ANDREW H. STAMP, P.C.
ATTORNEY AT LAW
Kruse-Mercantile Professional Offices, Suite 16
4248 Galewood St.
Lake Oswego, OR 97035

Admitted in Oregon.

Tele: 503.675.4318
Fax: 503.675.4319
andrewstamp@comcast.net

---

8 July 2021

VIA EMAIL

Newberg Planning Commission
c/o Newberg Community Development Department
P.O. Box 970
414 E. First Street
Newberg, Oregon 97132

Re: Hines/Neff Conditional Use Application, Docket no. CUP21-0001

Dear Newberg Planning Commission members,

This office represents neighbor Jonathan Umfleet with regard to Newberg File No. CUP21-0001. The Applicant is seeking conditional use permit application to allow short-term vacation rental use of the single-family house located at 412 W. Fifth Street, Tax Lot R3219CA 00100, We are opposed to this application because the nuisance-related impacts of short-term rentals are well-documented and have not been considered in this case. This neighborhood in particular does not have adequate streets and is not suitable for this commercial use of residential land.

Homeownership is one of the foundations of the American way of life that separates us from other countries. It provides stability to our communities and creates wealth. Anything that threatens the ability of citizens to reap the expected benefits of their primary residence – a cornerstone of the "American Dream" – should be carefully considered and appropriately balanced.

Unfortunately, the staff report treats the proposed use as if it is a use permitted outright in the zone. While the staff report pays lip service to the conditional use criteria, it does not address the criteria in any meaningful way. The applicable criteria require a rigorous application of the law to the facts, and that analysis has simply not been done in this case.

We understand that the hearing being held tonight is the "initial evidentiary hearing" as that term is used in ORS 197.763. For this reason, we exercise our right to demand that the record be held open for at least for the statutory minimum time period of seven days, but preferably for 3 weeks. ORS 197.763(6).

I. Legal Analysis.

The application and Staff Report fail to adequately address the relevant land use approval criteria, found at Newberg Municipal Code (NMC) §15.225.060 *et sequent.*

NMC §15.225.060 states:

> ***5.225.060 General conditional use permit criteria – Type III.***
> ***A conditional use permit may be granted through a Type III procedure only if the proposal conforms to all the following criteria:***
> ***A. The location, size, design and operating characteristics of the proposed development are such that it can be made reasonably compatible with and have minimal impact on the livability or appropriate development of abutting properties and the surrounding neighborhood, with consideration to be given to harmony in scale, bulk, coverage and density; to the availability of public facilities and utilities; to the generation of traffic and the capacity of surrounding streets, and to any other relevant impact of the development.***
> ***B. The location, design, and site planning of the proposed development will provide a convenient and functional living, working, shopping or civic environment, and will be as attractive as the nature of the use and its location and setting warrants.***
> ***C. The proposed development will be consistent with this code.***

These criteria are mandatory, and the application cannot be granted unless *all* of the criteria are met.

A. NMC §15.225.060(A).

NMC §15.225.060(A) represents a common compatibility criterion found in many zoning codes across the state. As a result, the case law applying this criterion is well developed. The Commission is required draft findings which provide justification for the conclusion that the proposed short-term vacation rental use is "reasonably compatible with and have minimal impact, impact on the livability or appropriate development of abutting properties and the surrounding neighborhood" considering several factors or prongs, including harmony in scale, bulk, coverage and density, the availability of public facilities and utilities; to the generation of traffic and the capacity of surrounding streets, and to any other relevant impacts. There are a plethora of LUBA cases that provide guidance on the level of detail needed for compatibility findings. *See generally Van Dyke v. Yamhill County*, __ Or LUBA __ (LUBA No 2019-047, Oct. 11, 2019); *York v. Clackamas County*, 79 Or LUBA 278, 286 (2019), *Horizon Construction, Inc. v. City of Newberg*, 28 Or LUBA 632 (1995); *Hannan v. Yamhill County*, 6 Or LUBA 83, 92 (1982); *Ruef v. City of Stayton*, 7 Or LUBA 219 (1983); *McCoy v. Linn County*, 16 Or LUBA 295, 301-02 (1987), aff'd 90 Or App 271 (1988); *Murphey v. City of Ashland*, 18 Or LUBA 182 (1990).

Findings in support of an approval under this criterion require a number of analytical steps, which we discuss below.

Step 1: Define the nature and scope of the proposed use to identify likely impacts.

The first step in analyzing this criterion is to determine the nature and scope of the proposed use. *See generally Columbia Riverkeeper v. Columbia County*, 70 Or LUBA 171 (2014), Slip op at 58 ("We generally agree with petitioners that because the compatibility standard focuses on "adverse impacts," it cannot be meaningfully addressed unless the "proposed use" is described sufficiently to identify and evaluate its likely adverse impacts.").

Step 2: Define the Geographic Study Area: What is Meant by the Term "Abutting Uses" "Surrounding Neighborhood"

NMC §15.225.060(A) requires a comparison of the proposed use with the "abutting properties and the surrounding neighborhood." When approval standards require an examination of impacts on a geographic area, the decision maker must delineate the area that is being examined. *DLCD v. Curry County*, 21 Or LUBA 130, 135 (1991): *Benjamin v. City of Ashland*, 20 Or LUBA 265, 271 (1990); *Multnomah County v. City of Fairview*, 18 Or LUBA 8 (1989); *Holder v. Josephine County*, 14 Or LUBA 454 (1986), The findings do not undertake this necessary step.

Unfortunately, the Newberg Municipal Code does not define the terms "surrounding" or "neighborhood." As far as we can tell, the City's Comprehensive Plan also does not define the term. *See generally O'Mara v. Douglas County*, 25 Or LUBA 25, 37, *rev'd and rem'd on other grounds*, 121 Or App 113, 854 P2d 470, *rev'd*, 318 Or 72, 862 P2d 499 (1993) (county must apply the "adjacent" language in zoning code consistently with the county's comprehensive plan, which defined the term.). Whatever the case here, the City has failed to define the area, a fatal flaw in its findings.

The term "surrounding neighborhood" is capable of more than one possible meaning and, therefore, requires interpretation. *Compare Leathers Oil Co. v. City of Newberg*, 63 Or LUBA 176 (2011); *Stefan v. Yamhill County*, 18 Or LUBA 820, 844-45 (1990). When surrounding land uses are protected under particular ordinance provisions, the status of those living nearby is given special significance." *Marineau v. City of Bandon*, 15 Or. LUBA 375 (1987). (Emphasis added). Generally speaking, a "neighborhood" is an area of a community with characteristics that distinguish it from other community areas and that may include schools, or social clubs, or boundaries defined by physical barriers, such as major highways and railroads, or natural features, such as rivers. No effort has been made to define this neighborhood.

/// /// ///

Step 3: Define the Characteristics of the "Abutting Properties" and the "Surrounding Neighborhood."

Once the geographic area is defined, the uses in that area must be described. *Compare Broetje-McLaughlin v. Clackamas County*, 22 Or LUBA 198, 213 (1991); *Multnomah County v. City of Fairview*, 18 Or LUBA 8 (1989); *McCoy v. Linn County*, 16 Or LUBA 295, 301-302 (1987), *aff'd*, 90 Or App at 271, 275-6, 752 P.2d 323 (1988). Topics under consideration can be broad, and may include issues concerning architecture, setbacks, yard size, sidewalks, and pedestrian walkways. *See e.g., White v. City of Oregon City*, 20 Or LUBA 470 (1991). While we will not attempt to do the Applicants' work for them, we note that this neighborhood is quiet and sleepy, and neighbors value that quality.

Step 4: Anticipate what uses constitute the "appropriate development" of the "Surrounding Neighborhood.

NMC §15.225.060(A) requires the decision-maker to consider impacts not only on existing uses occurring on the surrounding neighborhood, but also future uses that constitute "appropriate development." *See Horizon Construction, Inc. v. City of Newberg*, 28 Or LUBA 632 (1995) (conditional use standard requiring reasonable compatibility with, and no more than minimal impact on, "appropriate development" of surrounding properties requires the local government to consider a proposed conditional use's compatibility with, and impact on, future development of vacant properties); *Vizina v. Douglas County*, 16 Or LUBA 936 (1988).

In this case, there is an abutting vacant parcel to the south zoned AF-10, and the City has not considered the proposed vacation rental home's impacts on that parcel. Again, the City's Staff Report simply identifies the zoning on the abutting parcels, without describing any of the actual uses on those properties (currently, or likely in future). This is wholly inadequate to show the relevant NMC approval criteria have been met.

Step 5: Define what is meant by the Phrase "Reasonably Compatible" with Existing and Future Uses in the Defined Geographic Area; Define "Livability," Define What is Meant by "Minimal Impacts."

NMC §15.225.060(A) requires two separate and distinct analytical comparisons: "reasonable compatibility" and "minimal impacts." In order to accomplish this, the decision-maker must determine the correct meaning of the phrase "reasonably compatible with… the livability or appropriate development of abutting properties and the surrounding neighborhood". As far as we can tell, the terms "reasonably" and "compatible" are not defined in the Code. The Planning Commission must therefore interpret the meaning of these terms, and that is generally done by setting forth and applying the plain meaning of the terms. *See generally Vincent v. Benton County*, 5 Or LUBA 266 (1982), *aff'd,* 60 Or App 324, 653 P2d 279 (1982).

The Planning Commission also needs to define the term "minimal impact." In this regard "minimal" is a strict term that in general usage means "constituting the least possible in size, number or degree" or "extremely minute." *See Weist v. Jackson County*, 18 Or LUBA 627 (1990)("The LDO does not define "minimal" adverse impact. However, "minimal" is a word in common usage, and Webster's Third New International Dictionary defines it as 'constituting the least possible in size, number or degree' or 'extremely minute.'").

The Planning Commission also needs to define the undefined term "livability." LUBA has stated that findings addressing this criterion must first articulate what the term "livability" means. *Murphey v. City of Ashland*, 19 Or LUBA 182, *aff'd*, 103 Or App 238 (1990). The decision should also explain how the proposal either maintains or detracts from the livability of the area. In *McCoy v. Linn County*, 16 Or LUBA 295, 301-302 (1987), *aff'd*, 90 Or App at 271, 275-6, 752 P.2d 323 (1988). LUBA stated:

> "* * * to show that a proposed conditional use will not adversely affect the livability * * * of abutting properties and the surrounding neighborhood, the county must (1) identify the qualities or characteristics constituting the 'livability' of abutting properties and the surrounding neighborhood; and (2) establish that the proposed use will have no adverse effects on those qualities or characteristics. * * *"

Step 6: Discuss how the "Reasonably Compatible" with Existing and Future Uses in the Defined Geographic Area.

Where an approval standard requires that a proposed conditional use be "reasonably compatible with and have minimal impact on the livability of abutting properties and the surrounding neighborhood," the local government's decision must include a statement of reasons explaining why the impacts found lead to the conclusion that the proposed use will be reasonably compatible with and not have more than minimal impact on the livability of the abutting properties and surrounding neighborhood. *Eckis v. Linn County*, 22 Or LUBA 27 (1991). LUBA has stated that "compatibility" is measured by assessing both the characteristics and scale of the use and the surrounding uses. *Hannan v. Yamhill County*, 6 Or LUBA 83, 92 (1982). "For example, how intensive is the use, how much traffic it will generate and are these characteristics 'compatible' with existing structures and uses." *Ruef v. City of Stayton*, 7 Or LUBA 219 (1983).

In this case, the proposed use is a short-term vacation rental property allowing up to ten (10) renters to occupy a single-family house at the same time. The Staff Report concludes this proposed use "is compatible with the surrounding residential neighborhood and would function no differently than the existing residential uses in the neighborhood." Staff Report, p. 13. But it never explains how or why it made that conclusion, and it never identifies evidence to support that conclusion.

In fact, this conclusion is based on no evidence in the record. Second, it is manifestly untrue that short-term vacation rentals "function no differently" than standard residential uses (*i.e.* home ownership or long-term lease rentals). Anyone who ever lived near a vacation rental house knows many of its occupants act very differently than long-term residents and homeowners. Vacationers often party, drink alcohol, smoke marijuana, play loud music, keep late hours, litter, entertain, dine and socialize outdoors (the property has an outdoor gazebo structure and deck furniture specifically for the purpose), and otherwise conduct themselves in a much more disruptive and disharmonious manner with little regard for the neighbors or neighborhood. And why not? They are on vacation, do not have to get up early for work, and do not care about bothering or offending strangers they will never see again. The Applicants in this case have stated they will be renting the house when they are not occupying it, so there will be no-one onsite to monitor or supervise guest behavior, like a hotel desk clerk or owner of a bed & breakfast inn could do. This encourages loud, disruptive mischief of all sorts.

Nowhere does the Staff Report discuss the generation of traffic or the capacity of the surrounding streets. There is no traffic study, discussion of trip generation, or analysis of the impact of up to ten (10) additional vehicles (a "maximum of ten renters would be allowed to occupy the home." Staff Report p.13) driving on the surrounding streets and parking in the immediate area. There are only two parking spaces on the subject parcel. Thus the other eight vehicles would be forced to park all over the sides of the road, creating disharmony in the neighborhood. There is no evidence in the record to show the increased traffic and parking difficulties would be "compatible" with the neighborhood.

NMC §15.225.060(A) requires the decisionmaker to consider factors such as "harmony in scale," "bulk," and "coverage and density." LUBA has noted that when an approval standard such as the one at issue here uses three different words with different meanings, all three prongs must be separately analyzed. *See York v. Clackamas County*, 79 Or LUBA 278, 288-9 (2019). Nowhere does the Staff Report discuss the proposed use's harmony (or disharmony) in scale, bulk, coverage and density with the uses in the surrounding neighborhood, nor is there any evidence in the record that deals with these mandatory considerations.

A vacation party home holding up to ten (10) people and requiring accommodation for parking up to ten vehicles (when there are only two off-street parking spaces) certainly seems disharmonious for a quiet residential neighborhood composed of single-family detached houses, but the City failed to conduct any significant analysis before recommending approval of this application. This is reversible error on appeal.

<u>NMC §15.225.060(B).</u>

NMC §15.225.060(B) requires the applicant to demonstrate that the location, design, and site planning of the proposed development will provide a convenient and functional living, working, shopping or civic environment, and will be as attractive as the nature of the use and its location and setting warrants. Again, because this approval standard uses three different words, *i.e.* "location, design, and site planning," all three prongs must be separately analyzed. *See York v. Clackamas County*, 79 Or LUBA 278, 288-9 (2019). The Staff Report only discusses one of these prongs: location. The Staff Report does not discuss the "design" and "site planning" of the proposed development, and it does not appear that the Applicants have made any effort to make the proposed development "as attractive as the nature of the use and its location and setting warrants." The development is unattractive insomuch as the landscaping is overgrown, the property has no curb appeal, and the dwelling itself has no unifying architectural features.

NMC §15.225.060(C).

This criterion requires the applicant to demonstrate that the proposed use "will be consistent with this code." This broad criterion requires consideration of a broad range of issues.

NMC 15.410.070(D)(1)(b)

NMC 15.410.070(D)(1)(b) requires fences located within the front yard setback to not exceed 4 feet in height. The applicant does not explain how the "design" of the development complies with this requirement.

NMC §15.505.030(G)(7)

NMC §15.505.030(G)(7) requires that "[s]idewalks shall be provided on both sides of all public streets. Minimum width is five feet." The word "shall" means this requirement for development approval is mandatory.

The Staff Report and the Exhibit "B" Proposed Conditions of Approval do not require the Applicants do make any street improvements, let alone construct the mandatory 5-foot-wide sidewalk. There are no meaningful findings on the impact of the proposed use. The Staff Report states: "It is not practical at this time to construct street improvements along the approximate 100-feet of lot frontage on W Fifth Street." (p. 15). No explanation, details, or evidence appear anywhere in the Staff Report, Application or Record to support or expand upon this baseless conclusion of "impracticality." The Code requires other development applications to make street improvements as a condition of approval, and no findings explain why this application is somehow exempt.

NMC §12.05.090 states in relevant part:

> ***12.05.090 Permits and certificates.***
> ***A. Concurrent with the issuance of a building permit for the construction of a building for residential use or business structures or an addition to a dwelling or business structure, the value of which is $30,000 or more except as the city engineer may require on building permits of lesser value in accordance with NMC 12.05.040, the owner, builder or contractor to whom the building permit is issued shall meet the following requirements:***
>
> ***1. Construct a sidewalk within the dedicated right-of-way for the full frontage in which a sidewalk in good repair does not exist. The sidewalk construction shall be completed within the building construction period or prior to issuance of an occupancy permit, whichever is the lesser.***
>
> ***2. Dedicate right-of-way in accordance with the city transportation plan.***

> ***B. The city engineer may issue a permit and certificate allowing noncompliance with the provisions of subsection (A) of this section to the owner, builder or contractor when, in the city engineer's opinion, the construction of a sidewalk is impractical for one or more of the following reasons:***
>
> ***1. Sidewalk grades have not and cannot be established for the property in question within a reasonable period of time.***
>
> ***2. Future installation of public utilities or street paving would, of necessity, cause severe damage to existing sidewalks.***
>
> ***3. Topography or contours make the construction of a sidewalk impractical.***
>
> ***4. The noncompliance provided in subsection (B)(1) of this section shall be temporary and shall cease to exist when grades are established for sidewalks by the public works department or when public utilities or street paving have been constructed. The permit shall indicate the reason for its issuance.***
>
> ***C. If the owner, builder or contractor considers any of the requirements impractical for any reason, they may appeal the decision to the planning commission.***
>
> ***D. If a sidewalk is not constructed within the time required by this section, then the city may construct it for the full street frontage in front of the property and proceed with the construction, assessment and collection of costs as provided for in NMC 12.05.070. [Ord. 2048, 3-2-81; Ord. 1857, 5-2-77; Ord. 929, 7-2-40. Code 2001 § 96.09.]***

NMC §15.505.030(F) states in relevant part:

> ***F. Improvements Relating to Impacts. Improvements required as a condition of development approval shall be roughly proportional to the impact of the development on public facilities and services. The review body must make findings in the development approval that indicate how the required improvements are roughly proportional to the impact. Development may not occur until required transportation facilities are in place or guaranteed, in conformance with the provisions of this code. If required transportation facilities cannot be put in place or be guaranteed, then the review body shall deny the requested land use application.***

The Staff Report states the Applicants have undertaken major renovations to the property that "may exceed the threshold of $30,000" (Staff Report p. 14). This would trigger the

Code requirement to build a sidewalk (no less than five feet wide) along the 100-foot frontage of the Applicants' parcel, as it currently has no sidewalk in good repair. NMC §12.05.090(A)(1).

This requirement can only be waived if the City makes the "impracticality" findings required by NMC §12.05.090(B)(1)-(4). The City has failed to make any such findings, nor does the record contain any evidence supporting such findings. There is nothing that is "impractical" about requiring sidewalks at this time.

II. Conclusion.

For these reasons, and others which we may raise later, we respectfully request the Planning Commission deny this conditional use permit approval to allow an unwelcome, unharmonious, incompatible short-term rental vacation business in our quiet, peaceful residential neighborhood. Neither the Application nor the Staff Report adequately demonstrate compliance with the approval criteria found at NMC §15.225.060(A)-(C).

Please include this letter in the official record for this land use application, docket no. CUP21-0001.

Sincerely,

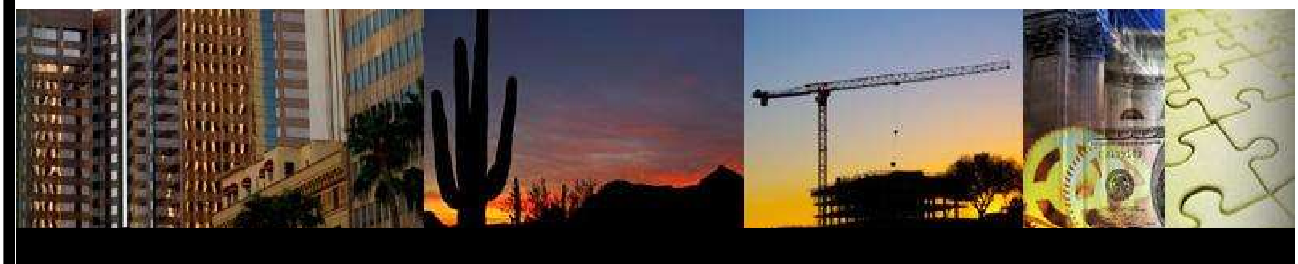
ANDREW H. STAMP, P.C.

/s/*Andrew Stamp*

Andrew H. Stamp
Attorney for neighbor Jonathan Umfleet

cc: clients (via email)

The Negative Consequences of Short-Term Rentals – Arizona's Recipe for Disaster



February 2021

Prepared by:

Elliott D. Pollack & Company
7505 East 6th Avenue, Suite 100
Scottsdale, Arizona 85251

Table of Contents

Preface

This research report was initiated to study the secondary or indirect impacts of the short-term rental (STR) industry on cities and neighborhoods, with a particular focus on Arizona – a state with some of the most STR industry-friendly laws that eliminate local oversight over these activities where they occur. During the course of the study, it became obvious that the so-called "unintended consequences" of the STR industry, often directed by Airbnb, are actually direct attempts to undermine local land use control, health and safety regulations, and tax collection all in an effort to maintain and grow revenues for this industry and, in the case of Airbnb, preserve its stock market valuation (currently more than Marriott and Hilton combined). The conclusion of this research report is that any supposed unintended consequences of the STR industry are instead direct, intentional consequences that will continue to affect local governments, the housing market, and residential neighborhoods until STR platforms are willing to negotiate in good faith to resolve these issues. Moreover, Arizona's unique, STR industry-leaning regulatory framework is intensifying adverse impacts on Arizona neighborhoods and the State. These negative impacts cannot be addressed adequately until and unless Arizona returns to a more mainstream approach that re-empowers local communities to use oversight and enforcement tools: tools that have proven effective in many other jurisdictions across the country that are not impeded by state-level laws like those in Arizona.

Executive Summary - Observations and Conclusions

The sharing economy, in its simplest terms, is a system in which assets or services are shared between private individuals, either free or for a fee, typically by means of the internet. Some of the best-known sharing economy platforms are those focused on short-term rentals exemplified by Airbnb. The STR industry is based on the premise that a person can rent a home they live in or a room in their home or a separate unit on their property (guest house, granny flat, auxiliary dwelling unit) to another person for income. This is the perception the STR industry tries to portray in its marketing efforts, but the industry has transformed into a variety of different business models, many of which involve exploiting regulatory loopholes all under the guise of innovation.

Findings and Conclusions

The review of business trends of the STR industry outlined in this study and the experiences of cities in dealing with the negative impacts of short-term rentals exposes a number of operating tactics of the industry and how local jurisdictions have been thwarted in their efforts to deal with STRs. In Arizona, current law encourages the growth of the STR industry which has proven harmful to neighborhoods, the traditional hotel industry, and the available housing stock for long-term renters. The primary findings and conclusions of this paper follow.

1. Airbnb and other STR platforms have consistently misrepresented the context of their business model within the "sharing economy" label. Instead, it has transformed over the years into a model that more and more relies on multi-unit hosts who operate miniature hotel chains, often within residential neighborhoods. In Arizona, this activity takes place without the traditional local oversight and controls that used to exist and do in fact broadly continue to be applied to STRs in many other localities around the country and the world. The STR platforms also significantly overstate their economic impact on local economies by failing to recognize that the vast majority of visitors would continue to travel to their destinations even if Airbnb did not exist.

2. Arizona's prohibition on the regulation of short-term rentals through SB1350 has clearly created a wide range of problems for local jurisdictions, particularly for those communities that have tourism economies. There are differences between the impact of STRs on cities such as Phoenix and Scottsdale just as there are differences between Scottsdale and its neighbor Paradise Valley. The rural communities of Arizona, exemplified by Sedona, also present a completely different set of circumstances compared to the urban areas of the state. There is not one set of regulatory standards that applies to all cities for land use and neighborhood issues. Each community needs to develop its own set of requirements relative to its own situation. Tourism-oriented

communities have been impacted the most by STRs and likely need the most tools to deal with their negative effects. Laws such as SB1350 are not the recommended path forward in Arizona for neighborhood stability and economic sustainability and growth.

3. Zoning is the bedrock foundation of local government land use protections. It helps to establish and maintain the character of a community in accordance with local desires and protects property values by separating uses that may be incompatible. Zoning is and always has been under local authority, subject to certain standards delegated by the state. The inability of local jurisdictions to regulate short-term rentals due to statewide bans such as SB1350 usurps citizens' and local communities' rights to determine and preserve the character of the community in which they live and to protect their property rights. At the very least, the STR issue should be subject to debate and input among all levels of government, as it is in other parts of the country.

4. Communities across the country have experienced the conversion of traditional rental units and owner-occupied homes to short-term rentals. The result is a decline in the available housing supply often impacting residents who depend on affordable housing for shelter. Conversely, the reduction in the supply of long-term rental housing also causes prices to rise as units are bid up in price by STR investors. Demand for housing is inelastic - households have little ability to forgo housing when it becomes more expensive. And even small changes in the supply can cause housing prices to rise. While large cities and metro areas may be able to absorb some of the loss of units to STRs, the result in smaller towns is quite different, affecting the fabric and character of neighborhoods and whole communities and regions.

5. A common theme found across most communities, which generates most of the complaints to local governments, is the negative impact of non-owner-occupied or investor STRs operating in residential neighborhoods as quasi-commercial uses. Complaints about STRs are commonplace from neighbors who live near these units concerning noise, crime, parking, and neighborhood peace. Most cities target their regulations at these types of units – but this is something that cannot be done in Arizona due to state-level laws preempting and preventing such traditional exercise of local laws and enforcement authority. Indeed, in Arizona, local authorities must expend taxpayer funds to react problems caused by STRs, typically with police forces or code enforcement that can have no lasting helpful impact under current law, that are avoided altogether in communities that are empowered to use traditional zoning and other legal tools.

6. The STR industry is growing and is poised to take advantage of a business model that, without adequate oversight, will continue to leverage their lower operating costs compared to traditional lodging and as key STR operating costs are, in effect, subsidized by other taxpayers. In 2019, STRs accounted for more than 10% of the traditional U.S.

hotel room inventory. Absent the COVID-19 pandemic, the STR inventory was expected to reach a 12% penetration rate of the hotel market in 2020 with the addition of 100,000 new units. While the traditional hotel industry has always been highly competitive, STRs in Arizona are operating at an unfair advantage due to the relative lack of oversight and regulation at the state and local level. STRs do not need to pay staff and are not regulated like hotels, which increases costs for traditional lodging operations substantially but is found to add value to the communities in which they operate. Indeed, many of the costs traditionally associated with building and running a hotel – on-site staff, security personnel, cleaning personnel, ADA facilities, fire safety systems, adequate parking, buffering from residential areas, commercial property taxes – are either avoided entirely by non-owner occupied STRs, or are externalized onto society at large by expecting neighbors of an STR to call local police forces when experiencing criminal activity, noise, or partying from an STR. Over the long-term, this will result in a loss of jobs in the hotel industry that are not directly replaced by the STR industry. Many STRs do not charge tourist bed taxes which further deepens the unequal competition. The unregulated and unrestricted growth of STR units is placing pressure on the hotel industry which ultimately will negatively impact (1) a reliable and consistent revenue source for state and local governments and (2) employment in the tourism/lodging industry.

7. STRs are here to stay in one form or another. There needs to be constructive discussion between STR platforms and adversely impacted communities on how they can continue to operate while minimizing impacts on local communities. There is a balancing act between the rights of certain property owners to use residentially-zoned properties in any manner they desire and the greater community good. The perceived property rights of a few STR owners should not infringe on the property rights of the majority.

8. STR platforms like Airbnb need to be more cooperative in assuring that there is tax compliance for their host operators and more transparency in sharing information with tax authorities. STR platforms should not list STRs on their websites unless they are registered with the local jurisdiction as legal short-term rentals. Most cities have been inundated with illegal STRs. The technology to provide host information to cities and assure that all STRs are legal in the eyes of the city or other governing authority is clearly available. STR platforms also need to self-monitor their hosts' activities and those of their guests.

In summary, there are significant negative economic impacts imposed on state and local jurisdictions by the STR industry.

- Housing disruption is one of the most significant negative impacts of the STR industry, affecting both the supply and price of housing units. At a time when housing affordability has become a problem across the country, the loss of long-term rental units to transient, short-term use will only exacerbate the issue.

- STR hosts are operating at an unfair advantage compared to the hotel industry by not abiding by building, safety, and taxing requirements imposed on traditional hotels, motels, and other lodging facilities, and externalizing those costs onto taxpayers generally, who in effect are forced to subsidize this niche business.
- State and local jurisdictions may see hotel tax revenues they depend upon decline or be less reliable due to ineffective STR tax collection efforts.
- Established tourism-related employment will decline as the number of multi-unit hosts listed on STR platforms increases. While there may be some offset of increased employment by STR operators, a net loss of employment will result causing distress across all hotel management levels with adverse impacts to job retention and growth.
- At the city level, property values will likely be affected as STRs invade traditional residential neighborhoods.

The true costs of the STR industry are externalized on many segments of society, from residential neighborhoods that must deal with disruptions, crime, and noise, to the hotel industry that is facing unfair competition, to reduction of jobs, and to the housing market that is facing rising costs and reduced supply.

Short Term Rentals and The Sharing Economy

Short term rentals, units rented by homeowners to persons typically from a few days to a few weeks, are part of the "sharing economy". In its simplest terms, the sharing economy is a system in which assets or services are shared between private individuals, either free or for a fee, typically by means of the internet. When not needed, a person can rent out his car, her apartment, or his bike to another person, all done digitally. The sharing economy depends upon technology-based companies that use the internet to bring people together to sell or rent services. These companies are often described as "disruptors" who use technology platforms to revive stagnant sectors of the economy and increase the quality of goods and services to the general public. They typically also provide persons with the opportunity to earn income.

Two of the best-known sharing economy platforms are Uber and Airbnb. Uber connects drivers with people needing to get somewhere. While conflicts have been noted throughout the world with unlicensed persons performing a service historically filled by licensed cab drivers, the model is based on the sharing economy. A person has a car and agrees to essentially rent it out and drive someone to a destination. That model has not changed over the years although skirmishes with state and city regulatory authorities continue to affect the company's business.

Airbnb is the most widely used platform in the short-term rental industry. It is based on the premise that a person can rent a home they live in or a room in their home or a separate unit on their property (guest house, granny flat, auxiliary dwelling unit) to another person for income. This is the perception Airbnb tries to portray in its marketing efforts, but the STR industry has transformed into a variety different business models, many of which involve exploiting regulatory loopholes all under the guise of innovation.

<u>In the top 30 STR metro area markets in the U.S., about two-thirds of the units are in the entire-home or apartment category, meaning that the renter occupies the unit without the owner or host being present.</u> The units where the owner is not present on the property have largely generated the most complaints from nearby residents, particularly in the case of single-family homes in residential neighborhoods. Apartments and condos, by comparison, typically have some type of monitoring of renter conduct and the properties are often located in commercial-type areas.

In 2019, there were more than 1.5 million STR units listed on various platforms in the U.S., about seven times the amount listed in 2014.[1] Not all the units were active or available for booking year-round. In the top 30 STR markets in the U.S. more than one-third of STR rentals are a house where an owner is not present.

2019 Short-Term Rental Supply By Type in Top 30 Markets				
Property Type	**House**	**Apt./Condo**	**Other**	**Total**
Entire Home/Apartment	34.4%	32.2%	1.3%	67.9%
Private Room	19.1%	8.9%	0.2%	28.3%
Shared Room	1.0%	0.6%	0.0%	1.6%
Hotel/Hostel	-	-	1.6%	1.6%
Bed & Breakfast	-	-	0.5%	0.5%
Total	**54.5%**	**41.8%**	**3.7%**	**100.0%**
Source: AirDNA, CBRE Hotels Research 2019				

As a whole, the STR industry represents a failure to engage with regulators and abide by local ordinances and regulations. It is a business model that largely ignores the impact of its hosts and guests on various aspects of the local housing market and neighborhood stability. The exploitation of regulatory loopholes includes avoiding or ignoring zoning regulations, building and safety regulations normally imposed on the hospitality industry, and sales and bed taxes normally collected from hotels, motels, and licensed bed and breakfast operators. In the case of Arizona, the avoidance of established local zoning and other regulations took the form of SB1350, which explicitly overrode those standards. In addition, the lack of oversight of host operators by STR platforms and the competitive advantages over traditional lodging enjoyed because of this pattern of behavior has led to the proliferation of STRs owned by a small number of hosts that operate multiple housing units as miniature hotel companies. At the heart of the discourse between the STR platforms and government regulators is whether the STR platforms operate as pure technology companies, providing a match-making service to willing participants, or whether they are operating in effect as a hospitality company.

The purpose of this report is to outline the negative consequences of the STR industry on local communities, which in many situations have transitioned into "intended" consequences as platforms such as Airbnb continue to defend their business model and disregard local regulatory and taxation policies. The expansion of Airbnb in Arizona has been fueled by a state law that is intended to block local oversight and enforcement. Significant questions have arisen about STRs' negative effects on local housing cost, affordability, and availability; the quality of life in residential neighborhoods; and local governments' ability to enforce municipal codes and collect appropriate taxes. An overview of the negative consequences STRs in Arizona and across the country are outlined hereafter in this report.

Arizona's Experience With Short Term Rentals

Arizona has among the most STR industry-friendly laws of which we are aware. SB 1350 enacted by the Arizona legislature in 2016 purposely and significantly restricts the ability of local governments to regulate STRs and, in fact, eliminated existing local laws that had traditionally applied to such activities. The law states that a city or town may not prohibit, restrict the use of, or regulate STRs based solely on their classification, use, or occupancy. In other words, an STR must be treated exactly the same way as an owner or long-term-tenant occupied home.[2] The law was originally promoted to the legislature as a way for Arizonan's to be able to rent an extra room in their homes more easily while they are present, but like other markets with STRs, this has not been the common experience. [3]

Representative John Kavanagh of Fountain Hills has sponsored legislation in 2021 to address the shortcomings of the current law and suggests a number of reforms to correct the negative consequences of STRs and externalities imposed on local communities. These reforms would reduce the concentration of STRs in neighborhoods, prohibit outdoor activities at night, limit ownership to persons in their primary or secondary residences, and establish occupancy limits. Legislative proposals to further amend current STR laws are expected in the 55th legislative session.

What SB 1350 fails to address is the proven value of traditional local oversight and enforcement along with the differences in local communities across Arizona. The state has a robust tourism industry. Some of those tourist destinations are in the rural areas of the state where housing opportunities are limited. Businesses who rely on employing persons in those rural communities need to have an available housing stock for their workers. In the urban parts of Arizona, housing opportunities are much more available, but affordability is often an issue. Many communities also wish to protect their residents from intrusion of commercial type uses into residential neighborhoods. This is particularly true in communities such as the Town of Paradise Valley which was founded in 1961 to create and preserve a low-density, residentially zoned community. The bottom line is that one blanket restriction on prohibiting the regulation of STRs at the local level does not work. Each community has different characteristics and may react differently to the introduction of STRs into their jurisdiction.

Indeed, in response to the concerns with the STR industry outlined above and the impact of SB1350 on local control of short-term rentals, 33 mayors of cities and towns across Arizona, including the largest cities in the state, signed a letter to the CEOs of Airbnb and Expedia Group requesting that the companies end their efforts to block local regulation of STRs in the state. The letter outlines how the ground swell of complaints from citizens for regulation of STRs in Arizona will eventually disrupt the industry's business model. The authors of the letter recognize that STRs can operate compatibly in Arizona, but that local control is the best approach to a sustainable STR industry. A copy of the letter is included in the Appendix to this report.

STR data was collected from AirDNA, a provider of short-term vacation rental data and analytics that tracks the daily performance of over STR listings on Airbnb, Vrbo, and other platforms. The data below shows the number of active STR units in Phoenix, Scottsdale, Paradise Valley, and Maricopa County relative to their housing inventory as of January 2020. Overall, the percentage of active STRs in Maricopa County compared to its housing stock stands at 0.7%. Phoenix has a low percentage of STRs relative to its housing supply while Scottsdale's STR inventory stands at 2.8% of total units. On a per unit basis, Scottsdale's housing stock is only 22% the size of the Phoenix housing stock yet it has 720 more active STR units than Phoenix. As one of the Valley's premier tourist destination, Scottsdale has experienced a more dramatic influx of STRs than Phoenix. Paradise Valley by comparison, which has a population of only 14,300 persons, has an even higher estimated level of STRs relative to its housing inventory at approximately 3.8%.

