$95 million on food and beverages and nearly \$85 million on accommodations.

To estimate lodging capacity, data from AirDNA was used because it provided a count of bedrooms across STRs in town. The exact count of STRs locally may vary depending on the source of data used. The most official and most local source is the town's registration list, which listed 758 STRs at the end of March. However, this list is relatively new, and the town is still working to achieve full compliance.

An alternative STR listing can be collected from the Department of Revenue (DOR). A copy of the list from August 2022 reported 1,312 STRs in town. However, this list also has drawbacks because there is not a mechanism to remove rentals from the list, so some units may no longer be active. The list is also not property based meaning entries cannot be tied directly to a property record as in the town list. This prevents deeper analysis of rentals without considerable work using the matching of street address and other information to property record data. This also makes it difficult to identify if a unit is part of a larger property, or a whole property. Finally in at least one case, a property was listed at a street address that did not appear to exist in Provincetown, with the town field likely having been filled out incorrectly as Provincetown.

A third source of data on STRs is the AirDNA dataset discussed previously. This dataset listed 1,025 STRS in town in 2022. Drawbacks to this dataset include that it is only a list of app-based rentals, and only through two services, Airbnb and VRBO. Rentals through a real estate agency or done informally by word of mouth are a considerable part of the rental market locally. Additionally, these units are not tied to a property so gathering additional detail, such as basic owner information from assessor's records, on these units is difficult. As with the DOR list, a single entry in AirDNA may represent either part of a property, or a whole property, with no way to distinguish the two using property records.

Finally, the town derived a STR count by working with municipal data company Granicus, which is hired by many towns to help track their short-term rental markets. In March of 2023, Granicus estimated

⁹ This rate is based on calculating total reservation days, summed across all units in the dataset, as a share of all available and reserved days.

between 1,450 and 1,500 STR units at peak season. Its approach looked across more than the two appbased services found in AirDNA and combined information from sources like the above.

Rental Revenue and Second Homeowners

The Provincetown Year-Round Market Rate Rental Housing Trust established a rate of \$2,400 per month for two-bedroom market-rate rental units in June of 2023. In a year, a landlord renting out a unit full-time at that rate could expect \$28,800. The median daily rate for a short-term, two-bedroom unit in Provincetown is \$425. At that rate, the property owner could expect to earn as much rental revenue as the above long-term unit landlord in what is likely to be less than 80 days (or roughly two and a half months). As described in more detail on page 49, for many owners of STRs, the gap between renting short and long term may be just over \$14,000. This amount is comparable to the per unit rates some towns have implemented to incentivize the use of rental units for long-term or workforce housing (see Other strategies: Incentivizing Renting to Workers or Year-Round Residents on page 41). An outstanding question, alluded to in the interview quote below, is what value owners put on their own use of the property.

This illustrates the differing incentives faced by owners of rentable properties in town. They can earn as much as they would get from a long-term rental in the space of two or three months. They could then occupy the unit themselves for the rest of the year or at points during the summer season. They could also share the unit with friends or family. Because of the high revenue homeowners can make renting their property as a short-term rental while still being able to use the property for themselves, there is little incentive for homeowners to rent to year-round residents. Matthew, a housing policy specialist, describes this tension between the gap in profit between long-term and short-term rentals:

"The amount that you would have to incentivize part-time owners of condos to make it available for year-round rental would take a huge amount of money to close that income gap, as well as tie up the property. I mean, it happens. Some people do decide to do it. Some people get tired of Airbnb, but let's be real, part of the value of real estate in Provincetown is based on the ability to put it on Airbnb and make a ton of money renting it out."

Additionally, by not having long-term renters the property becomes a tremendously flexible asset. Tenants with a lease have rights that make it difficult to evict or change the use of a unit. Tenants also have additional rights to retain housing while disputes with the landlord are resolved. By foregoing tenants, if owners decide they no longer want to manage a short-term rental property, they can stop at any time and put the house up for sale where it will likely sell quickly in a low-inventory, high-demand market. The potential revenue from short-term rentals is priced into properties in Provincetown, making

¹⁰ The breakeven implied by the median daily rate is 68 days (\$28,800 / \$425 = 67.7). However, the median daily rate includes the cleaning fee where applicable. We do not have adequate data to know how the typical cleaning fee, which is usually charged per stay rather than per day, would average into the daily rate. As a result, we have assumed some extra time in the breakeven calculation to allow for income for the property owners to be some amount less than \$425 per day.

property even less affordable for some, particularly for year-round residents. Spencer, a Provincetown Select Board Member, has a similar perspective to Matthew's:

"I think what is more unique to Provincetown is that when there is available supply, that supply is essentially priced for use as a short-term rental, which garners a significantly higher value for property. And because of this significantly higher income stream that you can get from a short-term rental versus a year-round tenant....what little housing supply is available, faces this economic issue of whether, you know, to rent a short-term rental or long-term rental...they are essentially priced for *short-term rental buy*."

While there is concern from residents about short-term rentals making the Provincetown housing market more expensive, there is another perspective from second homeowners who find that the ability to rent property as a short-term rental is an important component behind what helps make Provincetown home ownership affordable. When asked their thoughts on restrictions on short-term rental certificates, members of the Provincetown Part-Time Resident Taxpayers Association, many of whom are second homeowners, expressed skepticism over its overall effectiveness, arguing that it would further limit the buying pool:

"...[W]e thought to ourselves that's what you're going to end up with though, that group, that stereotype that you don't like, may well be the unintended consequence of restricting short-term rental certificates because you will limit the buyer pool to people that say 'I don't need that so I'll just pay whatever and I'll show up whenever I feel like showing up."

Beth, a part time resident and second homeowner, describes the strategy of year-round residents who use short-term rentals as a way to generate enough income to live in Provincetown for most of the year: "Another unintended consequence of the short-term rentals is that there are year-rounders who are managing their finances through short-term rentals. And if those are restricted, that will also have an impact on their ability to stay in town." Although many residents are concerned about the effect of short-term rentals on the housing and rental market, there are still some that are concerned that restrictions on these rentals could make the market less affordable for some.

A common concern in communities that have numerous short-term rentals is that people and businesses might buy up residential property purely to put it on the short-term rental market. However, there is evidence that new owners do not typically purchase their homes with the intent of solely renting them out. In the Cape Cod New Homeowners Survey conducted by UMDI in 2021, respondents were asked what their planned use was for the property over the next 20 years. Overall, 90 percent of respondents reported that their new home would be used as, or converted to, a primary residence within the period and 68 percent planned to do so in less than 20 years. The second most popular use for a new home was as a second home for personal or family use with 32 percent of respondents using their home for that in the 20-year timeframe. This was followed by short-term renting as the third most popular use case, with seven percent of all respondents considering short-term renting as a primary use for the property in the next 20 years.

A second survey, this time of specifically second-home owners, suggested that only 30 percent plan to convert their units to primary residences in the next 20 years. This suggests that for most vacation homeowners on the Cape, the long-term goal of their ownership is for recreational purposes in the immediate future. Again, only a small share, about eight percent, reported that they planned to use their unit as primarily a short-term rental in the 20-year timeframe.

The disparity between the feelings of residents and the stated desires of second-home owners may be explained by the high cost of Provincetown homes, which may discourage buying housing purely to profit from their rental, whether short or long term. The analysis performed earlier on the income required to afford the median condo in Provincetown in May 2023 YTD suggests monthly housing costs on a 30-year mortgage, including mortgage payments, condo fees, taxes, and insurance, to be \$6,119, or \$73,431 annually. However, that analysis assumed a five percent down payment. In most cases, banks require at least 20 percent down for a home purchased for use as something other than a primary residence. In that case, monthly costs drop to \$5,005, or \$60,065 annually.

Even with these lower costs, purchasing a home in Provincetown to rent is not self-evidently profitable at current prices. These annual costs are double or more the market rent for a two-bedroom. In the case of a short-term rental, assuming the unit was a two-bedroom and could be rented reliably at \$468 (the peak July 2022 median daily rate for such units), the condo would need to be rented for 129 days (about four months) per year just to break even on the financing, taxes, and insurance costs. If the home was bought outright and a mortgage payment was not an issue, the unit could pay for itself after 1,668 days of short-term renting at that same rate. This would equate to approximately 14 summers of renting every day, June through September. In the end, all these estimates would still fall short of actual breakeven costs as they exclude other holding costs like utilities, maintenance, realtor or Airbnb fees, and the opportunity costs of alternate investments (e.g., the risk-free return on Treasury bills).

When we asked multiple members of the Provincetown Part-Time Resident Taxpayers Association why one might short-term rent their home, members acknowledged financial incentives but also asserted that short-term rentals are a way to ensure their home does not stay empty when they are out of the area. Renting short-term allows second homeowners to offer their homes to friends, families, and members of the LGBTQIA+ community, in similar ways that many second homeowners experienced before purchasing their Provincetown homes. Robin describes renting short term as a way of paying forward access to local short-term housing. Carol, a second homeowner, points out that short-term rental properties can be a more affordable option for families who may not be able to afford to vacation in Provincetown otherwise:

"Staying for a week in Provincetown in these "inns" is very expensive and take Family Week for example: You got two women coming in with a couple of kids and probably a dog (because you know we all love our dogs). And they cannot afford...I would say pretty much across the board staying at the Red Inn or staying at Crown Point which doesn't even allow kids. [Short-term rentals] allows folks like that to vacation in Provincetown, to enjoy something like Family Week...you're talking about kids being raised by gay parents. And Family Week is very helpful to folks coming from other parts of the country where it's not so easy to be two moms raising a couple of kids or two

dads raising a couple of kids. Provincetown is a very nice place for everybody to meet for something like Family Week. Now, not that I'm trying to promote Family Week, but it's *not just a vacation*. It offers an opportunity for kids and their parents that they may not otherwise get in other parts of the country. If you've crossed that out, you limit the number of people that can rent, for short-term rentals. You're also making it harder for families like that to come to Provincetown. *You're going to price them out of this.*"

Additionally, Robin points out that renting their home while they cannot be there helps keep the town active and brings in tourists who actively contribute to local businesses:

"My feeling is that we are helping keep the town of Provincetown busy and active and fun. We've got a group of guys down there now renting our place and last week we had another group of guys down there renting so these people are out in the restaurants, they're out at the bars, they're out at the shows, they're keeping the town fun and active. While we cannot, you know, because we're back here paying, paying the bills, and paying the mortgage."

Literature Review and Background Research

Chapter Summary

- Studies on the app-based short-term rental market generally find small positive effects on home prices and rents in areas where these units are abundant.
- However, there are few studies of the direct impacts on prices and property values in reaction to STR regulations.
- The existing studies detail effects that could differ from the experience of Provincetown, most
 notably because these studies typically study the effects of converting year-round residences to
 short-term rentals whereas the primary transformation in Provincetown is more likely to be
 from year-round rentals to vacation homes, with STRs as an ancillary use.
- The main types of regulation studied fall into the following categories:
 - Quantitative caps on the number of units
 - Zoning restrictions
 - o Limits on total rental nights or rental instances
 - Restricting to only owner-occupied homes
 - Restricting to only single-family homes
 - o Related: incentives to rent to workers or year-round residents
- Most current studies point to low single-digit percentage changes in prices and rents because of STR regulation.
- Given the limited impact of the above policies on increasing the supply of attainable housing, if
 implemented, they are unlikely to reduce home prices and rents to a level that is affordable to
 many of the essential workers in town.
- Provincetown should consider other ways to increase the supply of attainable housing.
 Attainable housing can include subsidized affordable housing, housing that is only available to individuals at specific income brackets, and naturally occurring affordable housing (NOAH).
- In the interviews, the research team heard about a particularly acute need for NOAH and housing affordable to those earning more than the income limits for subsidized affordable housing (e.g., 30% to 60% of area median income).

Reasons for Implementing STR Regulations

The rise in STR units has led to increasing concern about its effect on the housing market, the most common concern being rising rents and increasing home prices. Among tourist destinations, additional common concerns are the supply of year-round housing, lodging for the high-season workforce, and the negative externalities from tourism.

Places with many short-term rentals have found that it can increase rent and home prices. A report from the Economic Policy Institute on the costs and benefits of Airbnb explains that the main cost of STR expansion is a potential increase in housing costs: "The largest and best-documented potential cost of Airbnb expansion is the reduced supply of housing as properties shift from serving local residents to serving Airbnb travelers, which hurts local residents by raising housing costs." ¹¹

A 2017 paper studied the short-term effects of the growth of Airbnb in Boston neighborhoods on the rental market. The study found that a one standard deviation increase in Airbnb listings is associated with an increase in asking rents of 0.4 percent. Another paper from 2017 found that a one percent increase in Airbnb listings is associated with a 0.018 percent increase in rental rates and a 0.026 percent increase in house prices in the U.S. The authors say that "while these effects may seem very small, consider that Airbnb's year-over-year average growth is about 44%," though that growth rate has since dropped considerably. They also found that ZIP codes with higher owner-occupancy rates are less affected by increases in Airbnb listings.

A 2019 report from the Economic Policy Institute reviews the existing literature on the impact of short-term rentals on housing markets and argue that an increase in Airbnb units can increase rent prices: "Because housing demand is relatively inelastic (people's demand for somewhere to live doesn't decline when prices increase), even small changes in housing supply (like those caused by converting long-term rental properties to Airbnb units) can cause significant price increases." ¹⁴ In particular, the authors cite the work of Wachsmuth which finds the expansion of Airbnb in New York City was associated with an increase in average rents of nearly \$400 annually. ¹⁵

¹¹ Bivens, Josh. "The Economic Costs and Benefits of Airbnb: No Reason for Local Policymakers to Let Airbnb Bypass Tax or Regulatory Obligations." Economic Policy Institute, January 30, 2019. https://www.epi.org/publication/the-economic-costs-and-benefits-of-airbnb-no-reason-for-local-policymakers-to-let-airbnb-bypass-tax-or-regulatory-obligations/.

¹² Horn, Keren, and Mark Merante. "Is Home Sharing Driving up Rents? Evidence from Airbnb in Boston." Journal of Housing Economics 38 (December 1, 2017): 14–24. https://doi.org/10.1016/j.jhe.2017.08.002.

¹³ Barron, Kyle, Edward Kung, and Davide Proserpio. "The Effect of Home-Sharing on House Prices and Rents: Evidence from Airbnb." SSRN Scholarly Paper. Rochester, NY, March 4, 2020. https://doi.org/10.2139/ssrn.3006832.

¹⁴ Bivens, "The Economic Costs and Benefits of Airbnb"

¹⁵ Wachsmuth, David, and Alexander Weisler. "Airbnb and the Rent Gap: Gentrification through the Sharing Economy." Environment and Planning A: Economy and Space 50, no. 6 (September 1, 2018): 1147–70. https://doi.org/10.1177/0308518X18778038.