Short-Term Rentals in Selected Communities

	Phoenix	Scottsdale	Paradise Valley	Maricopa County
Population	1,680,988	258,064	14,362	4,485,414
Housing Units	637,511	145,936	6,091	1,789,265
Active STRs	3,372	4,092	234	12,219
% Active STRs of Total Units	**0.5%**	**2.8%**	**3.8%**	**0.7%**

Sources: AirDNA, American Community Survey 2019 5-Year Estimates

The above estimates point to the fact that some communities will react differently to the STR issue. Scottsdale's former Mayor Jim Lane, for instance, testified in front of the Joint Ad Hoc Committee on the Impact of Short-Term Rentals on Arizona Communities in December 2019 pointing to the concern of commercial enterprises renting out single-family homes for tourists. He indicated that short-term rentals, if they continue to grow in number, could potentially change the entire complexion of neighborhoods. In addition, STRs are also in direct competition with the city's resorts and hotels and there needs to be some equalization of regulation. The city has also dealt with crime and shootings at STRs over the last few years.[4]

The Town of Paradise Valley has expressed great concern about negative impacts related to STRs and the introduction of commercial uses into the community. Paradise Valley is a low-density residential community that enjoys the highest property values in the State, low crime, and is home to many of the State's executives, entrepreneurs, and notable citizens. Since its founding by former Supreme Court Justice Sandra Day O'Connor and other prominent citizens in 1961, Paradise Valley has relied on stringent local zoning laws and restricted commercial lodging uses in the town to a handful of high-quality hotels and resorts which are highly regulated through zoning and other laws, buffered from residential areas, well-staffed, and required to monitor and protect against loud or unruly behavior. Arizona's current state law does away with this long-standing traditional balance. Now, the Town commonly sees the use of entire homes as locations housing dozens of STR visitors on a nightly basis, which has introduced unwanted commercial activities, crime, and other serious and uncontrolled nuisances directly into residential neighborhoods.

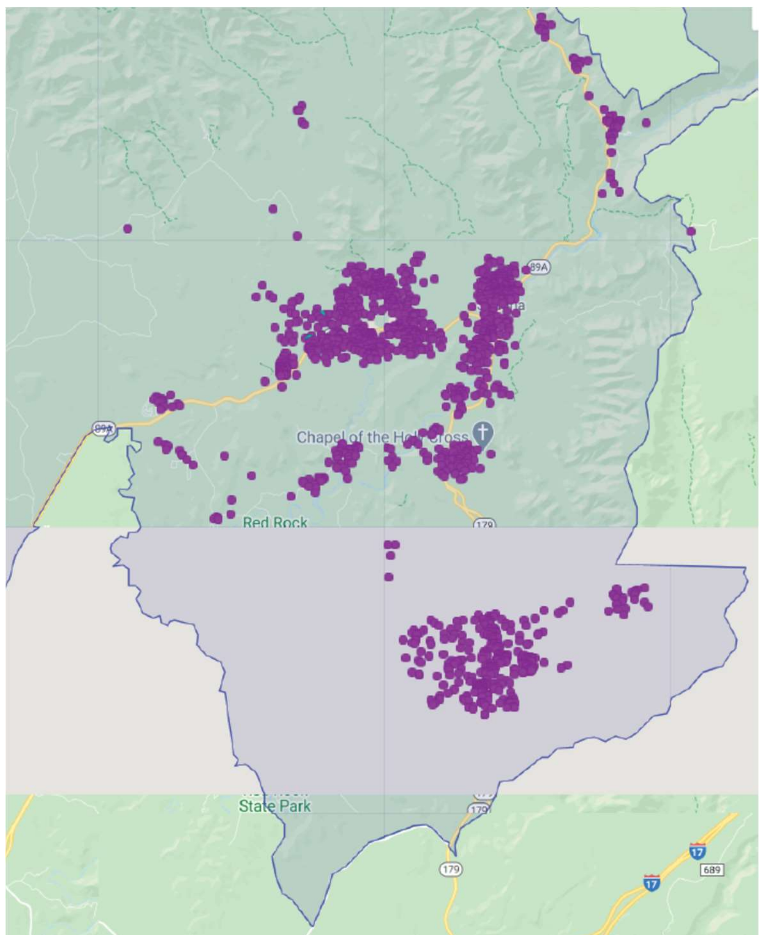
A frontpage article in The Wall Street Journal from December 10, 2020 further highlighted some of the difficulties faced by Arizona's communities and other cities across the U.S. in dealing with STRs. The article outlines how with the passage of SB 1350 investors poured into affluent communities like Paradise Valley and Scottsdale, snapping up homes to rent on the STR platforms. Nearby residents have complained about declining home values, loud parties into late hours of the night, and neighborhood disturbances such as shootings. In response, grassroots efforts are underway across the country to overturn laws such as SB 1350. In fact, Airbnb has warned investors in its stock filings (Airbnb went public in late 2020) that "managing its success in the face of angry neighbors and unfavorable local laws is among its biggest challenges in the U.S. and around the world".

Of additional concern is the impact of STRs on Arizona's small, rural tourism-oriented communities.

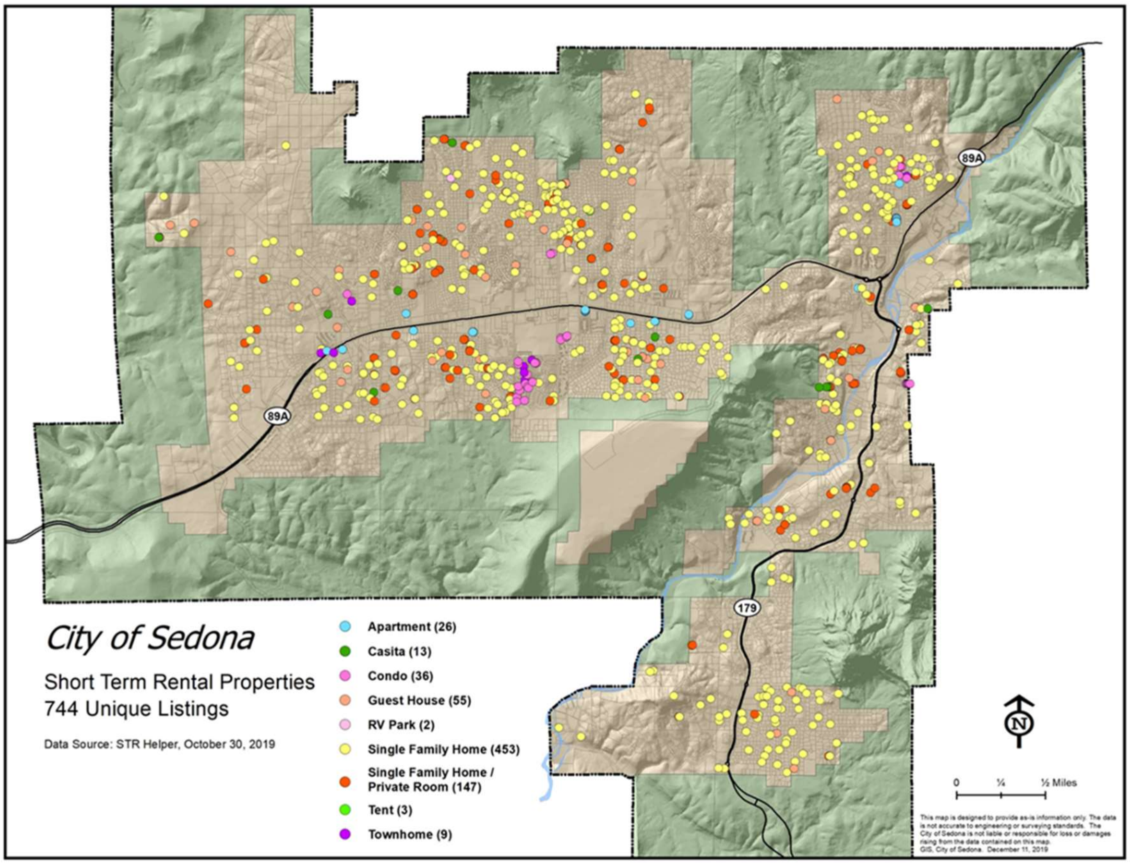
<u>Sedona</u>

Sedona is a world-renown tourist destination that has experienced significant negative impacts from the STR industry. These impacts include the disruption of neighborhoods, zoning and building safety violations, nuisance violations, and the loss of housing for its residents and persons working in the city. In January 2021, there were 2,378 active STRs listed on the AirDNA website for Sedona and Village of Oak Creek, including some units that are outside of Sedona city boundaries. However, a number of hotels and time share properties list their units on the STR platforms. Applying a 20% reduction for these types of properties results in an estimate of 1,902 active STRs or approximately 16.9% of the 11,200 housing units in the two communities. The map below shows the concentration of those STR units according to AirDNA.

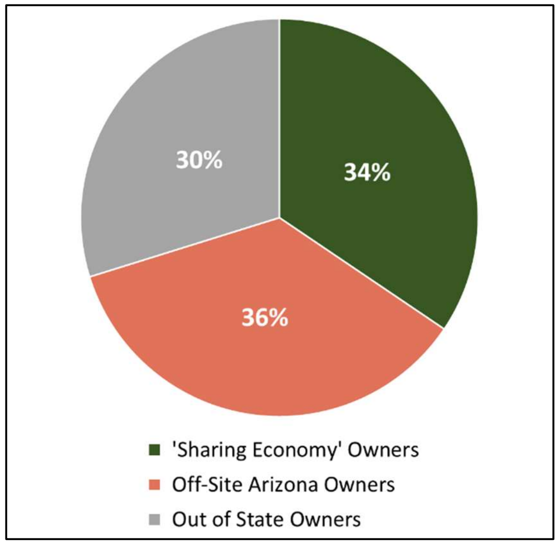
Active STRs in Sedona Area				
	Sedona	Village of Oak Creek	Total	Less 20% for Hotels, Timeshares
Housing Units	7,096	4,147	11,243	11,243
STRs			2,378	1,902
Percent STRs			**21.2%**	**16.9%**
Sources: AirDNA, American Community Survey 2019 5-Year Estimates				



The City of Sedona is among communities highly active in voicing concerns with STRs due to their proliferation over the last few years. In 2019, the city collected available data on STRs and cleaned from the data hotels, timeshare units, and other traditional guest units that advertise on the STR platforms. The result is a total of 744 unique listings within city boundaries or 10% of the housing units in the city. The STR units were categorized by type with a majority being single family homes (61%) followed by homes with a private room. The database also includes RVs and tents that have popped up around the city. The dispersion of the units is shown on the exhibit below indicating substantial clustering of units in single family areas.



Of significant concern is the ownership pattern of the STR units. Only 34% of the units are associated with a property that is occupied by the owner, shown in the chart below as "sharing economy" owners. The remaining two-thirds of STR units are owned by out-of-state persons or persons who do not live on the STR property.



Sedona has historically had high housing prices which created affordability issues for its workforce. Between 2015 and 2019, the average home price, including single family homes, condos, and mobile homes, increased by 45% to $636,000. While the lack of affordable housing and rising prices cannot be fully attributed to the proliferation of STR units, it certainly has contributed to the problem. There is a significant amount of anecdotal information on the conversion of long-term rentals to short-term. Stories abound of residents being forced to move at the end of their leases as properties are converted to use for short-term visitors.

<u>The decline in the supply of long-term rental units has torn at the fabric of the community.</u> In 2019, the school district closed one of three elementary schools. The high school graduating class is down to about 50 students, about one-half of what it was five or six years ago. The district has now added 7th and 8th grades to the high school so the building can be fully utilized. Little league baseball and football programs are no longer organized because young families are leaving the city.

Data from the U.S. Census appears to verify the trends that are visible to city residents. The Census indicates that between 2010 and 2019 the number of owner-occupied households in Sedona increased, but the count of renter households declined by 22%. In addition, the loss of renter households is in the prime child-rearing age groups of 24 to 59 years old. Even owner-occupied households in the 45 to 64 year-old age groups declined in number as well. The loss of these households correlates with the decline in families with children and in school enrollment in the Sedona area. The decline in population has significant financial impacts for local governments including a potential decrease in state shared revenues which typically comprise a significant portion of community revenue.

Tenure By Age of Householder 2010 - 2019			
Tenure and Age of Householder	Sedona		
	2010	2019	Change
Total Households	**5,307**	**5,542**	**235**
Owner Occupied:	3,660	4,262	**602**
15 to 24 years	-	8	**8**
25 to 34 years	53	17	**(36)**
35 to 44 years	217	247	**30**
45 to 54 years	608	494	**(114)**
55 to 59 years	687	569	**(118)**
60 to 64 years	526	455	**(71)**
65 to 74 years	866	1,500	**634**
75 to 84 years	514	578	**64**
85 years +	189	394	**205**
Renter Occupied:	1,647	1,280	**(367)**
15 to 24 years	34	51	**17**
25 to 34 years	340	97	**(243)**
35 to 44 years	366	351	**(15)**
45 to 54 years	322	157	**(165)**
55 to 59 years	190	170	**(20)**
60 to 64 years	79	163	**84**
65 to 74 years	265	269	**4**
75 to 84 years	11	22	**11**
85 years +	40	-	**(40)**

Sources: ACS 2010 and 2019 5-Year Estimates

Beyond the change in the character and mix of Sedona's population due to the proliferation of units and the number/density of STRs in certain neighborhoods, Sedona has heard many complaints from permanent residents about what is perceived as commercial business activity in residential neighborhoods which leads to the loss in the character of the neighborhoods. People don't know their neighbors anymore which ultimately damages the fabric of the city. RVs have been placed on vacant lots and advertised on STR websites. Some of the new home construction activity has involved large buildings with eight to ten bedrooms, bunk rooms, and large outdoor entertaining areas often without the appropriate number of parking spaces. These miniature hotels are not meeting building and safety standards normally imposed on hotels. The City's small staff has been strained in its enforcement efforts of building activity and complaints.

Sedona is just one tourist-oriented, rural community that has had to deal with the consequences of the STR industry and the inability to regulate the rentals. The number of

STRs in Sedona relative to the total housing inventory, estimated between 10% and 17%, is excessive and well beyond what is found in the urban parts of Arizona. Unless there is some way for communities similar to Sedona to deal with STRs, absentee owners and investors will continue to build and/or convert units from long-term to short-term rentals.

Page, Arizona

Page is situated in an isolated area of northeastern Arizona, surrounded by the Navajo Nation reservation. The city was established in 1957 as the camp site for workers and their families during construction of the Glen Canyon Dam. Since that time, the community has transitioned to a tourist economy as the gateway to Lake Powell and other natural sites such as Antelope Canyon and Horseshoe Bend on the Colorado River. Page attracts an estimated 3 million visitors a year.

According to AirDNA in January 2021, there were an estimated 358 active STRs in the city representing 12.6% of the community's 2,840 housing units. Due to its isolated area, housing is at a premium for its workforce. The existing housing market is facing increased demand for both temporary and permanent lodging for service industry employees. The hotel industry has grown significantly with an increase of 860 rooms since 2012. At the same time, the vacation rental market has also grown limiting housing opportunities for workers. The city notes that even with the growth of the hospitality industry, few of the new service sector workers have resulted in an increase in the permanent population of Page. The city is now attempting to attract housing developers to the city to expand its permanent housing supply.

Impacts of the Short-Term Rental Industry

1. Adverse Impacts to Residential Neighborhoods by Circumvention of Zoning Laws

Zoning is the bedrock foundation of local government land use control. It helps to establish the character of a community in accordance with local desires and protects property values by separating uses that may be incompatible. It also provides certainty for those that are living in the community that they are protected from the intrusion of unsuitable uses. Zoning is, and always has been under local control, subject to certain standards and conditions delegated by the state.

The potential for negative impacts of STRs on a community's neighborhoods is a primary consideration that led to zoning regulations that banned STRs in residential areas. The inability of local jurisdictions to regulate short-term rentals due to statewide bans on regulation usurps that local authority's right to respond to citizen voices that determine the character of its community and to protect the property rights of its residents. At the very least, the STR issue should be subject to debate and input among all levels of government.

One of the primary negative consequences of STRs continually faced by local communities and residents is the circumvention of zoning laws – the use of a home or housing unit as a commercial transient lodging business in a residential neighborhood and the consequences that flow from it. In Arizona, this problem is at the most extreme because current state law does not allow local governments to treat STRs as commercial activities for zoning purposes, or to engage in proactive measures to mitigate the impacts of STRs on neighborhoods. This is particularly an issue resulting from absentee owners who rent their properties out to short-term visitors who may not respect the surrounding neighborhood from the standpoint of noise, parking congestion, and other externalities. There are even examples of Airbnb hosts who rent units on long term leases, then sublease their units to short-term travelers. Through this arrangement, the ultimate property owner is shielded from the externalities that are imposed on neighbors. Complaints are often made to local authorities who have little or no ability to deal with the issue.

Homeownership is one of the foundations of the American way of life that separates us from other countries. It provides stability to our communities and creates wealth. Anything that threatens the ability of citizens to reap the expected benefits of their primary residence – a cornerstone of the "American Dream" – should be carefully considered and appropriately balanced.

While we cannot find any empirical studies on the impact of STRs on neighborhood desirability and property values in Arizona, in theory, a prospective buyer of a home located adjacent to or near an unregulated STR unit would likely offer a reduced price for the home or cancel the purchase outright. The end result is declining property values for owner-occupied homes, while STR investment homes enjoy distorted valuations as commercial investment assets. The inability to regulate STRs at the local level is bad economic policy that, among other problems, eventually could cause a decline in homeownership rates, neighborhood stability, population, and school enrollment. States with STR-leaning laws, such as Arizona, may likely find themselves at a competitive disadvantage to retain and attract people who desire to live in stable and safe neighborhoods. This is particularly a problem in Arizona's tourism-dependent communities.

2. Rising Housing Costs and Loss of Long-Term Rental Units

Communities across the country have experienced the conversion of traditional rental units and owner-occupied homes to short-term rentals. The result is a decline in the available housing supply often impacting residents who depend on affordable housing for shelter. While large cities and metro areas may be able to absorb some of the loss of units to STRs, the result in smaller towns is quite different, affecting the fabric and character of neighborhoods and whole communities. School districts in some of these communities are faced with declining enrollments as families are forced from their rental homes and must search for housing farther from their place of work.

The most significant and best-documented cost of the short-term rental industry is the reduced supply of housing as properties are converted from long-term occupancy to short-term occupancy for travelers. The outcome is that housing prices rise as units are bid up in price by STR investors. Over the past few years, housing affordability has become a significant issue across the U.S., causing economic stress for moderate and lower-income households. Since demand for housing is inelastic, households have little ability to forgo housing when it becomes more expensive. And even small changes in the supply can cause housing prices to rise.

A number of empirical studies have evaluated the impact of Airbnb on the long-term housing supply and prices in major cities.[5] These studies include:

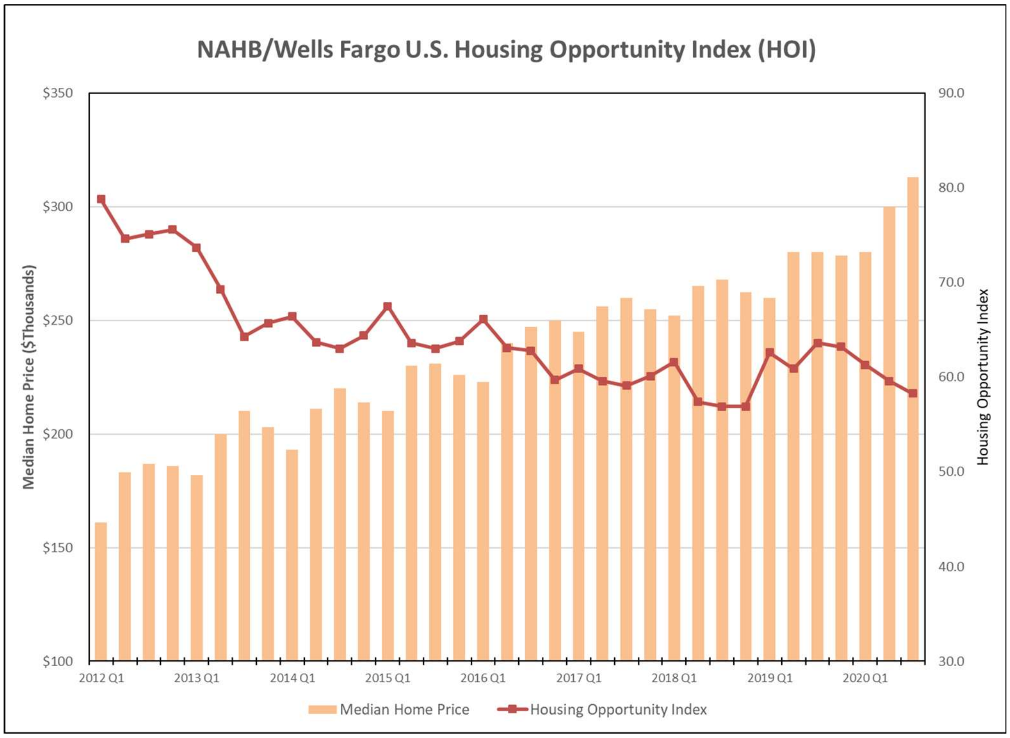
- A study of Airbnb's growth in Boston estimated that asking rents for long-term rentals between 2015 and 2019 would increase as much as $178 per month if short-term rental growth continued. In addition, the authors forecasted that an increase of 12 Airbnb listings within a single census tract correlated with a 5.9% decrease in the number of rental units offered for rent.
- A study conducted in New York City suggested that a doubling of Airbnb activity in a small geographic area was associated with a 6 to 11 percent increase in home sales prices.

- A further study of the large increase in Airbnb rentals in New York City found that it contributed to a 1.4% increase in rents from 2015 through 2017, implying a $384 annual increase in rents.

Particularly for New York City, the availability of affordable housing is at crisis levels. The influx of Airbnb rentals is aggravating housing conditions even more. The City is also concerned about the safety risks of transforming homes and apartments into illegal hotels.

Cities that have strong tourism economies have seen a dramatic increase in the growth of STRs. New Orleans, with its year-round festivals and events, is another city that has experienced an affordable housing shortage as investors bought up homes for short-term rentals. In some areas of the city, entire blocks have been converted into units for tourist. In 2018 there were 4,319 whole-unit Airbnb listings in the city, more than double the 1,764 units in 2015. Neighborhoods with the highest concentration of units saw increasing rents, rising property tax bills, and the removal of longtime residents from their residences. The result is a reduction in the number of available rental units. [6]

Over the past five years during the recovery from the Great Recession, housing affordability has evolved into a significant issue for households earning at or below the median income. For instance, the NAHB/Wells Fargo Housing Opportunity Index (HOI) is defined as the share of homes sold in the U.S. that would have been affordable to a family earning the median income, based on standard mortgage underwriting criteria. For the third quarter of 2020, 58.3% of new and existing homes sold between the beginning of July and end of September were affordable to families earning an adjusted U.S. median income of $72,900. This is down from the 59.6 percent of homes sold in the second quarter of 2020 that were affordable to median-income earners and the lowest reading since the fourth quarter of 2018. Since 2012, the HOI has been on a downward trend although it rose slightly since 2019 due to historically low interest rates.



For individual cities, the loss of housing units due to their conversion to short-term rentals has exacerbated the problem.

3. The Net Economic Benefits of STRs are Questionable and Grossly Overstated in STR Studies

Research reports reveal that much of the economic activity generated by Airbnb would have occurred in any case in the absence of Airbnb units, likely by the guests staying in traditional hotels. By comparison, the STR platforms would like the public to believe that they are independently generating travel that would not have otherwise occurred.

The STR platforms have produced a variety of studies that are intended to show the positive economic impact of the STR industry. One of the most noted report is "Airbnb's Global Support to Local Economies: Output and Employment" prepared by NERA Economic Consulting in 2017. The report focused on the impact of Airbnb on the 200 cities across the globe that had the largest number of STR stays. In summary, NERA estimates that Airbnb supported about 730,000 jobs in the 200 cities and supported more than $60 billion in output. The U.S. accounted for approximately $14 billion of the global output and 130,000 jobs. These estimates include not only the amount a tourist might spend to rent the STR (which is considered income to the host), but also spending on food, retail goods, local transportation, entertainment, and other normal expenditures made during their visit.

In summary, the methodology used by NERA is flawed and fails to consider that virtually all the money spent by Airbnb visitors is money that likely would have been spent elsewhere if Airbnb had not existed. The possibility that Airbnb visitors would still have visited a city even if Airbnb units were unavailable is completely excluded from the NERA analysis. Empirical research, by comparison, finds that Airbnb and traditional hotels are seen as potential substitutes by travelers. A study of Airbnb's entry into Texas found that it had a negative impact on hotel room revenue in 2017.[7]

A further survey of Airbnb users showed that only 2% of Airbnb users would not have taken the trip except for the ability to rent an Airbnb unit. The remaining 98% felt they would have made the trip but stayed in other lodging accommodations. A survey by Morgan Stanley suggests that between 2% and 4% of Airbnb guests would not have taken their trip but for the presence of Airbnb. And roughly 75% of Airbnb guests indicated Airbnb was a substitute for a hotel.

The above research suggest that the NERA study overstates the economic impact of Airbnb by somewhere between 96% and 98%.

A similar economic impact study of the San Diego STR market prepared by the National University System Institute for Policy Research (NUSIPR) used a similar methodology as NERA. NUSIPR estimated the number of short-term rentals in 2015 at more than 6,000 with an economic impact of 1,842 jobs and $285 million in economic output. However, the study assumed that all STR rental income and additional visitor spending was directly attributable to the STR industry without consideration that the tourist spending would likely have occurred in any case if STR units were not available. [8]

In summary, economic studies prepared for Airbnb and the STR industry overstate the impact of the short-term rental market on the local economy without consideration that a variety of optional accommodations are available. They also overlook the fact that many STRs are illegal in the eyes of regulatory authorities and may not be paying bed and other taxes required of the hotel industry.

4. Local Government Taxation Problems

One of the most important considerations in the regulation of STRs is the fiscal impact on state and city revenues. Bed or lodging taxes are significant sources of revenue for many communities. This is true, for example, for the Town of Paradise Valley which does not have a local property tax, and typically generates around 40% of its revenue from tax collections from its hotels and resorts. In Sedona, approximately 34% of the city's general fund operating revenue comes from hotel sales taxes and bed taxes. The reduction in hotel tax revenues due to the influx of STR units, many of which may not be properly licensed or paying sales and bed taxes, could have long term financial impacts for these tourism-oriented communities.

Airbnb has consistently attempted to avoid the payment of lodging taxes by arguing that it is a platform that does not operate a lodging business. In its efforts to demonstrate that it wants to help local governments to collect taxes, it has entered into what are referred to as VCAs – Voluntary Collection Agreements – with state and local jurisdictions. A report entitled "Airbnb Agreements with State and Local Tax Agencies" prepared by Dan R. Bucks for the American Hotel and Lodging Association[9] outlines a number of problems with these agreements that include unjustified favoritism for Airbnb and its hosts. The agreements also typically violate standards for transparency in tax collection. The conclusions of the report are summarized as follows.

- The Airbnb VCA agreements do not guarantee accountability for the proper payment of lodging taxes because tax agencies cede substantial control of the payment and audit processes to Airbnb. The agreements provide a shield of secrecy for lodging operators that prevents their discovery by public agencies and creates a de facto tax and regulatory haven for those operators. Essentially, tax agencies are not able to audit the lodging operators or hosts because Airbnb will not identify the names and addresses of the hosts. That secrecy is most valuable for the commercial-style lodging operators who now fuel Airbnb's growth, but that are also most likely to violate zoning and housing laws. Thus, the agreements facilitate unimpeded and often illegal conversions of residential property into commercial-style lodging facilities. Tax agencies signing these agreements enable this process.

- SB 1350 enacted by the Arizona legislature in 2016 is specifically cited in the report as an example of laws that limit the effectiveness of tax compliance. The law (1) severely narrows the grounds on which local governments can regulate short-term rentals, (2) allows online marketplaces to collect and pay taxes for the lodging operators, but only in returns that do not identify the lodging operators, and (3) exempts the returns submitted from a major portion of information exchange laws. The latter includes prohibiting information sharing with local governments, other Arizona state agencies, other state governments and the Internal Revenue Service. For the limited disclosure that is allowed, the online marketplace must give written consent to the disclosure.

The report concludes that tax agencies should seek legislation updating lodging laws to require registration, reporting, and collection and payment by online booking companies and lodging operators with a single payment process. At the very least, legislation should be enacted to require online booking companies to provide the names and addresses of lodging operators to tax agencies.

5. Adverse Impacts of STRs on Jobs and the Hotel Market

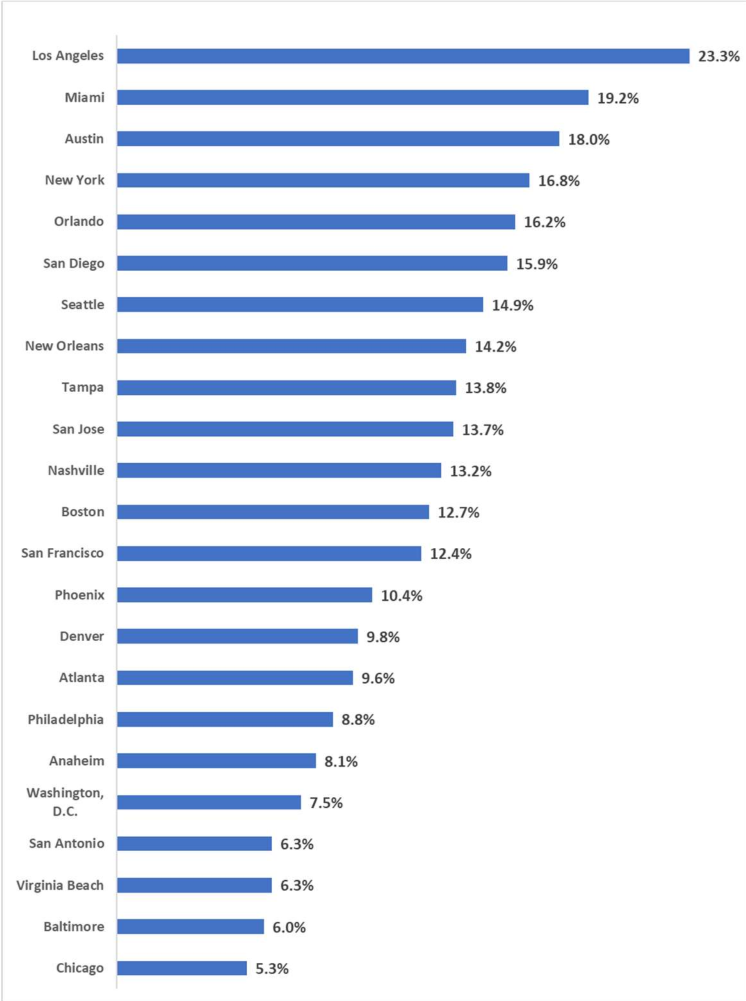
In 2019, STRs accounted for more than 10% of the traditional U.S. hotel room inventory according to a report by CBRE Research released in 2020.[10] Absent the COVID-19 pandemic, the STR inventory was expected to reach a 12.2% penetration rate of the hotel market in 2020 with the addition of 100,000 new units. While the traditional hotel industry has always been highly competitive, STRs are often operating at an unfair advantage due to the lack of oversight and regulation at the state and local level including building and safety standards, tax collection, and local zoning issues. In addition, STRs do not need to pay staff and are not regulated like hotels which comparatively increases hotel costs substantially. Over the long-term, this will result in a loss of jobs in the tourism/hotel industry that are not directly replaced by the STR industry. Many STRs do not charge tourist bed taxes which further deepens the unequal competition. Without regulation, the STRs industry will continue to have preferential, unfair treatment relative to the hotel sector over the long term.

The impact of the shift of occupancy from hotels to STRs means a less reliable source of revenue for state and local governments. This impact evolves from the inability of state and local governments to depend upon verifiable revenue from STRs platforms. Through its agreements with state and local governments, Airbnb has been awarded preferential treatment on the collection of lodging taxes, a significant benefit that is not bestowed upon traditional hotels.

The hotel markets in the U.S. that are most penetrated by STR units are in traditional leisure and destination areas that include Los Angeles, Miami, Austin, New York, and Orlando. All these metro areas have an STR inventory relative to the hotel room supply that ranges from 16% to 22%. In Phoenix, the STR market represents 10.4% of the total hotel room supply. However, between 2018 and 2019, Phoenix had the second highest growth rate in STR units at 44.4%. Only Atlanta, which benefitted from the 2019 Super Bowl, had a faster growth rate.

The CBRE report suggests that the traditional hotel industry has not experienced growth in average daily rates (ADR) since 2016 (adjusted for inflation), despite record occupancy levels. The growth of STR units and increase in the supply of hotel rooms has restricted increases in ADR. The unregulated and unrestricted growth of STR units is placing pressure on the hotel industry which ultimately could affect a more reliable and consistent revenue source for state and local governments as well as a negative impact on employment in the industry.

2019 STR Rental Unit Penetration to Hotel Supply



Sources: AirDNA, CBRE Hotels Research 2019

The rapid growth of STRs in unregulated and illegal locations in the end will affect the hotel industry and the collection of taxes by local jurisdictions that would normally be paid for by hotel operators. The unfair competitive advantages of STRs relative to the hotel industry include:

- Lower operating costs since STRs do not pay commercial property tax rates in Arizona if located in residentially zoned areas,
- Limited or no regulation of safety or building requirements, and
- Limited or no staff to hire, train, and pay.

Some of the costs of STRs are also externalized to local governments to enforce and monitor unruly behavior of guests and other complaints from neighbors, a role traditionally supplied by hotels and their trained staff members.

6. The Growth of Multi-Unit Hosts

The reason that tax collection and reporting from STR platforms is so important is the growth of multi-unit owners. These absentee owners are often the primary target of complaints by neighbors in residential areas because they are not present on the site of the STR unit to control activity on the property. A report released by CBRE in 2017 outlines how Airbnb is expanding primarily by the growth of multi-unit operators and how they are a key component of Airbnb's revenue. The VCAs outlined in the previous section shield these owners from tax audits by state and local governments. [11]

The CBRE study evaluated revenue trends for the U.S. and the top 13 Airbnb markets in the country in 2016. Those hosts with two or more entire-home units (either a single-family home, condo, or apartment) accounted for only 7.1% of the total hosts and 20.5% of total Airbnb units, but generated 32.1% of Airbnb's $5.7 billion in revenue. <u>Hosts with ten or more properties generated one quarter of all multi-unit host revenue in the 13 metro areas studied.</u>

Airbnb U.S. Performance October 2015 - September 2016

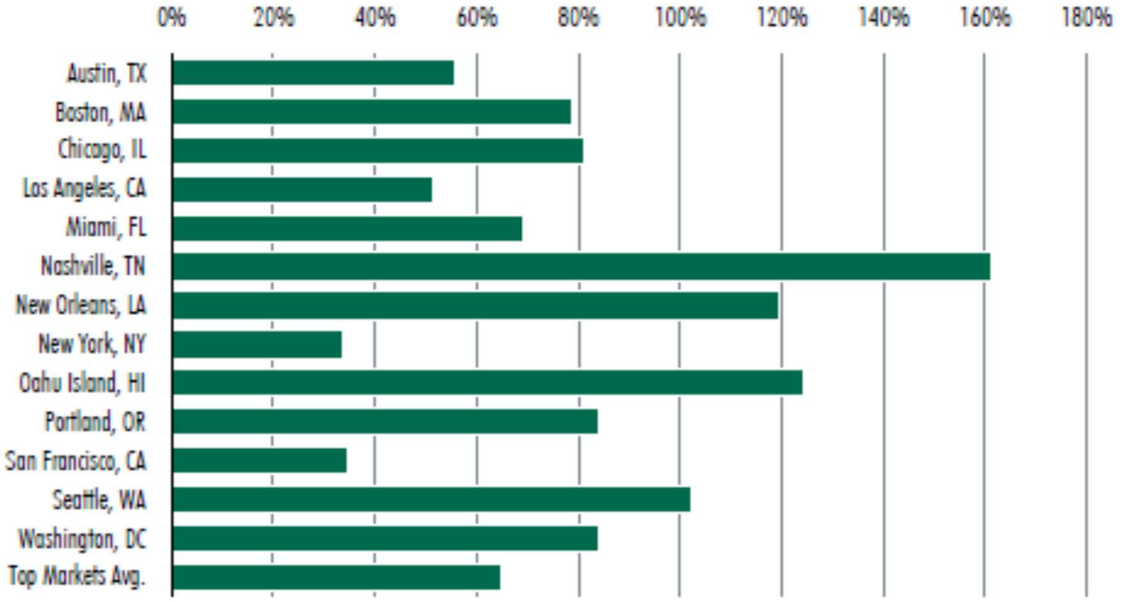
	Host	Annual Totals			% of Entire-Home Rentals			% of Total		
Type	Units	Hosts	Units	Revenue	Host	Units	Revenue	Host	Units	Revenue
Entire-Home	1	236,413	258,133	$2,787,695,396	88.9%	66.1%	60.4%	56.8%	40.0%	49.0%
Entire-Home	2+	29,381	132,224	$1,828,166,706	11.1%	33.9%	**39.6%**	7.1%	20.5%	**32.1%**
Entire-Home	Total	265,794	390,357	$4,615,862,102	100.0%	100.0%	100.0%	63.9%	60.5%	81.1%
All Other		150,321	254,493	$1,074,193,112				36.1%	39.5%	18.9%
Market Total[1]		416,115	644,850	$5,690,055,214				100.0%	100.0%	100.0%

Sources: Airdna, CBRE Hotels' Americas Research, January 2017

[1] Includes all Airbnb rentals including entire homes, private rooms, shared rooms, unique properties, and units with a minimum stay requirement of 30 days or more.

Of the 13 top markets for Airbnb, all realized an increase in the total number of units managed by multi-unit hosts. Four markets had a year-over-year growth rated above 100% including some of the primarily leisure and vacation markets in the country - Nashville, Oahu, and New Orleans.

Airbnb Multi-Unit Hosts Unit Growth by City 2015-2016



Source: Airdna, CBRE Hotels' Americas Research, January 2017.