Some communities have sought to frame the above cost and price issues in equity terms as additional reasons to regulate STRs. Findings from a 2019 study on Washington, D.C. suggest that having short-term rentals in the neighborhood can significantly inflate property prices. ¹⁶ An Urban Institute article discusses the equity implication of unregulated STRs, saying there can be inequities based on race, ethnicity, income, and class. ¹⁷ The report from the Economic Policy Institute points to similar issues surrounding equity. ¹⁸ Because homeowners are the ones who benefit from STR income, any preexisting disparities in homeownership would also manifest in disparities among those who benefit from the wealth created by STRs and those who feel the burdens of increasing rents. ¹⁹ In tourist destinations like Provincetown, restricting STRs also creates equity concerns on the other side of the ledger. Where overnight lodging is in high demand and supply constrained, fewer STRs will likely put the most pressure on low-income visitors, who will face higher prices, and families, whose lodging needs may be better suited to homes rather than hotels and inns.

Another push toward STR regulations that is especially common in tourist destinations is the possibility that new rules could address negative externalities in neighborhoods (e.g., noise, traffic, etc.) and combat a shortage of affordable and workforce housing (both year-round and high season). In Truckee, California, a town near Lake Tahoe that is a popular tourist destination, the town started the process of creating STR regulations in late 2020 which "intended to strike a balance between welcoming visitors to Truckee while reducing neighborhood nuisance issues associated with short-term rental properties." The Lake Tahoe region has a tourism economy focused on outdoor recreation. Summer is the busiest time of year, with visitation peaking in July like Provincetown, but winter is also a major draw, with mountain resorts opening in November and staying open through April. Additionally, leaf peeping in the fall and late spring skiing bring in many visitors in the shoulder seasons. The Town of Truckee added new regulations in 2022 in response to the regional shortage of housing available to the local workforce.

In Palm Springs, California, the city passed new STR regulations in late 2022. One of its goals was "to minimize adverse effects of vacation rental uses on surrounding residential neighborhoods." The city was also concerned about the impact of STRs on the housing supply and rental prices. Most other communities have adopted STR regulations for similar reasons of trying to reduce issues in residential neighborhoods and issues with a restricted housing supply that can lead to higher rent and home prices.

¹⁶ Zou, Zhenpeng. "Examining the Impact of Short-Term Rentals on Housing Prices in Washington, DC: Implications for Housing Policy and Equity." Housing Policy Debate 30, no. 2 (March 3, 2020): 269–90. https://doi.org/10.1080/10511482.2019.1681016.

¹⁷ Godinez-Puig, Luisa, and Jorge González-Hermoso. "With an Abundance of Short-Term Rentals, Who Wins and Who Loses?" Urban Institute, December 19, 2022. https://www.urban.org/urban-wire/abundance-short-term-rentals-who-wins-and-who-loses.

¹⁸ Bivens, "The Economic Costs and Benefits of Airbnb"

¹⁹ Godinez-Puig and González-Hermoso. "With an Abundance of Short-Term Rentals, Who Wins and Who Loses?"

²⁰ Town of Truckee website, https://www.townoftruckee.com/government/administrative-services/short-term-rental-division.

Housing Development and STR Policies in Provincetown

While the housing shortage is a serious problem in town, it is worth noting that the town has taken steps towards addressing this issue. Furthermore, any new regulation of STRs would occur in the context of the existing framework. The following section summarizes existing and planned housing developments and some of the more recent changes to STR policies.

Of all Cape and Island towns, Provincetown has the highest share of its housing counting towards the Low-Income Housing Inventory. At just over nine percent, this percentage represents deed restricted units for low-income residents. As a result, Provincetown is very close to the 10 percent threshold required by Chapter 40B. The planned housing project at the former VFW will bring Provincetown across that threshold with the addition of 65 affordable units. Construction is planned to begin in 2024.

The VFW is just one of several planned housing projects. In the fall of 2023, the Barracks, a 108-bed seasonal worker dormitory with an additional 16 year-round units will begin construction. The town recently selected a developer for a year-round market rate rental project with 40 units at the current site of the town's police station. Through the Provincetown Year-Round Market Rate Rental Trust, Provincetown currently operates Harbor Hill, which contains 28 units of year-round rental housing restricted to middle income workers and residents.

As an additional strategy to target supply directly, the town has worked towards inclusionary zoning, by implementing a requirement that one in every six units of housing in a new development be affordable or community housing units. Projects smaller than six units, or that are otherwise unable to include affordable units in the plan, make payments to the housing fund proportional to the size of the project. Projects that incorporate certain amounts of affordable or community housing can also benefit from density and height bonuses as well as fee reductions.

In January 2023, Provincetown made notable changes to its STR regulatory framework. The changes focused on fee and licensing changes coupled with improvements in compliance monitoring. Following Select Board approval on January 9, 2023, the Provincetown Board of Health (BOH) increased the fee for a Short-Term Rental Certificate to \$750 per year, effective as of January 19, 2023. In addition to the fee increase, the BOH also updated its Rental Certificate program to create two types of certificates: a Long-Term Certificate (rental period of greater than 31 days) and a Short-Term Certificate (rental period of 31 days or fewer). As mentioned, the fee for the new Short-Term Certificate will be \$750 for one year compared to the Long-Term Certificate fee of \$300 for three years, which is unchanged from the previous Rental Certificate fee. This differentiation in Rental Certificates will help the town gather data that more accurately reflects the type and duration of rentals taking place in Provincetown.

All properties that are rented, or offered for rent, must have the correct Rental Certificate. This includes property that is rented as part of a work agreement, or other non-payment arrangement. All rental properties are required to meet the Minimum Standards of Human Habitability (105 CMR 410). Properties operated solely as hotels, motels, and bed and breakfasts do not require rental certificates. If a property is discovered to be rented without the correct Rental Certificate, double fees will be assessed. Fines of up to \$300 per day may be applicable as well.

After the new certificate and new fee structure was created for short-term rentals, the town contracted with Granicus to help with STR compliance. The town began using Granicus compliance software in the spring of 2023 to monitor and enforce adherence to STR regulations. Granicus helps identify properties that are being advertised as rentals on online platforms like VRBO and Airbnb. The software's integration required some adjustment and collaboration with Granicus to ensure its accuracy and effectiveness.

The town works closely with Granicus to ensure compliance with the new regulations. Properties that appear on online platforms without proper rental certificates receive letters from the town providing proof that their STR listing has been found online, but that there is no valid STR certificate on file with the town. If the owners do not respond, a second compliance letter is sent. Through this process, 53 percent of property owners who received a non-compliance letter applied for and acquired the required rental certificate (as of August 1, 2023).

Through this work, the town now believes that the compliance season, during which a higher number of non-compliant units are anticipated, is expected to occur between late fall and early spring. It is during this period that the town expects non-compliant STR listings to rise and so will be working to identify, contact, and bring them into compliance.

If subject to a compliance action, property owners can achieve compliance in one of two ways: (1) by removing their online rental listings or (2) by obtaining the required rental certificate. Properties that achieve compliance through the removal of online ads are placed on a watch list to ensure continued compliance. If the property appears on online platforms again, Granicus will identify it for further compliance and enforcement actions.

The following provides specific data related to the town's compliance efforts in the last four months:

- Number of letters sent in the first round of enforcement: 78
- Number of compliance letters sent in the second round of enforcement: 29
- New certificates issued from these compliance efforts: 34
- Letters sent in error/further discussion with property owner confirmed they were not operating an STR outside of our regulations: 14
- Number of additional enforcement letters to be sent at this time: 7
- Total amount collected from STRs registrations since BOH changes in January 2023: \$198,775
- Amount collected directly from Granicus STR compliance work as of August 8, 2023: \$25,500
- Number of STR certificates applied for since the regulation change: 265
- Number of LTR (long-term rental) certificates applied for since the regulation change: 63

Types of STR Regulations

The review of literature and STR regulations in other places found many different methods of regulating the supply of STRs. There is not yet a uniform method or even an emerging consensus for the best way to regulate them. Most communities are trying a method that best meets the needs of their residents and their specific community. These regulations also vary by state due to different policies and regulations.

Quantitative Unit Caps

Many cities and towns that have undertaken regulation of STRs have issued some type of quantitative cap based on a fixed number of permits or based on a percent of the housing stock. There are many different methods to determine what that cap should be. Places must determine if they want to reduce the existing number of STRs, maintain the existing level, or allow for a slightly higher number than the existing number of permits.

Truckee has a cap of 1,255 short-term vacation rentals, which was the number of active registered short-term rentals at the end of 2021. This cap is equivalent to 9.2% of the town's housing stock and roughly one-fifth of the seasonally vacant homes. Like Provincetown, Truckee's share of seasonally vacant homes approaches half of the housing stock. When Truckee adopted the regulations in 2022, the town decided to cap the number of STRs at the existing level of permits. There is a waiting list for when STR permits become available when homeowners do not renew their permits.

Palm Springs has a percentage cap and only allows 20 percent of homes in a residential neighborhood to operate as short-term rentals. The city grandfathered in existing permits and the applications that came in before the new regulations. The city maintains a website with up-to-date information related to specific vacation rental neighborhood percentages (to see if they are at 20%) and a map to assist with identifying the neighborhood a property is in.²¹

Frisco, Colorado, near the ski mountain of Breckenridge, capped the number of short-term-rental properties within its jurisdiction at 900, or 25% of the local housing stock, above the existing number of STRs, back in October 2022.

Lincoln County, Oregon, which is in a coastal part of the state, implemented a rule that between one and two percent of housing stock can be STRs. The exact percentage depends on how many tax lots were in each subregion within the county.

²¹ City of Palm Springs website, https://www.palmspringsca.gov/government/departments/special-program-compliance/vacation-rentals-1098

Folly Beach, South Carolina, recently passed a cap of 800 STRs, which is below its current level of 1,200 in an effort to reduce the number to 800, which was the number of licenses pre-pandemic in 2020. The city staff estimate it could take about three years for Folly Beach to drop back down to 800.²²

The city council of Santa Rosa, California, voted in August 2022 to limit the number of STRs in its jurisdiction to 198.

Considerations for quantitative caps:

- There could be issues with grandfathering in existing permits or already submitted applications for STR permits.
- There are many ways to determine what the cap or percentage should be for STRs, and the community has to decide what makes the most sense for it.
- If a cap is established in relation to the current level of STRs, that actual level must be well known.
- Requires the community to determine if it wants to maintain the existing level of permits, reduce the number of permits, or allow an increase in the number of permits.
- It could be complex or difficult to manage caps for each neighborhood or different caps for certain areas.

Zoning Regulations

Another STR regulation strategy is to use zoning rather than a quantitative cap. Some places only permit STRs in certain zones or have different regulations for residential zones. For example, in North Carolina, the state ruled that local municipalities cannot impose a cap on STRs; however, the City of Asheville has limited STRs through zoning laws. STRs are only permitted in the "resort zoning district". This is a way to restrict STRs in residential neighborhoods without a traditional cap.

The report from the Economic Policy Institute on the costs and benefits of Airbnb also notes how zoning can help with the negative externalities caused by STRs in residential neighborhoods: "These externalities are why hotels are clustered away from residential areas. Many Airbnb rental units are in violation of local zoning regulations, and there is the strong possibility that these units are indeed imposing large costs on neighbors." ²³

²² Caitlin Byrd. "Folly Beach Votes to Cap Short-Term Rentals at 800 in Closely Watched Election." Post and Courier, February 7, 2023. https://www.postandcourier.com/news/folly-beach-votes-to-cap-short-term-rentals-at-800-in-closely-watched-election/article 91575d5a-a638-11ed-a317-236a721e7779.html.

²³ Bivens, "The Economic Costs and Benefits of Airbnb."

Considerations for STR zoning regulations:

- STR zoning regulations can help minimize the negative externalities in residential zones.
- Provide the ability to differentiate regulations by zone.
- Zoning changes can be difficult to pass in Massachusetts towns due to the requirement of a supermajority vote for most changes.

Additional STR Restrictions: Restricting Number of Nights or Rental Instances

In addition to having some type of cap or restrictions on STRs, many communities have included additional restrictions on STR permits such as rules on the number of nights owners can rent their homes per year or the number of visitors allowed at one time.

Palm Springs limits the number of times that STR owners can rent their homes to 26 instances per year. Palm Springs also created a junior permit, which has a reduced annual fee and is only for six rental contracts per year. The junior permits do not get factored into the neighborhood 20 percent cap.

In 2022, Great Barrington implemented a cap on rental days to 150 unless the owner is present on the property, in which case rental days are unlimited.

Additionally, some places limit room nights to a minimum length. Holmes Beach, Florida implemented a 30-night minimum stay in 2007, before the rise of app-based short-term rentals. The hope was to decrease the usage intensity and turnover of short-term units in town. Florida has since banned municipalities from regulating the length and number of stays in their communities.

Considerations of these additional restrictions:

- Limiting the number of nights or times per year a STR can be rented could increase the prices for tourists.
- Junior permits or lower-tier permits could help with people who only want to rent a few times a year. These junior permits also do not need to count toward the cap.
- Restricting the number of nights or times per year may not free homes for other uses like workforce housing given the ability to generate large revenues from these rentals in a short period of time.
- High room night minimums clash with the popular week and weekend long events that bring people to Provincetown.
- Especially during high demand periods, room night minimums do not necessarily reduce crowding. A rental occupied by one group for four weeks or four groups for one week each does not change the number of visitors to town, though there are likely material differences in

average spending per day and the types of businesses patronized between in the "long stay" and "short stay" groups.

Additional STR Restrictions: Restricting to owner-occupied homes

Some other additional restrictions seen with STR regulations are ones that limit rentals to owner-occupied homes, or where the home is the primary residence for at least most of the year. In the paper, "The Effect of Home-Sharing on House Prices and Rents", the authors say absentee landlords reduce the housing supply and increase the cost of living for local renters. They say their results show that one way to reduce the effect on local renters would be "to limit how many homes can be added to the short-term rental market, while still allowing owner-occupiers to share their extra space." 24

In Asheville, the city has "homestay" permits for residentially zoned areas that are separate from STR permits. These homestay permits are for where residents live in the house or apartment full-time while renting one to two bedrooms; and where they rent out these bedrooms for less than 30 days at a time. Owners must live on-site full-time to rent bedrooms in their homes.

The City of Wilmington in North Carolina also has homestay lodging for renting individual bedrooms, where the host lives and remains onsite during the rental period. For what Wilmington calls "wholehouse lodging" – the rental of an entire dwelling without a host present – a local operator must be within 25 miles and available 24 hours a day.

Palm Springs' ordinance only allows vacation rentals and home sharing is only allowed as ancillary and secondary uses of residential property in the city. This ordinance also states that an owner may only be issued and benefit from one Vacation Rental or Homeshare Registration Certificate at any time, meaning one owner cannot own multiple STRs. Great Barrington's new policy also limited owners to one STR per person, and only allows STRs in properties owned by individuals or LLCs owned by individuals.