A report entitled "From Air Mattresses to Unregulated Business: An Analysis of the Other Side of Airbnb" estimated in 2016 that 40.8% of the Airbnb revenue generated in Greater Phoenix came from multi-unit hosts who represented only 14.7% of the total host count. While the data is now dated, it is suspected that multi-unit host operators have expanded significantly since 2016.

The CBRE study verifies the fact that Airbnb and other STR platforms have transitioned from a pure home sharing model to a business venture for persons who own multiple units. In many cases, these multi-owned units are managed by a single entity and often situated in residential areas where there is little oversight and monitoring of on-site activities. Most of the complaints received by local governments about STRs evolve from these units that are essentially commercial operations. From a tax standpoint, they may be avoiding taxes normally paid by traditional hotels. Under the cover of Airbnb's VCA, there is little way in which these operations can be audited.

A further example of the expansion of multi-unit hosts/operators using STR platforms to generate business is the master lease model. Several companies have used this model in which they lease a block of apartment units from a landlord, typically on a long-term lease of five years or so, then furnish and manage the units for short-term stays. The model depends once again on the conversion of traditional long-term rental units into short-term modified hotel operations. This affects not only the supply of apartment units available in the community but the hotel industry as well by expanding the supply of short-term guest units. Cities will need to evaluate how short-term rentals in apartment buildings are regulated, the impact on the supply of rental units, the payment of hotel taxes, and any zoning or building safety code violations.

Regulatory Efforts of Local Governments

Cities and towns across the country have attempted to regulate short-term rentals since the inception of the STR platforms. These efforts are noted for their contrast to the current Arizona model, which generally does not allow for local oversight or enforcement. Most efforts have been met with lobbying of elected officials on the benefits of STRs - and then lawsuits if and when lobbying efforts fail.

New Orleans

New Orleans has had a long running battle with Airbnb to preserve its owner-occupied and renter housing stock from conversion to STRs. It forged an agreement with Airbnb in 2016 to legalize STRs, ban illegal listings, provide sharing of names and addresses of hosts, and create an online system that registers hosts with the city. However, the surge in STR conversions continued primarily by out-of-town owners. Approximately 11% of operators owned 42% of the city's STRs. However, Airbnb did not provide an adequate registration system and did not provide information on the hosts and owners. Eventually the registration system was disabled, and Airbnb was accused of deliberately hiding data and not cooperating with the city.[12]

Later in 2019, the New Orleans City Council decided to ban whole-home rentals in residential neighborhoods due to the disruption caused by party houses and the reduction in the available housing stock for long-term occupants. The City created two categories of permitted STRs: (1) units in residential areas where an owner-occupant could, with a permit rent out up to three units on the property and (2) in commercial areas (usually condos and apartments) where up to 25% of the units on the property could be rented. The ordinance also bans STRs in the French Quarter.[13]

In the end, Airbnb criticized the new rules but pledged to work on their implementation. The new restrictions are supposed to be enforced by the STR platforms to remove listings that violate city rules. The city is also raising taxes on STRs, part of which will be used for enforcement efforts. At the end of 2019 when the ordinance went into effect, there were an estimated 8,500 STRS in the city but only 2,500 registered with the city.

San Diego

San Diego has had a long history of short-term rentals primarily available within its beach neighborhoods. Because of that history, the short-term rental market does contribute to the local economy and provide income for property owners, many of whom are absentee owners. However, the proliferation of units throughout the city, now totaling close to

13,000, has caused the city to consider a new set of regulations. Under a proposal approved by the city planning commission in December 2020, the number of absentee-owners renting units for less than 30 days would be capped at 6,500 including a carve-out for 1,100 units in the Mission Beach neighborhood. The cap represents 1% of the city's housing inventory. Expedia, which owns VRBO, supports the regulations. The hotel worker's labor union lobbied for a lower cap on STRs. Airbnb did not comment on the regulations but did advocated for a 1.2% cap on units.

This represents an about-face for Airbnb which funded a referendum to overturn San Diego's STR regulations in 2018 to ban short-term rentals that were not the owner's primary residence. Faced with nearly twice the number of signatures needed to force a city-wide vote, the city council rescinded the ordinance. At the time, Airbnb's position was that the ordinance "would have devastated the local economy, impacted property rights in every San Diego neighborhood, and cost the city millions annually in tax revenue."[14] As noted earlier in this report, Airbnb's economic impact studies significantly overstate the true impact of the STR industry.

<u>Nashville</u>

With a significant tourism economy, Nashville saw an explosion of STRs across the city. The city was faced with illegal STRs that exceeded more than 4,500 units on STR platforms. In 2017 based on neighborhood complaints, the city considered prohibiting non-owner-occupied homes used for STRs referred to as mini-hotels. Nashville subsequently passed a law in early 2018 phasing out STRs that aren't occupied by their owners. These properties would be required to cease doing business in June 2020. At the same time, Airbnb was lobbying the state legislature to ban local restrictions on STRs, spending between $225,000 and $350,000 on this effort. In early 2018, Airbnb signed a VCA with the state of Tennessee that requires Airbnb to collect the 7% state sales tax on its bookings, but not the 5% Nashville occupancy tax. It was shortly thereafter that Nashville passed the STR ordinance prohibiting mini-hotels.[15]

Airbnb subsequently formed a political action committee called the Committee to Expand Middle Class by Airbnb and started to donate funds to state legislators. A bill was introduced specifying that STRs should not be considered hotels under state law. It also included a provision stripping cities of the power to ban existing STRs and grandfathers in non-owner-occupied STRs. The bill passed in April 2018.

The Tennessee state law preempts the Nashville regulations passed in February 2018. Nashville had taken a reasoned approach to STR regulation by allowing STRs in multifamily or mixed-use areas plus permitting STRs that are occupied by their owners. STRs in residential areas owned by absentee owners would have been banned due to their negative impacts on neighborhoods. Another 27 cities in Tennessee also had rules that prohibited non-owner-occupied STRs in residential areas. Those local rules are now preempted as well.

The Nashville example demonstrates the lengths to which Airbnb will go to eliminate restrictions on STRs. Because Airbnb will not collect the city's occupancy tax, Nashville must now develop a system to identify STR addresses and hosts. In addition, Nashville was faced with illegal STRs and growing concern from citizens. Over 4,500 STRs were listed on 60 active websites. Due to staffing limitations, a consulting firm was retained to develop software solutions. As a result, more than $2.8 million in STR revenue was collected in the first year.

Austin

Austin has been at the forefront of the STR issue in Texas for several years. It revamped its STR ordinances in 2016 by creating three types of STRs.

- Type 1: An owner-occupied residence (owner living on-site a minimum of 51% of the year) including the rental of an entire unit or part of the unit.
- Type 2: A non-owner-occupied unit including single family and duplex units in a residential zoning district.
- Type 3: A non-owner-occupied unit that is part of an apartment or condo property in a commercial district.

The ordinance prohibited the issuance of new Type 2 STR licenses and discontinued existing Type 2 STRs in residential neighborhoods by April 2022. The city ordinance also established STR occupancy limits, regulations on sound equipment, regulations of live music, a prohibition on outdoor assemblies after 10 p.m., and restricted the density of Type 2 STR units in neighborhoods.

In 2019, the city had 10,000 STRs advertised on websites, but only 2,500 had licenses to operate. Of 1,312 complaints in 2019, citations were issued to 581 properties, 93% of which were unlicensed. City enforcement primarily focused on complaints but finding and tracking down thousands of illegal STRs was well beyond city resources. The city hired a consulting firm to identify those unregistered STRs.[16]

In 2016, a number of STR property owners sued the City of Austin, claiming that the regulations were unconstitutional. In November of 2017, the trial court sided with the

City and upheld the city's STR ordinance, but the issue was appealed. In 2018, the Texas Attorney General intervened in the lawsuit in support of the STR owners stating that "city governments do not have the authority to trample Texas constitutional rights and protections for property owners and their guests."

In November 2019 the Third Court of Appeals ruled that Austin's provision banning non-owner-occupied Type 2 STRs was void because of the effect on property rights. The opinion also stated that people have the right of assembly on private property, voiding addition provisions of the city ordinance. The case is now on appeal to the Texas Supreme Court.

The involvement of the Attorney General indicates there are political undertones to the STR issue. The dispute is grounded in the competing rights of STR owners, STR tenants, online platforms, government regulators, and neighboring owners. The primary question is whether the right to rent property on a short-term basis is a fundamental privilege of private property ownership. The outcome will establish the guidelines between the rights of a few to infringe on the property rights of the majority and the rights of local governments to maintain the character of their communities.[17]

Summary

The efforts of the above communities to regulate short-term rentals illustrate the range of issues that STR platforms have imposed upon state and local governments. While these issues exist everywhere STRs do business, their impacts are pronounced in Arizona, where state-law disables local communities from using traditional measures such as zoning to prevent and deal with these adverse consequences. These issues include many complex and controversial matters such as local control over land uses, private property rights and citizen expectations for safe, quiet, and peaceful neighborhoods, building and safety requirements, tax collection, and equity in the treatment of hotel operators. Each city has its own individual issues, but the one that stands out the most is each city's attempt to protect residential neighborhoods from the intrusion of non-owner-occupied STRs and multi-unit owners operating as miniature hotel chains.

Appendix

Letter from Arizona mayors to Airbnb and Expedia Group CEOs

December 9, 2020 By Federal Express & Email

Mr. Brian Chesky
CEO, Airbnb, Inc.
888 Brannan Street
San Francisco, CA 94103
brian.chesky@airbnb.com

Mr. Peter M. Kern
CEO, Expedia Group, Inc.
1111 Expedia Group Way West
Seattle, WA 98119
pekern@expediagroup.com

Dear Messrs. Chesky and Kern,

As you know, Arizona's state law SB1350 gutted local authority over short-term rentals in Arizona, including the local zoning and enforcement authority that traditionally applied to such activities. We, the undersigned mayors of cities and towns across the great State of Arizona, are taking the unusual step today of sending this letter to ask that you immediately end lobbying activities designed to prevent reform of this disastrous state law which your industry promoted.

All of us can provide examples of how SB1350 is causing serious harm to our citizens and neighborhoods, and we are deeply concerned that short-term rentals operating without appropriate local government oversight are causing long-term damage to our communities and the entire state.

Brian Chesky recently admitted that "We really need to think through our impact on cities and communities." Thank you, Mr. Chesky, we agree. But your industry's actions in Arizona are inconsistent with this stated concern.

There is no question that Arizona's SB1350 weakens our communities and has left us defenseless in the face of harmful and undesirable activities. Specifically:

- Once peaceful neighborhoods suffer from unsupervised groups coming in and out for daily stays, which include unruly, disruptive and noisy large gatherings;
- Neighborhoods are experiencing dangerous criminal activity from short-term rental properties, including shootings, sexual and physical assaults, and the use of short-term rental properties as locations and staging places for other criminal activity (over the summer, looting and rioting);
- Affordable housing stocks are being gobbled up by investors who are focused on short-term commercial uses of their properties, rather than neighborhood stability and prosperity;

- Hotels and resorts, which provide jobs for our citizens and a tax base for our communities, face unfair competition under the current Arizona law while they follow a different, more responsible, set of rules.
- As bars and restaurants have been in limited service during the pandemic, short-term rentals have emerged as alternative venues. Many have hosted unsafe and unwelcome parties for hundreds of people during the closures. Cleaning standards are not uniform, if there is recommended cleaning at all, and there typically are no responsible owners present;
- The State of Arizona doesn't have the interest to monitor and identify short-term rental "hosts." Local communities experience hosts avoiding required local registration, platform fees, and taxes by booking "off-line." Local government cannot currently partner with you effectively on this mutual issue;
- Some communities have seen over half of citizen police calls relate to problems with short-term rentals. This is a direct result of our local communities' inability to enact and enforce responsible regulations.

These are just a few of the issues our communities are confronting with no relief in sight under current state law. Earlier this year, bipartisan state legislation that would have substantially returned appropriate authority and effective tools to local communities was advancing through the state legislature with our support. The legislation did not impose bans on short-term rentals, but rather restored to local governments the longstanding right and ability to protect residential neighborhoods. As you know, this is the way things work across the nation, except for Arizona. Unfortunately, the COVID-19 pandemic forced the state legislature out of session before the broadly supported bill could become law.

Your companies have actively and cynically opposed needed reform through public relations and paid lobbying efforts. Your support of Arizona's SB1350 is tearing at the fabric of our communities and is an affront to every Arizona homeowner who aspires to the "American Dream" of peaceful homeownership. The time has come for you to get on the right side of this issue and recognize that supporting our neighborhoods is also in your long-term economic interests and the long-term interests of your investors.

Your current Arizona business model is unsustainable. Until the law returns local control of short-term rentals to locally accountable elected officials, the demand from our citizens for reform will continue to amplify and become a business disruption that cannot be ignored, perhaps with unintended consequences for your companies' larger aspirations.

We believe there are ways for short-term rentals to compatibly and successfully operate in a variety of settings. We also believe that allowing local leaders to manage activities in their communities is the wise and business-savvy approach to creating a sustainable short-term rental industry. All we ask is that you end your efforts to block Arizona's needed return to local standards governing your activities in neighborhood areas.

Thank you for your attention.

Sincerely,

Scott Anderson
Mayor, Gilbert

Mila Besich
Mayor, Town of Superior

Jerry Bien-Willner
Mayor, Town of Paradise Valley

Tom Brady
Mayor, Bullhead City

Ginny Dickey
Mayor, Town of Fountain Hills

Tim Elinski
Mayor, City of Cottonwood

Coral Evans
Mayor, City of Flagstaff

Kate Gallego
Mayor, City of Phoenix

John Giles
Mayor, City of Mesa

Kevin Hartke
Mayor, City of Chandler

Stephanie Irwin
Mayor, Town of Pinetop-Lakeside

Mike LeVault
Mayor, Youngtown

Georgia Lord
Mayor, City of Goodyear

Thomas McCauley
Mayor, City of Winslow

Craig McFarland
Mayor, City of Casa Grande

Greg Mengarelli
Mayor, City of Prescott

Jen Miles
Mayor, City of Kingman

Tom Morrissey
Mayor, Town of Payson

Frederick W. Mueller
Mayor, City of Sierra Vista

Douglas J. Nicholls
Mayor, City of Yuma

Eric Orsborn
Mayor, City of Buckeye

David Ortega
Mayor-Elect, City of Scottsdale

Rui Pereira
Mayor, Town of Wickenburg

Les Peterson
Mayor, Town of Carefree

Micah Powell
Mayor, City of Eloy

Regina Romero
Mayor, City of Tucson

Thomas L. Schoaf
Mayor, City of Litchfield Park

Cal Sheehy
Mayor, Lake Havasu City

Bob Teso
Mayor, City of South Tucson

Anna Tovar
Mayor, Tolleson

Kenneth Weise
Mayor, City of Avondale

Joe Winfield
Mayor, Town of Oro Valley

Corey Woods
Mayor, City of Tempe

cc: 1) Ms. Sara Garvin, VP – Global Communications and Corporate Brand, Expedia Group Inc.

2) Mr. Nick Wilkins, Director of Communications, Airbnb, Inc.

Endnotes

[1] CBRE Research. *Short-Term Rentals: A Maturing U.S. Market and Its Impact on Traditional Hotels*. 2020.

[2] Arizona's law does permit a city or town to regulate STRs if the regulation is narrowly tailored to protect public health and safety for the purposes of fire and building codes, health and sanitation, transportation or traffic control, solid or hazardous waste, and pollution control.

[3] HB 2672 passed in 2019 provided limited relief to cities and towns by requiring STR operators to (1) secure a sales tax license, (2) providing owner or owner's designee contact information to local governments for responding to complaints, and (3) prohibiting STR owners from renting their properties for nonresidential purposes such as a special event or uses such as retail, restaurant, or banquet space. However, SB1350 still prohibits cities and towns from regulating the use of STRs particularly in residential neighborhoods and imposes a state-level enforcement regime.

[4] Rosequist, Melissa. "Short-Term Rental Reforms Appear at Play at Arizona Legislature". Daily Independent. December 31, 2019.

[5] Bivens, Josh. *The Economic Costs and Benefits of Airbnb*. Economic Policy Institute. January 2019.

[6] Adelson, Jeff. "Stricter Limits Will Hit New Orleans Short-Term Rentals After Council Vote; Here's What to Know". NOLA.com news article. August 8, 2019.

[7] Bivens, Josh. *The Economic Costs and Benefits of Airbnb*. Economic Policy Institute. January 2019.

[8] National University System Institute for Policy Research. *Short-Term Rentals in the City of San Diego: An Economic Impact Analysis*. October 2015.

[9] Bucks, Dan R. *Airbnb Agreements with State and Local Tax Agencies: A Formula for Undermining Tax Fairness Transparency and the Rule of Law*. March 2017.

[10] CBRE Research. *Short-Term Rentals: A Maturing U.S. Market and Its Impact on Traditional Hotels*. 2020.

[11] CBRE Hotels America Research. *Hosts with Multiple Units – A Key Driver of Airbnb Growth: A Comprehensive National Review Including a Spotlight on 13 U.S. Markets*. March 2017.

[12] Martineau, Paris. "Inside Airbnb's 'Guerilla War' Against Local Governments". WIRED.com. March 3, 2019.

[13] Adelson, Jeff. "Stricter Limits Will Hit New Orleans Short-Term Rentals After Council Vote; Here's What to Know". NOLA.com news article. August 8, 2019.

[14] Martineau, Paris. "Inside Airbnb's 'Guerilla War' Against Local Governments". WIRED.com. March 3, 2019.

[15] Avalara MyLodgeTax Blog. "Nashville Votes to Phase Out Non-Owner-Occupied Short-Term Rentals". February 9, 2018.

[16] Sokolowsky, Jennifer. "New Data Helps Austin Crack Down on Illegal Short Term Rentals". Avalara MyLodgeTax Blog. July 30, 2019.

[17]Badgett, Rebecca. Coates Cannon Blog. "Short Term Rental Regulations Found Unconstitutional in Texas: Renting is a Fundamental Privilege of Property Ownership". UNC School of Government. April 7, 2020.

References

Adelson, Jeff. "Stricter Limits Will Hit New Orleans Short-Term Rentals After Council Vote; Here's What to Know". NOLA.com news article. August 8, 2019.

American Hotel & Lodging Association. *From Air Mattress to Unregulated Business: An Analysis of the Other Side of Airbnb*. March 2016.

Avalara MyLodgeTax Blog. "Nashville Votes to Phase Out Non-Owner-Occupied Short-Term Rentals". February 9, 2018.

Badgett, Rebecca. Coates Cannon Blog. "Short Term Rental Regulations Found Unconstitutional in Texas: Renting is a Fundamental Privilege of Property Ownership". UNC School of Government. April 7, 2020.

Binzer, Ulrik. *A Practical Guide to Effectively Regulating Short-Term Rentals on the Local Government Level*. Granicus. Undated.

Bivens, Josh. *The Economic Costs and Benefits of Airbnb*. Economic Policy Institute. January 2019.

Bucks, Dan R. *Airbnb Agreements with State and Local Tax Agencies: A Formula for Undermining Tax Fairness Transparency and the Rule of Law*. March 2017.

CBRE Hotels America Research. *Hosts with Multiple Units – A Key Driver of Airbnb Growth: A Comprehensive National Review Including a Spotlight on 13 U.S. Markets*. March 2017.

CBRE Research. *Short-Term Rentals: A Maturing U.S. Market and Its Impact on Traditional Hotels*. 2020.

Dogru, Tarik, Mody, Makarand, and Suess, Courtney. "The Hotel Industry's Achilles Heel? Quantifying the Negative Impacts of Airbnb on Boston's Hotel Performance". Boston Hospitality Review Fall 2017, Vol. 5, Issue 3. 2017.

Granicus. "Short-Term Rental Vacation Rental Compliance". Undated website reference.

Martineau, Paris. "Inside Airbnb's 'Guerilla War' Against Local Governments". WIRED.com. March 3, 2019.

National University System Institute for Policy Research. *Short-Term Rentals in the City of San Diego: An Economic Impact Analysis*. October 2015.

NERA Economic Consulting. *Airbnb's Global Support to Local Economies: Output and Employment*. Prepared for Airbnb. March 2017.

Rana, Preetika. "Airbnb Challenged by Angry Neighbors, Unfavorable Local Regulations Loom as Company Begins Trading Publicly". The Wall Street Journal. December 10, 2020.

Rosequist, Melissa. "Short-Term Rental Reforms Appear at Play at Arizona Legislature". Daily Independent. December 31, 2019.

Rothstein, Matthew. "Not All Short-Term Rental Companies Will Weather the Pandemic Recession Like Airbnb". Bisnow East Coast. January 10, 2021.

Sokolowsky, Jennifer. "New Data Helps Austin Crack Down on Illegal Short Term Rentals". Avalara MyLodgeTax Blog. July 30, 2019.

Sheridan, Mike. "Short-Term Rentals and the Effects on Housing Affordability". Urban Land. Urban Land Institute. October 21, 2019.

Sokolowsky, Jennifer. "Tennessee Lawmakers Pass Bill Limiting Cities' Powers Over Short-Term Rentals". Avalara MyLodgeTax Blog. April 27, 2018.

Weisberg, Lori. "New Regulations Slashing San Diego Short-Term Rentals by 50 Percent Endorsed by Planning Commission". San Diego Union Tribune. December 3, 2020.

Wilson, Trey. "3rd Court of Appeals: Austin's Short Term Rental Ordinance Void". Attorney Website Posting. December 9, 2017.

CITY OF YACHATS
ORDINANCE NO. 364

AN ORDINANCE AMENDING THE YACHATS MUNICIPAL CODE CHAPTER 4.08 RELATED TO VACATION RENTALS

Whereas, the City has regulated vacation rentals for over twenty years so it has been able to observe the impact of the regulations on the community and observe which areas of the regulations could be improved to better obtain the desired results; and

Whereas, the City desires to maintain a strong sense of community and not overwhelm neighborhoods with short-term rentals that impact livability for owner-occupied and long-term rental homes; and

Whereas, the City has a record of responding to complaints related to vacation rentals and the impacts that these rentals have on neighborhoods, including noise, excessive trash, and parking problems; and

Whereas, the City understands the needs of owners that choose to rent out their homes on a short-term basis, so the City seeks to balance the wants of such owners with the wants of their neighbors that deal with the nuisance impacts that can result from vacation rentals; and

Whereas, the City wants to encourage all those property owners that engage in short-term renting of their property to license their activities so that all property owners are operating under the same rules; and

Whereas, the City wishes to make select changes to its vacation rental regulations based upon its review of recent complaints, examples from other jurisdictions, and reflection on its current practices,

NOW THEREFORE, the City of Yachats ordains as follows:

Section 1. Yachats Municipal Code Chapter 4.08.

Yachats Municipal Code Chapter 4.08 shall be amended to read as follows:

Section 4.08.010 Purpose.

The vacation rental license is in recognition of the desire of many owners to rent their property on a short-term basis and to provide for the orderly use and regulation of such rentals to preserve the health, safety and welfare of the community. This use shall not adversely affect the residential character of the neighborhood. These standards and procedures are in addition to City ordinances and Federal and State laws and regulations.

Section 4.08.020 Definitions.

"Dwelling unit" means any building or portion thereof which contains separate living facilities, including provisions for sleeping, eating, cooking and sanitation.

"Incident" means an offensive activity or breach of the standards in Section 4.08.030.

"Local contact person" means a person with the authority to take action or make decisions concerning the management of a licensed vacation rental property.

"Occupant" means a person over the age of four (4) years who occupies a rented dwelling unit.

"Overnight" means anytime between the hours of 10:00 p.m. and 7:00 a.m. on the following day.

"Sleeping area" means a bedroom or loft within a dwelling unit which meets the requirements of the building code as adopted by the State of Oregon.

"Surfaced" means a gravel, paved, tile, brick or concrete surface suitable for parking a vehicle.

"Vacation rental" means a single-family dwelling, duplex or triplex which is rented, or held out as available for rent, for periods of less than thirty (30) days, such as by the day or week. The dwelling may consist of individual units or be in a contiguous form to be considered a vacation rental dwelling; however, each individual unit is to be considered separately for licensing and regulation purposes. A dwelling which is listed with an agent as a vacation rental, advertised, available by referral, word of mouth, commendation and reputation are some of, but not limited to, the ways of identifying a vacation rental. It shall be a rebuttable presumption that a dwelling unit is a vacation rental if it is visited overnight by at least four (4) different vehicles over the course of a month, for three (3) consecutive months. The exchange of consideration is not necessary to meet the definition of a vacation rental if the dwelling otherwise is held out as available for occupancy for periods of less than thirty (30) days.

Section 4.08.030 Standards.

A vacation rental license shall be issued to the dwelling owner providing the following standards are met:

A. Except for individual units located on the same property, such as a duplex or triplex as defined above in Section 4.08.020, a person holding a vacation rental license or an interest in a property covered by a vacation rental license shall not be eligible to apply for or hold, as a member of a group or any other form of beneficial ownership, a vacation rental license covering any other property. Any change of ownership, in whatever form, shall be reported to the City within thirty (30) days.

B. Vacation rentals in residential zones shall have no more than four (4) bedrooms. (This provision shall be waived for any existing vacation rental as of the effective date of Ordinance No. 328, adopted November 13, 2014.)

C. A vacation rental shall comply with all applicable laws. Basic visitor rules as provided by the City must be prominently displayed on the inside of the primary exit door.

D. Each vacation rental shall have a local contact person who must live within ten (10) miles of the City of Yachats and be available for response to alleged violations within two (2) hours of notification. The contact information for the local contact person shall be kept current with the City of Yachats; identified on the vacation rental application; and available by phone at all reasonable times (8:00 a.m. to 11:00 p.m.) and respond within two (2) hours if there is a problem during the dwelling's use as a vacation rental. The City license, with the name and phone number of the local contact, shall be posted on the front of the vacation rental building, where the public can easily read it. The license placard furnished by the City will be a specific color matched to property management companies, to further assist the public in identifying the responsible party. The house number for the vacation rental shall be prominently displayed on the exterior of the building, using numbers at least four (4) inches in height, and be readily visible from the street. A copy of the local contact person agreement, in a form approved by the City, which lists the duties and responsibilities of the local contact person, signed by both the property owner and the local contact person, shall be filed with the City, and kept current. The local contact person must maintain an accurate listing of complaints received about the vacation rental. The listing must document the date of each complaint received, the nature of the complaint and how the complaint was resolved. The listing must be provided to the City as part of the annual license renewal for the vacation rental.

E. One on-property parking space, as defined in Section 9.04.030 for off-street parking, shall be provided for each sleeping area in the dwelling, but in no event shall fewer than two (2) spaces be provided for the vacation rental. (This provision shall be waived for any existing vacation rental as of the effective date of Ordinance No. 226, adopted 1/15/2002.) If access to the rental property crosses private property via an easement, right-of-way, or other conveyance, all parking must be contained on the rental property. Owners are required to provide parking that is unimpeded, surfaced, useable and available to renters. The parking shall be mapped and posted in the home, and a copy given to the City with the vacation rental license application, and again whenever the location of designated parking spaces change. The owner shall require renters to use only the parking spaces that are surfaced and marked on the map.

F. The maximum number of vehicles allowed on the property shall not exceed the number of surfaced parking areas on the property or six (6) vehicles, whichever is less. Parking is limited to surfaced parking on the property. If access to the rental property crosses private property via an easement, right-of-way, or conveyance, ingress and egress must be accomplished without encroachment on other properties adjoining the privately maintained access road or driveway. In such situations applicants will provide evidence of their right to use the privately maintained access road or driveway consistent with vacation rental before a vacation rental license is granted.

G. There shall not be any noise, litter or odor noticeable at or beyond the property line resulting from the use of the dwelling as a vacation rental that violates Yachats Municipal Code.

H. The maximum allowable number of occupants shall be two (2) persons per sleeping area plus two (2) additional persons per vacation rental. The rental agent shall match the number of persons and vehicles to the particular property being rented. Advertisements for the rental shall not list a number of occupants that exceeds the number authorized by the City. Recreational vehicles, campers, tents and similar structures shall not be allowed on vacation rental properties. Parking a boat trailer of moderate size, with or without a boat, is permitted as a substitute for one vehicle.

I. Weekly solid waste collection service shall be provided. A sufficient number of suitable garbage receptacles shall be provided and must have bear-proof mechanisms. Except on collection day, these garbage receptacles shall not be readily visible from the street. Renters shall be advised not to place trash outside in plastic bags.

J. Each vacation rental shall provide and maintain a container for the disposal of cooking grease into a solid waste receptacle to prevent the grease from entering the sewer system.

K. All pets must be under control at all times. Methods of control include a leash or demonstrated effective voice command. The person having the control, custody or possession of a dog shall clean up after the dog by using a dog waste bag or other suitable method.

L. Vacation rental licenses are non-transferable.

M. The licensee must comply with the requirements of the occupancy tax ordinance as a condition for issuance or renewal of a vacation rental license.

N. Licensees shall keep all information on the GoYachats website current and notify City Hall of any changes in mailing address, email address or agent or contact person. Email addresses, mailing addresses and phone numbers for the owner, local contact person and person responsible for tax reporting shall be kept current with the City. Failure to keep contact information current shall constitute a violation of this chapter.

O. Licensees may not advertise a vacation rental for a higher occupancy than the maximum allowable number of overnight occupants listed on the license.

P. Vacation rentals shall comply with the standards in this section, whether or not the vacation rental is occupied by a renter, owner, or other person.

Section 4.08.040 Inspection, license and annual fee.

A. The City shall prepare an application form for a vacation rental license. Prior to issuance of a vacation rental license, the City will inspect the subject property to determine occupancy capacity, parking and access compliance. Upon receipt of the completed application, the annual license fee, inspection and attestation that the licensing standards have been met, the City shall issue a license to the applicant (not the dwelling) for a period of one year. The license may be renewed annually if all standards are met. The vacation rental will be subject to inspection every two years. The City retains the right to re-inspect the property at any time. Complaints received by the City may trigger a re-inspection. An inspection fee will be assessed for the initial inspection, for additional inspections undertaken due to complaints, and for each two (2) year inspection completed by the City. A vacation rental licensee shall not be required to pay a business occupation license fee in addition to the annual license fee. The annual license and inspection fees shall be set by resolution of the City Council. All fees are non-refundable.

B. All licenses shall be obtained prior to any rental of the property. The required application and license fee are due on January 1 of each year for the fiscal year commencing with that date and are delinquent on February 1. The delinquency fee will be set by resolution.

C. A total of one hundred twenty-five (125) licenses will be available at any one time. For license renewals each year, priority will be given to existing licenses seeking renewal, so long as the renewal application is delivered to the City by December 29, or the next business day if December 29 falls on a day City Hall is closed. After December 29, if existing licenses are below one hundred twenty-five (125) in total number, and there are licenses available after accounting for all license renewal, new applications will be accepted on a first-come first-served basis, with process identified through administrative policy.

Section 4.08.050 Complaints.

All complaints shall be in writing on a form provided by the City and signed by the complainant. The complainant must show or attest that they have made a timely attempt to resolve the issue with the local contact person responsible for management of the property. The complainant is expected to initiate the process while the out of compliance incident is occurring or when they first become aware that a property is not in compliance with the regulations. All complaints filed with the City shall be verified by the City for validity.

A. When a complaint is filed that is verified by the City to be valid, the owner and local contact person will be notified in writing by mail or email, and provided with a copy of the complaint. Either the owner or the local contact person will be required to meet with a City representative to discuss means by which further complaints may be avoided. If the licensee fails to meet this requirement within a reasonable amount of time, City staff will prepare a report for City Council action.

B. Upon a second complaint that is verified by the City to be valid, the owner and local contact person will again be notified in writing by mail or email and provided with a copy of the complaint. Either the owner or local contact person will again be required to meet with a City representative to further discuss means by which further complaints may be avoided. If the licensee fails to meet this requirement within a reasonable amount of time, the City Recorder will prepare a report for City Council action.

C. Upon a third complaint within a ninety (90) day period that is verified by the City to be valid, the owner and agent, if any, will be notified in writing by mail or email and provided with a copy of the complaint.

1. City staff may schedule a hearing and prepare a report for City Council action.

2. The City Council may schedule a hearing.

3. Either the City Manager or City Council may, without a hearing, revoke the license immediately.

4. In the event that a license is revoked, the applicant or license holder shall have the right of appeal. The written notice of appeal to the Council shall be filed with the City within fifteen (15) days of the notice of revocation.

D. Standards of judging complaints shall include, but are not limited to, the following:

1. Noncompliance with vacation rental license standards as stated in Section 4.08.030;

2. Monopoly of on-street parking;

3. Other offensive activities not in harmony with the residential neighborhood such as trespass, excessive noise or pets running loose.

E. The City Council, upon hearing the evidence, may: (1) approve the license as it exists; (2) revoke the license; (3) impose appropriate restrictions on the operation of the license.

Section 4.08.060 Violations—Penalties.

It is unlawful for any person so required to fail or refuse to apply for a license, or operate without a license as required herein. Any person who violates any provisions of this chapter is subject to a fine of up to one thousand dollars ($1,000) per violation, with each day of a continuing violation constituting a separate violation. The third violation within any consecutive twelve (12) month period shall result in revocation of the vacation rental license for twelve (12) months, after which time the owner may reapply for a new license, in accordance with Section 4.08.040(C). Violations shall be subject to the procedures and penalties of Chapter 1.12, as now constituted or hereafter amended or revised.

Section 2. Effective date.

Pursuant to the Yachats Charter, this ordinance shall take effect 30 days after adoption.

Passed and adopted by the City Council of the City of Yachats on this ___ day of _______, 2019.

	YES	NO	NOT PRESENT
John Moore, Mayor	☐	☐	☐
Max Glenn	☐	☐	☐
James Kerti	☐	☐	☐
Jim Tooke	☐	☐	☐
Leslie Vaaler	☐	☐	☐

____
W. John Moore, Mayor

Attest by:

____
Shannon Beaucaire, City Manager

1843
YAMHILL COUNTY

ASSESSMENT & TAX
CARTOGRAPHY

N.E.1/4 S.W.1/4 SEC.19 T.3S. R.2W. W.M.
YAMHILL COUNTY OREGON
1" = 100'

CANCELLED TAXLOTS:
1000
101

DATE PRINTED: 7/28/2020

2017




Assessing and Responding to Short-Term Rentals in Oregon

ENABLING THE BENEFITS OF THE SHARING ECONOMY

BY: SADIE DINATALE
COMMITTEE CHAIRS: REBECCA LEWIS, Ph.D. and ROBERT PARKER, AICP

UNIVERSITY OF OREGON | DEPARTMENT OF PLANNING, PUBLIC POLICY, AND MANAGEMENT

This page is intentionally blank.

Table of Contents

Abstract

**Assessing and Responding to Short-Term Rentals in Oregon:
Enabling the Benefits of the Sharing Economy**

Local, regional, and state governments across the country struggle to manage the impacts of short-term rentals (STRs), and the sharing economy more generally. Often referred to as vacation rentals, STRs are not new to the housing market yet, in the last decade, technology has greatly influenced their prevalence. Private, web-based businesses such as Airbnb, VRBO, HomeToGo, LUXbnb, CouchSurfing, HomeAway, FlipKey, and VaCasa, have given people access to a user-friendly, global marketplace for home sharing.

As the sharing economy proliferates, STRs have often flown under the radar of government taxation and regulation. Accordingly, many perceived negative impacts of STRs exist including the loss of tax revenue and impacts on traditional lodging businesses, neighborhoods, housing affordability, and housing availability. Still, the widespread use of these platforms show evidence of many localized benefits. Some of these benefits include allowing property owners to earn income by renting out their unused space, offering tourists an experience that is more unique, and among others, driving visitors to places not conventionally accessible for tourists (spurring economic activity in new areas and communities).

Because this economic activity, as it used today, is a relatively new phenomenon, existing research is sparse and tends to focus on large/mega cities. Thus, this research fills an important gap by focusing on small, tourism-oriented towns in Oregon. We address the following research questions in this paper: 1) What is the prevalence and characteristics of short-term rentals in Oregon? 2) What is the revenue potential of short-term rentals in Oregon? 3) What are the existing perceptions around short-term rentals in Oregon? 4) How are short-term rentals currently being regulated in Oregon? 5) To what extent do short-term rentals compete with long-term rentals?

To examine the prevalence of short-term rentals, we rely on city-level data from AirBnB and property-specific data from AirDnA, for cities under 100,000 in population. We also use American Community Survey data to examine the share of total housing units and vacant units with short-term rentals. To understand the positive and negative impacts and the regulatory environment, we rely on a survey administered to city managers and city planners.

This work provides timely and valuable information to small and mid-sized cities regarding a recent trend affecting housing. Planners and city staff need to understand how short-term rentals are affecting their communities and respond with appropriate regulatory controls.

Acknowledgments

A sincere thank you to Rebecca Lewis, PhD and Robert Parker, AICP for providing guidance and direction on this project as committee chairs. In addition, thank you to Beth Goodman for your generous consultation.

Moreover, I would like to thank the University of Oregon's Department of Planning, Public Policy and Management for providing financial support.

Thank you to the many individuals who provided input with survey responses and thank you to AirBnB who has supported this research by proving valuable data.

Questions of More Information?

Oregon communities interested in short-term rental data for their community, county, or region (or who have questions about this report) can contact Sadie DiNatale at Sadie.dinatale@gmail.com.

Executive Summary

This summary briefly outlines the purpose of this project, delineates key findings, and concludes with ways to respond to the impacts of short-term rentals (STRs) in smaller cities.