These strategies try to increase local ownership of the STR industry. These policies also make it more difficult for companies and people to scale up STR ownership into a full-time business. This aims to prevent owners who are only buying homes as an investment and do not live in the area.

Another restriction related to this is in Truckee which has implemented a 365-day waiting period after a home sale before the new owner may register an STR. This may prevent people from buying a home solely for the purpose of making it a short-term rental.

Considerations for these restrictions:

• Can make buying or owning a second-home less affordable for those who need the rental income to pay the mortgage.

²⁴ Barron, Kung, and Proserpio, "The Effect of Home-Sharing on House Prices and Rents."

- There can be different levels of permits for owner-occupied rentals that vary in cost based on the intensity of STR use. Full-time STRs would pay higher fees than owner-occupied homes that only rent for a short time each year. These rentals also would not need to count toward a cap if a fixed cap was implemented.
- There are other related regulations to discourage owners from buying a home just for a short-term rental such as limiting one permit per person or instituting a waiting period for a permit.
- Owner occupancy among STRs throughout the Cape appears to be very low. Out of 1,317
 registered STRs in the state registry in Provincetown, 186 had the owner-occupied flag, or 14
 percent.

Additional STR Restrictions: Restricting to single-family homes

In both Truckee and Palms Springs, their ordinances included restrictions on using apartments as STRs. Truckee plans to phase out STRs in Accessory Dwelling Units (ADUs) and Multi-Family Dwelling Units and no new registration certificates will be issued for these property types. Palm Springs limits vacation rental and homesharing lodging to single-family dwelling units and prohibits these uses in apartments.

Considerations of restricting to single-family homes:

- Allows apartment housing stock to stay open for workforce or year-round residents.
- Some owners might use an ADU or rent one half of a multi-family unit to make owning either a primary residence or a second home more affordable.

Combination of Strategies

There are also different combinations of these various regulations. For example, Breckenridge, Colorado has regulated STRs through having different quantitative caps based on the zoning. The Town of Breckenridge said it took "a zoned approach to short-term rental licensing". ²⁵ The areas are described as a Resort Properties Zone, a Tourism Zone (Zone 1), the Downtown Core (Zone 2), and single-family residential areas (Zone 3). A smaller percentage of STRs is allowed in residential neighborhoods compared to the resort and tourism zones. Areas that are zoned single-family residential can only have 10 percent of homes with an STR license while the downtown core and tourism zones can have a higher percentage as STRs. Each zone is handled separately in terms of license caps and availability of future licenses and there is a separate waitlist for each zone.

²⁵ Town of Breckenridge website, https://www.townofbreckenridge.com/your-government/short-term-rentals/license-caps-and-zoning-regulations

Table 3: Town of Breckenridge STR Caps

Town of Breckenridge STR Zones	% Allowed STR
Resort Properties Zone	100%
Tourism Zone (Zone 1)	92%
Downtown Core (Zone 2)	51%
Single-family Residential areas (Zone 3)	10%
Total	52%

Source: Town of Breckenridge

Considerations for these strategies:

- Can be complex if there are multiple different caps depending on the zoning or neighborhood.
- Limiting STRs more strictly in residential areas where they are less abundant will have little impact on the perceived externalities of the industry.

Other strategies: Incentivizing Renting to Workers or Year-Round Residents

Rather than regulating STRs, other strategies to address needs like workforce housing can be to incentivize homeowners to rent to local workforce.

In Truckee, the town was dealing with similar issues to Provincetown with a shortage of workforce housing for seasonal workers. In response, the town passed programs to help incentivize short-term workforce housing rentals. The Town of Truckee Workforce Lease to Locals Program (launched on October 14, 2020) "aims to unlock existing housing stock for the local workforce." The program includes incentives for homeowners that shift from renting their home short-term — or not renting at all — to 5-to 12-month-plus lease arrangements with locally employed tenants. Participating and qualifying homeowners will receive grants ranging from \$2,000 to \$18,000 (up from \$1,000 to \$10,000 in 2020) and free tenant-matching services. Tenant qualification in this program is based on annual income. The program has housed 276 people across 126 units of housing as of July 2023 in a city of 17,000.

Neighboring Placer County has a similar Lease to Locals program and uses the same tenant-matching service, but the requirements are work based rather than income based. A tenant must have proof of work of at least 20 hours in the area and not be related to the owner. The program provides a \$2,500 grant per qualified tenant housed through the program for a seasonal rental and a \$6,000 grant per tenant for a long-term rental.

In Summit County Colorado, home to the Breckenridge ski resort, property owners who provided units could receive up to \$20,000 per property depending on the number of rooms and the length of the lease. Throughout the program's 2021-2022 timeframe, about \$915,500 of incentives were awarded. This rounded out to an average incentive award of about \$5,950 per bedroom and about \$18,570 per unit, according to Summit County Government Communications Director, David Rossi. Summit County also used the Lease to Locals framework and had the most successful program in the entire network. In

general, all these lease-to-locals programs require that the home was previously rented short-term or at least not occupied on a full-time basis prior to entering the program.

Truckee has a second program, the Short-Term Rental Workforce Housing Token Pilot Program. Described as "a new and innovative approach to workforce housing creation in Truckee," it is intended to incentivize the creation of workforce housing (long-term housing) by offering in-kind payment in the form of tokens, which are redeemable for a Transient Occupancy Registration Certificate – an STR permit without being subject to the waitlist.

Considerations of these incentive policies:

- Potentially not enough of an incentive to motivate homeowners to rent to workers rather than short-term renters. Sedona in Arizona implemented a similar program to the above-listed places and has struggled to find owners willing to participate.
- Could end up being high payouts for low impact.
- Money spent on such a program could go towards developing a bank of affordable and/or dedicated worker housing.
- Currently being implemented in many places, with tangible, if small, results.

Impacts of STR Regulations

It is difficult to measure the impact of regulations because many regulations and STR policies are still new enough that there has not been sufficient time for them to be fully studied and evaluated. More specifically, there are even fewer studies that have evaluated STR policies and regulations with a view to their impact on home prices or rents.

One 2017 study looked at a group of neighboring Florida coastal communities. One community had implemented a regulation on short-term rentals, requiring that renters stay a minimum of 30 days. The neighboring towns had planned on implementing similar policies but were prevented by a state regulation which took away control of short-term rentals from those municipalities. The study found that overall, the STR restrictions brought down property values, but that this change varied by the density of the residential zone. Low-density zones saw larger decreases, on average of 15 percent. However, high-density residential zones saw a smaller negative impact and in the highest density sections of the town, property values actually increased. This is because in low-density zones, which experienced less externalities from STRs, the primary impact of regulation was to make STRs less convenient. In high-density zones, where the high number of STRs caused significant externalities, restrictions somewhat improved the value of properties by reducing those externalities.

²⁶ Kim, Jin-Hyuk, Tin Cheuk Leung, and Liad Wagman. "Can Restricting Property Use Be Value Enhancing? Evidence from Short-Term Rental Regulation." Journal of Law and Economics 60 (May 2017).

Another study from 2021 looked at the Los Angeles short-term rental market. Los Angeles started to regulate STRs as if they were hotels. These restrictions halved the short-term rental market in the area and in response house prices and rent fell by two percent.