Introduction

Short-term rentals (STRs) are often defined as housing units that are rented or leased for less than 30 days, although they not officially defined by state or federal authorities. Part of the sharing economy, STRs are representative of a phenomenon in which people are increasingly choosing to share access to goods and services via a lateral or hierarchical exchange (which often includes a monetary exchange as well). This trend has been understood to offer both benefits and costs to communities across the country.

Accordingly, this project uses Airbnb property data for the state of Oregon to understand how this sharing economy activity influences cities with populations fewer than 100,000. Case studies are used to delve deeper into this analysis. A survey sent to Oregon city managers and planning directors complements this research by gauging the existing policy frameworks for STRs in Oregon. This survey provides insight into how cities view STRs and assists in the development of regulatory best practices for responding to STR impacts.

Key Findings

What is the prevalence and characteristics of short-term rentals in Oregon cities with <100,000 people?

- Airbnbs account for more than 5% of total housing in only 16 cities, indicating that short-term rentals are not prevalent in most jurisdictions. Still, we must qualify this statement with the fact that not all short-term rentals are equivalent to one dwelling unit.
- Airbnbs are most prevalent in Central Oregon and the North Coast.
- From 2014 to 2016, the number of new STRs created increased by roughly 180%.
- Short-term rentals tend to be in lower income neighborhoods more commonly.
- Most Airbnb hosts operate a single STR. Of approximately 4,400 hosts, 22% operate more than one STR.
- Approximately 70% of Airbnb hosts rent out their entire home/apartment (either primary or second home) and another 30% of STRs are listed or rented out as a private room (the remaining 1% is listed as a shared room).
- Most STRs are traditional property types. Approximately 60% of all listed properties are houses and another 13% are apartments.

What is the revenue potential of short-term rentals in Oregon cities with <100,000 people?

- Short-term rentals generate substantial revenue in Oregon. Hosts have earned an aggregated $82 million in the last year.
- Nine of the 15 cities with the highest grossing revenue are in the North Coast.
- Eight of the 15 cities with the highest revenue per capita are also located in the North Coast.

- Approximately 70% of Airbnb hosts generate less than $10,000/year in gross revenue for operating their short-term rental(s).
- Transient lodging taxes (TLT) imposed on Airbnbs by the state generate substantial fiscal revenue. The state, imposing a 1.8% TLT on an estimated $82 million, earned approximately $1.5 million from Airbnb STRs in the last year.

To what extent do short-term rentals constrain the supply of housing in Oregon cities with <100,000 people?

- Half of all STRs are reserved for less than 30 days (36% are reserved for 10 or fewer days).
- In more urbanized regions such as Portland Metro and Willamette Valley, STRs are operated as private rooms slightly more than as entire homes.
- Perhaps a more accurate determination of housing supply constraints is the ratio of STRs (entire homes, rented for more than 30 days per year) to total housing units. Using this ratio to measure supply constraints, STRs account for approximately 2% of total housing in the North Coast and approximately 1.8% in Central Oregon.
- For most case study cities, data suggests that STRs are constraining the supply of long-term housing.
    - In case study cities, new STR growth is increasing at a faster rate than newly constructed total housing units.
    - Property owners in resort communities (case studies) can generate more annual revenue off STRs than they can off standard long-term rental units.

What are the existing perceptions around short-term rentals in Oregon?

- In general, survey respondents indicated that while residents shared mixed perceptions about STRs, local elected officials and businesses within the accommodation sector viewed STRs as less problematic.
- STRs provide great benefits including their ability to provide transient lodging tax revenue, to support tourism activities, and to support communities that rely on tourism.
- STRs economically weaken communities by impacting resources such as the availability of housing (especially affordable and rental housing) and police and city staff time who deal with complaints from neighbors/business owners.
- Respondents who agreed or strongly agreed with that statement that STRs evaded policies and regulations in their communities (26%), surprisingly did not all agree that their policies were ineffective.
- Communities who do not see the need to regulate STRs indicated that STRs are either not a problem in their community (e.g. there are no STRs or not enough STRs to regulate) or that STRs fit in with the character of their community and therefore regulation was not necessary.
- Most communities who will potentially develop ordinances to regulate STRs in the next five years will do so primarily to formalize the process and rules associated with it, legitimize existing situations, develop clear and objective standards, and promote fairness.

How are short-term rentals currently being regulated in Oregon?

- STRs are commonly referred to as short-term rentals, transient rentals, or vacation rentals.
- STRs are most commonly defined as units rented for less than 30 days.

- Most regulations for STR require that operators have a license and/or permit (92%) and 81% of respondents also indicated that their community imposes a transient lodging tax (or similar tax) on STRs.
- Respondents also commonly regulate STRs by relying on concentration caps or occupancy requirements.
- Most respondents (60%) find their regulations for STRs, or lack thereof, to be neither effective nor ineffective in managing the economic benefits or negative impacts of short-term rentals.
- STR ordinances were most commonly enforced by issuances of administrative citations (62%) and fines (58%).

Conclusion

We know that the solution to STRs will be different for every city. What is true for Oregon is true for communities across the United States: STRs affect cities dissimilarly and in turn, view STRs diversely. Accordingly, many communities have taken the experimental and incremental approach, not knowing if their policy will truly mitigate the impacts and/or enable the benefits hoped for but needing to trial something.

In the response to short-term rentals, communities should **construct regulations in conjunction with both a local, community conversation and a regional conversation.** This inclusivity aspect is key to construct equitable regulations less likely to be evaded and more likely to mitigate the negative externalities created by STRs and these policies themselves.

Additional best practices are as follows. More information on these practices can be found in Chapter 3.

- Define Short-Term Rentals and Codify Regulations in City Ordinances
- Distinguish Between Short-Term Rentals
- Restrict Use or Incentivize Moderate Use (rather than banning STRs)
- Normalize STRs as a Residential Activity (with Caveats)
- Permit STRs in Premium Areas with Monitoring
- Develop Appropriate Regulatory Standards
- Require STRs to Get a Permit or License
- Require STR Operators to Pay Fees and Taxes

Regarding enforcement, it is difficult for governments to regulate something they do not have complete control over. Initiating community conversations to educate and encourage appropriate use of STRs can, however, induce a culture of self-regulation and compliance.

Recommendations

The following sections break recommendations into minimum requirements and ancillary requirements for cities. Next, I provide recommendations for counties/regions and the State.

Minimum Regulatory Recommendations for All Cities

Whether a city has STRs or not, communities should establish the following regulations, even as a precautionary measure:

1. Legally define STRs as "short-term rentals" and establish a fair frequency of use standard that is complimentary of regional standards.
2. Codify regulations in local ordinance. Impose a guest capacity limit and require inspections.
3. Levy a transient lodging tax (if not imposed at the county level).
4. Require that STR operators register their unit(s) on an annual basis.

Ancillary Regulatory Recommendation with Thresholds for Cities

Variations in number and concentration of STRs should influence policy choices. The following recommendations provide thresholds for ancillary regulations as a starting point. In that, thresholds may vary between communities.

1. Restrict (cap/limit) STRs or incentivize moderate use if STRs account for more than 4% of total housing stock.
2. Impose a clause that revokes a STR permit for properties that receive more than five nuisance complaints in a calendar year.
3. Limit STRs in proximity to other STRs (deconcentrate) when city-wide/area-specific nuisance complaints exceed 25 complaints in a calendar year. Communities should establish a fair distance (e.g. 50 to 200 feet buffer between STRs), weigh equity implications, and re-evaluate buffer distance every two to five years.
    a. Before establishing a buffer distance, cities should increase regulatory standards and evaluate whether nuisance complaints reduce (e.g. establishing minimum parking standards may mitigate parking complaints).

Recommendations for Counties and Regions

Smaller jurisdictions may have difficulties managing STRs. That said, counties/regions should help facilitate proper management of STRs.

1. Levy a transient lodging tax at the county level if barriers exist for cities to impose their own (due to population size, low prevalence of STRs in individual communities, administrative limitations, etc.).
2. Establish a regional representative or liaison to attend Sharing Economy Committee meetings (see first "Recommendation for Oregon"). Regional liaisons should represent multiple counties.

Recommendations for Oregon

Oregon can and should become a leader in the management of STRs. This will require the state to become a leader in sharing economy affairs.

1. Establish a Sharing Economy Committee to facilitate research (including analysis of STR trends) and to assist communities across the state dealing with various issues. The objective of this committee should be one in support of sharing economy activities.

2. Hire a state employee to work directly in sharing economy affairs. Responsibilities should include:
    - Analyze sharing economy trends across the state, country, and globe
    - Communicate initiatives, information, and best practices to governments across the state
    - Provide government assistance in STR management
    - Collaborate with sharing-economy platforms
    - Collect data
    - Participate in global sharing economy networks
    - Coordinate state Sharing Economy Committee meetings, trainings, and workshops
    - Launch policy demonstration studies to pilot regulatory frameworks and options
3. Maintain a neutral Transient Lodging Tax at 1.8% to allow regions and cities to use their tax rates to manage STR growth.
4. Establish a pool of funding to help small communities amend land use ordinances for STRs.

Chapter 1: Introduction

While not officially defined by state or federal authorities, a short-term rental (STR) can be generally characterized as a housing unit that is leased or rented for less than 30 days. It is an arrangement that involves the trade of the temporary, but not future use, of a full or partial housing unit (Flath 1980). Sometimes referred to as vacation rentals, they are not new commodities of the housing market.

In recent years however, technology has greatly influenced the STR and vacation rental market (Varma 2016, Fleetwood 2012). Internet-based businesses such as Airbnb, VRBO, HomeToGo, LUXbnb, CouchSurfing, HomeAway, FlipKey, and VaCasa have given people access to a user-friendly, global marketplace (i.e. Airbnb alone reaches 191 countries). These companies cater to the exchange of short-term rentals under the coordination of a web-interface. Today, with STRs remaining relatively unregulated, just about anyone can rent out a room, their home, or their apartment by following a simple, streamlined process.

Tech-based platforms (i.e. Airbnb; VRBO) that provide a market to short-term rentals are taking advantage of the sharing economy phenomenon. The prevalence of access based services (that employ pay-per-use models rather than ownership of certain goods) has increased in recent years. Technological advances coupled with individuals placing higher value on experiences (rather than possessions) have also aided in this market shift. This phenomenon has allowed businesses and individuals under this access/sharing economy umbrella to cash in on the new opportunities this phenomenon brings. For instance, Airbnb claims approximately 100 million users with 500,000 bookings/night (Smith, 2017) and is expected to earn upwards of $3.5 million/year by 2020 (Gallagher, 2017). With that said, in a survey of Airbnb users, respondents were "nine times more likely to be more satisfied with Airbnb than their hotel stay" (Dillow, 2016).

With the introduction of new, sharing economy, business models came debate about how existing regulations address these new activities. Debate has considered whether the companies that market short-term rentals have also been able to reap greater financial returns by taking advantage of regulatory loop holes (allowing property owners to market their STRs through their site despite not being registered with the appropriate jurisdiction or despite these properties not having permits or paying tax, if applicable).

TERMS

Short-Term Rental (STR): A housing unit, rented or leased for less than 30 days; not officially defined by state or federal authorities

Sharing Economy:
An economic and social activity that mutualizes access to goods/services; tech-based and grown out of the open-source community; involves a peer-to-peer exchange (lateral exchange)

"a sharing economy is a blueprint of a future business idea that explains how to link economic, environmental and social issues"
(Daunorienè et al. 2015)

Access Economy: Suggested term for sharing economy activities which are market-mediated by a tech-based, intermediary company between suppliers and consumers (hierarchical exchange)

Impact:
The measurable effect a specific activity has on a defined area or people

The widespread use of these web-based platforms show evidence of many localized benefits, advertised to include: increasing tourism in local communities, helping property owners earn income by renting out their unused space, offering tourists and visitors the experience of living like a local, and driving visitors to areas tourists did not traditionally flock to.

> "On the one hand, there are those who see the sharing economy as a tool for addressing pressing social justice or environmental issues — such as people establishing time banks, food sharing schemes or those pursing alternative, low carbon lifestyles. At the other end of the spectrum, there are many entrepreneurs who stand to make millions of dollars from their new sharing platforms, mainly by encouraging people to rent out the underutilized goods they own". (Makwana, 2013)

Still, these companies often face criticism for negative impacts (such as nuisance issues or constraining the availability of housing) or for allowing its users to evade local policy. Because of these real and perceived negative impacts, cities have sought to regulate short-term rentals to recoup lodging taxes, prevent impacts on housing affordability, and address neighborhood concerns around noise, traffic, and parking. Accordingly, short-term rentals have gained a reputation of both satisfying a cultural, social, and economic need while not being completely without social and economic consequence.

Purpose

The purpose of the research project is to assess how short-term rentals, as part of the sharing economy, directly impact small and mid-sized cities in Oregon via revenue generation and fiscal revenue potential. This study also looks at ways in which demand for STRs influence the supply of long-term housing. Better understanding these impacts will fill a gap in existing literature, as most studies have focused on how short-term rentals impact large cities or mega-cities. Moreover, the purpose of this project is to gauge existing perceptions and policy frameworks of STRs in Oregon cities as to better understand the political and social climate around this activity. This policy analysis is intended to assist planners and policy makers of small communities respond to and better manage STRs in order to enable the benefits of the sharing economy.

Methodology

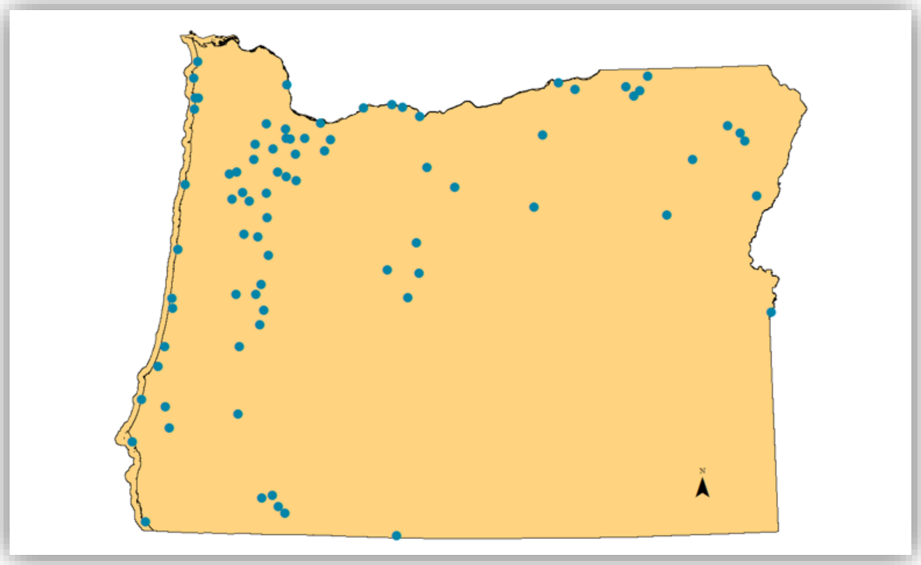
This study uses a mixed-method-approach. Data analysis used secondary sources including:

- **AirDnA:** market summary and property performance reports
- **AirBnB:** aggregated industry data by city
- **American Community Survey:** Housing and Population characteristics

Data analysis is used to answer the questions: What is the prevalence and characteristics of short-term rentals in Oregon? What is the revenue potential of short-term rentals in Oregon? And, to what extent do STRs constrain the supply of housing? This analysis specifically looks at cities with a population of less than 100,000 (communities that have been mostly excluded from existing studies on this topic).

In addition, we created an innovative survey, developed on Qualtrics, to get information about policies and perceptions of city administrators and planners across Oregon. The survey had 32 questions and asked City managers and planners to comment on the ways in which STRs impact their community. Questions also asked City staff to comment on the ways in which various actors perceive STRs in their community. Finally, the survey asked City staff to comment on their existing or potential policy framework for STRs. The survey received 103 responses out of a possible 294 yielding a response rate of 35%.

Map 1.1. Location of Survey Respondents



Source: Responding to Short Term Rentals in Oregon Survey, Q27, 2017.

Further, using a series of selected case studies, I dig deeper into the connection between regulatory frameworks, perceptions of STRs, and the actual impact they create in small to mid-sized cities. Criteria for selection was that the city possess elevated levels of Airbnb rentals as compared to other Oregon cities and/or possess a high percentage of Airbnb rentals as compared to the community's total housing units. Additionally, I ensure that case studies represented a range of city sizes (with populations of under 100,000) and that selected cities came from a range of geographic regions in Oregon. Predominantly, these cities are tourist destinations. A description of the case studies and applicable data is in Appendix B. Case studies are: Ashland, Bend, Depoe Bay, Hood River, Joseph, Lincoln City, Manzanita, Rockaway Beach, Seaside, and Sisters.

Limitations

As in most analyses, several limitations exist. To enable transparency, this study presents the following limitations:

- AirDnA data was heavily relied on for this analysis. While the data set was very useful in explaining both the nature of short-term rentals and their impact in Oregon, margins of error are unknown and thus, its accuracy is questionable. I did compare AirDnA data (presented at the property level) with Airbnb data (limited to the city level) as a sensitivity test in Appendix D and found similarities. AirDnA data was also slightly manipulated by the researcher to remove fake and test listings.

- All STRs are not advertised or listed through the Airbnb platform. For instance, some property owners may use VRBO, HomeAway, and other platforms to market their STRs. Thus, communities may have more STRs than what was documented in this study.

- A limitation to the 'Responding to Short-Term Rentals in Oregon' survey is that not all cities in Oregon participated, meaning these results are not entirely comprehensive. Some communities indicated that they did not take the survey because they do not have any STRs (real and perceived) which may have limited learning about the perspectives of communities who are not currently concerned about this component of contemporary housing discussions.

- A final limitation was time. The researcher was unable to conduct interviews with city administrators or staff planners in each of the case studies cities (or with regional/state housing experts). This restricted the ability to fully compare findings with perceptions and to discuss potential future actions. As a result, full reliance was placed on the applicable city's survey responses (apart from Depoe Bay which was not received) and code review.

Chapter 2: Key Findings

The organization of this chapter[1] is as follows:

1) What is the prevalence and characteristics of STRs in Oregon?
2) What is the revenue potential of STRs in Oregon?
3) What are the existing perceptions around STRs in Oregon?
4) How are STRs currently being regulated in Oregon?
5) To what extent do STRs constrain the supply of housing in Oregon?

Overarchingly, this chapter conveys findings only for cities in Oregon with populations less than 100,000 (unless otherwise specified). ***In that, Portland, Eugene, Salem, and Gresham were excluded from analysis as to focus in on how STRs affect smaller cities in Oregon. Also, excluded from analysis are STRs in census-designated places or towns (as of 2015).***

What is the prevalence and characteristics of short-term rentals in Oregon?

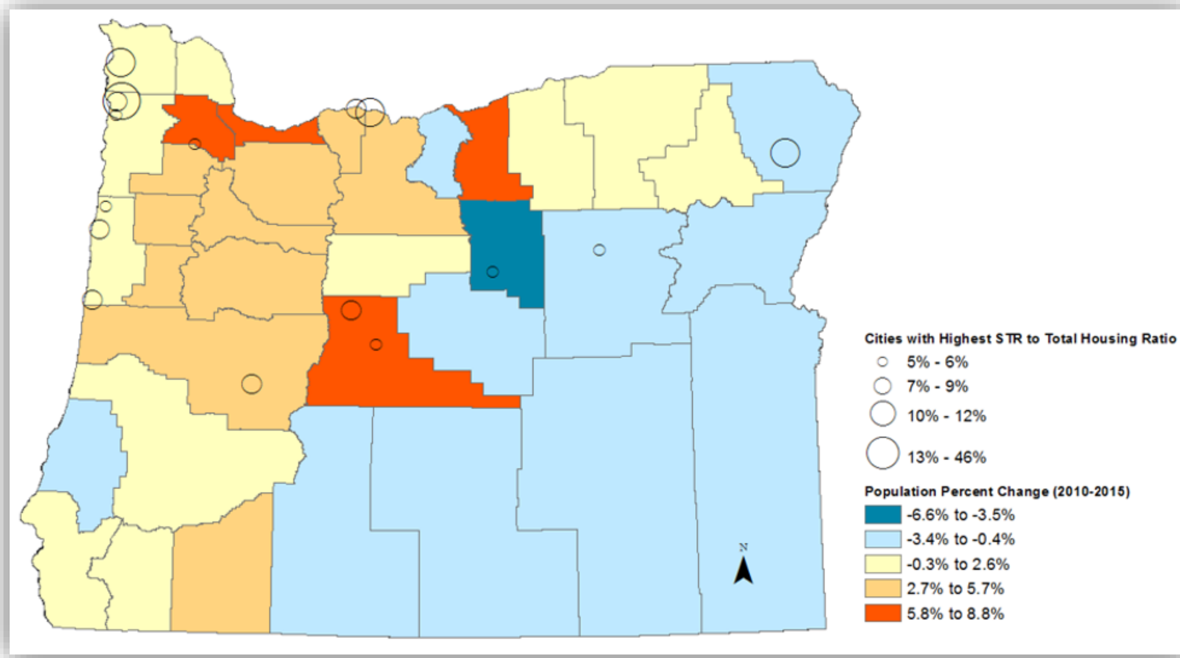
Oregon's four largest cities (Portland, Eugene, Salem, and Gresham) encompass approximately 10,000 AirBnBs (56% of the state's AirBnB short-term rental stock). Cites with less than 100,000 people (from this point further: cities) encompass approximately 8,000 Airbnb STRs; roughly 44% of total Airbnbs for the state. As a note, Airbnb are located within every county and in 75% of the state's total cities.

Assessing the approximate number of STRs (as well as their location and property characteristics) enables conceptualization of the industry. Use of existing studies provides additional context for findings.

- **Airbnbs account for more than 5% of total housing in only 16 cities, indicating that short-term rentals are not prevalent in most jurisdictions (see Map 2.1).** Still, we must qualify this statement with the fact that not all short-term rentals are equivalent to one dwelling unit. Nevertheless, for these 15 jurisdictions (Bend, Depoe Bay, Gaston, Hood River, Joseph, Lincoln City, Long Creek, Manzanita, Mitchell, Mosier, Nehalem, Rockaway Beach, Seaside, Sisters, Westfir, and Yachats), the ratio of AirBnBs to housing units could suggest a potential housing supply constraint. This concern will be further addressed later in this report.

[1] This chapter uses AirDnA data as well as information from the American Community Survey to paint a picture of the nature of STRs in Oregon as well as their impact. The Responding to Short-Term Rentals in Oregon Survey was also used to understand existing policy frameworks and perceptions of STRs.

Map 2.1. Indication of Potential Housing Supply Constraint for Cities with Higher Portion of STRs



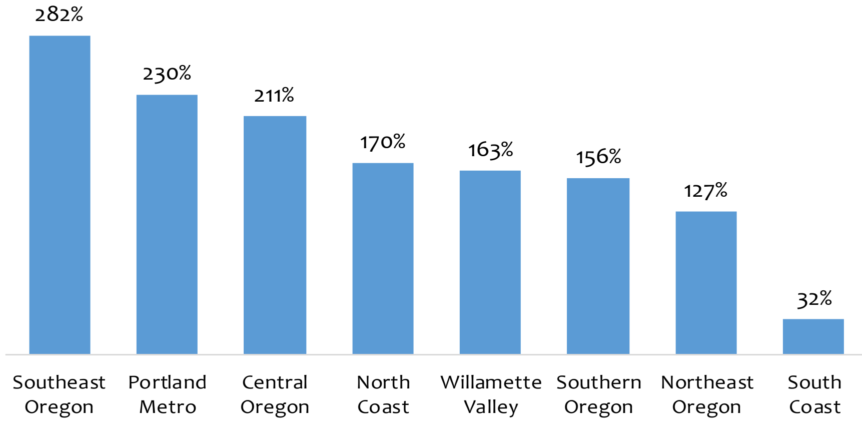
Source: AirDnA Property Data, Retrieved 2017. United States Census, American Community Survey, Population Data, 2011-2015. Excludes Portland, Eugene, Salem, and Gresham.

- **Airbnbs are most prevalent in Central Oregon and the North Coast**. In Central Oregon, AirBnBs account for approximately 4% of the region's total housing stock. In the North Coast, Airbnbs account for 5% of the region's total housing stock. Again, this is not a precise equivalency; rather it is an opportunity for conceptualization. For cities in the remaining six regions, Airbnbs account for approximately 1% of the total housing stock. As "the top five activities engaged in by travelers on overnight trips to Oregon were shopping, visiting a beach/waterfront, visiting a national/state park, visiting a landmark/historic site, and hiking/backing," it is understandable why these two regions attract so many tourists and visitors and further explains why there is such a demand for STRs.[2]

- **From 2014 to 2016, the number of new STRs created increased by roughly 180%.** In this same time, but by region, the number of new STRs created increased most drastically for Southeast Oregon (282%), Portland Metro (230%), and Central Oregon (211%), see Figure 2.2.

[2] Longwoods, International, USA. (2015). Oregon 2015 Visitor Report. http://industry.traveloregon.com/content/uploads/2016/11/Oregon-2015-Visitor-Final-Report.pdf

Figure 2.2. Growth of Newly Created Short-Term Rentals by Region, 2014 to 2016



Source: AirDnA Property Data, Retrieved 2017. Excludes Portland, Eugene, Salem, and Gresham.

- **Short-term rentals tend to be in lower income neighborhoods more commonly.** To measure, neighborhood is defined as the properties' census tract and lower income as median household income of census tract divided by the county's median household income. In areas like the South Coast, North Coast, and Central Oregon, I find more than half of the regions' properties are geographically located in lower income neighborhoods, see Table 2.9.

Table 2.9. Properties in Tracts with Higher/Lower Median Household Incomes than County, 2015

Region	Less Than County	Equal to/More Than County	Total
South Coast Oregon	66%	34%	309
Central Oregon	65%	35%	2,887
North Coast Oregon	64%	36%	1,720
Southern Oregon	42%	58%	769
Willamette Valley	40%	60%	961
Northeast Oregon	37%	63%	177
Portland Metro	35%	65%	1,052
Southeast Oregon	27%	73%	142
Total	**54%**	**46%**	**8,017**

Source: AirDnA Property Data, Retrieved 2017. ACS 2011-2015, Median Household Income. Excludes Portland, Eugene, Salem, and Gresham.

- **Most Airbnb hosts operate a single STR listed as the entire home.** Approximately, 4,400 hosts operate an Airbnb in small to mid-sized Oregon cities. Of these, 970 hosts (22%), operate more than one STR. Approximately 70% of Airbnb hosts rent out their entire home/apartment (either primary or vacation home) and another 30% are listed or rented out as a private room (the remaining 1% is listed as a shared room). This data reveals a bit about STR hosts. For instance, while most hosts are renting out their entire housing unit, a substantial portion of hosts (approximately 1/3) appear to be interested in making supplementary income solely off some of their extra space. This is an important distinction about the use of short-term rentals. To explain, as of 2015, the average household size for owner/renter-occupied housing units was approximately 2.5 people while almost 60% of housing units had 3 or more bedrooms.[3] Accordingly, despite actual motives, many short-term rental operators are capitalizing on the efficient use of space, driving sustainable practices.

- **Most STRs are traditional property types.** Approximately 60% of all listed properties are houses and another 13% are apartments. Other common STR property types also remain more traditional, to include: condominiums, bed and breakfasts, cabins, and townhouses (see Table 2.3). Larger cities tend to encompass a larger percentage of apartment buildings, indicative of more urbanized areas.

Table 2.3. Airbnb Property Types (using all cities for added context)

Property Types	Cities with Pop. < 100,000		All Cities		Property Types	Cities with Pop. < 100,000		All Cities	
House	4,877	60.0%	10,927	59.4%	Timeshare	10	0.1%	10	0.1%
Apartment	1,068	13.1%	4,000	21.7%	Hostel	8	0.1%	12	0.1%
Other	470	5.8%	639	3.5%	Castle	6	0.1%	13	0.1%
Condominium	426	5.2%	638	3.5%	Boat	5	0.1%	27	0.1%
Bed & Breakfast	316	3.9%	465	2.5%	Dorm	5	0.1%	16	0.1%
Cabin	244	3.0%	322	1.8%	Nature Lodge	5	0.1%	5	0.0%
Townhouse	181	2.2%	321	1.7%	Treehouse	5	0.1%	8	0.0%
Camper/RV	116	1.4%	201	1.1%	Train	3	0.0%	3	0.0%
Guesthouse	76	0.9%	195	1.1%	Hut	1	0.0%	6	0.0%
Villa	69	0.8%	104	0.6%	Island	1	0.0%	1	0.0%
Bungalow	61	0.8%	124	0.7%	Lighthouse	1	0.0%	1	0.0%
Loft	57	0.7%	162	0.9%	Entire Floor	-	-	7	0.0%
Boutique Hotel	38	0.5%	43	0.2%	Earth House	-	-	5	0.0%
Tent	37	0.5%	73	0.4%	Igloo	-	-	2	0.0%
Chalet	20	0.2%	24	0.1%	Cave	-	-	1	0.0%
Yurt	14	0.2%	23	0.1%	Van	-	-	1	0.0%
Tipi	12	0.1%	13	0.1%	**Total**	**8,132**	**100%**	**18,392**	**100%**

Source: AirDnA property data, 2017. Excludes Portland, Eugene, Salem, and Gresham.

What is the revenue potential of short-term rentals in Oregon?

Analysis of the financial details of STRs allows one to understand the profitability of these units (for hosts and municipalities) as well as the potential economic development opportunity they can bring.

- **Short-term rentals generate substantial revenue in Oregon.** Hosts have earned an aggregated $82 million in the last year. This indicates potential positive gains to local economies assuming hosts reinvest locally. After discounting larger cities, Central Oregon and the North Coast far out earn other regions. These two regions also charge a higher daily rate/Airbnb on average and receive more annual bookings (Table 2.4).

[3] United States Census. American Community Survey, 2011-2015, Selected Housing Characteristics for Oregon (DP04).

Table 2.4. Annual Revenue Earned by Hosts and State Tax Revenue Earned (estimate)

Regions	Average Daily Rate per Property	Total Bookings Annual	Annual Revenue	State Levy (1.8%) Annual Earnings
Central Oregon	$ 209	46,391	$ 37,539,776	$ 675,716
North Coast	$ 206	38,927	$ 24,875,499	$ 447,759
Willamette Valley	$ 97	14,026	$ 5,315,475	$ 95,679
Portland Metro	$ 72	11,172	$ 4,937,697	$ 88,879
Southern Oregon	$ 98	13,209	$ 4,886,800	$ 87,962
South Coast	$ 132	5,710	$ 2,335,541	$ 42,040
Northeast Oregon	$ 129	3,307	$ 1,738,663	$ 31,296
Southeast Oregon	$ 125	2,977	$ 1,143,628	$ 20,585
Total	**$ 134**	**135,719**	**$ 82,773,079**	**$ 1,489,915**

Source: AirDnA. Airbnb property level data. Retrieved 2017. Excludes Portland, Eugene, Salem, and Gresham.

- **Nine of the 15 cities with the highest grossing revenue are in the North Coast.** Still, Table 2.5 shows that Bend receives a far more substantial amount of revenue (accounting for approximately 86% of all revenue from Central Oregon). Additionally, of these highest grossing cities, nine have Airbnbs that account for at least 5% of its housing stock (Bend, Depoe Bay, Hood River, Joseph, Lincoln City, Manzanita, Rockaway Beach, Seaside, and Yachats).

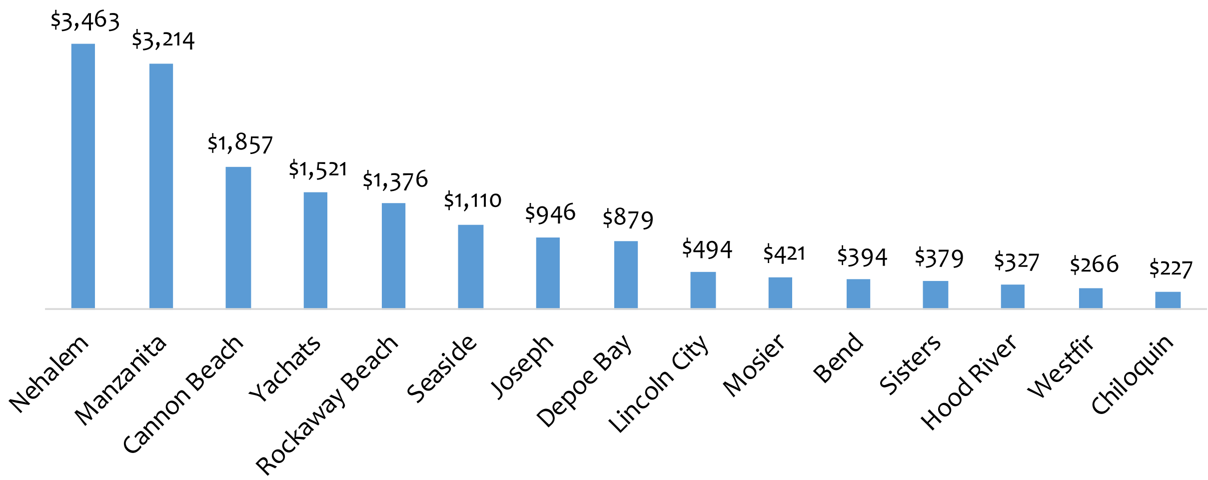
Table 2.5. Annual Revenue Generated with Frequency Data for Highest Grossing Cities

Cities	Region	Annual Revenue	Annual Revenue per Property (Max)	Annual Revenue per Property (Mean)	Annual Revenue Per Property (Std Dev)
Bend	Central Oregon	$32,207,439	$157,773	$14,801	$18,642
Seaside	North Coast	$7,198,080	$198,425	$16,285	$27,235
Lincoln City	North Coast	$4,145,729	$117,250	$12,265	$14,601
Cannon Beach	North Coast	$2,876,320	$203,617	$35,077	$39,131
Hood River	Central Oregon	$2,426,970	$81,215	$7,537	$10,428
Ashland	Southern Oregon	$2,160,243	$59,876	$8,309	$10,923
Rockaway Beach	North Coast	$1,688,036	$98,481	$15,925	$16,170
Depoe Bay	North Coast	$1,650,062	$59,288	$13,866	$16,207
Beaverton	Portland Metro	$1,620,761	$64,717	$4,739	$7,833
Manzanita	North Coast	$1,368,957	$90,051	$16,105	$16,773
Newport	North Coast	$1,322,513	$63,141	$9,380	$11,142
Redmond	Central Oregon	$1,036,179	$42,518	$6,642	$8,796
Tillamook	North Coast	$1,014,970	$69,780	$11,941	$13,862
Yachats	North Coast	$1,000,579	$62,675	$14,714	$11,232
Joseph	Northeast Oregon	$996,192	$64,836	$17,176	$13,523

Source: AirDnA Property Data, 2017. Excludes Portland, Eugene, Salem, and Gresham.

- **Eight of the 15 cities with the highest revenue per capita are also located in the North Coast (see Figure 2.6).** Revenue per capita for the state, excluding cities over 100,000 and using ACS population data for 2015, is approximately $54 dollars per person in the last year.

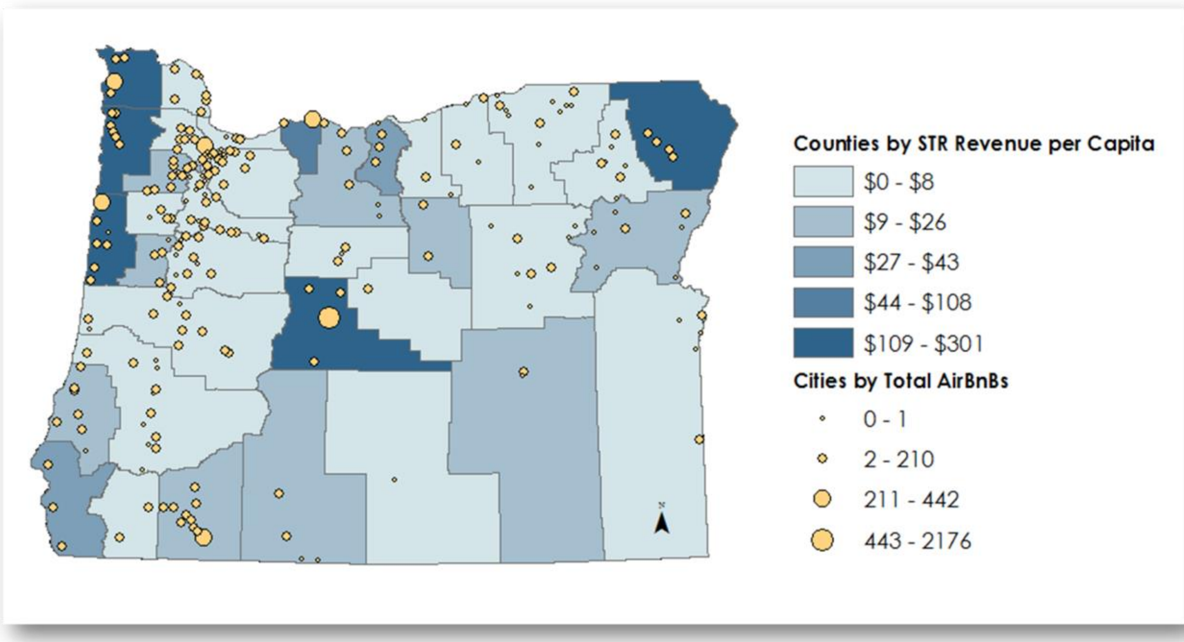
Figure 2.6. Cities with highest revenue generated per capita, 2015 population



Source: AirDnA Property Data, 2017. U.S. American Community Survey, 2011-2015 Population. Excludes Portland, Eugene, Salem, and Gresham.