A 2020 study on STR regulations in New Orleans found that there was a "one-time decline" in Airbnb listings following the enforcement of the city's regulations, which focused on the French Quarter. After the decline, growth continued in the number of STRs, but in the neighborhoods outside of the French Quarter. The study found that "the successful reduction of [Airbnb listings] in the French Quarter provides evidence that neighborhood limits or restrictions can prevent listings in certain parts of a city, but it must be acknowledged that this will likely cause growth in other surrounding areas." This study did not discuss the effect on rents or property values in New Orleans but instead focused on how the number of STRs increased in certain residential areas, which caused concern for local residents.

The Town of Truckee completed a yearend review of the STR ordinance amendments and their impacts in summer 2023. Soing forward, the reviews will be conducted bi-annually. Initial evaluations show some reduction in home prices, but it is difficult to separate single-year impacts from other simultaneous changes in the housing market, such as those from rising interest rates nationally and extreme weather events locally. One area where the results do seem robust is that the increased enforcement that accompanied the new regulations has significantly reduced complaints to the STR Helpline from members of the public, suggesting that nuisance levels have decreased. The research team recommends Provincetown follow the ongoing evaluations in Truckee and couple that with a review of the Census data on seasonally vacant homes there to see how the ongoing implementation of these policies change not only prices and externalities but also if they change the percentage of homes that are actually used as year-round residences.

Evaluation of these different types of STR regulations discussed cannot fully be known until enough time has passed to see an impact. The literature so far suggests that regulations of any kind on STRs will have the following impacts:

- The price of STR rentals will increase, shifting the local tourism market towards higher income visitors.
- May reduce nuisance levels from STRs.
- May reduce property values by removing or reducing a valuable use for units not under the cap.
- May increase property values in places where excessive STR growth was causing externalities.

²⁷ Holm, Eric Joseph van. "Evaluating the Impact of Short-Term Rental Regulations on Airbnb in New Orleans." Cities 104 (September 1, 2020): 102803. https://doi.org/10.1016/j.cities.2020.102803.

²⁸ Johnson, Rosie. "Short-Term Rental Ordinance Year One Performance Review and Council Direction on Potential Policy Revision Topics." Town of Truckee, August 8, 2023. https://portal.laserfiche.com/Portal/DocView.aspx?id=59661438&repo=r-6a91ddbc.

- May increase the number of STRs in neighboring communities.
- Will incur enforcement costs.
- Remains unclear whether regulations will change the mix of vacation homes and year-round homes in vacation destinations.

The predicted impact of any STR regulation on the affordability of the Provincetown housing market is likely small. Literature suggests that in many places the growth in STRs only caused small increases in home prices so reducing their supply will likely only undo that small change. While most of these studies focused on urban areas that are very different from Provincetown, one of the biggest differences is the level of demand for non-residential uses of homes. Unlike in cities, there is extremely high demand for vacation homes in Provincetown. Demand for these kinds of units is very inelastic and if STRs are restricted, permanent vacation homes may fill the space they left behind. The growth in seasonally vacant homes between 1990 and 2010 in particular suggests a vacation home market that did not need the innovation of app-based rentals to grow.

The following table compares different regulations and scores them on their predicted impact. Afterwards the scoring will be explained in detail.

Table 4: Summary of STR Regulation Impacts

Type of Regulation or Policy	Impact on Number of Short- term Rentals	Impact on Housing Affordability (Rent and Home Prices)	Impact on Housing Availability (Housing Supply)	Possible to have in Provincetown?	Certainty
Fixed Cap, by count or percentage of housing stock	High	Low	Low	Possible	High
Zoning Regulations for STR zones	High	Low	Low	Difficult	Moderate
Restricting number of nights rented in a year	Low	Low	Low	Difficult	High
Restricting STRs to owner- occupied homes	High	Low	Low	Possible	High

Type of Regulation or Policy	Impact on Number of Short- term Rentals	Impact on Housing Affordability (Rent and Home Prices)	Impact on Housing Availability (Housing Supply)	Possible to have in Provincetown?	Certainty
Restrictions on STRs to single-family homes	Low	Low	Low	Difficult	High
Limit STRs to one permit per owner	Low	Low	Low	Possible	High
Incentive programs to use housing for year-round residents or workers	Low	Low	Moderate	Possible	High

Source: UMDI Analysis

Fixed Cap, by count or percentage of housing stock

Impact on Number of Short-term Rentals:

Unlike other regulations, a fixed cap can have a precise impact on the number of short-term rentals depending on where the cap is set, so the impact on the STR count can be exactly what the town would like it to be. A cap requires enforcement to be effective but there is a growing set of tools to monitor and enforce short-term rental policy.

Impact on Housing Affordability:

Most studies on the impact of increasing STRs on communities suggest they change prices by a small amount. Additionally, the historical increase in the number of seasonally vacant units in town suggests that even in the absence of STRs listed via services like Airbnb, Provincetown homes will be desirable as vacation homes, largely unoccupied for most of the year. This will keep prices high even if STRs are severely restricted.

Impact on Housing Availability:

Again, given the competing use of STRs as vacation homes, regulating STRs is unlikely to encourage a substantial number of owners to transform their homes into year-round housing as it would require the owners to give up use of the home themselves.

In summary, a cap on units is predicted to have a high impact on the number of STRs, depending on the level of the cap, and a low impact on affordability and supply of housing. The potential impact is closely tied to the level of the cap. A cap below the current level of STRs being the most impactful and a cap at or above current levels having little to no impact on current pricing. Note that the statutory cap and the

actual count could differ greatly depending on any requirements to honor pre-existing non-compliant uses.

Some interviewees believe that a fixed cap will not lead to people renting year-round. When asked how he thought homeowners would respond to a possible fixed cap on short-term rentals, Jason, a local realtor, voiced skepticism: "It's not going to achieve what they want. Because if they cap them, or they limit them, people are not-they're not going to rent year-round. They'll rent for the month. They'll rent for the month or two months, or a couple of months or a month to a group and let them use it where each one takes a week. They're just not-That's not the way to do it. That's not the way to achieve getting more housing."

There is concern from homeowners who believe a cap would hurt their property value. Matthew, a local resident who works in housing development, describes his concern: "I think that's another big issue too when it comes to short-term rental tax. Like I had, even though I'm an advocate for doing something about short-term rentals, half of my net worth is in my condo that I own. I live in Provincetown, and I live in it year-round, but to be able to say to me, gee, when you go to sell it, 'I'm sorry, you can't sell it to somebody who could use it as a short-term rental.' You've just taken away a couple \$100,000 in my in my assets. And so even capping short-term rentals is complicated. How do you compensate people who bought it with that use possible and the value of the property and the debt that they took on? If you're going to take it away, I think you've got to find some way to compensate people who had bad luck and didn't buy it early enough and put it on Airbnb early enough so that they qualify for an existing short-term rental certificate."

Zoning Regulations for STR zones

Impact on Number of Short-term Rentals:

Caps or other restrictions tied to zoning in town are also able to have a direct impact on the number of STRs. Even more so than a townwide cap, these caps need to be based on good data on the number and location of STRs, and enforcement must be sufficient to make sure the regulation is implemented.

Impact on Housing Affordability:

Like townwide numeric caps, this will likely have little impact on prices and what impact it does have will vary by zoning district. Zones where they are severely restricted may have the largest reduction in prices, while zones designated as open for STRs may see no change.

Impact on Housing Availability:

The impact on availability will be proportional to the strictness of the regulation. Where STRs are heavily restricted, some owners may choose to rent year-round, but the amount of people to do so is likely small for the same reasons as stated in the previous section.

A change of similar impact to an overall cap is predicted but there is less certainty about the exact effects because of ambiguity about the rules for each neighborhood and their interaction with existing housing stock and housing uses. Perhaps most importantly, conversations with town staff suggest there is little enthusiasm locally for revisiting zoning as a tool to regulate the STR market.