Displayed in another way, Figure 2.7 shows STR revenue per capita by county with an Airbnb property dot density layer.

Figure 2.7. Counties with STR Revenue per Capita

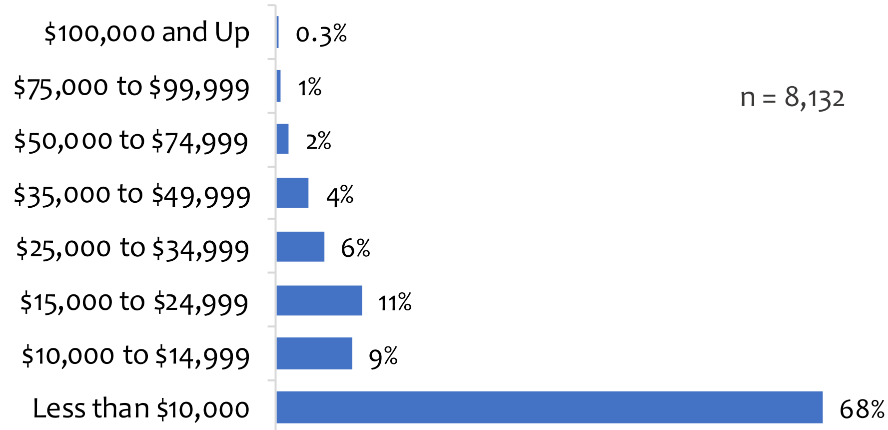


Source: AirDnA Property Data, 2017. Excludes Portland, Eugene, Salem, and Gresham.

- **Approximately 70% of Airbnb hosts generate less than $10,000/year in gross revenue for operating their short-term rental(s), see Figure 2.8.** Of those hosts, 30% generate less than $600/year. As independent contracts are expected to report income earned to the IRS after

$600 (via a 1099-MISC form), a large majority of hosts may be outside the law. In that, Airbnb only issues 1099-K tax forms to hosts who "earn over $20,000 and have 200+ transactions in the calendar year".[4] Outside of submitting 1099-K form to select operators, Airbnb passes on responsibility to hosts to report any income earned suggesting they consult a tax professional for income reporting assistance.

Figure 2.8. Percent of Hosts by Annual Revenue Earned



Source: AirDnA, Property Data, Retrieved 2017. Excludes Portland, Eugene, Salem, and Gresham.

- **Transient lodging taxes (TLT) imposed on Airbnbs by the state generate substantial fiscal revenue.** The state, imposing a 1.8% TLT on an estimated $82 million, earned approximately $1.5 million from Airbnb STRs in the last year. Still, Oregon's TLT rate is much lower as compared to other state levied taxes on this same lodging type. Of the states which levy one or more state taxes on Airbnbs, rates range from 1.8% to 14.5% and average about 8%.[5]

- **Many cities do not levy TLTs on STRs.** Airbnb indicates that nine cities[6] levy a tax on STRs marketed through their site, averaging 8.5% and ranging from 4% to 10.4%.[7] If all remaining cities levied just a 5% local option levy/TLT on STRs, an additional, aggregated $2 million could be earned (estimate). This would be in addition to the $4 million already being earned by cities who do charge a TLT or similar tax on STRs. I note the discrepancy that while Airbnb indicates that nine cities levy a tax on STRs, the Responding to Short Term Rentals in Oregon Survey found that 21 communities levy a tax on STRs. This suggests that many communities

[4] AirBnB. Should I expect to receive a tax form from Airbnb? Retrieved May 2017. https://www.airbnb.com/help/article/414/should-i-expect-to-receive-a-tax-form-from-airbnb
[5] AirBnB. In what areas is occupancy tax collection and remittance by Airbnb available? Retrieved May 5, 2017. https://www.airbnb.com/help/article/653/in-what-areas-is-occupancy-tax-collection-and-remittance-by-airbnb-available
[6] Cities are: Beaverton, Bend, Cottage Grove, Eugene, Florence, Lincoln City, Newport, Portland, Springfield. Counties were Lane, Multnomah, Tillamook, and Washington.
[7] AirBnB. In what areas is occupancy tax collection and remittance by Airbnb available? Retrieved May 5, 2017. https://www.airbnb.com/help/article/653/in-what-areas-is-occupancy-tax-collection-and-remittance-by-airbnb-available

imposing a STR/TLT tax have not communicated this information to STR web-based platforms like Airbnb.

To what extent do short-term rentals constrain the supply of housing?

Communities across Oregon are concerns whether STRs constrain the supply of housing (long-term rentals, owner-occupied units, workforce or affordable housing, etc.). This section provides some evidence to get us closer to understanding this impact.

- **Half of all STRs are reserved for less than 30 days (36% are reserved for 10 or fewer days).** As Table 2.12 on the following page shows, 28% of STRs are reserved for 30 to 90 days, 17% are reserved for 91 to 180 days, and 5% are reserved for 180 days or more. The average reservation day across the state is 52 days in a calendar year.

- **In more urbanized regions such as Portland Metro and Willamette Valley, STRs are operated as private rooms slightly more than as entire homes.** In Central Oregon and the North Coast, STRs are being operated more commonly as entire homes, providing some indication of the type of space available (e.g. more second homes, vacation houses, etc.), see Table 2.12.

Table 2.12. Airbnbs Organized by Listing Type, Days Reserved, and Region

Reservation Days	Entire Home/Apt.	Private Room	Shared Room	Total
Central Oregon	**2,264**	**624**	**17**	**2,905**
Less than 30 Days	35%	11%	1%	46%
30 to 90 Days	26%	5%	0%	32%
91 to 180 Days	13%	4%	0%	17%
181 Days or More	4%	1%	0%	5%
North Coast Oregon	**1,483**	**228**	**9**	**1,720**
Less than 30 Days	38%	6%	0%	44%
30 to 90 Days	24%	3%	0%	27%
91 to 180 Days	18%	3%	0%	21%
181 Days or More	6%	1%	0%	7%
Northeast Oregon	**150**	**80**	**3**	**233**
Less than 30 Days	29%	25%	1%	55%
30 to 90 Days	21%	6%	0%	27%
91 to 180 Days	12%	3%	0%	16%
181 Days or More	3%	0%	0%	3%
Portland Metro	**434**	**591**	**27**	**1,052**
Less than 30 Days	21%	34%	2%	57%
30 to 90 Days	9%	15%	1%	25%
91 to 180 Days	8%	5%	0%	13%
181 Days or More	3%	2%	0%	5%
South Coast Oregon	**232**	**76**	**1**	**309**
Less than 30 Days	36%	12%	0%	48%
30 to 90 Days	23%	8%	0%	31%
91 to 180 Days	13%	4%	0%	16%
181 Days or More	4%	1%	0%	5%
Southeast Oregon	**135**	**34**	**1**	**170**
Less than 30 Days	41%	11%	1%	52%
30 to 90 Days	25%	3%	0%	28%
91 to 180 Days	12%	6%	0%	19%
181 Days or More	1%	0%	0%	1%
Southern Oregon	**441**	**318**	**10**	**769**
Less than 30 Days	28%	24%	1%	52%
30 to 90 Days	14%	9%	0%	23%
91 to 180 Days	12%	7%	0%	19%
181 Days or More	4%	2%	0%	6%
Willamette Valley	**476**	**484**	**14**	**974**
Less than 30 Days	23%	28%	1%	53%
30 to 90 Days	14%	13%	0%	27%
91 to 180 Days	9%	7%	0%	17%
181 Days or More	2%	1%	0%	3%
Total	**69%**	**30%**	**1%**	**8,132**
Less than 30 Days	32%	17%	1%	49%
30 to 90 Days	21%	7%	0%	28%
91 to 180 Days	13%	5%	0%	17%
181 Days or More	4%	1%	0%	5%

Source: AirDnA. Airbnb property level data. Retrieved 2017. Excludes Portland, Eugene, Salem, and Gresham.

- **Perhaps a more accurate determination of housing supply constraints is the ratio of STRs (entire homes, rented for more than 30 days per year) to total housing units. Using this ratio to measure supply constraints, STRs account for approximately 2% of total housing in the North Coast and approximately 1.8% in Central Oregon.** Remaining regions attribute to less than 1%.

- **For most case study cities, data suggests that STRs are constraining the supply of long-term housing.** Hood River, Joseph, and Seaside's housing stock are particularly influenced by STRs (see Table 2.13 or Appendix A, Table B.7).

Table 2.13. Indication of STRs Potentially Constraining Housing Supply

Case Studies	Airbnbs (Entire Home, Rented for 30+ Days)	% of Total Housing Units	Airbnbs (Entire Home, Rented for 91+ Days)	% of Total Housing Units
Ashland	92	1%	59	1%
Bend	997	3%	370	1%
Depoe Bay	56	4%	28	2%
Hood River	108	34%	47	15%
Joseph	41	7%	21	4%
Lincoln City	154	2%	65	1%
Manzanita	45	4%	20	2%
Rockaway Beach	63	3%	38	2%
Seaside	215	5%	18	0%
Sisters	43	3%	43	3%
Total	**1,814**	**3%**	**709**	**1%**

Source: AirDnA Property Data, Retrieved 2017.

- **In case study cities, STR growth is increasing at a faster rate than total housing units are (see Appendix B, Table B.5).** In some of these communities, household formation is also increasing at a faster rate than the construction of new housing units, indicating housing supply constraints (Bend, Depoe Bay, Joseph, and Manzanita).

- **Property owners in resort communities (see Appendix B, Table B.6) can generate more annual revenue off STRs than they can off standard long-term rental units.** Therefore, in these communities, there may be more of a motive for property owners to operate STRs (although the differential in time and cost of maintenance for long-term vs short-term rentals is unknown).

What are the existing perceptions around short-term rentals in Oregon?

Using the Responding to Short-Term Rental Survey, analysis can delve into the existing perceptions that communities hold over STRs.

- **In general, survey respondents indicated that while residents shared mixed perceptions about STRs, local elected officials and businesses within the accommodation sector viewed**

STRs as less problematic. Still, respondents who indicated that STRs may be more problematic in their own community than in other Oregon communities or comparable communities across the U.S., tended to agree or strongly agree that STRs impacted the availability of affordable and workforce housing (78%), long-term rental housing (78%), and owner-occupied housing (56%).

- **STRs provide great benefits including their ability to provide transient lodging tax revenue, to support tourism activities, and to support communities that rely on tourism.** For instance, they serve a market need by providing additional lodging options (especially for communities without any traditional accommodation types) and thus, they bring in tourists that might not have otherwise visited. Furthermore, they provide income and employment opportunities, allowing homeowners to get extra use out of their properties (thereby making homes more affordable).

- **STRs economically weaken communities by impacting resources such as the availability of housing (especially affordable and rental housing) and police and city staff time who deal with complaints from neighbors/business owner**s. On the latter point, slightly over half of survey respondents indicated that residents have raised nuisance issues within the last five years. Among the cited nuisance complaints include: parking concerns (78%), noise concerns (67%), garbage and outdoor clutter concerns (56%), high occupancy levels (485), and excessive parking (45%). Furthermore, respondents indicated concern over the possibility that hosts could be individuals or companies from out of the state that take their revenue with them. Finally, respondents indicated that STRs can economically weaken communities in that they tend to be operated seasonally creating periods of no economic stimulation followed by a community that falters in the off-season.

- **Respondents who agreed or strongly agreed with that statement that STRs evaded policies and regulations in their communities (26%) still did not all agree that their policies were ineffective.** In that, of that 26%, approximately 20% indicated their policy was somewhat effective, 44% indicated their policy was neither effective nor ineffective, and 36% indicated their policy was somewhat (16%) or very ineffective (20%).

- **Communities who do not see the need to regulate indicated that STRs are either not a problem in their community (e.g. there are no STRs or not enough STRs to regulate) or that STRs fit in with the character of their community and therefore regulation is not necessary.** Other reasons why communities have not pursued regulation was the issue has not been raised by community members or that staff resources and time was preventing them from adopting policies.

- **Most communities who will potentially develop ordinances to regulate STRs in the next five years will do so primarily to formalize the process and rules associated with it, legitimize existing situations, develop clear and objective standards, and promote fairness.** Still, some respondents indicated wanting regulations as the STR trend is increasing and they want to mitigate impact before STRs become a burden, or because they do not want to be overrun by STRs. The desire to reap transient tax revenue was also a common motivation for regulation.

How are short-term rentals currently being regulated in Oregon?

The Responding to Short-Term Rentals in Oregon Survey also provided information about existing ways STRs are being regulated in the state. The following provides some information about prevailing policy frameworks.

- **STRs are commonly referred to as transient rental or vacation rentals**. Less commonly, some refer to STRs as traveler/accessory traveler accommodations, bed and breakfasts, motels, or RV parks. Some of these less common terms (e.g. RV parks) are used in lieu of a term specific to STRs as policies have not caught up to this housing trend.

- **STRs are most commonly defined as units rented for less than 30 days.** Some policies indicate that they must be rented for a certain number of days before qualifying as a STR (e.g. at least 10 days in a calendar year). Lease type (e.g. less than a month-to-month basis) was also found to be used.

- **Most regulations for STR require that operators have a license and/or permit (92%) and 81% of respondents also indicated that their community imposes a transient lodging tax (or similar tax).** While fees vary widely, by cost and by type (e.g. conditional use permit, short-term rental licenses, business license, etc.) tax rates tend to remain more consistent (see Table 2.10). The following table provides some data on fees and tax rates.

Table 2.10. Frequency for Fee and Tax Rates

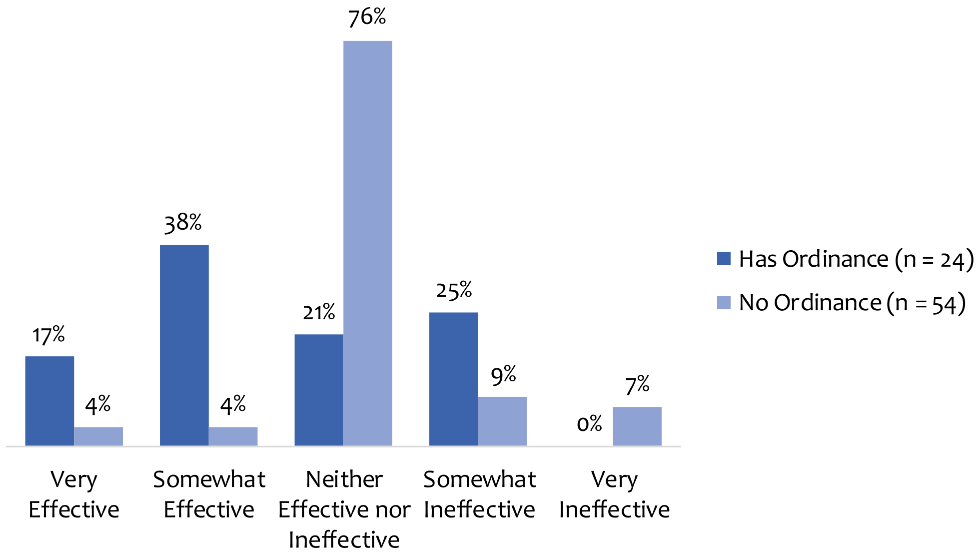
Fee Rate Frequency		Tax Rate Frequency	
Mean	$ 498	Mean	7.4%
Median	$ 358	Median	7.5%
Standard Deviation	$ 554	Standard Deviation	2.3%
Range	$ 2,150	Range	8.6%
Min	$ 50	Min	1.8%
Max	$ 2,200	Max	10.4%

Source: Responding to Short-Term Rentals in Oregon Survey, y-Q20 and y- Q21, 2017.

- **Respondents also commonly regulate STRs by relying on concentration caps/limits or occupancy requirements.** Restricting STRs to certain zones, adopting guest behavior standards, or making properties subject to review and inspection (making determinations on case-by-case basis) have also been put into place to mitigate nuisance and promote health, safety, and wellbeing.

- **Most respondents (60%) find their regulations for STRs, or lack thereof, to be neither effective nor ineffective in managing the economic benefits or negative impacts of short-term rentals.** Approximately 21% found their regulations, or lack thereof, to be very or somewhat effective and 18% found them very or somewhat ineffective. Still, we note that a generous portion of those that found their policies/lack of policies to be neither effective or ineffective did not actually have any regulatory framework. This can be explained in that many smaller communities in Oregon still do not have many STRS (if any) and thus, do not have many of the same concerns as other communities (e.g. around nuisance issues or housing supply concerns), see Figure 2.11. Noting that STRs are uncharted territory for many cities, it may take time to adopt the appropriate regulatory framework that works best for each community.

Figure 2.11. Effectiveness of Short-Term Rental Ordinance or Lack of Ordinance



Source: Responding to Short-Term Rentals in Oregon Survey, Q25, 2017.

- **STR ordinances were most commonly enforced by issuances of administrative citations (62%) and fines (58%).** In addition, many respondents commented on the fact that enforcement was a challenge.

Chapter 3: Conclusions

This chapter deliberates the findings discussed in chapter 2 and uses the literature review in Appendix A to provide some theoretical underpinnings. Primarily, this chapter discusses best ways Oregon planners and policy makers can respond to STRs, should they want to. Examples are provided throughout to enhance understanding or to provide those interested with more information. However, explicit recommendations are laid out in the following chapter. Smaller jurisdictions outside of Oregon and across the United States may also find use out of these best practices. Finally, this chapter outlines possible, future steps for continued research on this topic to ensure more accurate policy responses.

How should policy makers and planners in Oregon respond to short-term rentals?

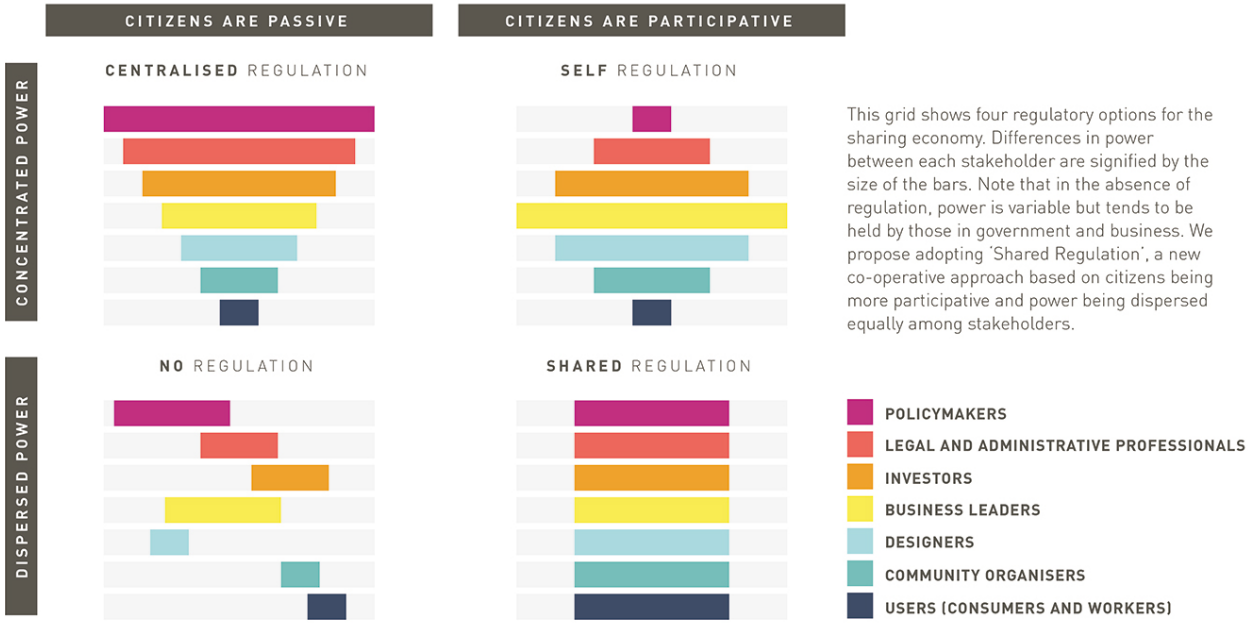
We know that the solution to STRs will be different for every city. What is true for Oregon is true for communities across the United States: STRs affect cities dissimilarly and, in turn, they view STRs diversely. Accordingly, many communities have taken the experimental and incremental approach, not knowing if their policy will truly mitigate the impacts and/or enable the benefits hoped for but needing to trial something. Performance of STR policies are still unknown. We need more data and rigorous statistical research to measure the impacts and policy treatments given. In the meantime, and while much is still unknown, following some general best practices to manage STRs may prove fruitful.

In Oregon, I find that when linking existing policy to perceptions, in general, policy reactions have met community reactions. In that, communities unchallenged by STRs (or where STRs are not a community concern) tend to be undaunted by the need to regulate, as an existing practice or as a future precaution. Communities, who are challenged by STRs (at any extreme) and/or where community members (residents, local elected officials, etc.) have raised the issue, have generally adopted or amended their regulations recently (since 2000) or are planning to in the next five years.

> "Users in particular should be at the centre [sic] of the regulatory process because they could play a greater role in compliance" (Balaram, 2016).

Inclusivity is the key to construct equitable regulations that are less likely to be evaded and more likely to mitigate the negative externalities created by these policies. Research has already posited four broad approaches to regulation: centralized regulation, self-regulation, no regulation, and shared regulation (see Figure 3.1 on the following page). Shared regulation, deemed the most effective approach, is intuitive to regulatory best practices generally, in which policies for STRs should be no different. Including local community members and business stakeholders in discussions about regulation is valuable. Not only will this approach generate stronger regulations but policy makers can also learn the ways in which people in their community want take part in this sharing economy activity.

Table 3.1. Broad Approaches to Regulate Short-Term Rentals



Source: Balaram, Brhmie (2016). https://www.thersa.org/discover/publications-and-articles/rsa-blogs/2016/07/how-do-we-collaboratively-regulate-the-sharing-economy

Accordingly, regulation should be a part of a community conversation as it is necessary to understand the true impacts that STRs have on hosts, accommodation sector businesses, and residents. Regulation should be a part of a regional conversation as most areas in Oregon receive regional tourism, and therefore regulatory frameworks in one community (e.g. the option of banning outright) can have unintended consequences on nearby jurisdictions (e.g. increasing STRs usage potentially affecting their housing availability more than otherwise). Ideally, sharing economy platforms should be involved too. For instance, policy makers and policy monitors need big data to construct useful regulatory frameworks and these platforms have this missing piece. Jurisdictions having access to audited, databases or summary data will help improve the way local governments manage STRs (Sundararajan, 2016).[8]

Thus, while community and regional conversations should be a given, additional approaches are more variable. Compiled below are several, general, best practices. Jurisdictions should consider these practices by reviewing them in context of their community.

Define Short-Term Rentals Codify Regulations in City Ordinances

The first step in attempting to respond to STRs is to have it defined in an ordinance. Many communities have no framework in place to address STRs which has presented challenges in mitigating issues that arise. Some communities, lacking an appropriate definition have relied on similar lodging terminology, such as temporary living accommodations (e.g. hotels, motels, extended-stay hotels, etc.), to address issues that arise but this is not an adequate practice for the

[8] STRs data is becoming increasingly easy to access free of charge or for predetermined prices. Collaborating with academic institutions can help reduce the cost of data, and if purchased on a state or regional level, can reduce the price on a per capita basis.

long term. STRs are different than traditional lodging and should be regulated accordingly. The best approach is to define the use as "short-term rentals." Terminology such as vacation rental should also be reconsidered as it implies that these units are only used for tourism or recreational purposes. In actuality, STRs are used by those on prolonged business trips or by existing or potential residents who are in the process of looking for housing in a particular community and therefore uninterested in a long-term lease.

In addition to terminology, a frequency of use standard should be determined. The common standard is less than 30 days in a calendar year or less than 30 consecutive days but this can vary and allow for more flexibility. As best practice, generate official designation in conjunction with a local, community conversation and a regional conversation. Communities where STRs are not highly prevalent may fair well with a looser standard (e.g. less than 120 days in a calendar year) while other communities may enforce a stricter standard (e.g. less than 15 days in a calendar year).

Once defined, this activity will become easier to classify and regulate usage. It also legitimizes STRs so residents who want to operate a STR can do so legally. Equally important, this becomes the only way for communities to collect taxes on STRs. Despite commentary of communities that lack any STRs (in reality or as perceived) indicating there is no need to regulate, any community with residencies can, at any time—be affected by STRs. Therefore, the growing trend of STRs requires communities to take precaution and be proactive.

The following are examples of definitions for local, Oregon ordinances:

- City of Gearhart: "Vacation Rental Dwelling. Any structure, or any portion of any structure, which is occupied or offered or designed for transient occupancy for less than 30 days for dwelling, lodging or sleeping purposes; and includes houses, cabins, condominiums, apartment units or other dwelling units, or portions of any of these dwelling units, that are used for temporary human occupancy, provided such occupancy is less than a 30-day period."

- City of McMinnville: "Vacation Home Rental. The Use of a dwelling unit by any person or group of persons entitled to occupy for rent for a period of less than 21 (twenty-one) consecutive days."

- City of Manzanita: "Short Term Rental. A dwelling unit that is rented to any person on a day to day basis or for a period of less than thirty (30) consecutive nights."

Distinguish Between Short-Term Rentals

While all STRs function similarly, they are not all the same. STRs can be an entire home, or a shared/private room. They can be located in the main house/apartment or be located in a secondary dwelling on the property. Further, some STRs are used for a single night or a weekend while others can be reserved for several weeks to a month at a time. In addition to duration, frequency also distinguishes STRs in that a neighbor may not notice a single tourist or family who have rented out a house for a weekend but may notice when there are new visitors every week or more than 30 visitors/new families in a single year.

Thus, policies that differentiate between types of STRs will promote fairness and equitability. Tiered restrictions can be used to make it less financially burdensome on property owners who are interested in renting out their home for less than 10 days in a calendar year compared to high volume owners (someone who rents their home out two to three times for 30 consecutive days in a calendar year). Per example, "raising the cost for high volume listings of short-term apartments to the point where long-term residential leases become more profitable" can be considered a useful strategy to discourage "hotelization" (Katz, 2015). With that, more lenient requirement for those renting out a single room can encourage property efficiency. For communities with affordable housing issues, higher fees for STRs in accessory/secondary dwelling units may incentivize property owners to use that valuable space for full-time residents as opposed to visitors. There should also be a distinction between certain STRs and second homes[9].

For an example, visit the City of Ashland's Development code which differentiates between "Travelers' Accommodations" and "Accessory Travelers' Accommodations."

- http://www.ashland.or.us/SIB/files/AMC_Chpt_18_current.pdf (18.2.3.200)

Restrict Use or Incentivize Moderate Use

Literature attests that the 'banning STR outright' policy response will not likely fix housing availability or affordability issues due the amount of STRs there are in most cities (small portion, comparatively). Further, literature hypothesizes that banning outright can have more unintended, negative repercussions by preventing the positive aspects that the sharing economy brings to residents and local economies via this tourism niche (Short Term Rental Advocacy Center). This is not to say that banning is not a legitimate policy approach particularly in areas in a housing crisis. However, in smaller jurisdictions, where neighborhoods are less dense and where housing tends to have larger footprints, banning outright can also disallow efficient uses of individual properties. Accordingly, I provide two alternative options that may better enable the benefits of STRs while still allowing proper management of STRs (see Figure 3.2). Regulatory paths for each option are laid out in the following chapter.

[9] Hood River, Oregon makes this distinction in their 2015 Housing Needs Assessment. This STR/second home distinction is valuable as their uses have different sets of implications. With that said, a second home has more impact on the availability of housing than does a STR in a room of somebody's primary dwelling.

Figure 3.2. Alternatives to the Policy Option of Banning Short-Term Rentals

Restrict Use	Incentivize Moderate Use
Purpose: to limit the number of short-term rentals in a community or in particular areas of a community	***Purpose:*** to encourage property owners to responsibily limit how they use their properties as short-term rentals
Advantages: systematically controls the prevalence and influence of short-term rentals	***Advantages:*** preserves property rights; permits efficient use of participating properties
Disadvantages: potential for policy evasion; concerns over fairness (who is allowed to participate)	***Disadvantages:*** potential for property owners to choose not to moderate use (especially those with higher-incomes)
Example: In Manzanita, Oregon short-term rentals are allowed outright with a percentage cap on the number of short-term rentals permitted in some areas. A waiting list is used for eligible homeowners who would otherwise be eligible for a license to operate.	***Example:*** In Portland, Maine, annual registration fees for non-owner occupied short-term rentals are twice as expensive than those for owner occupied units. In addition, fees increase for each unit (e.g. ranging from $100 for the first unit to $2,000 for the fifth unit for owner-occupied units and $200 for the first unit to $4,000 for the fifth unit for non-owner occupied units).
More information: Manzanita, Oregon. Ordinance No. 10-03 (As amended by Ord. No. 16-05 12/7/16), "An Ordinance Establishing Rules and Regulations Relating to Short Term Rentals"	***More information:*** Portland, Maine. Amendment to Portland City Code Chapter 6 and Chapter 14, Re: Short Term Rentals. http://portlandmaine.gov/Document-Center/Home/View/15848

Source: DiNatale, Sadie (2017). Assessing and Responding to Short-Term Rentals: Enabling the Benefits of the Sharing Economy.

These progressive options help to "ensure that people only occasionally rent out their house whilst away (sharing economy), rather than run a permanent, unregulated hotel (not sharing economy)" by regulating "the rental of homes in such a way that it becomes part of the sharing economy as previously defined" (Frenken, et al. 2015). Determination about what route local government should take is contingent upon the way in which property owners operate STRs in that community as well as the perceptions community members have for STRs. Either option, will require evaluation to ensure that the intended outcome has been achieved.

It may be that STRs are not an existing problem, or that STRs receive praise for providing lodging opportunities where no traditional lodging options were available (etc.). In community situations like these, there may be no need to restrict use or incentive moderate use.

Normalize STRs as a Residential Activity (with Caveats)

Another point of controversy and debate is whether to classify STRs as a residential or commercial use. This determination will have huge implications in how STRs are used, and who can use them. On one end, STRs provides a property owner with employment while technically using their home as a small, business venture (though not to the degree of a hotel or motel). On the other hand, STRs are located in residencies, function residentially (e.g. used for eating, sleeping, hanging out), and the rental units maintain their residential character. Normalizing STRs as a residential activity, with regulatory caveats that ensures property owners maintain the properties' residential character (see subsection, "Develop Appropriate Regulatory Standards") can ensure that those who use STRs moderately and within legal parameters can continue to do so.

The following outlines some court cases in which STRs were determined a residential activity:

- "*Short-term rentals of lakefront house are not commercial use in violation of residential zoning laws*, for the purpose that residential referred to activities on the property and not the owners' intent to make a profit, there was never more than on family occupying the house, and the renters engaged in residential activities."
    - Siwinski v. Town of Ogden Dunes, Court of Appeals of Indiana [intermediate court], Decided March 16, 2010, 922 N.E.2d 751. (Judicial Decision: 62 PEL 210, Indiana.)

- *Short-term rental determined predominately residential* for the reasons that "the property was designed for use predominately as a residence, the site was purchased and the home was built for personal use, the intent was to use the property as a second home, the decision to allow short-term rentals was made to offset expenses and to share the outdoor experience with visitors, most of the rental activity occurred during the summer months, [the property owners] used the property when possible." Further, "the receipt of income does not transform residential use of property into commercial use" (Farny v. Board of Equalization). Finally, the intent was not to generate profit (as is the case of hotels, motels, and bed and breakfasts) but to assist with the cost of maintenance.
    - O'Neil v. Conejos County Board of Commissions, Court of Appeals of Colorado, Decided March 9, 2017.

- Piece of a condominium declaration "affirming that no business, trade, occupation or profession of any kind shall be conducted, maintained or permitted on any part of the property was not intended to restrict the right of any condominium unit owner to rent or lease his condominium unit from time to time." In addition to restrictive covenants not being favored in Missouri, "the covenant was interpreted narrowly in favor of the free use of the property and that nightly rentals did not violate the R-3 multiple-family dwellings statute."
    - Mullin v. Silvercreek Condominium Owner's, 195 S.W.3d 484 (Mo. Ct. App. 2006):

Still, depending on the political climate and level of controversy in a given community, limiting STRs to specific zones (e.g. mixed-use, neighborhood commercial, higher or lower density residential areas) may prove to be a useful compromise or solution (also see next subsection "Permit STRs in Premium Areas with Monitoring"). Further, in some situations restrictive covenants (in Home Owners Associations, for example) may view STRs as a breach of rules and landlords may still prohibit their tenants from operating short-term rentals in the same way they may prohibit sub-leasing. Accordingly, some management of STRs can occur outside of municipal control.

Permit STRs in Premium Areas with Monitoring

If community conversations come to the conclusion that STRs are to be limited to certain areas of a community, consider permitting the use of STRs in premium areas. In this sense, premium areas can be considered areas of city with abundant natural resources: places tourists and visitors flock to where STRs tend to be most prevalent. Allowing STRs in these areas are in line with sharing economy values. In that, more people are given access to homes in superior locations.

Still, as communities with these premium areas (e.g. resort communities) are facing greater challenges than non-resort communities, paying attention to the number and use of STRs in these areas is important as allowing them without management may disrupt the character of those neighborhoods (see next subsection, "Develop Appropriate Regulatory Standards").

Develop Appropriate Regulatory Standards

In considering STRs as a residential use, it is important to set specific standards on these units to ensure they are not overly burdensome to the neighborhood. For instance, limiting guest capacity to the family/household capacity, quantifying the frequency and duration of visitor stays, and fining property owners for created nuisances are some options for maintaining the character of neighborhoods. In respects to the quantification of frequency and duration of visitors, one can equate the number of days the property is rented to the number of days the property is owner-occupied. In areas with constrained housing availability, requiring that property owners live in their dwelling unit for six to nine months out of the year, for example, can disincentive the hotelization of neighborhoods.

Finally, requiring that STR units receive inspections should also be a minimum to promote the health, safety, and wellbeing of both residents and visitors. Inspections could include a general home inspection or a fire inspection.

Require a Permit or License

Requiring STR operates to register their units or get a permit/license can help communities stay on top of where these rentals are located and can help manage how many there are. It will also allow communities to collect data (aiding in the chance to measure the benefits/costs that STRs could have on neighborhoods, hosts, and/or residents). Collecting fees from these permits/licenses can be low (solely used to cover the administrative cost of processing permits/licenses) or higher if excess revenue is needed for other initiatives (STR education, outreach, inspection services or complaint follow-up, etc.). Requiring STR operators to register for a business permit (as opposed to getting a permit specially designated for STRs) may also prove to be less administratively burdensome.

An example of language for requiring a short-term rental license is as follows:

- City of Bend (7.16.030): "Annual Short-Term Rental Operating License Required. No owner of property within the Bend City limits may advertise, offer, operate, rent, or otherwise make available or allow any other person to make available for occupancy or use a short-term rental without a short-term rental operating license. Advertise or offer includes through any media, whether written, electronic, web-based, digital, mobile or otherwise. [Ord. NS-2239, 2015]"

Require STR Operators to Pay Fees and Taxes

Tourism often puts a strain on services. Collecting fees and taxes should be used to mitigate negative externalities of this activity. Fees, as mentioned briefly above, should cover the cost of administrator time and resources needed to regulate and enforce STRs as well as cover outreach activities. Transient lodging taxes should be levied in all communities using a rate that makes sense for the community (e.g. higher if there are too many STRs or lower if the community does not have sufficient lodging opportunities/wants to encourage STRs). There are also precedents for alleviating costs for lower-income households that may be impacted by these rates dissimilarly; for instance, a fee exemption or reduced fee rate. Higher fee rates for property owners with more than one STR in a single community may also help to disincentive "hotelization."[10]

How should planners and policy makers enforce short-term rentals?

While not all jurisdictions in Oregon have to deal with enforcement issues, those that do understand that enforcement of STR policies is difficult at best and traditional methods such as administrative citations, fines, revoking permits, or court mandates have only been slightly effective overall in curbing code evasion.

Still, opportunities for enforcement exist, however, they may not be in line with traditional best practices. For instance, while more time intensive, providing outreach to community members is one opportunity to ensure that residents and possible hosts understand their rights when it comes to STRs. Reaching out to community members about what existing regulatory frameworks are and what they are intended to accomplish can help inform residents and potential hosts of the standard operating procedures for the area. Teaching them of the negative externalities (specific to the community) may help with compliance. Additionally, with "community" and "trust" as cornerstones of the sharing economy, using these values to frame community discussions may also prove to be more effective than addressing this activity from a strictly legal and economic agenda. Outreach to educate operators about the hazards of being an absentee property owner and the danger of allowing visitors to stay longer than 30 consecutive days (e.g. risks visitors gaining tenant's rights) should also occur.

> "What's striking about the shared economy is not the technology that has made it possible, but the vast changes it has triggered in society."
> (Stan, 2016).

Using regional outreach methods may help ease administrative burden, especially in areas with smaller populations. Alternatively, local governments can offset some of this outreach onto property owners by requiring them to reach out to their neighbors before registering their STRs (e.g. potentially requesting neighbor approval or confirmation that hosts at least speak to their neighbors about their new venture). This option can give property owners and neighbors a chance to talk

[10] Recently, Paris triples its vacant home tax to 60% to mitigate artificial shortages in their housing stock. http://www.zerohedge.com/news/2017-03-07/vacant-homes-are-global-epidemic-and-paris-fighting-it-60-tax

about concerns before the opportunity for nuisances to occur arises. This will enable trust and transparency.

Along the lines of trust and transparency, the sharing economy has become effective at self-regulation. In general, web-based platforms that utilize customer review and rating systems can allow property owners to be more selective of who they let into their homes and neighborhoods. Again, educating hosts in some of the dangers that could occur through home-sharing may make the hosts more perceptive to these review/rating systems. Further, if these hosts have previously talked to their neighbors about their primary concerns, hosts will be able to read through potential visitor's reviews to better select individuals less likely to create the nuisances sure to annoy neighbors.

In summation, it is difficult for governments to regulate something they do not have complete control over. Using community members to encourage and expect appropriate use of STRs as well as educating STR operators on what is suitable can induce a culture of self-regulated compliance.

The Need for Continuous Evaluation

Not just a best practice but a necessity, jurisdictions should continue to monitor STRs in their community so that appropriate evaluation of their policies can occur. Particularly, many cities have found their regulations, or lack thereof, to be neither effective nor ineffective, which makes continued evaluation that much more important.

Potential opportunities to inaugurate monitoring and evaluation into existing administrative and planning activities includes: inventorying STRs when participating in buildable lands inventories or conducting housing needs assessments, considering STRs when developing regional plans or new master plans (particularly for downtowns and tourism-based districts), and incorporating STRs into relevant strategic plans (e.g. Travel Oregon) and state-wide tourism research. Further, using town halls, neighborhood association meetings, existing community newsletters, polls on governmental Facebook pages, and the like can streamline outreach activities just as easily as it can assist in gauging community perspectives about STRs. Longitudinal studies will be essential to truly gauge the effectiveness of STR policies.

Future Research

As other studies on the topic conclude, there is still much research needed regarding the topics of STRs and the sharing economy to understand their impact on communities and local economies. The following questions were unable to be addressed in this report but should be considered moving forward (see Table 3.3):

Table 3.3. Opportunities for Continued Study

Research Questions	Potential Method(s)	Potential Data Sources
Do short-term rentals affect the availability of long-term rentals, owner-occupied housing, or affordable housing? If so, to what extent?	Regression Analysis	American Community Survey and Housing Survey Data
Do short-term rentals affect property values or inflate rental costs?	Regression Analysis	American Community Survey and Housing Survey Data
What is the land use efficiency of short-term rentals vs. hotel/motel accomodations?	Geographic Information Systems; Static and Dynamic Analysis	Historical rates of land consumption, Residential and accomodation sector employment growth rates/trends of land utilization, Characteristics of land and tax lot information
In allowing STRs to support additional tourism, do the benefits derived from an increase in tourism outweigh the costs of increased tourism?	Cost-Benefit Analysis	Government spending and tax revenue; Economic, social, and environmental indicators
How can web-based, sharing economy businesses, governments, and community members collaborate in the response to short-term rentals?	Surveys, Interviews, Focus Groups	Residents, Businesses within the accomodation sector, Elected officials, Government representatives, Sharing economy platforms
How do community members perceive short-term rentals in their community?	Surveys (e.g. chi-square), Interviews, Focus Groups	Residents, Businesses within the accomodation sector, Elected officials
To what extent do community members value home-sharing? In what ways do values differ amongst various groups?	Surveys (e.g. chi-square), Interviews, Focus Groups	Residents and Community members
What are the motives of property owners who operate a short-term rental(s)? How do motives rank amongst each other?	Surveys, Interviews, Focus Groups	Short-term rental operators

Source: DiNatale, Sadie. (2017). Assessing and Responding to Short-Term Rentals in Oregon: Enabling the Benefits of the Sharing Economy.

Additionally, many survey responded indicated the following summarized tools would be helpful for them to better respond to STRs[11]:

- Construction of a model code or sample ordinance[12]
- Easier access to Transient Lodging Tax rolls to establish whether STRs exist in certain locations or are contributing taxes
- Access to housing data (e.g. spatial data of housing stock)
- Funding to amend land use codes

[11] Responding to Short-Term Rentals in Oregon Survey, n-Q24, 2017.
[12] Two potential sample codes are located here: http://stradvocacy.org/category/sample-ordinances/. Many cities in Oregon have also adopted codes that could be used as a resource. When developing code language, looking at samples from a range of comparable jurisdictions is important.

Chapter 4: Policy Recommendations

The purpose of this chapter is not to recommend a precise recipe for how various communities should manage STRs; this would be inefficient given all the nuances between cities. Rather, this chapter presents general recommendations for cities (with populations less than 100,000), regions, and Oregon. Lastly, delineated in a typology (based-off previously cited best practice) are specific regulatory options that communities can consider.

Regulatory Recommendations

The following sections break recommendations into minimum requirements and ancillary requirements for cities. Next, I provide recommendations for regions and the State.

Minimum Regulatory Recommendations for All Cities

Whether a city has STRs or not, communities should establish the following regulations, even as a precautionary measure:

1. Legally define STRs as "short-term rentals" and establish a fair frequency of use standard that is complimentary of regional standards.

2. Codify regulations in local ordinance. Impose a guest capacity limit and require inspections.

3. Levy a transient lodging tax (if not imposed at the county level).

4. Require that STR operators register their unit(s) on an annual basis.

Ancillary Regulatory Recommendation with Thresholds for Cities

Variations in number and concentration of STRs should influence policy choices. The following recommendations provide thresholds for ancillary regulations as a starting point. In that, thresholds may vary between communities.

1. Restrict (cap/limit) STRs or incentivize moderate use if STRs account for more than 4% of total housing stock.

2. Impose a clause that revokes a STR permit for properties that receive more than five nuisance complaints in a calendar year.

3. Limit STRs in proximity to other STRs (deconcentrate) when city-wide/area-specific nuisance complaints exceed 25 complaints in a calendar year. Communities should establish a fair distance (e.g. 50 to 200 feet buffer between STRs), weigh equity implications, and re-evaluate buffer distance every two to five years.

    a. Before establishing a buffer distance, cities should increase regulatory standards and evaluate whether nuisance complaints reduce (e.g. establishing minimum parking standards may mitigate parking complaints).

Recommendations for Counties and Regions

Smaller jurisdictions may have difficulties managing STRs. That said, counties/regions should help facilitate proper management of STRs.

1. Levy a transient lodging tax at the county level if barriers exist for cities to impose their own (due to population size, low prevalence of STRs in individual communities, administrative limitations, etc.).

2. Establish a regional representative or liaison to attend Sharing Economy Committee meetings (see first "Recommendation for Oregon"). Regional liaisons should represent multiple counties.

Recommendations for Oregon

Oregon can and should become a leader in the management of STRs. This will require the state to become a leader in sharing economy affairs.

1. Establish a Sharing Economy Committee to facilitate research on the sharing economy generally (to include analysis of STR trends) and to assist communities across the state deal with new issues. The objective of this committee should be one in support of sharing economy activities.

2. Hire a state employee to work directly in sharing economy affairs. Responsibilities should include:
   - Analyze sharing economy trends across the state, country, and globe
   - Communicate initiatives, information, and best practices to governments across the state
   - Provide government assistance in STR management
   - Collaborate with sharing-economy platforms
   - Collect data
   - Participate in global sharing economy networks
   - Coordinate state Sharing Economy Committee meetings, trainings, and workshops
   - Launch policy demonstration studies to pilot regulatory frameworks and options

3. Maintain a neutral Transient Lodging Tax at 1.8% to allow regions and cities to use their tax rates to manage STR growth.

4. Establish a pool of funding to help small communities amend land use ordinances for STRs.

Legislative Approaches: A Typology for Smaller Jurisdictions

The following policy options represent common legislative approaches for smaller jurisdictions. Communities must consider the viability of each approach/regulatory option within context of their community. A community may adopt some or none of these options. “Grade,” intends to provide a starting point for a community conversation around equitability of regulatory frameworks. Communities are encouraged to develop their own metrics or expand the following.

Table 4.1. Legislation Approaches and Regulatory Options

Legislative Approaches	Regulatory Options	Equity Consideration	Grade
Definitions	**Terms**	-	-
	Vacation Rental	Not an all-encompassing term; assumes use is tourism-based only.	Poor
	Transient Rental	Inclusive term.	Good
	Short-Term Rental	More inclusive term and observed globally.	Best
	Frequency of Use	-	-
	Unspecified	Not specifying the number of days STRs can be reserved for could create hotelization.	Poor to Adequate
	Less than 183 days in a calendar year; Less than 30 consecutive days	For communities unchallenged by housing availability, the use of second homes as STRs may be acceptable, for others, this could create artificial housing supply constraints.	Adequate
	Less than 90 days in a calendar year; Less than 30 consecutive days	Allowing STRs to be reserved for a total of 3 months in a calendar year enables property owners who may travel (or function with a more nomadic lifestyle) to get better use out of their primary properties while away.	Good
	Less than 30 days in a calendar year	More commonly used by local governments as a way to balance the benefits and negative externalities of STRs while continuing to learn from and evolve with the sharing economy.	Good
	Listing Types	-	-
	Accessory/Secondary Dwelling	Allowing STRs in ADUs can allow property owners to use their lots more efficiently. However, for communities with housing supply constraints, this may inhibit long-term housing options.	Adequate
	Entire House/Apartment	STRs as entire homes and apartments are efficient but frequent use could generate artificial housing shortages in some communities.	Good
	Shared/Private Room	Enabling STRs as shared/private rooms can make it easier for property owners to use their excess space.	Best

Legislative Approaches	Regulatory Options	Equity Consideration	Grade
Restrictive Zoning	**Cap/Limit**	-	-
	STRs in Proximity to Another	Mitigate nuisance issues and ensures certain areas of a community does not become overrun by STRs.	Good
	the Number of STRs in a City	Limiting STRs allows benefits to be reaped and greater flexibility. Using a lottery system or waiting list can promote fairness.	Good
	the Number of STRs in a Neighborhood or District	Allows for more accurate and fair management of STRs in areas that are more heavily influenced by STRs than others. Using a lottery system or waiting list can promote fairness.	Good
	Rentals per Property Owner	Reduces threat of hotelization in neighborhoods and better ensures an adequate supply of housing for residents.	Best
	Land Use Classes	-	-
	Banning Outright	Banning outright will likely lead to policy evasion and missing out on the many benefits the sharing economy brings.	Poor
	Permit Outright	Many communities may find it acceptable to allow STRs outright as long as appropriate regulatory standards mitigate concerns and promote fairness.	Good
	Permit in Some Districts/Zones	Being selective of where STRs are able to locate is important for most communities where STRs are creating issues. A cost-benefit analysis weighing the benefits/drawbacks of sharing economy activities in various areas is necessary to make informed decisions on behalf of the entire community.	Best
Incentive-Based Provisions	**Higher Fee Rate**	-	-
	for Second Permit or More	Making STR operators pay higher rates for STR permits, after their initial permit, can discourage property owners from operating more than one STR in a given community.	Good
	Reduced Fee Rate	-	-
	Property Owner's Primary Residence	Allowing reduced fares for STRs in operator's primary home can discourage people from purchasing residential units solely for the purpose of operating STRs.	Best
	Fee Exemptions	-	-
	for Hardship	Exempting residents experiencing financial hardship from fee requirements can ensure that lower-income residents can still operate a STR legally to earn extra income, if they want.	Best
	Use for less than 10 days in calendar year	Exempting operators from permit fees who operate STRs infrequently can ensure residents are not financially discouraged from use their properties more efficiently.	Best

Legislative Approaches	Regulatory Options	Equity Consideration	Grade
Permitting	Conditional Use Permit	High rates of standard conditional use permits may reduce STRs financial viability discouraging use, which may or may not be the intention. For moderate users this may induce concerns over fairness.	Adequate to Good
	Business License	Requiring STR operators to get a business license can streamline administrative efforts.	Good
	Short-Term Rental License	A separate license, specifically for short-term rentals, may allow more flexibility in treating this activity and in setting fee rates at more appropriate levels.	Best
Taxation	No Transient Lodging Tax	For some communities, levying a TLT may discourage STRs in areas where STRs' other benefits of STRs may outweigh the additional fiscal revenue.	Poor to Adequate
	Transient Lodging Tax Imposed by County	Counties where aggregated STRs in each city are too low to be administratively efficient to levy at a city level, may benefit from a tax levied at a regional level. Imposing a transient tax maintains fairness across the accommodation sector.	Good
	Transient Lodging Tax Imposed by City	Tourists put a strain on city services and cities should levy a tax to offset financial burden on residents. Imposing a transient tax maintains fairness across the accommodation sector.	Good
Registration	No Registration	Not requiring STRs to register may have long-term effects on the character of neighborhoods, on housing availability or affordability, and may make enforcement more difficult.	Poor
	Renewal Every 3 to 5 Years	Ensures process is not overly burdensome but less frequent monitoring may create opportunities for policy evasion and neighborhood nuisances.	Adequate
	Annual Renewal	Most appropriate way to track STRs on a regular basis.	Good
Review Processes	No Review Process	Not having any kind of review process may negatively influence the health, safety, or wellbeing of residents or the character of neighborhoods.	Poor
	Site/Design Review	While necessary depending on other regulatory options selected (e.g. conditional use permit) for other communities, a site/design review process may be overly burdensome to both staff and potential STR operators.	Adequate to Good
	Neighbor Consent	Some form of consent process with neighbors (not official hearing) can improve neighborhood relationships and increase transparency. Some nuisance issues may be mitigated with open dialogue.	Good
	Performance/Behavior Measures	Policies that revoke STR privileges for nuisance issues or complaints is a useful clause to ensure neighbors are not negatively impacted by STRs in nearby properties.	Good
	Health, Fire, Building Inspections	More of a necessity, there should be some checks and balances to ensure that STR properties are up to code, ensuring the safety of visitors.	Best

Legislative Approaches	Regulatory Options	Equity Consideration	Grade
Standards	Minimum Parking Requirements	Requiring that STR operators adhere to parking requirements may mitigate nuisance issues in some areas or be unnecessary and overly burdensome in others.	Poor to Adequate
	Vehicle Limits	Limiting guest vehicles can mitigate neighborhood concerns and nuisance issues.	Good
	Minimum Aesthetic Code Requirements	Some aesthetic requirements (e.g. limiting signage) can mitigate degradation of neighborhood character in primarily residential areas.	Good
	Proof of Owner-Occupancy	Requiring a property owner to use their property for a certain number of days out of a calendar year can discourage absentee property owners and hotelization.	Best
	Guest Capacity	Maintaining a guest capacity at level of family/household can mitigate nuisance issues and ensure that STRs in traditionally, residential areas are not overly disruptive to the existing character of neighborhoods.	Best

Source: Information was derived from Appendix A and B of this report as well as from the Responding to Short-Term Rentals in Oregon Survey.

Appendix A: Literature Review

This chapter organizes findings of existing studies and current literature on the topic of short-term rentals.

Impact of Short-Term Rentals

STRs are understood to impact, or potentially impact the cost and availability of housing, local economies, and the sharing economy generally.

Impact on Housing

A scan of applicable literature quickly returns results of short-term rentals (STRs) impact on housing. First however, most reports comment on the fact that there are very clear limitations in the availability of data to fully understand the impact STRs have on housing markets or housing stock (ECONorthwest 2016, Rees Consulting 2016, and accessorydwellings.org 2016). Speculation and inherent assumptions are widespread, though, academics and practitioners are eager to learn about the true effects. Being that there is no standard or agreed upon definition for STRs, the ability to draw clear conclusions on causality across space becomes especially difficult (ECONorthwest, 2016).

In a study that analyzed the impact that HomeAway rentals had in Seattle, it was found that STRs did not have a significant impact on home values, that properties were generally not on the STR market for long, and that STRs were generally located in traditionally higher income areas (ECONorthwest 2016). Yet, in a study of STRs in New York City and New Orleans, STRs were associated with increased property values (Sheppard, et al. 2016 and Kindel, et al. 2016).Thus, we can conclude that STRs' impact on housing will differ between geographic regions and local economy types.

Some reports looked at the impact STRs had on specific housing types. In a white paper looking at four cities in Colorado, with populations under 7,000, it was found that STRs did lead to the reduction of homes and bedrooms previously used by employees increasing the demand for workforce housing and reducing its supply (Rees Consulting 2016). Another analysis showed that in Portland, banning short-term accessory dwelling unit rentals did not increase long-term accessory dwelling rentals (accessorydwellings.org 2016).

Economic Impacts

Impacts to the Government and Local Economies: Short-term rentals have the potentially to positively affect municipalities through production of fiscal revenue. In a report assessing the impact of STRs in San Diego, Los Angeles, Monterey County, Santa Barbara, and St. Joseph (Michigan) it was found that taxing the STR industry generates substantial revenue for the municipality and it does support job growth (NUSI 2015; TXP, Inc. 2014; and TXP, Inc. 2015). In addition, literature attests that "with proper regulation and enforcement, citizens and communities can benefit from the increased tourism" that short-term rentals bring (Binzer, 2017).

Impacts to Short-Term Rental Hosts: A primary reason property owners operate STRs is the income operators' can earn. Still, in a study of HomeAway rentals in Seattle, ECONorthwest found that STRs did not generate significant incomes for owners (2016) —potentially unveiling other value-drivers for operating STRs beside purely economic gains. For instance, social and sustainability benefits may also motivate property owners to continue operating these rentals. Nevertheless, in an assessment of Airbnb hosts, it was found that the annual expected profit is approximately $20,000, but "'hands-off' Airbnb hosts can expect occupancy rates (and revenue) at least 15% lower" than more involved hosts (Wallace, 2016).

Impacts to Businesses within the Accommodation Sector: Despite localized economic benefits, the STR industry can disrupt formal industries in the accommodation sector by attracting visitors away from conventional lodging and accommodation companies (Guttentag 2013, Fang 2015). This disruption becomes exacerbated in that many STRs marketed through web-based platforms are often illegal (e.g. being operated without a license/permit, without paying proper taxes/fees, or without having proper inspections). This gives traditional, regulated lodging businesses an economic disadvantage (Guttentag 2013). Continued studies evaluating occupancy rates, revenues per available room, rates of use and rental price, estimated non-lodging spending from short-term renters, and estimates on potential revenue earnings for municipalities will assist in the development of knowledge in this area (NUSI 2015).

Impact on Sharing Economy

STRs often operate by property owners leasing their unused space to tourists and visitors. We characterize activities as sharing economy activities when they use a distribution process to balance the availability of resources and needs of consumers (Daunoriene, et al. 2015). The ways in which STRs influence the sharing economy is still open to interpretation however. I speculate that growth of STRs offered through web-based platforms indicates that there is at least additional capacity in existing housing stock and that these property owners are willing to share their excess space in exchange for monetary compensation (Ellen 2015). Outside of this reality, debate about whether home sharing, through web-based platforms, negatively or positively influences the sharing economy finds a range of perspectives.

In theoretical debates, policy makers have considered adapting the Airbnb home-sharing model to house lower income individuals as a new form of housing assistance (Ellen 2015). The idea that people are interested in providing access to their space to strangers, initiates the conversation that sharing economy activities can be operated in many capacities (outside of corporate co-options), providing different social and economic benefits therein (Martin 2015). STR hosts can also reap economic benefits by participating in the sharing economy, reinforcing their desire to participate in that economy. Specifically, hosts can distribute their assets to supplement their income which has the added benefit of materializing the collaborative use of resources (Lazarouiu 2014, Daunoriene, et al. 2015). Social impacts are realized from public relations perspectives in which, the incremental shift towards home-sharing "has engendered visions of renewed forms of collective urban life" involving sustainability, symbolic interaction, and communication that empowers trust (Gregory et al. 2016).

Other perspectives debate how STRs and home-sharing through web-based platforms bring detrimental impacts on the sharing economy, or at least diminish its reputation. For instance, intermediary businesses that "provide the infrastructure necessary to sustain the sharing community" (Gregory et al. 2016) often enables, or intensifies, the evasion of local laws and regulations (Interian 2016). These businesses can also displace companies that are regulated, and often, do not hold themselves accountable to the negative externalities their business models can create (Interian 2016).

Summary of Impacts of Short-Term Rentals

There is limited data on the impact that short-term rentals have on governments and local economies, hosts and residents, and accommodation sector businesses. Certainly, however, positive and negative impacts will vary across space and time (particularly in regards to housing supply and affordability). Additionally, STRs have and will likely continue to disrupt traditional, lodging options but likely will not replace these businesses altogether. In general, there are also mixed perceptions about how home sharing will affect the sharing economy at large which has created a dichotomy around the topic (expected to remain until more research can occur).

Short-Term Rental Policy

This section first discusses STR policy frameworks and the impact they can have.

Policy Approaches

Integrating STRs into the formal sector through regulations and enforcement has been cited as an important next step to correct some of the negative impacts of STRs (Guttentag 2013). However, policy makers continue to grapple with the rationales, process, and practices of how to best regulate STRs. In a time of economic recession, many wonder if it is beneficial to regulate the STR market at all—in the chance it inhibits homeowners from making ends meet on their mortgages or housing payments (Gottlieb 2013). In general, however, the literature seems to agree on the fact that STRs should be regulated in some fashion, the extent to which is unclear and controversial (Gottlieb 2013, Goodman 2016, and Hood River County 2016).

There appears to be no best way to regulate the STR market that fits the needs of all communities across space. One report suggested a three-part solution:

1. Launch a standard of safety and accountability (strengthening nuisance laws, ensuring hosts have appropriate insurance, etc.);
2. Move past a yes or no debate on short-term rentals (consider the nuances of individual communities and tailor regulations to those nuances); and
3. Enforce what is on the ground and online (to cut down on opportunities to evade laws) (Goodman 2016). Another report articulated several alternatives: develop public nuisance abatement ordinances, ban short-term rentals outright, enact time restrictions (i.e. allowing short-term rentals for a period of 30 days or less), or enact performance based standards (Gottlieb 2013).

The American Planning Association suggests that jurisdictions require licenses, fees and taxes, and insurance; they also suggest consistency with their land use controls and to determine whether inspections are necessary (Sullivan, 2017). In a guidebook on the equitable regulation of short-term rentals, suggestions include clear definitions, active record keeping, protections for housing (supply and affordability), protections for guests, procedures for oversight, protections for neighborhood preservation, and imposition of taxes (Sustainable Economies Law Center 2016). Others argue that STRs, as part of the sharing economy, need special or "innovative" regulatory treatments "precisely because the business model is so new" (Katz 2015).

Transient Lodging Tax

Transient lodging taxes (TLT) are a local option tax levied on lodging facilities (hotels, motels, bed and breakfasts, etc.). While all jurisdictions do not levy a tax of this kind, "taxing tourism is an appealing option for governments facing budgetary constraints and pressures to decrease reliance on a variety of taxes" (Gooroochurn and Sinclair 2005). For instance, taxes levied to hotels offset burden onto tourists, which is especially advantageous in areas with "superior or unique natural resources" as to "capture the 'rent' of these resources through taxation" (Oakland and Testa n.d.).

TLTs, and other tourism taxes, are further considered efficient relative to taxing other sectors (Gooroochurn and Sinclair 2005). TLTs are useful to discourage certain businesses, curb negative impacts of certain businesses, or improve fairness (recover service costs from those who benefit from those services) (Oakland and Testa n.d.).

Policy Impacts

Pros and cons exist for all routes and systems of regulation. Overarchingly, we are not fully aware of the impacts alternate policies will have on residents, the local economy, or housing in the long-term. In jurisdictions where STR policies are already established, we still lack a complete awareness on the affect short-term rentals have on residents (Hood River County 2016). Accordingly, because the regulation of STR could affects community members differently, developing policies becomes a challenge and a discussion of equitability. Thus, communities "should arrive at an appropriate and equitable policy through open dialogue with the diversity of stakeholders involved" (Sustainable Economies Law Center 2016).

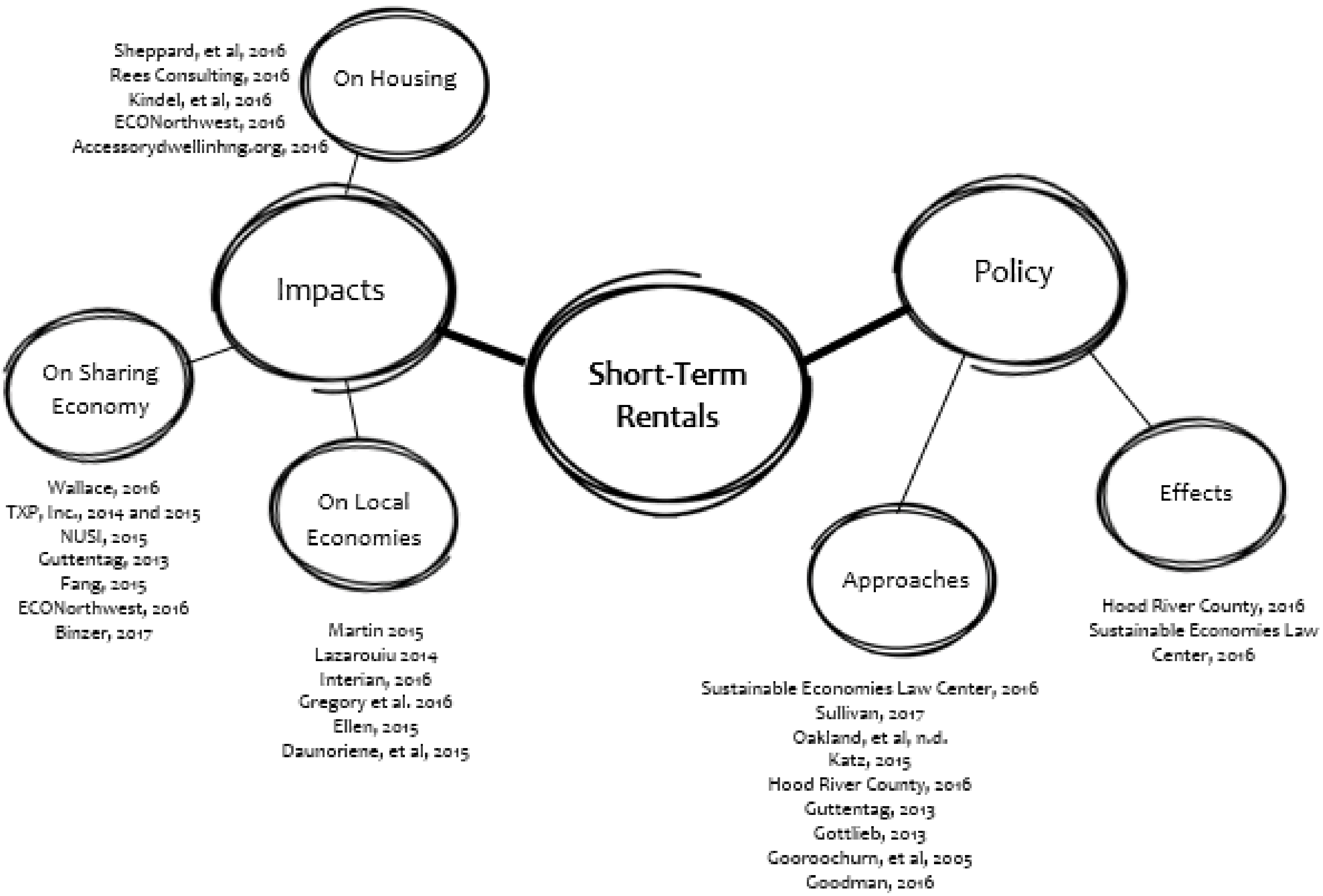
Summary of Impacts of Policy and Regulation

The establishment of policies for STRs in communities across the country is relatively new. Policies imposed can and likely will disproportionally affect residents. Thus, it is important to establish rules in accordance with best practices and community conversations. As a follow-up to regulations imposed, communities should evaluation the impact their policies have had on residents, neighborhoods, the economy, and housing. Communities should modify policies when deemed necessary.

Summary

Short-term rentals refer to housing units leased or rented for less than 30 days. It is an arrangement that involves the trade of the temporary, but not future use, of a full or partial housing unit (Flath 1980). STRs can provide benefits and/or costs to communities (which will vary across time and space), but appropriate regulations can manage these impacts. The concept map on the following page visually displays the connection between STR subtopics.

Concept Map



Sheppard, et al, 2016
Rees Consulting, 2016
Kindel, et al, 2016
ECONorthwest, 2016
Accessorydwellinhng.org, 2016
On Housing
Impacts
Policy
On Sharing Economy
Short-Term Rentals
Effects
Wallace, 2016
TXP, Inc., 2014 and 2015
NUSI, 2015
Guttentag, 2013
Fang, 2015
ECONorthwest, 2016
Binzer, 2017
On Local Economies
Approaches
Hood River County, 2016
Sustainable Economies Law Center, 2016
Martin 2015
Lazarouiu 2014
Interian, 2016
Gregory et al. 2016
Ellen, 2015
Daunoriene, et al, 2015
Sustainable Economies Law Center, 2016
Sullivan, 2017
Oakland, et al, n.d.
Katz, 2015
Hood River County, 2016
Guttentag, 2013
Gottlieb, 2013
Gooroochurn, et al, 2005
Goodman, 2016

Appendix B: Case Studies

This appendix conveys key findings on 10 Oregon cities, selected as case studies (see Table C.1). Case studies are used to delve into the details of STRS in smaller cities (cities with <100,000 people).

Table B.1. Selected Case Studies with Descriptors, 2015

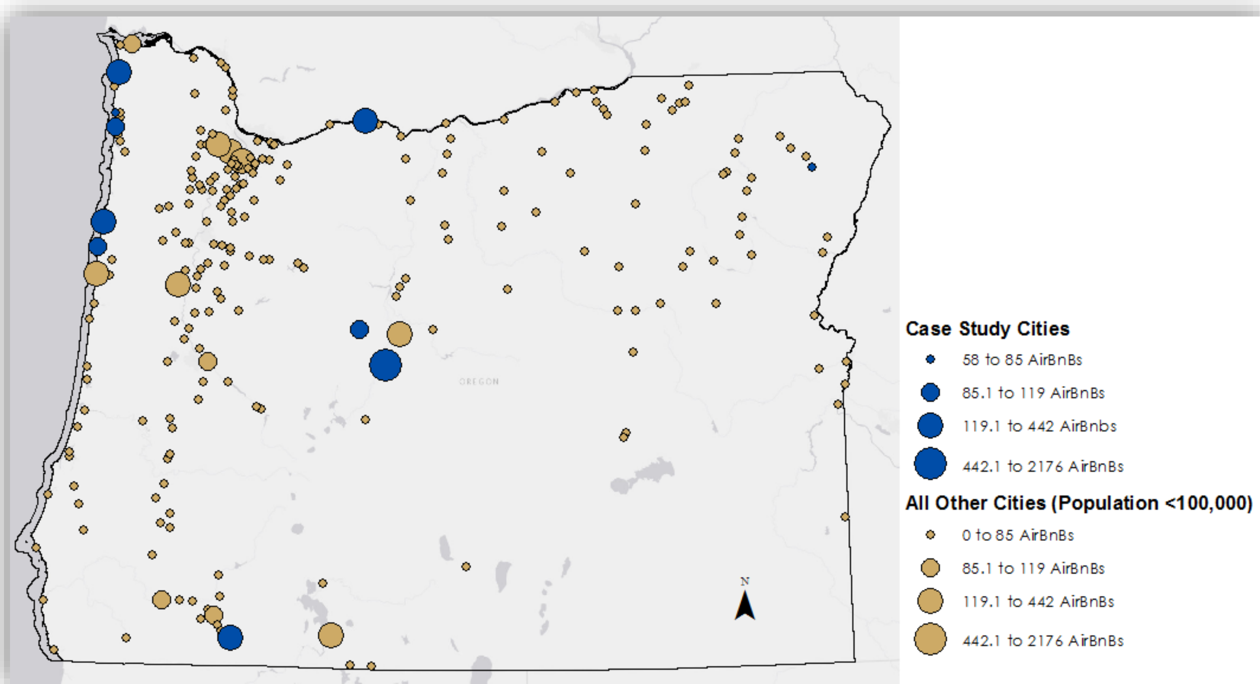
Case Studies	Total Population	City Size Class	City Size Class Legend	Region	Coastal City
Manzanita	426	1	Less than 1,000	North Coast	Yes
Joseph	1,053	2	1,000 to 5,000	Northeast Oregon	No
Rockaway Beach	1,227	2	1,000 to 5,000	North Coast	Yes
Depoe Bay	1,877	2	1,000 to 5,000	North Coast	Yes
Sisters	2,596	2	1,000 to 5,000	Central Oregon	No
Seaside	6,483	3	5,001 to 20,000	North Coast	Yes
Hood River	7,412	3	5,001 to 20,000	Central Oregon	No
Lincoln City	8,386	3	5,001 to 20,000	North Coast	Yes
Ashland	29,556	4	20,0001 to 50,000	Southern Oregon	No
Bend	81,780	5	50,001 to 100,000	Central Oregon	No
Total	**140,796**	-	-	-	-

Source: Population was derived from the American Community Survey, 5-year estimates 2011-2015.

Case studies were chosen as they possess 1) higher levels of Airbnbs (total number) as compared to other Oregon cities and/or 2) they possess a high percentage of Airbnbs as compared to the community's total housing units. All case studies rank within the top 25 cities in either of those two categories; most case studies (except Ashland and Joseph) rank within the top 25 cities of both categories.

The case studies chosen represent 49% of the Airbnbs in cities under 100,000 and 22% of the Airbnbs in all Oregon cities. These 10 cities generate approximately $54.8 million annually which is 66% of all revenue generated from Airbnbs in cities under 100,000 and 35% of the revenue generated from Airbnbs in all Oregon cities.

Map B.2. Number of Airbnb's by City using Proportional Symbols



Source: AirDnA. Property Data, Retrieved 2017. Oregon Spatial Data. *This map excludes cities with populations greater than 100,000 (Portland, Eugene, Salem, and Gresham). Cities are only showcased in this map that have at least one Airbnb short-term rental.*

Summary Facts

Our case study cities are highly influenced by STRs.

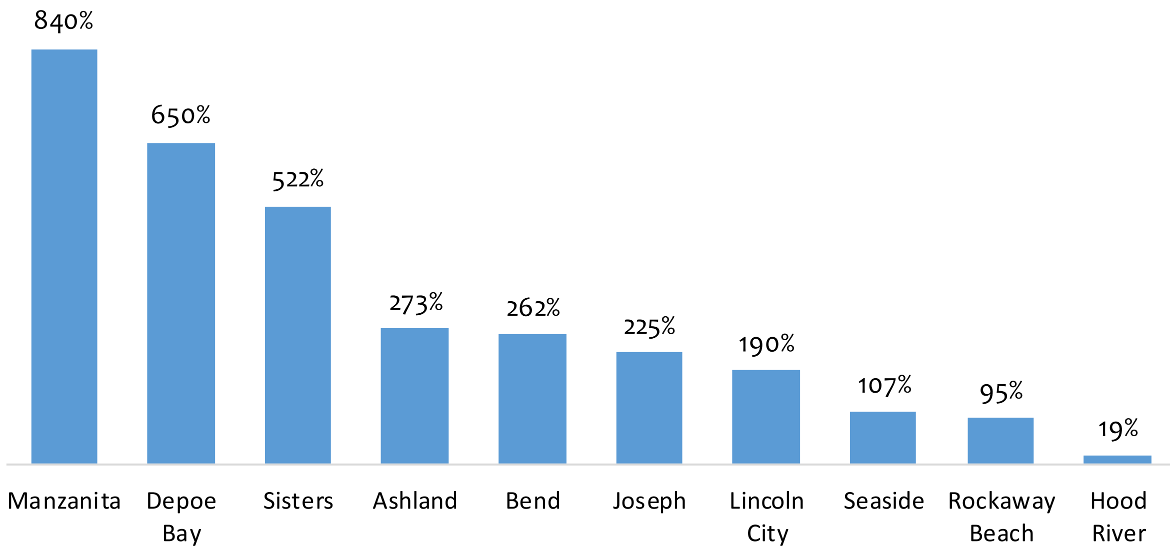
Table B.3. Quick Facts, 2011-2015 Estimates

Case Studies	Population (2015)	Total Housing Units (2015)	Median Household Income (2015)	AirBnBs as % of Total Housing
Ashland	20,556	10,372	$ 45,704	3%
Bend	81,780	36,579	$ 52,989	6%
Depoe Bay	1,877	1,469	$ 46,853	8%
Hood River	7,412	3,504	$ 47,310	9%
Joseph	1,053	595	$ 37,216	10%
Lincoln City	8,386	6,439	$ 37,894	5%
Manzanita	426	1,263	$ 51,429	7%
Rockaway Beach	1,227	2,105	$ 37,227	5%
Seaside	6,483	4,602	$ 37,887	10%
Sisters	2,596	1,331	$ 50,324	8%

Source: American Community Survey, 2011-2015. AirDnA Property Data, 2017.

Newly created STRs in our case study cities continues to grow. Future, longitudinal studies will helpful to understand how recent policies effect the amount of STRs entering the market in these communities.

Figure B.4. Percent Change of Newly Created Short-Term Rentals, 2014 to 2016



Source: AirDnA Property Data, Retrieved 2017.

In the following case study cities, STR growth is increasing at a faster rate than total housing units are. In some of these communities, household formation is also increasing at a faster rate than the construction of new housing units, indicating housing supply constraints (Bend, Depoe Bay, Joseph, and Manzanita).