Related to zoning, some argue that allowing for increased density, for example with more accessory dwelling units, duplexes, townhouses, and multifamily construction, could help to increase the housing supply as would expansion of town infrastructure such as sewage and water. Spencer, a Provincetown Select Board Member, argues:

"We also are undergoing a significant expansion of sewer capacity right now as a town, so we do have limitations around our capabilities for sewer access based on the system that is available today. And I think that is a limiting factor for density in many parts of town that are not serviced by that system. I personally believe that denser housing regardless of whether it's deed restricted or not, does eventually lead to a better situation for supply and affordability. Particularly in a place that is both resource constrained and particularly land constrained as Provincetown, since 70% of the land area of the town is occupied by the National Seashore."

Local resident and homeowner Jason believes the residents in existing single-family zones probably would not want denser housing in their neighborhoods so there could be an issue trying to expand housing density this way. He said, "I'm in one of the only communities that has single-family homes... (listing neighborhoods) those are all the single-family zones where they're still single families and people probably want them to stay that way."

Alternative or Indirect Caps:

Policies like room-night caps, restricting STRs to owner-occupied homes, and restricting STRs to single-family homes are effectively quantitative caps set to the level of owners or homes that fit within each regulation.

Impact on Number of Short-term Rentals:

The owner-occupancy restriction would have the strongest impact on short-term rental numbers. The department of revenue short-term registry list suggests 14 percent of STRs in town are owner-occupied. Restricting STRs to just these homes would severely reduce the number of STRs in town. The net impact would likely be less than an 86 percent reduction in active STRs because some owners may transfer their residence to Provincetown to allow themselves to rent in the peak summer months, but they might just as well leave their homes empty outside of when they use it themselves. Additionally, if prices climb enough, more owner-occupied units may come online.

A restriction on STRs to single-family homes would have a strong effect as well. Data on occupied homes in Provincetown from the Census suggests just over half of all homes are single family, either detached or attached.²⁹ If the seasonally vacant housing stock reflects this makeup as well, the STR market may be effectively halved.

²⁹ The Census tracks the number of units in a structure. Single family homes best fit single units. If a single unit is in a standalone structure, it is detached. If a unit is part of a block of housing, such as a row house, where the dividing wall goes from

Restricting room nights would have the least impact. Like a quantitative cap on units, a limit on room nights would need to consider current activity levels, which are a median of about 90 days rented per year. Data on pricing suggests that even in a short amount of time, an STR owner could earn a large amount of revenue, so restricting rental nights aggressively may not encourage many owners to shift to a long-term housing model. Conversations with the town emphasized that there are many weekend and week-long events which would still be profitable times for short-term rentals and could fit underneath even an aggressive cap on nights. Inversely, room night minimums, such as restricting rentals to periods of a week or more would severely discourage short visits by tourists. Data from AirDNA suggests the average reservation is a week or less in length.

Impact on Housing Affordability:

Vacation housing would remain an extremely valuable use for homes. As in all the above cases, it is likely that many owners would convert their properties to full-time vacation properties rather than move to the area or rent them long term.

Impact on Housing Availability:

These regulations are unlikely to have a significant impact on the affordability or supply of housing and will not incentivize many owners to leave the STR market to become owner occupants or landlords to long-term tenants.

Complementary

The following policies can stand alone or alongside previously mentioned policies.

Limit STRs to one permit per owner

Impact on Number of Short-term Rentals:

This policy would slightly reduce STRs because there are a limited number of multi-unit owners. An analysis of owner names in property records compared to the town's registry list suggests three percent of owners with registered STRs own multiple STRs across several parcels in town. That three percent of owners own seven percent of town parcels, with most owners having two parcels under their name. This analysis is based on the stated name of the owner. Some owners may have a unique LLC, trust, or other name for each parcel. This count is also based on the town's registry list from March of 2023 which was still reaching full compliance so not all owners are captured in this analysis.

Impact on Housing Affordability and Availability:

By only reducing the number of STRs slightly, the overall impact on prices will be very small. Multiple STR owners are few which would make a regulation like this practical but potentially unnecessary. Most

ground to roof, it is treated as a single unit, and labelled as attached. Over 80 percent of Provincetown single family homes are detached.

towns that implement this policy are worried about corporate owners of properties driving up prices, but such owners appear to be quite rare based on this analysis.

In general, this regulation would have a very small impact in terms of making housing more available or affordable. It also has limited impact on the overall STR market.

Financial incentive programs to use housing for year-round residents or workers Impact on Number of Short-term Rentals:

Evidence from other communities suggests most owners would not be interested in such a program. Short-term renting remains the more profitable and convenient endeavor in most places, but a small number of owners could certainly be convinced to participate rather than renting out short-term. It is possible that owners could cycle in and out of programs as their needs changed by, for example, bringing in long-term tenants one year when the owners do not expect to travel to Provincetown much and moving back to short-term renters the following year to regain personal use of the property.

Impact on Housing Affordability and Availability:

These programs often implement a rental price cap which, depending on where it is set, could make units very affordable. Truckee implemented a rental price cap of \$3,500 for subsidized units. Low-income residents may still need to turn to other subsidized affordable units in the area if that cap is still too high for their budget. The lower the price cap, the larger the incentive will need to be to bring owners on board.

As a volunteer program with considerable incentives, there is little downside for property owners if the program fits their lifestyle. Survey data suggests many homeowners on the Cape maintain homes there to use them, and converting these units to year-round renting would eliminate that flexibility. But this program is still quite practical for Provincetown, though there is a financial cost to the town with some programs spending nearly \$20,000 per unit per year. Truckee, California implemented the program and, for a city of 17,000 people, was able to house 276 people under the program between October 2020 and July 2023 at a cost of around \$4,500 per tenant for a 12-month lease. This equates to 1.6 percent of the local year-round population though some of those served were seasonal employees. For a town the size of Provincetown, this share would be the equivalent of housing 60 persons.

Earlier in this report, a revenue comparison between short- and long-term renting in Provincetown found short-term renting could generate the same revenue as a long-term rental in less than 80 days. This analysis can be extended to estimate what the incentive would need to be to encourage a short-term renting owner to rent year-round. Assuming an owner rents a unit short term for 92 days (June through August) at the peak July rate of \$468 the owner would earn around \$43,000 compared to \$28,800 for a year of renting at the two-bedroom market rate. This suggests a gap of just over \$14,000³⁰

³⁰ The short-term revenue estimate also includes the cleaning fee. With that value subtracted from the revenue estimate, the gap between long-term and short-term revenue would be smaller.

which is comparable to the per unit rates some towns have implemented for these incentives. An outstanding question is what value owners put on their own use of the property. An incentive simply covering the revenue differential between short- and long-term renting may not be sufficient compensation for owners who plan on using the unit themselves in a given year or season. The second homeowner survey suggested most owners are interested in turning these homes into permanent residences. In the meantime, they may be compelled to rent year-round, and spend the summer season elsewhere, if the incentive is properly set.