Table B.5. Indication of Possible Housing Supply Constraints

Cities in Oregon	Household Formations			Vacation/Seasonal/ Occasional Use Housing Vacancy			Housing Units			Short-Term Rentals		
	2010	2015	Change	2010	2015	Change	2010	2015	Change	2014	2015	Change
Ashland	9,339	9,446	1%	291	317	9%	10,230	10,372	1%	76	127	67%
Bend	31,596	33,396	6%	1,224	1,414	16%	35,610	36,579	3%	434	1,066	146%
Depoe Bay	618	870	41%	431	446	3%	1,125	1,469	31%	22	66	200%
Hood River	2,764	3,005	9%	247	313	27%	3,214	3,504	9%	127	232	83%
Joseph	435	533	23%	70	40	-43%	556	595	7%	6	45	650%
Lincoln City	3,831	3,876	1%	1,432	2,138	49%	5,731	6,439	12%	125	191	53%
Manzanita	207	200	-3%	1,062	993	-6%	1,320	1,263	-4%	15	36	140%
Rockaway Beach	670	565	-16%	1,026	1,387	35%	1,750	2,105	20%	39	65	67%
Seaside	2,839	2,897	2%	1,221	920	-25%	4,428	4,602	4%	134	255	90%
Sisters	765	949	24%	46	187	307%	956	1,331	39%	17	48	182%
Total	**53,064**	**55,737**	**5%**	**9,060**	**10,170**	**12%**	**64,920**	**68,259**	**5%**	**995**	**2,131**	**114%**

Source: AirDnA Property Data. Retrieved 2017. U.S. Census, American Community Survey, 2010 and 2015.

The following table shows that in some situations, property owners can generate more annual revenue off STRs than they could off standard long-term rental units. This suggests that in resort communities, there may be more of a motive for property owners to operate STRs.

Table B.6. Indication of Competition between Short and Long-Term Housing

Cities in Oregon	Average Annual Revenue (STRs)	Max of Annnual Revenue (STRs)	Average Annualized Rent (ACS)	Average Annualized Mortgage (ACS)
Ashland	$8,309	$59,876	$12,456	$20,208
Bend	$14,801	$157,773	$12,972	$18,648
Depoe Bay	$13,866	$59,288	$12,264	$18,636
Hood River	$7,537	$81,215	$13,488	$20,016
Joseph	$17,176	$64,836	$7,980	$14,232
Lincoln City	$12,265	$117,250	$10,080	$18,804
Manzanita	$16,105	$90,051	$10,548	$24,432
Rockaway Beach	$15,925	$98,481	$8,316	$14,556
Seaside	$16,285	$198,425	$10,704	$19,356
Sisters	$9,196	$48,000	$12,312	$19,068
Total	**$13,662**	**$198,425**	**$11,112**	**$18,796**

Source: AirDnA Property Data, Retrieved 2017. U.S. Census, American Community Survey, 2010 and 2015.

Table B.7. Airbnbs Organized by Listing Type and Days Reserved

	Entire home/apt	Private room	Shared room	Total
Ashland	**180**	**79**	**1**	**260**
Less than 30 Days	34%	21%	0.4%	55%
30 to 90 Days	13%	4%	-	17%
91 to 180 Days	17%	5%	-	22%
181 Days or More	6%	1%	-	7%
Bend	**1,765**	**407**	**4**	**2,176**
Less than 30 Days	35%	9%	0.1%	45%
30 to 90 Days	29%	5%	0.0%	34%
91 to 180 Days	13%	3%	0.0%	16%
181 Days or More	4%	2%	-	6%
Depoe Bay	**113**	**6**	**-**	**119**
Less than 30 Days	48%	4%	-	52%
30 to 90 Days	24%	-	-	24%
91 to 180 Days	20%	1%	-	21%
181 Days or More	3%	-	-	3%
Hood River	**211**	**99**	**12**	**322**
Less than 30 Days	32%	17%	4%	52%
30 to 90 Days	19%	6%	-	25%
91 to 180 Days	11%	7%	-	17%
181 Days or More	4%	1%	-	5%
Joseph	**51**	**6**	**1**	**58**
Less than 30 Days	17%	3%	-	21%
30 to 90 Days	34%	3%	-	38%
91 to 180 Days	29%	3%	2%	34%
181 Days or More	7%	-	-	7%
Lincoln City	**319**	**19**	**-**	**338**
Less than 30 Days	49%	2%	-	51%
30 to 90 Days	26%	1%	-	27%
91 to 180 Days	17%	2%	-	19%
181 Days or More	2%	1%	-	3%
Manzanita	**77**	**8**	**-**	**85**
Less than 30 Days	38%	5%	-	42%
30 to 90 Days	29%	5%	-	34%
91 to 180 Days	20%	-	-	20%
181 Days or More	4%	-	-	4%
Rockaway Beach	**99**	**6**	**1**	**106**
Less than 30 Days	34%	2%	1%	37%
30 to 90 Days	24%	1%	-	25%
91 to 180 Days	28%	2%	-	30%
181 Days or More	8%	1%	-	8%
Seaside	**393**	**46**	**3**	**442**
Less than 30 Days	40%	6%	-	46%
30 to 90 Days	26%	3%	0.2%	29%
91 to 180 Days	16%	1%	0.5%	18%
181 Days or More	7%	0%	-	7%
Sisters	**78**	**29**	**-**	**107**
Less than 30 Days	33%	15%	-	48%
30 to 90 Days	23%	8%	-	32%
91 to 180 Days	15%	3%	-	18%
181 Days or More	2%	1%	-	3%
Total	**3,286**	**705**	**22**	**4,013**

Legislative Approaches

Table c.4. Case Study City Legislative Approaches

Case Study	Defined	Adopted	Requirements & Standards	Indication of Effectiveness	Ordinance Link
Ashland	Travelers' Accommodations (TA) or Accessory Travelers' Accommodations (ATA), for one or more occasions for a period less than 30 consecutive days	2015	TA and ATA Requirements: Conditional Use Permit; Subject to Site Design Review; Subject to inspection by fire department and Jackson County Health Department; City business license; Register for and pay transient occupancy tax TA Standards: Located within 200 feet of boulevard, avenue, or neighborhood collector; Property must be primary residence of the business-owner or person entered into a lease agreement with the property owner permitting use of property for the accommodation; Primary resident on site must be 20 years old; Minimum lot and GSF standards; Parking standard (one off-street parking space per accommodation and business-owner's unit must have two parking spaces) ATA Standards: Limit to one accommodation unit per property (no more than two bedrooms with two people per room); No signs; Property must have two off-street parking spaces; Guest vehicles must not exceed one; Meals and kitchen cooking facilities are not permitted	Somewhat Effective	http://www.ashland.or.us/SIB/files/AMC_Chpt_18_current.pdf (Section 18.2.3.220)
Bend	Use of a dwelling unit by any person or group of persons entitled to occupy for rent for a period of less than 30 consecutive days	2006, Updated 2015	Short term rental permit, Subject to review dependent on location and days available; Annual operation license; Concentration limits (250 feet between properties); Less than 30 days and owner-occupied allows exemption from concentration limits; Occupancy limited to two persons per bedroom plus two additional people; One parking space per bedroom; Subject to inspection	Very Effective to Somewhat Effective	http://www.codepublishing.com/OR/Bend/ (Section 3.6.500)
Depoe Bay	Less than 30 successive calendar days	-	Prohibited except as permitted under the zoning code; 8% Transient Room Tax, City business license; Registration; Four year amortized period	-	http://www.cityofdepoebay.org/pdf/ordinances/zoning24codifiedNov2011.pdf (Section 4.650)

Case Study	Defined	Adopted	Requirements & Standards	Indication of Effectiveness	Ordinance Link
Hood River	Transient Rental: a dwelling unit or room(s) rented for compensation on less than a month-to-month basis	2016	3% transient room tax; Short-term rental operating license; Maximum occupancy two persons per bedroom plus two additional persons; One off-street parking space for every two bedrooms; Dwelling must be primary residence of the property owner	Too Soon to Tell	http://ci.hood-river.or.us/pageview.aspx?id=20524 (Section 17.04.115)
Joseph	Travelers accomodation: any primary resdience, which is not a hotel or motel, having rooms, apartments or sleeping facilities rented or kept for rent on a daily or weekly basis to travelers or transients for a fee; Occupancy for less than 30 days	2016	3% transient lodging tax; Licence and/or permit; Facility is subject to review during first three years of operation after which time a permanent permit for the facility as accredited travelers' accomodation will be issued; One off-street parking space with owner's unit having two spaces; One sign of six sf maximum with no more than 150 watts of illumination; Annual inspection by the County Health Department	Somewhat Ineffective	https://drive.google.com/file/d/0B6NISJIjv4gad3NoR3BHTjIZODg/edit
Lincoln City	Vacation rental dwelling: a dwelling unit that is used, rented or occupied on a daily or weekly basis, or is available for use, rent, or occupancy on a daily or weekly basis, or is advertised, or listed by an agent, as available for use, rent, or occupancy on a daily or weekly basis.	Initially in 1996, updated 2016	$350 land use approval application fee, plus $100 license fee, plus $150 occupational tax permit; Transient lodging tax at 9.5% of rental charge	Somewhat Effective	http://www.codepublishing.com/OR/LincolnCity/ (section 17.80.050, and at Chapter 5.1), amendments are found at http://www.lincolncity.org/index.asp?SEC=55A859F7-5E25-4659-B7BE-B0445F128F08&Type=B_BASIC in Ordinances 2016-14, 2016-20, and 2016-26
Manzanita	Short Term Rental: A dwelling unit that is rented for a period not to exceed 29 days.	1994; current policies adopted 2010, amended 2016	$250 permit (annual), 9% transient room tax; Advertisement must contain licensing number; Subject to inspection and periodic reinspection; Some areas subject to cap; Off-street parking for two vehicles; Signage no larger than 90 square inches; Occupancy capacity of two persons per sleeping room plus an additional four persons	Somewhat Ineffective	http://www.ci.manzanita.or.us/_docs/ordinances/STR/Ordinance%2010%2003%20STR%20regulations%20amend%2016%2005%20120716.pdf

Case Study	Defined	Adopted	Requirements & Standards	Indication of Effectiveness	Ordinance Link
Rockaway Beach	Under 30 nights stay	Prior to 2003	Business license; 9% transient room tax	Somewhat Effective	http://library.amlegal.com/nxt/gateway.dll/Oregon/rockawaybeach_or/thecityofrockawaybeachoregoncodeofordina?f=templates$fn=default.htm$3.0$vid=amlegal:rockawaybeach_or
Seaside	Less than 30 day		Conditional Use Permit subject to public hearing; Subject to inspection; Transient room tax provisions; Permit will be reviewed if two complaints are received by different residencies claiming adverse impact; Minimum of two off street parking spaces plus one addtional for each bedroom over two	-	http://www.cityofseaside.us/sites/default/files/vrd_checklist2016.pdf; http://www.cityofseaside.us/sites/default/files/vrd_checklist2016.pdf
Sisters	Vacation rental: The use of a residential dwelling unit by any person or group of persons entitled to occupy for rent for a period of less than 30 consecutive days per month and that is rented in such a manner for more than 10 days in a calendar year	2010	Business license, Transient room tax, Subject to inspection, Compalints can revoke permit, Subject to type 1 review process	Somewhat Effective	http://sistersoregon.gelfuzion.net/pdf/development-code/Chapter%202.15%20Special%20Provisions%2011.23.14.pdf

Source: Responding to Short-Term Rentals Survey, 2017 and code review (see links in table).

Appendix C: Industry Summary for Cities with Airbnbs

The following table provides industry data for all cities in Oregon with Airbnb.

Table D.1. Industry Summary by Region

City by Region	AirBnBs as % of Total Housing	Avg. Daily Rate per Property	% of Properties Reserved >30 Days	% of Properties (Entire Home)	% of Properties (Private/Shared Room)	Annual Revenue
Central Oregon	**4%**	**$209**	**53%**	**78%**	**22%**	**$37,539,776**
Bend	6%	$238	55%	81%	19%	$32,207,439
Cascade Locks	1%	$75	57%	57%	43%	$20,557
Culver	0%	$0	0%	100%	0%	$0
Dufur	1%	$150	75%	50%	50%	$19,189
Hood River	9%	$129	47%	66%	34%	$2,426,970
La Pine	3%	$95	65%	81%	19%	$214,018
Madras	0%	$49	0%	73%	27%	$4,635
Maupin	1%	$216	100%	100%	0%	$57,672
Mosier	12%	$100	42%	81%	19%	$200,261
Prineville	1%	$93	54%	50%	50%	$171,475
Redmond	1%	$115	49%	74%	26%	$1,036,179
Sisters	8%	$153	51%	73%	27%	$983,947
The Dalles	0%	$108	53%	43%	57%	$197,434
North Coastal Oregon	**5%**	**$206**	**53%**	**86%**	**14%**	**$24,875,499**
Astoria	2%	$101	61%	52%	48%	$890,097
Bay City	2%	$133	57%	93%	7%	$111,417
Cannon Beach	4%	$322	71%	95%	5%	$2,876,320
Depoe Bay	8%	$207	47%	95%	5%	$1,650,062
Garibaldi	0%	$199	0%	100%	0%	$4,575
Lincoln City	5%	$237	48%	94%	6%	$4,145,729
Manzanita	7%	$271	56%	91%	9%	$1,368,957
Nehalem	46%	$168	58%	60%	40%	$879,648
Newport	2%	$185	46%	79%	21%	$1,322,513
Rockaway Beach	5%	$192	63%	93%	7%	$1,688,036
Seaside	10%	$216	49%	89%	11%	$7,198,080
Tillamook	4%	$156	55%	89%	11%	$1,014,970
Toledo	0%	$25	50%	0%	100%	$6,134
Waldport	4%	$145	57%	76%	24%	$435,804
Warrenton	1%	$168	55%	95%	5%	$282,578
Wheeler	0%	$0	0%	100%	0%	$0
Yachats	8%	$158	78%	78%	22%	$1,000,579
Northeast Oregon	**1%**	**$129**	**45%**	**64%**	**36%**	**$1,738,663**
Baker City	0%	$115	55%	60%	40%	$158,813
Condon	1%	$89	0%	50%	50%	$1,091
Elgin	1%	$86	43%	43%	57%	$22,840
Enterprise	3%	$127	48%	52%	48%	$217,418
Fossil	4%	$134	30%	30%	70%	$24,072
Grass Valley	3%	$127	50%	100%	0%	$7,355
Haines	0%	$85	0%	0%	100%	$1,615
Halfway	2%	$75	25%	75%	25%	$8,595

City by Region	AirBnBs as % of Total Housing	Avg. Daily Rate per Property	% of Properties Reserved >30 Days	% of Properties (Entire Home)	% of Properties (Private/Shared Room)	Annual Revenue
Northeast Oregon Continued...						
Heppner	0%	$0	0%	100%	0%	$0
Hermiston	0%	$15	0%	75%	25%	$120
Ione	4%	$67	0%	50%	50%	$1,200
Irrigon	0%	$0	0%	0%	100%	$0
John Day	1%	$85	14%	100%	0%	$13,905
Joseph	10%	$205	79%	88%	12%	$996,192
La Grande	0%	$86	25%	55%	45%	$44,465
Long Creek	5%	$86	0%	0%	100%	$344
Lostine	4%	$89	60%	100%	0%	$45,525
Milton Freewater	0%	$95	20%	60%	40%	$23,925
Mitchell	6%	$147	0%	83%	17%	$11,222
Moro	3%	$76	0%	0%	100%	$2,490
Pendleton	0%	$140	27%	67%	33%	$49,041
Prairie City	1%	$120	60%	100%	0%	$31,464
Richland	1%	$72	100%	100%	0%	$5,495
Umatilla	0%	$198	0%	100%	0%	$792
Union	0%	$133	0%	100%	0%	$5,319
Unity	2%	$105	0%	100%	0%	$2,200
Wallowa	0%	$48	50%	50%	50%	$9,690
Wasco	4%	$91	88%	13%	88%	$53,475
Portland Metro	**2%**	**$82**	**48%**	**57%**	**43%**	**$69,880,529**
Beaverton	1%	$61	49%	37%	63%	$1,620,761
Cornelius	0%	$146	100%	50%	50%	$15,402
Damascus	0%	$48	44%	33%	67%	$35,011
Fairview	0%	$75	61%	61%	39%	$86,018
Forest Grove	0%	$65	42%	33%	67%	$90,651
Gladstone	0%	$62	33%	56%	44%	$30,761
Gresham	0%	$78	35%	39%	61%	$196,700
Happy Valley	1%	$79	26%	46%	54%	$197,404
Hillsboro	1%	$75	37%	37%	63%	$757,834
Lake Oswego	1%	$98	41%	55%	45%	$993,534
Oregon City	1%	$57	36%	38%	62%	$373,295
Portland	3%	$83	49%	60%	40%	$64,746,132
Sherwood	0%	$104	48%	52%	48%	$197,885
Troutdale	0%	$50	33%	43%	57%	$71,959
West Linn	1%	$71	38%	45%	55%	$383,343
Wilsonville	0%	$49	28%	24%	76%	$83,839
South Coastal Oregon	**1%**	**$132**	**52%**	**75%**	**25%**	**$2,335,541**
Bandon	2%	$227	52%	63%	38%	$423,053
Brookings	2%	$124	40%	65%	35%	$447,365

City by Region	AirBnBs as % of Total Housing	Avg. Daily Rate per Property	% of Properties Reserved >30 Days	% of Properties (Entire Home)	% of Properties (Private/Shared Room)	Annual Revenue
South Coastal Oregon Continued...						
Coos Bay	1%	$109	74%	74%	26%	$393,664
Coquille	0%	$67	67%	0%	100%	$9,600
Florence	1%	$103	58%	80%	20%	$342,405
Gold Beach	3%	$136	51%	88%	12%	$310,273
Lakeside	0%	$58	33%	100%	0%	$12,625
North Bend	0%	$93	72%	89%	11%	$122,735
Port Orford	4%	$137	32%	97%	3%	$208,399
Reedsport	1%	$73	35%	53%	47%	$65,422
Southeast Oregon	**1%**	**$125**	**48%**	**79%**	**21%**	**$1,143,628**
Burns	1%	$42	30%	40%	60%	$60,935
Chiloquin	1%	$130	74%	89%	11%	$185,222
Jordan Valley	1%	$2	50%	50%	50%	$161
Klamath Falls	1%	$135	46%	82%	18%	$880,611
Ontario	0%	$53	50%	50%	50%	$7,709
Paisley	1%	$145	100%	100%	0%	$8,990
Southern Oregon	**1%**	**$98**	**47%**	**57%**	**43%**	**$4,886,800**
Ashland	3%	$119	45%	69%	31%	$2,160,243
Canyonville	0%	$180	0%	20%	80%	$1,052
Cave Junction	2%	$69	50%	36%	64%	$57,470
Central Point	0%	$91	63%	43%	57%	$180,830
Eagle Point	0%	$98	50%	40%	60%	$49,303
Elkton	3%	$44	33%	100%	0%	$26,213
Gold Hill	1%	$141	63%	100%	0%	$57,729
Grants Pass	1%	$76	41%	52%	48%	$449,096
Jacksonville	4%	$97	45%	52%	48%	$318,241
Medford	0%	$85	53%	59%	41%	$728,615
Myrtle Creek	1%	$55	25%	63%	38%	$15,248
Myrtle Point	0%	$63	100%	0%	100%	$25,257
Oakland	1%	$123	50%	25%	75%	$41,461
Phoenix	1%	$59	33%	33%	67%	$50,563
Riddle	0%	$0	0%	100%	0%	$0
Rogue River	0%	$122	100%	100%	0%	$33,902
Roseburg	0%	$88	37%	44%	56%	$180,605
Sandy	0%	$182	85%	77%	23%	$140,041
Shady Cove	0%	$179	0%	100%	0%	$4,015
Talent	3%	$69	53%	39%	61%	$366,916
Winston	0%	$0	0%	100%	0%	$0
Yoncalla	0%	$0	0%	100%	0%	$0
Willamette Valley	**1%**	**$109**	**45%**	**53%**	**47%**	**$14,333,540**
Albany	0%	$42	50%	33%	67%	$142,465

City by Region	AirBnBs as % of Total Housing	Avg. Daily Rate per Property	% of Properties Reserved >30 Days	% of Properties (Entire Home)	% of Properties (Private/Shared Room)	Annual Revenue
Willamette Valley Continued...						
Amity	1%	$147	86%	86%	14%	$98,095
Aumsville	0%	$80	0%	100%	0%	$80
Aurora	2%	$99	71%	71%	29%	$63,928
Banks	1%	$114	43%	29%	71%	$43,118
Brownsville	1%	$107	80%	70%	30%	$59,008
Canby	0%	$50	52%	24%	76%	$67,515
Carlton	3%	$158	28%	83%	17%	$155,952
Clatskanie	0%	$53	33%	33%	67%	$12,001
Columbia City	0%	$0	0%	50%	50%	$0
Corvallis	1%	$78	46%	32%	68%	$994,099
Cottage Grove	1%	$40	26%	43%	57%	$81,810
Creswell	1%	$68	55%	55%	45%	$36,876
Dallas	0%	$78	40%	60%	40%	$26,238
Dayton	4%	$138	45%	79%	21%	$199,324
Detroit	0%	$187	0%	100%	0%	$5,050
Dundee	3%	$216	57%	67%	33%	$341,089
Estacada	0%	$32	50%	50%	50%	$11,879
Eugene	2%	$124	43%	59%	41%	$8,284,555
Falls City	0%	$0	0%	100%	0%	$0
Gaston	5%	$126	55%	82%	18%	$112,446
Gates	2%	$113	25%	100%	0%	$18,485
Harrisburg	0%	$180	0%	100%	0%	$6,030
Hubbard	0%	$51	0%	0%	100%	$760
Idanha	4%	$219	40%	40%	60%	$32,812
Independence	1%	$82	41%	59%	41%	$71,170
Jefferson	0%	$46	40%	60%	40%	$11,738
Junction City	1%	$97	50%	56%	44%	$68,555
Lafayette	0%	$0	0%	100%	0%	$0
Lebanon	0%	$51	50%	50%	50%	$15,787
Lowell	1%	$153	67%	100%	0%	$49,060
Lyons	1%	$115	67%	50%	50%	$67,071
Mcminnville	1%	$133	62%	58%	42%	$647,527
Mill City	0%	$118	50%	0%	100%	$2,490
Molalla	0%	$68	0%	40%	60%	$5,161
Monmouth	0%	$54	29%	29%	71%	$33,461
Monroe	1%	$112	50%	0%	100%	$8,536
Newberg	1%	$151	47%	64%	36%	$594,929
North Plains	0%	$35	0%	50%	50%	$1,341
Oakridge	0%	$46	22%	78%	22%	$24,837
Philomath	1%	$71	53%	67%	33%	$78,164

City by Region	AirBnBs as % of Total Housing	Avg. Daily Rate per Property	% of Properties Reserved >30 Days	% of Properties (Entire Home)	% of Properties (Private/Shared Room)	Annual Revenue
Willamette Valley Continued...						
Rainier	0%	$0	0%	50%	50%	$0
Saint Helens	0%	$45	25%	25%	75%	$12,493
Saint Paul	1%	$0	0%	100%	0%	$0
Salem	0%	$60	46%	32%	68%	$733,510
Scappoose	0%	$53	50%	25%	75%	$55,434
Scio	2%	$93	67%	50%	50%	$55,987
Scotts Mills	2%	$157	67%	100%	0%	$19,789
Sheridan	1%	$101	50%	60%	40%	$38,935
Silverton	1%	$98	59%	41%	59%	$179,167
Springfield	0%	$98	45%	46%	54%	$454,422
Stayton	0%	$85	67%	67%	33%	$50,039
Sublimity	0%	$77	67%	0%	100%	$10,425
Sweet Home	0%	$24	0%	67%	33%	$648
Tangent	0%	$124	100%	100%	0%	$4,451
Turner	0%	$49	50%	50%	50%	$1,472
Veneta	1%	$92	20%	45%	55%	$54,950
Vernonia	1%	$79	29%	14%	86%	$15,236
Westfir	8%	$96	33%	50%	50%	$74,176
Willamina	0%	$108	100%	100%	0%	$14,133
Woodburn	0%	$61	56%	11%	89%	$21,562
Yamhill	3%	$104	42%	58%	42%	$63,269
Total	**2%**	**$120**	**49%**	**63%**	**37%**	**$156,733,976**

Source: AirDnA. Property Data. *Airbnbs as % of* total housing units uses American Community Survey data (2011-2015).

Appendix D: Sensitivity Test, AirDnA vs Airbnb Data

Sensitivity testing suggests similarities between both datasets. Note, AirBnB data was pulled in January of 2017, while AirDnA data was pulled in March of 2017. This may have created slight discrepancies for indicators. Still, proportion of entire homes and private/shared rooms are within +/- 3% on average. Host incomes were within +/- $5,000 (removing Cannon Beach as the outlier). Average nights hosted/reserved days were within +68/-42 days and the average difference between monthly rates was $72.

Table E.1. Sensitivity Testing of AirDnA and Airbnb Data using Various Indicators

City	Proportion of Entire Home Listings		Propotion of Private/ Shared Room Listings		Typical Host Income		Typical Nights Hosted/ Reservation Days		Average Nightly Rate	
	AirBnB	AirDnA	AirBnB	AirDnA	AirBnB (Groomed)	AirDnA	AirBnB (Groomed)	AirDnA	AirBnb (2016)	AirDnA
Ashland	77%	69%	23%	31%	$10,550	$8,309	71	53	$131	$189
Astoria	55%	52%	45%	48%	$8,080	$9,176	67	75	$132	$136
Bandon	67%	63%	33%	38%	-	$8,814	-		$162	$294
Beaverton	44%	37%	56%	63%	$6,290	$4,739	94	52	$92	$120
Bend	75%	81%	25%	19%	$10,280	$14,801	46	56	$154	$354
Brookings	78%	65%	22%	35%	-	$7,849	-	49	$145	$197
Cannon Beach	97%	95%	3%	5%	$9,930	$35,077	28	96	$255	$426
Corvallis	43%	32%	57%	68%	$5,760	$5,178	40	50	$98	$109
Cottage Grove	42%	43%	58%	57%	-	$2,337	-	32	$67	$85
Depoe Bay	99%	95%	1%	5%	-	$13,866	-	50	$311	$347
Florence	81%	80%	19%	20%	-	$8,560	-	69	$119	$153
Gearhart	97%	-	3%	-	-	-	-	-	$294	-
Gold Beach	90%	88%	10%	12%	-	$7,216	-	42	$183	$290
Grants Pass	68%	52%	32%	48%	$7,560	$4,491	69	38	$111	$141
Hillsboro	41%	37%	59%	63%	$5,240	$3,609	49	35	$80	$115
Hood River	66%	66%	34%	34%	$7,400	$7,537	36	50	$150	$186
Jacksonville	58%	52%	42%	48%	$6,170	$4,750	45	39	$118	$141
Jordan Valley	68%	50%	32%	50%	-	$81	12	17	-	$75

City	Proportion of Entire Home Listings		Propotion of Private/ Shared Room Listings		Typical Host Income		Typical Nights Hosted/ Reservation Days		Average Nightly Rate	
	AirBnB	AirDnA	AirBnB	AirDnA	AirBnB (Groomed)	AirDnA	AirBnB (Groomed)	AirDnA	AirBnb (2016)	AirDnA
Joseph	87%	88%	13%	12%	-	$17,176	-	78	$181	$240
Klamath Falls	85%	82%	15%	18%	$3,220	$6,572	21	43	$142	$178
La Pine	83%	81%	17%	19%	-	$6,904	-	59	$139	$438
Lake Oswego	63%	55%	37%	45%	$8,930	$6,759	57	42	$136	$211
Lincoln City	94%	94%	6%	6%	$14,170	$12,265	32	51	$182	$386
Manzanita	95%	91%	5%	9%	$16,160	$16,105	57	60	$269	$362
McMinnville	55%	58%	45%	42%	$8,850	$8,750	58	61	$149	$190
Medford	63%	59%	37%	41%	$10,410	$6,809	60	65	$109	$159
Milwaukie	49%	-	51%	-	$9,790	-	170	-	$71	-
Nehalem	45%	60%	55%	40%	-	$12,217	-	76	$153	$214
Newberg	62%	64%	38%	36%	$4,980	$7,345	59	44	$152	$234
Newport	82%	79%	18%	21%	$10,730	$9,380	60	47	$167	$343
Oregon City	53%	38%	47%	62%	-	$4,912	-	48	$87	$104
Redmond	76%	74%	24%	26%	$9,090	$6,642	49	50	$107	$171
Rockaway Beach	94%	93%	6%	7%	$18,800	$15,925	94	76	$225	$314
Seaside	85%	89%	15%	11%	$11,170	$16,285	24	56	$203	$309
Sisters	71%	73%	29%	27%	$8,010	$9,196	58	47	$185	$246
Springfield	51%	46%	49%	54%	$3,720	$4,057	61	44	$79	$137
Talent	34%	39%	66%	61%	$5,850	$4,892	100	64	$77	$98
The Dalles	41%	43%	59%	57%	-	$6,581	-	63	$108	$146
Tigard	35%	-	65%	-	$3,140	-	55	-	$91	-
Tillamook	92%	89%	8%	11%	-	$11,941	-	64	$189	$243
Waldport	83%	76%	17%	24%	$15,290	$9,474	51	55	$189	$258
West Linn	50%	45%	50%	55%	$4,670	$4,675	62	42	$106	$115
Yachats	76%	78%	24%	22%	$13,520	$14,714	122	115	$130	$200

Source: AirDnA, Property Data, Retrieved March 2017. Airbnb Property Data, as of January 1, 2017.

Bibliography

Airbnb, Inc. https://www.airbnb.com/ Retrieved October 24, 2016.
Balaram, Brhmie. (2016). How Do We Collaboratively Regulate the Sharing Economy? RSA. https://www.thersa.org/discover/publications-and-articles/rsa-blogs/2016/07/how-do-we-collaboratively-regulate-the-sharing-economy
Becker, K. F. (2004, March). The Informal Economy. Sida. Retrieved October 15, 2016.
Benner, K. (2016, Oct.) Airbnb Sues Over New Law Regulating New York Rentals. NY Times. http://www.nytimes.com/2016/10/22/technology/new-york-passes-law-airbnb.html?_r=0
Binzer, Ulrik. (2017). What to Do about Airbnb, Planning, Chicago 83.2: 44.
Botsman, R., & Rogers, R. (2010). What's mine is yours: The rise of collaborative consumption. New York, NY: Harper Business. Retrieved October 15, 2016.
Broughton, P. D. (2015, March 28). Unfair shares: The sinister, manipulative side of Uber and Airbnb. The Spectator. Retrieved October 15, 2016.
Daunoriene, Asta; Draksaite, Aura; Snieska, Vytautas; Gitana Valodkiene. (2015). Evaluating Sustainability of Sharing Economy Business Models. 20th International Scientific Conference Economics and Management. Procedia – Social and Behavioral Sciences 213, 836-841.
Dillow, Clay. (2016). Can Airbnb Book a Billion Nights a Year By 2025, Fortune. http://fortune.com/2016/04/11/airbnb-bookings-one-billion-a-year/
Economic & Planning System, Inc. (2015, July 7). The Impact of Vacation Rentals on Affordable and Workforce Housing in Sonoma County. The Economics of Land Use. Retrieved October 15, 2016.
ECONorthwest. (2016, July). Housing Affordability Impacts of Homeaway in Seattle. Retrieved October 15, 2016.
Ellen, I. G. (2015, July 14). Housing Low-Income Households: Lessons from the Sharing Economy? Housing Policy Debate, 2015, 25(4), 783-784. Retrieved October 15, 2016.
Fang, B., Ye, Q., & Law, R. (2016, March). Effect of sharing economy on tourism industry employment. Annals of Tourism Research, 57, 264-267. Retrieved October 15, 2016.
Flath, D. (1980, April). The Economics of Short-term Leasing. Economic Inquiry. 18(2), 247-259.
Fleetwood, B. (2012). DIY B&B. The Washington Monthly, 44, 38-39. Retrieved October 15, 2016.
Frenken, Koen; Meelen, Toon; Arets, Martijn; and van de Glind, Pierter. (2015). Smarter regulation for the sharing economy, The Guardian. https://www.theguardian.com/science/political-science/2015/may/20/smarter-regulation-for-the-sharing-economy
Gallagher, Leigh. (2017). Airbnb's Profits to Top $3 Billion by 2020, Fortune. http://fortune.com/2017/02/15/airbnb-profits/
Goodman, J. (2016, February). Could You BnB My Neighbor? A planner's take on the sharing economy. Planning, 29-33. Retrieved October 15, 2016.
Gottlieb, C. (2013, January 17). Residential Short-Term Rentals: Should Local Governments Regulate the 'Industry'? Planning & Environmental Law. Retrieved October 15, 2016.
Gregory, Anne and Halff, Gregor. (2017). Understanding public relations in the 'sharing economy,' Public Relations Review 43, 4-13.
Gurran, Nicole and Phibbs, Peter (2017). When Tourists Move In: How Should Urban Planners Respond to Airbnb?, Journal of the American planning association, 83:1, 80-92, DOI: 10.1080/01933464.2016.1249011
Guttentag, D. (2013, September 2). Airbnb: Disruptive innovation and the rise of an informal tourism accommodation sector. Current Issues in Tourism. Retrieved October 15, 2016.

Hill, S. (2015). The Unsavory Side of Airbnb. The American Prospect, 26(4), 80-85. Retrieved October 15, 2016.
HOM Editor. (n.d.). How Short-Term-Rentals Impact Your Neighborhood. Retrieved from http://homeownershipmatters.realtor/issues/short-term-rentals-impact-neighborhood/
Hood River County Community Development. (2016, April 13). Short Term Rental ("STR") Background Information. Retrieved October 15, 2016, from http://hrccd.co.hood-river.or.us/images/uploads/documents/+_Staff_Memo_Issues_Exhibits_4.13.16.pdf
Interian, J. (2016). Up in the Air: Harmonizing the Sharing Economy through AirBnB Regulations. Boston College International and Comparative Law Review. Retrieved October 15, 2016.
Jackson, P. J. (2006, April 26). Tax Treatment of Short Term Residential Rentals: Reform Proposal. CRS Report for Congress. Retrieved October 15, 2016.
Katz, Vanessa. (2015). Regulating the Sharing Economy, Berkeley Technology Law Journal. Volume 30, Issue 4, Annual Review. http://scholarship.law.berkeley.edu/cgi/viewcontent.cgi?article=2083&context=btlj
Kindel, Nicholas, et al. (2016). Short Term Rental Study, City of New Orleans. https://www.nola.gov/city-planning/major-studies-and-projects/short-term-rental-study/final-short-term-rental-study/
Lowe, D., & Hughes, D. (2012). Private Rented Housing Market: Regulation or Deregulation. Ashgate.
Makwana, Rajesh (2013). Values and the Sharing Economy, Our World, Humanitarian Affairs. https://ourworld.unu.edu/en/values-and-the-sharing-economy
Martin, C. J. (2016). The sharing economy: A pathway to sustainability or a nightmarish form of neoliberal capitalism? Ecological Economics, 149-159. Retrieved October 15, 2016.
Miller, S. R. (2016). First Principles for Regulating the Sharing Economy. Harvard Journal on Legislation, 53. Retrieved October 15, 2016.
National University System Institute for Policy Research. (2015, October). Short-term Rentals in the City of San Diego: An Economic Impact Analysis. Retrieved October 15, 2016.
Nickles, C. (2015). How Community Can Help Baby Boomers Cope with Caregiving. Community, 27. Retrieved October 15, 2016.
Oakland, William H. and Testa, William A. (n.d.). State-local business taxation and the benefits principle. Economic Perspectives, Federal Reserve Bank of Chicago.
Office of Management and Finance, Revenue Division, Bureau of Development Services, & Bureau of Planning and Sustainability. (2016, September). Accessory Short-term Rentals Monitoring Report.
Rees Consulting, Inc. (2016, June). White Paper Short-Term Vacation Home Rentals Impacts on Workforce Housing in Breckenridge. Retrieved October 15, 2016.
Sawatzky, K. (2016, October 5). Response to the City of Vancouver's proposed approach to regulating short-term rentals. Retrieved October 15, 2016, from https://shorttermconsequences.wordpress.com/
Sheppard, Stephen and Udell, Andrew. (2016). Do Airbnb properties affect house prices? Williams College Department of Economics and Dropbox, Inc. Retrieved April 19, 2017.
Short Term Rental Advocacy Center (n.d.). Policy Positions. http://stradvocacy.org/policy-positions/
Smith, Craig. (2017). 90 Amazing Airbnb Statistics and Facts (March 2017), DMR. http://expandedramblings.com/index.php/airbnb-statistics/
Stan, Adriana. (2016). The future is the trust economy, Tech Crunch, https://techcrunch.com/2016/04/24/the-future-is-the-trust-economy/.
Sullivan, Edward. (2017). Regulating Short-Term Rentals, Legal Lessons, American Planning Association.

Sundararajan, Arun. (2016). What Governments Can Learn From Airbnb and the Sharing Economy, Fortune. http://fortune.com/2016/07/12/airbnb-discrimination/

Sustainable Economies Law Center (2016). Regulating Short-Term Rentals: A Guidebook for Equitable Policy.