Alternative Pathways to Increase the Supply of Attainable Housing

Given the limited impact of the above policies on increasing the supply of attainable housing, Provincetown should consider other policy levers to increase the supply of attainable housing. Even if the STR policies and regulations described here are implemented, they are unlikely to reduce home prices and rents to a level that is affordable to many of the essential workers in town. This report previously described Provincetown's specific planned projects and recent policy changes in the section **Housing Development and STR Policies in Provincetown** on page **34.**

Attainable housing can include both subsidized affordable housing, housing that is only available to individuals at specific income brackets (such as public housing), and naturally occurring affordable housing (NOAH). While there is a need for all forms of attainable housing, in our interviews we heard about a particularly acute need for NOAH and housing affordable to those earning more than the income limits for subsidized affordable housing (e.g., 30% to 60% of area median income). The challenge is that market forces in Provincetown and limitations on development due to the geography and natural characteristics of the town may make it difficult to increase the supply of housing in a manner that will bring down the cost of housing significantly. Removing zoning barriers to housing development and addressing opposition to housing construction, often known as "NIMBYism", are important pathways to increasing the supply of NOAH as the construction of new housing frees up existing units for lower income renters and homeowners through a process known as filtering. ³¹ However, in areas with an acute shortage of housing, more needs to be done. In other words, while increasing the overall supply of housing should continue to be a focus in Provincetown, alone it will not solve the affordability crisis, especially in the short term.

Thus, there is a place for housing policies that are focused on reserving some of the housing stock in the town for workers and those without the means to purchase or rent housing at market rates. The Provincetown Year-Round Market-Rate Rental Housing Trust should continue to acquire housing and pursue deed restrictions (or restrictive covenants) on units to ensure there is a dedicated supply of housing for workers. The Vail InDEED program could serve as an example. Through the program the town has obtained deed restrictions on dozens of units from homeowners and developers to permanently limit the occupancy of a unit to individuals employed in the local county. Note that in some cases the restrictions are placed on the unit for as little as 15 to 20 percent of the unit cost. In essence

³¹ Brickman, David. "Addressing Rental Affordability by Increasing Multifamily Housing Supply." Brief. Urban Institute, August 22, 2023. https://www.urban.org/research/publication/addressing-rental-affordability-increasing-multifamily-housing-supply.

the town of Vail provides down-payment assistance in exchange for ensuring that the unit remains available to Vail residents. There are no income restrictions placed on the unit. According to a HUD case study: "Although the agreement does not limit the resale price or rent that the owner may seek, the occupancy requirement effectively shrinks the market of buyers by tying the asking price to local wages — in other words, the deed restrictions separate the local housing market and the out-of-town market, insulating locals from competition with wealthier buyers and renters." Even with as little as 15 to 20 percent down, funding deed restrictions may be challenging given the high housing prices in Provincetown.

Increasing the supply of attainable housing in Provincetown will require an on-going commitment from the town and investment of state, federal, and philanthropic resources to preserve and increase the supply of attainable housing in the area. Given that programs and incentives to construct affordable housing are often at the state level (for example the MassHousing Opportunity Fund and Workforce Housing Initiative) and federal level (for example the Low-Income Housing Tax Credit program), there may be a role for building or growing existing coalitions across the Cape and Islands and Massachusetts to advocate for additional support for affordable housing and the expansion of existing funding streams.

³² "Vail, Colorado: The Vail InDEED Program Provides Deed-Restricted Workforce Housing in a Resort Market." Case Study. HUD USER. HUD office of policy development and research. Accessed September 1, 2023. https://www.huduser.gov/portal/casestudies/study-081121.html.

Conclusion

The central policy question for Provincetown is how to balance the three main uses of homes: year-round residences, vacation homes, and summer workforce surge housing. These three uses are mutually exclusive and all integral to the identity of Provincetown as a beachside vacation destination. The very fact of the town's desirability complicates the housing problems. The research team expects that demand for both vacation homes and year-round homes is effectively unlimited with respect to the foreseeable supply of housing. In other words, there exists enough unmet demand to fully absorb any homes that become available, which does not indicate that prices will come down organically under current economic conditions.

There is evidence from studies in large urban areas that short-term rentals are associated with modest increases in rents and home prices. Thus, there is reason to believe that regulating this use could induce downward movements in prices. However, Provincetown is unique in that short-term rental units are likely to be captured as vacation homes that sit vacant or are used by family and friends rather than being rented out because demand for vacation homes is so high. Thus, the evidence gathered in this study suggests that any STR regulation is unlikely to reduce home prices or rents to a level affordable to residents or to induce owners of vacation homes to stop using the homes themselves and instead rent them out to local workers. The scale of the adjustment needed to achieve either of these goals is well beyond the scope of regulations the research team examined. For example, the median condo price in Provincetown would need to fall by as much as 70 percent to be affordable for someone earning the area median income. Similarly, it is unlikely that residents would be able to afford the rents that would make converting a \$1-million-plus vacation home into a long-term rental financially rational. For example, the largest price change found in the research, and a notable outlier, was a 15 percent reduction in one Florida community; most other studies were considerably less and in the range of low single digits. Even if this large reduction came to pass, average home prices in Provincetown would still not be affordable to those earning the area median income.

In the case of Provincetown, any regulation of STRs requires a second level of analysis. Unlike most places studied in the literature, the primary use of homes in Provincetown is not for year-round residences but rather vacation homes. Therefore, the market is set by out-of-town buyers, mainly purchasing second homes for seasonal/occasional use. Based on assessor records, these buyers are coming from high-income areas like Boston, Cambridge, New York, and San Francisco. In this environment, the question around STR regulation is whether it would induce fewer people to buy second homes, force current vacation homeowners to sell, or convert vacation homeowners to landlords. Again, there is little evidence to support this view. Even at current prices, properties in Provincetown still compare favorably to prices in the home markets of many out-of-town buyers. Additionally, Census data shows strong growth in the share of seasonal-use homes well before the proliferation of app-based rentals, suggesting that there are enough buyers who do not need rental income to afford to buy in town, resulting in fewer options for visitors without increasing options for residents.

One area where there is a paucity of data is the number of second homeowners who need rental income to afford to keep using their homes as an occasional use property. More information in this area could give a better sense of what movement could be expected in the housing market in the face of STR regulation. The owners who rent because they need to are essentially the marginal homeowner in any potential STR regulation. Any policy that limits, restricts, or otherwise hinders short-term renting would first impact these owners and it would be they that could be induced to sell or rent long-term, though that inducement does not necessarily translate to transaction prices or monthly rents that are affordable to the target population nor does switching to long-term rentals necessarily mean year-round rentals.

While the research does not support the conclusion that regulating STRs would make housing in Provincetown materially more accessible and affordable, there may be other reasons that Provincetown nevertheless chooses to do so and where regulation is shown to be effective. Though current data (and an analysis of operating costs) suggests there are few properties used solely as STRs, Provincetown may still wish to restrict this use to encourage every homeowner to have a connection to the community, whether as a resident or seasonal visitor. That can be done through restricting the number of STR licenses available to any single owner or banning corporate ownership without an obvious natural person as the beneficial owner. Other options could include room-night restrictions to limit particularly high intensity uses.

Another broad set of possible solutions is to tackle year-round housing directly. Options there include building more and/or denser developments, especially deed restricted affordable units; payments, tax breaks, or other financial incentives to induce owners to covert to year-round rentals; support for greater summer workforce housing to reduce pressure on year-round housing stocks; and regional investments in housing and transportation to expand the area that feels "local" to Provincetown. These policies vary in their expense, timelines, and potential impacts so would require some study to design effectively.

To wrap up, though it is likely that the ability to short-term rent is priced into the cost of housing in Provincetown, there is insufficient evidence to suggest that any likely policies restricting STRs would materially change the relationship between local home prices and local incomes. This study suggests that the most direct way to increase year-round housing affordability and accessibility is to evaluate policies that address it directly by targeting supply and providing incentives where useful.