TXP, Inc. (2014). The Local Economic Impact of Participating Short Term Rentals in Los Angeles. Retrieved April 19, 2017.

TXP, Inc. (2014). The Local Economic Impact of Participating Short Term Rentals in Monterey County. Retrieved April 19, 2017.

TXP, Inc. (2015). The Local Economic Impact of Participating Short Term Rentals in Santa Barbara, CA. Retrieved April 19, 2017.

TXP, Inc. (2014). The Local Economic Impact of Participating Short Term Rentals in St. Joseph, MI. Retrieved October 15, 2016.

Varma, A., Jukic, N., Pestek, A., Shultz, C. J., & Nestorov, S. (2016, September). Airbnb: Exciting innovation or passing fad? Tourism Management Perspectives, 228-237. Retrieved October 15, 2016.

Wallace, Nick. (2016). Where do Airbnb hosts make the most money? SmartAsset. https://smartasset.com/mortgage/where-do-airbnb-hosts-make-the-most-money

Will short-term rentals actually reduce long term housing in granny flats? (2016, April 4). Retrieved from https://accessorydwellings.org/2016/04/04/adustr/

BEND, OREGON VACATION RENTAL CONTROVERSY

https://buyinbend.wordpress.com/2014/08/27/bend-oregon-vacation-rental-controversy/

August 27, 2014 · by Cheri Smith & Molly Brundage *· in* *Bend Oregon*, *home buyers* *·* *Leave a comment*

(This topic has been updated. Read the blog post by clicking here: Short Term Rental Code Amendments)

I have helped numerous buyers identify and purchase homes that would make profitable vacation rentals in Bend. Bend has a lot of tourists and for many of them, renting a house is preferable to staying in a hotel. It's much easier to bring and store bikes, kayaks, and skis when you're staying in a house, and if the vacation rental allows pets, it's really convenient to have a backyard. In the summertime, it's so nice to sit on the front porch or deck and enjoy a beer from one of Bend's countless breweries and a vacation rental allows you to do that. It also makes traveling much cheaper when you can stock a kitchen rather than eating out at every meal. If you're vacationing with family or friends, it's really nice to all stay in one location (most of the time anyway!). I think that for the most part, vacation rentals are a positive thing but not everyone agrees. The City Council is expected to begin a discussion of vacation rentals and whether to regulate them at a September 17, 2014 meeting, and city employees are gathering information such as whether vacation rentals had code violations or other problems to present at the meeting. A recent Bulletin article tells more of the story.

By Hillary Borrud / The Bulletin / @hborrud
Published Aug 26, 2014 at 12:01AM

If you want to see how the increase in vacation rental homes has impacted parts of Bend, NW Riverfront Street is a good place to do so.

John Kelly moved into a house on NW Riverfront 15 years ago and has since purchased a second home there. He used to lease his 520-square-foot house to long-term renters but decided several years ago to try renting it out as a vacation home. Kelly's neighbors had the same idea, and there are now nine vacation-home rentals on the short street, according to data from the city of Bend.

Kelly, who is also a member of the Old Bend Neighborhood Association board, said most rentals on the street are operated by people who live there.

Kelly even became friends with some of the vacationers who rented his little house and met up with them for a beer when they returned to Bend on other occasions.

"They're happy; they're here to have fun," Kelly said of the tourists who stayed in his home.

The positive experiences of residents on NW Riverfront are not the rule, however, and complaints have prompted city officials to look into possible regulations on the homes.

The City Council is expected to begin a discussion of vacation rentals and whether to regulate them at a Sept. 17 meeting, and city employees are gathering information such as whether vacation rentals had code violations or other problems to present at the meeting.

Bend City Councilor Doug Knight also lives in the Old Bend neighborhood, and residents there and from across the city have complained to him about loud parties and other problems with the vacation homes. Knight said he received a complaint from one man who lives next to a vacation home after an exotic dancer showed up on the resident's doorstep, looking for the house where she was scheduled to perform.

"When I purchase a home in a residential neighborhood, I expect solace and stability," Knight said. So far, Knight said, he received complaints about problems that range from "loud, raucous parties," to a "conveyor belt of strangers next door and the perceived inability of people to have communication over the fence, neighbor to neighbor." In at least one case, a homeowners association has asked residents to vote for changes to property restrictions that would prevent owners from renting out homes for less than a seven-day period.

One of the concerned homeowners who contacted the city is Stephen Junkins, who lives on NW Federal Street and said his home is surrounded on three sides by vacation rentals. Junkins said the city should stop issuing new permits for vacation-rental homes and then consider permanent restrictions such as a cap on the density or total number of rentals allowed in neighborhoods.

"The noise, the parties, the strangers are important concerns, but they're sort of secondary to that loss of community and loss of neighborhoods," Junkins said.

Unless the City Council specifically designates new regulations as retroactive, they will apply only to future vacation rentals, according to an internal memorandum from city attorneys to the council. The attorneys warned the city would have to build a strong, evidence-based case to change local land use law to restrict vacation-rental homes. Attorneys suggested the City Council also consider a system of incentives and disincentives, such as a licensing system in which properties that repeatedly violate established rules lose their rental licenses, as an alternative to land use code changes.

There were at least 358 vacation-home rentals in Bend as of Aug. 20, according to The Bulletin's analysis of city lodging tax information. As of June, the city had identified roughly two dozen properties that might not be paying their taxes and thus might not be included in the number of active tax accounts. In 2013, the city hired a contractor to audit tax payments by vacation-home operators. City employees contacted the 84 potential scofflaws identified in the audit, and most either paid their taxes or explained why they were not on the tax rolls, such as because they no longer operated the property as a rental.

Vacation-rental homes in Bend currently must apply for land use approval from the city, which includes a fee of $454. Each home must have at least one off-street parking space per bedroom and, as with everyone else in the city, the occupants must comply with the city noise ordinance.

Many cities across Oregon have already adopted regulations on vacation homes, according to the city attorneys' memorandum. Ashland prohibits the rental of homes in single-family residential zones for periods of less than 30 days, although the city recently began working on proposed changes to allow vacation rentals if the property owner lives onsite and meets other conditions.

On the coast, Manzanita allows vacation-home rentals throughout the city but capped density at 17.5 percent of homes citywide, while Depoe Bay banned all vacation-home rentals except in commercial zones and on a couple of specific oceanfront lots. Seaside designated specific neighborhoods where vacation rentals are prohibited, Cannon Beach created a rental permit program and capped the total number at 92 — the number that existed in 2004, the year the cap took effect — and Tillamook County commissioners adopted an ordinance that regulates issues such as quiet hours, garbage removal and parking, according to Bend city attorneys.

The city of Portland did not allow any short-term rentals in residential zones until the end of July, when the City Council approved an ordinance to legalize one- and two-bedroom vacation rentals in private homes. Property owners in Portland must obtain a $180 permit and inspection of the property, as well as notify their neighbors.

There are no cities in Oregon with moratoriums on vacation-home rentals, and there does not appear to be a basis in state law for a moratorium. However, the attorneys also wrote that they could not find a law that specifically disallowed a moratorium.

“So far, Oregon courts have not spoken to this particular issue,” city attorneys wrote in the memo. “Accordingly, to implement a moratorium or pause on issuing vacation home rental permits is not without risk.”

Mayor Pro Tem Jodie Barram said this will likely be a time-consuming issue that the city will continue working on in 2015, with the city’s planning commission also likely gathering input from the community this fall. “There’s a public involvement process to be followed, and we don’t have enough data yet,” Barram said.

City Councilor Mark Capell said residents have contacted him to share both positive and negative experiences with vacation-rental homes.

“A couple of folks have said, ‘We don’t think this is good for our neighborhood, and we don’t like it, and put a stop to it,’” Capell said. “But then other people have said it’s a big improvement over the long-term rentals because (vacation homes are) kept up better.”

Dennis O’Shea, a board member with the River West Neighborhood Association, said few people raised concerns about vacation rentals at an association meeting on the topic earlier in the summer. A couple of residents who attended the meeting did discuss “losing the neighborhood feel,” as well as problems with parking and noise, O’Shea said. However, a couple of other property owners in the neighborhood later contacted the association and said they had a different view on the subject.

After all, Bend continues to rely on tourism as a major economic driver. According to the most recent data available from the Oregon Employment Department, 13 percent of jobs — or nearly 6,400 — in Bend fell into the category of leisure and hospitality during the third quarter of 2013, said Regional Economist Damon Runberg. That’s two percentage points higher than the state average of 11 percent.

“It’s not all we are, but it’s part of our economy, and it’s a very important part,” Runberg said. “Our high quality of life, which people see because they’re visiting as tourists, really has helped the city grow and sustain in other ways outside tourism.”

Back on NW Riverfront Street, Kelly acknowledged there are some problematic vacation homes, such as a larger home on the street that regularly has nine or 10 cars in the driveway. But Kelly said city officials should distinguish between the problem properties and those that function well. Kelly believes if existing property owners were prohibited from renting their second homes to tourists, it would not protect these old neighborhoods. Instead, it would bring a different type of change.

“I also think that a lot of the old mill houses that are vacation rentals would get torn down and replaced with McMansions, if they were not allowed to be vacation rentals,” Kelly wrote in an email.

“We used to have a really, really tight neighborhood,” Kelly said later in an interview. “And it still is; it’s just not like it was. … Prices have increased. I bought my vacation rental (house) for $135,000. It was a different world then.”

— Reporter: 541-617-7829, hborrud@bendbulletin.com
Read the article in its entirety on The Bulletin website by clicking here.

Short-Term Rentals, Long-Term Impacts

https://eugeneweekly.com/2020/09/29/short-term-rentals-long-term-impacts/

After months of deliberation, the Eugene City Council votes to make short term rental owners register with the city

BLOGNEWSBY TAYLOR GRIGGSPOSTED ON 09/29/2020

The Eugene City Council has been toying with imposing more regulations on short term rentals (STRs) since September 2019, when councilors discussed how these rentals, most commonly hosted through Airbnb, have impacted other cities, and what regulations might curb some of their potential downsides.

At the Sept. 28 City Council meeting, councilors voted to require STR owners to register with the city starting next year, provide a street address for the property, contact information for property management and whether the short-term rental is owner-occupied. This registration will be free.

This comes after multiple public forum sessions where councilors floated more serious regulations, like requiring a business license to operate an Airbnb.

The council voted 6-2 for this registration, with Councilors Betty Taylor and Alan Zelenka saying that they didn't think this requirement solves any real problems that short-term rentals might be causing.

Airbnbs and affordable housing

Some of the benefits of STRs that councilors discussed at a Sept. 23, 2019, work session were increased tourism and adding jobs to the local economy. On the other hand, STR properties, especially those that are not owner-occupied, might create nuisance problems in otherwise quiet neighborhoods and might also reduce the availability of affordable housing.

Eugene lacks affordable housing, and according to a 2019 city survey, the majority of rental households in Eugene are rent-burdened, with 58 percent of rental households paying more than 30 percent of their income on rent, and 36 percent of rental households paying more than half of their income on rent.

According to data provided by the city at the work session last year, Airbnbs have had an impact on availability of affordable housing in other cities, but while there isn't sufficient data suggesting that many property owners in Eugene would buy housing just to rent it to short term renters, there is anecdotal evidence that this has been happening.

The impact on property owners

Many people who own and operate STRs, however, have spoken out against imposing regulations on their properties.

At a June 15 public hearing on the issue, STR owners spoke out about the harm that requiring business licenses to operate these rentals would have on their livelihoods. Many of these owners said that the city does not have sufficient data to suggest that these rentals have caused problems in Eugene.

Valerie Harris, an Airbnb host, said that imposing regulations based on neighbor complaints, as was posed by the council, could have discriminatory implications in a mostly white city.

“As an STR host in an affluent, white community, my all-white neighbors display the ugly truth whenever I have guests of color by coming over to my house and berating me and my guests,”Harris said. “This regulation is going to turn into yet one more tool in a white man’s toolbox to keep their privilege. There is no data to support that there are any problems associated with STRs in Eugene.”

Paul Schwartz, who also owns and operates an Airbnb, said that he doesn’t think that the city should be looking at regulations for STR owners now, in the middle of a pandemic that has caused a massive hit on the hospitality industry.

“As with all people and businesses in the hospitality industry, the recent COVID-19 restrictions and concerns have had a major impact on the revenue we received,” Schwartz said. “With so many families suffering financially at this time, it strikes me as a bad time for the city to be considering new registration that would limit that income that may help us make ends meet.”

With the Olympics — and the Eugene-hosted U.S. Olympic Team Track and Field trials — and World Track and Field Championships pushed back a year, the University of Oregon cancelling in-person graduation ceremonies and nobody traveling to watch Duck games, people haven’t been traveling to Eugene as much as usual.

Last October, Airbnb revealed that Eugene was on the list of top 20 worldwide destinations to visit in 2020, with a 213 percent year over year increase. But the STR platform took a big hit due to COVID-19, and while it’s unclear exactly how much Eugene STR owners suffered during the pandemic, they are likely not doing as well as they hoped.

Registration requirement

At a July 13 work session, Lydia Kaye, Building and Permit Services director for the city of Eugene, said the city does not have accurate data about how many STRs are in Eugene, and that they don’t know how many nuisance complaints are regarding STRs as opposed to other types of rentals.

Kaye said that a registration process for short-term rental owners would help the city find more of this data so they could consider future regulations.

Taylor said that STRs have hurt other cities by taking up housing supply that could be used for affordable housing. She said that they shouldn't wait until short term rentals cause problems to regulate them.

"The time to take care of this is before there are serious problems, not after," Taylor said.

During the Sept. 28 vote, Taylor voted not to move forward with the registration requirement, because she wanted more serious regulations.

"This doesn't do anything. We had a start a few months ago when we were brought a possible ordinance about STRs, and that died somehow," Taylor said. "We have plenty of examples of what has happened in other communities with STRs and how they have destroyed the affordable housing supply. I think this is ridiculous that after all this time, we haven't really done anything."

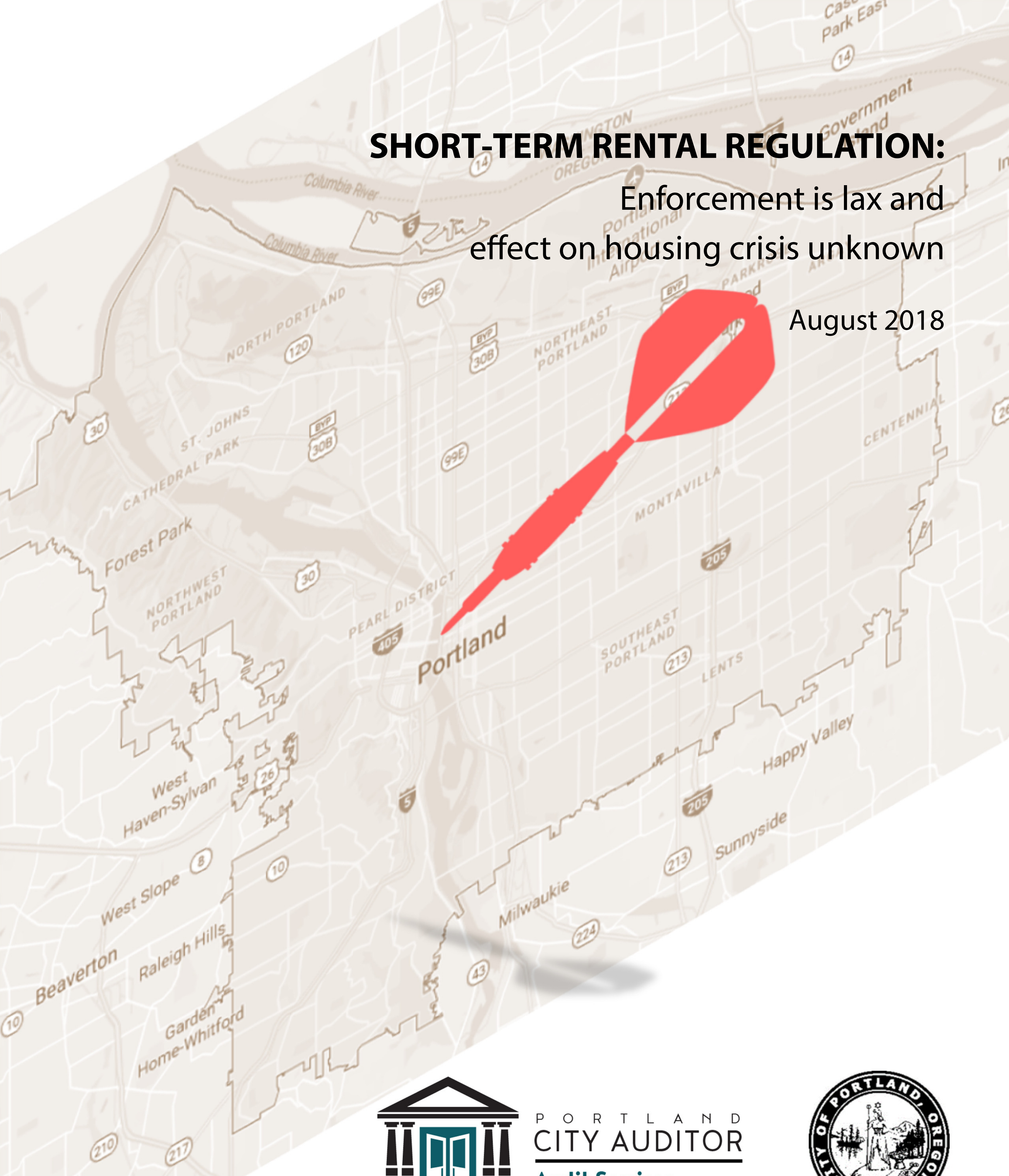
Zelenka dissented as well.

"I don't think this does anything, it certainly doesn't solve any of the problems that STRs create," Zelenka said. "I'm sure this will come back to us, it's not the end of this issue."

SHORT-TERM RENTAL REGULATION:

Enforcement is lax and effect on housing crisis unknown

August 2018



PORTLAND
CITY AUDITOR
Audit Services

CITY OF PORTLAND, OREGON
1851

See complete data from this report on Audit Services' website

Mary Hull Caballero, City Auditor

Kari Guy, Audit Services Director

Audit Team

Alexandra Fercak, Senior Management Auditor

Tenzin Gonta, Senior Management Auditor

Minh Dan Vuong, Senior Management Auditor

Cover

Map data © Google

Short-Term Rental Regulation

Enforcement is lax and effect on housing crisis unknown

Summary

The City began regulating short-term rentals in 2014, and the market has more than doubled since then. The intent of regulations was that homes should be used primarily for residential rather than commercial purposes, but the City's current approach cannot assure this. Most hosts do not obtain the required permits: only an estimated 22 percent of properties are permitted, and the City rarely enforces its regulations. Despite concerns about the effect of short-term rentals on housing availability and affordability, the City does not collect data needed to regulate these rentals and to monitor the housing market.

City sets rules for short-term rentals

In 2014, City Council changed the zoning code to allow hosts to rent their residences for short terms. Commonly, hosts and renters find each other using online booking agents, such as Airbnb, HomeAway or Vacasa. Before these rules were adopted, the City only regulated and taxed hotel, motel, and bed & breakfast rentals.

The City's short-term rental regulations require hosts to get a Type A or Type B permit depending on the size of the rental and follow certain restrictions:

- The host must occupy the residence at least nine months of the year
- The rental property must be the primary residence of the host
- A maximum of 25 percent of units in a multi-family building may be rented
- Rentals must be for less than 30 days

These requirements were intended to preserve the residential character of neighborhoods and to prevent *commercial* short-term rental activity.

The Bureau of Development Services conducts home inspections before issuing permits to ensure the safety of visitors renting the units. Development Services also investigates complaints and enforces short-term rental regulations.

Hosts are required to obtain a business license from the Bureau of Revenue and Financial Services and pay City taxes and fees. Those taxes include the lodging tax also required of hotels, and a business tax if rental and other business income combined exceeds $50,000 per year. Recent changes to city tax codes also added fees specific to short-term rentals. Online booking agents may remit lodging taxes and fees on behalf of hosts.

We conducted this audit to determine the effectiveness of the City's regulations, and how the City evaluates the effect of short-term rentals on housing availability and affordability.

Audit Findings

If the regulations were working as intended, all short-term rentals would meet permit requirements, inspections would ensure the safety and livability of the spaces rented, and all taxes would be paid. In addition, the City would analyze effects of short-term rental activity on housing affordability and availability. We found shortcomings in these areas.

One factor that has limited City bureaus' ability to enforce the regulations is the lack of data about short-term rental activity, including data on listings and their hosts, how often and for how long listings are rented, and rental rates and revenue. Of approximately15 booking agents active in Portland, none regularly provide data to the City, citing privacy protections for hosts. The City recently reached an agreement with one booking agent, HomeAway, to provide data on hosts as soon as Airbnb also agrees to provide data to the City. At the time of this audit, the City had not yet reached agreement with other booking agents.

Because the City did not have data on short-term rentals, we used information gathered by Inside Airbnb. Inside Airbnb is a group not affiliated with Airbnb that compiles public information from Airbnb's website. Its data includes the listing, the availability calendar, estimated location, host information, and reviews for all properties offered on the Airbnb website. This information is limited: it doesn't include properties offered by other booking agents; the data does not show nights rented, whether a host lives on site, or the address of the unit. In addition, a listing on Airbnb doesn't always represent a housing unit such as an apartment or house, and one permit issued may be applicable to more than one listing. However, because most Portland rentals are listed on Airbnb, we found the data sufficiently reliable to provide an estimate of short-term rental activity in Portland and to highlight the importance of obtaining complete data from the booking agents.

This audit's findings rely on City permit and complaint data and Inside Airbnb data. Visual representations based on Inside Airbnb data can be found on the City Auditor's website.

Compliance is low and enforcement is limited

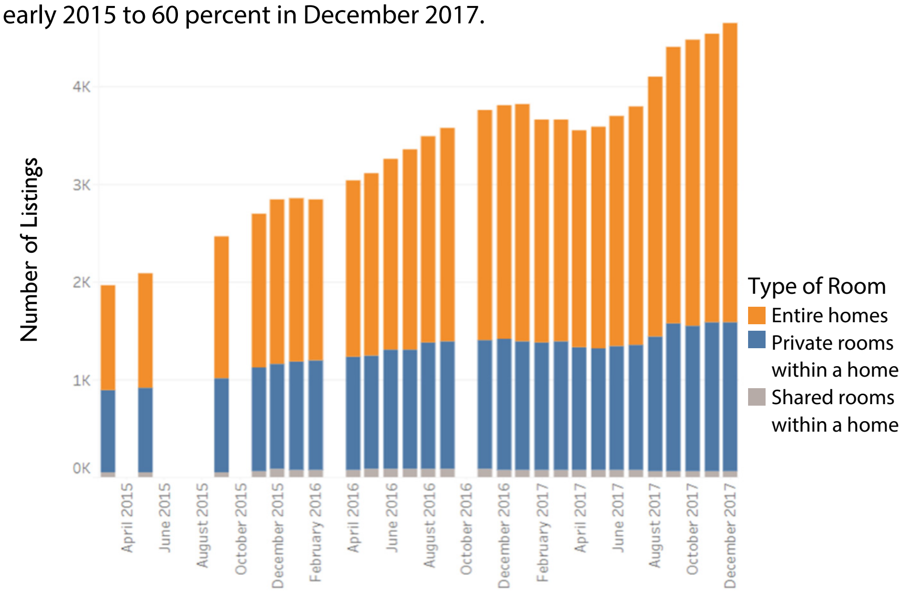
As of October 2017, Development Services had issued 1,638 active permits. In contrast, data from Inside Airbnb shows over 4,600 listings offered on Airbnb alone. Assuming a one-to-one relationship between permits and listings, and estimating number of listings from the other booking agents, only about 22 percent have permits.

Only about

22%

of short-term rentals are permitted

Since 2015, listings on Airbnb have more than doubled. Among all listings, the percentage of entire houses/apartments has grown from about 55 percent in early 2015 to 60 percent in December 2017.



Source: Audit Services analysis of data from Murray Cox, Inside Airbnb

See complete data on Airbnb listings and hosts on our website

Data is for Airbnb listings only. Listing might be for the whole house/apartment or a room within the house/apartment. For some months data was not available.

One reason for the low permit compliance may be that the cost and time to obtain a Type B permit is high. Since 2014, the City granted 1,733 Type A permits, which are required for hosts renting one or two bedrooms. The permit fee is $178 and requires no land-use review. A Type B permit is required for hosts who want to rent three or more bedrooms. The fee costs about $5,000 and Type B permits require a land use review. Only 13 Type B permits have been issued as of October 2017, but an estimated 444 of the 4,600 listings identified in 2017 by Inside Airbnb are for properties with three bedrooms or more.

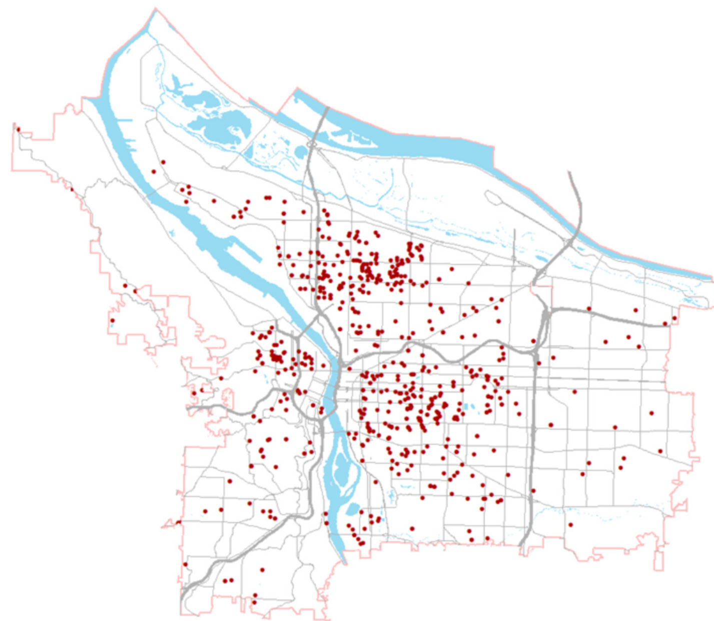
Another reason for low compliance with permit requirements may be that booking agents do not require a rental to have a City permit before posting the listing to their websites. This is required by City Code where the City can fine agents for each unpermitted listing, but it is not enforced because the City does not have host data. In contrast, San Francisco requires booking agents to verify that hosts have obtained a permit, and the city reached an agreement with booking agents to obtain their host data and fines agents for unpermitted listings.

Enforcement by Development Services is also limited because it reacts to complaints rather than using more proactive approaches. The Bureau investigates complaints about properties to determine whether they are valid and if fines should be imposed, but does not proactively enforce the Code. The number of complaints about short-term rentals increased from 24 in 2013 to 297 in 2017.

Our analysis of Inside Airbnb data shows some neighborhoods with high concentrations of short-term rentals, but the Bureau does not use this information to target them for enforcement. The data shows some hosts with multiple listings, contrary to Code requirements. Relying on a complaint-based process means that only those with knowledge of the process will submit a complaint to the City and increases the likelihood that compliance with regulations will remain low.

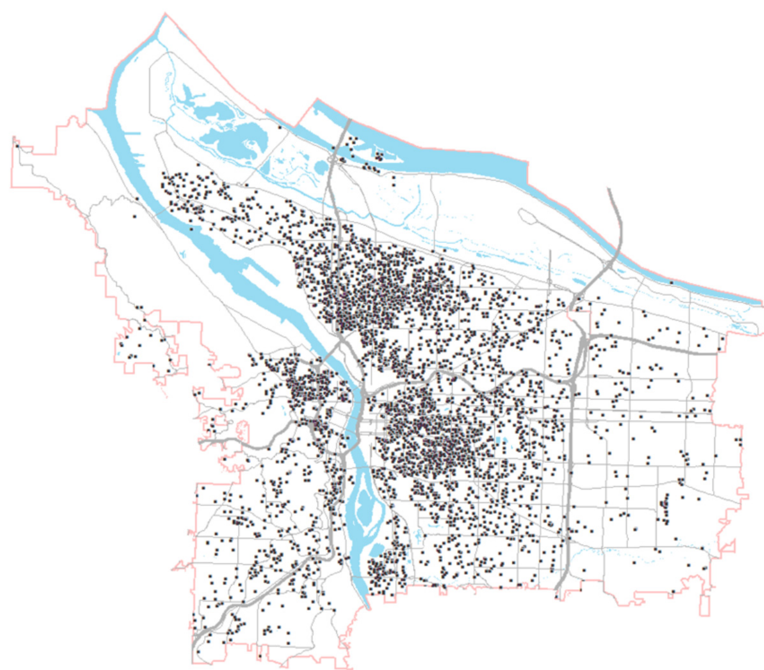
As long as the City does not proactively enforce requirements and there is widespread non-compliance, it will be unable to control short-term rental activities and protect the residential nature of neighborhoods.

Complaints are concentrated in Northwest and Northeast Portland (Fiscal Year 2013-2018).



Source: Audit Services analysis of Bureau of Development Services short-term rental complaint data. Only partial data for FY 2018.

Airbnb listings are concentrated in Northwest, Northeast, and Southeast Portland.



Source: Audit Services analysis of data from Murray Cox, Inside Airbnb, December 2017 Data is for Airbnb listings only.

Go online for data visualization on Airbnb listings types and hosts.

Inspections may not ensure safety

Over 90 percent of permit applicants pass the safety inspection on the first try. Safety inspections are brief, taking about ten minutes to complete. This is because current City Code includes only specific requirements, such as the presence of a smoke detector in the bedrooms, and does not require a comprehensive safety inspection of the property.

Inspections were intended to ensure the safety of visitors renting the units, but the current inspection requirements and practices are minimal and may not meet that intent or the public's expectations. For example, someone renting a permitted space would reasonably expect the house or apartment to be safe for overnight stay. In addition, the City may be exposing itself to legal risk when inspectors do not address a property's other Code violations, such as an unsafe staircase or patio. An alternative approach could be to conduct targeted inspections and focus resources on high-risk properties.

Most booking agents remit lodging tax

Ten out of an estimated 15 booking agents remit lodging taxes to the City. Since these ten agents represent the majority of Portland's listings, Revenue Division estimates that most hosts are paying the lodging tax. However, without access to the host and listing data, it is difficult for the Division to audit these booking agents. The Division estimates the total number of hosts by searching each agent's website, which may not provide an accurate count. The result is that the City may be missing out on taxes owed.

Booking agent	Pays lodging tax
Airbnb	✔
Craigslist	
Evolve	
HomeAway	✔
HomeToGo	
HouseTrip (TripAdvisor)	✔
Misterbnb	✔
Roomorama	
StayAlfred	✔
TripAdvisor/Flipkey	✔
Vacasa	✔
VacationHomeRentals (TripAdvisor)	✔
VacationRentals (HomeAway)	✔
VRBO (HomeAway)	✔
Wimdu	

Source: Division of Revenue

Revenue's approach to improve tax compliance and get data on listings has been through litigation. Revenue was successful in reaching agreement with HomeAway to provide listing data if and when Airbnb also provides the data. At the time of our audit, the City was negotiating with Airbnb to obtain its data.

Effect of short-term rentals on housing market is unknown

Even as the number of short-term rental units has increased each year, their effect on housing availability, affordability, and neighborhood quality has not been monitored by the City. No City bureau has been assigned the responsibility to collect data and measure the impact on housing or related goals.

Prior work by City bureaus does not sufficiently address these questions. In 2016, the Bureau of Planning and Sustainability produced a short-term rental regulation progress report, but it did not describe effects on the three areas of concern. The Housing Bureau attempted to review the short-term rental market as part of its State of Housing Report in December 2017, but it lacked data on hosts and listings.

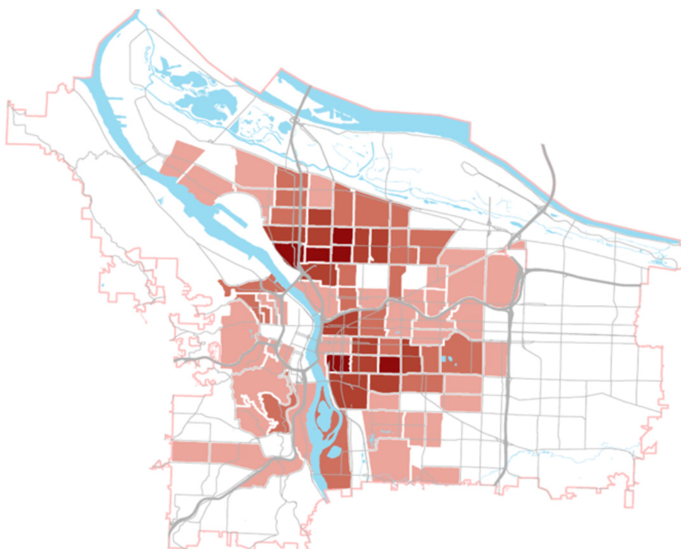
The 4,600 Airbnb listings identified by Inside Airbnb make up approximately 1.7 percent of the City's 273,000 housing units. However, addresses for listings are not provided, and one housing unit may have more than one listing. At the time regulations were developed in 2014, City Council and community members raised concerns about the effect of short-term rental units on the housing market, but the City has not obtained complete data from the booking agents to assess these effects.

Analysis of Inside Airbnb and City data

Some Portland neighborhoods have higher activity

Some neighborhoods have a high concentration of short-term rentals and high numbers of visitors staying in these units. To provide a neighborhood comparison, we estimated the number of nights units are occupied and compared them to the housing stock for each neighborhood.

Neighborhoods in inner Northeast and inner Southeast are frequented by short-term renters more often than other parts of the city. These also are neighborhoods that have experienced gentrification and are facing housing shortages. These neighborhoods may need to be monitored to determine how short-term rental activity affects them. For example, some cities have limited short-term rental units in certain neighborhoods because of high use that detracts from neighborhood livability.



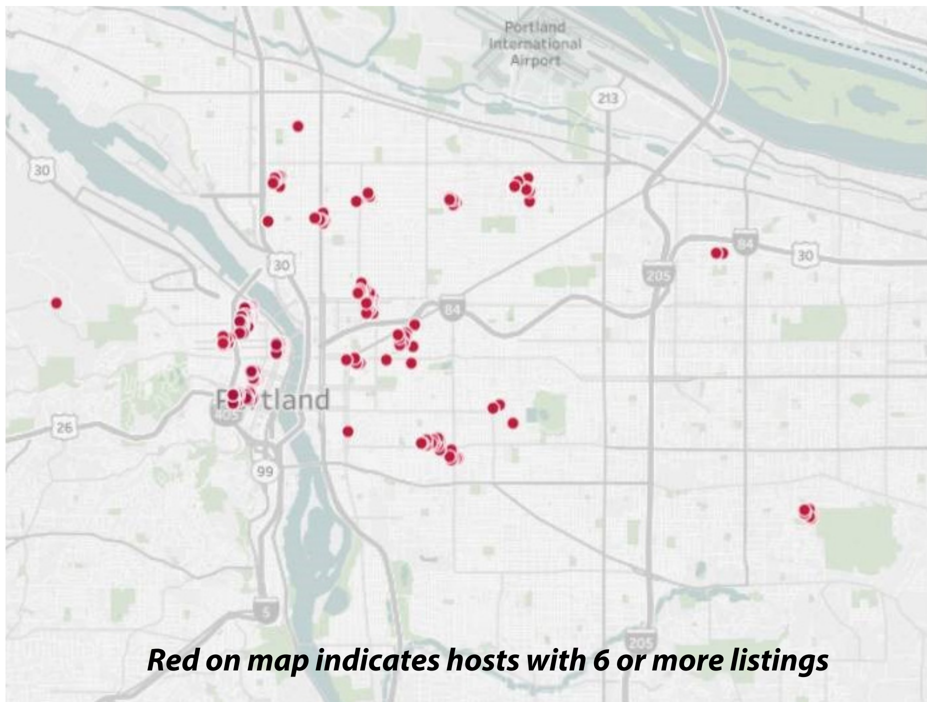
Source: Audit Services analysis using data from Murray Cox, Inside Airbnb, December 2017
Data is for Airbnb listings only. Estimated nights of occupancy as a percent of total housing stock.

Hosts renting multiple short-term rentals may decrease housing supply

Inside Airbnb data shows there are several Portland hosts with multiple listings (see data on [Auditor's website]). Due to limited data on listings, it is unclear how much of this activity represent illegal short-term rentals. For example, some of these hosts are hotels or bed & breakfast firms that list separate rooms, or hosts that list separate bedrooms in their homes. Some may be management companies that list and manage units for clients. Others may be hosts listing multiple houses that are not their primary residence, which would be a violation of City Code.

Because the City doesn't have access to complete data on these listings, it does not know the effect on long-term rental rates or whether hosts are removing residences from the long-term rental market. Research in other cities shows growth in the number of hosts who rent multiple properties in residential areas. This commercial-type activity in residential areas also risks diminishing the character and livability of the neighborhood.

Some Airbnb hosts offer multiple listings



Source: Audit Services analysis using data from Murray Cox, Inside Airbnb, December 2017. Data is for Airbnb listings only. See data on Auditor's website

Accessory dwelling units intended to increase affordable housing supply may be used as short-term rentals

Council intended for accessory dwelling units, also known as in-law apartments, to contribute to the City's affordable housing and housing density goals. However, for permitted short-term rentals, we found that 21 percent of properties are estimated to have an accessory dwelling unit.

21%

of short-term rental permits are properties with an accessory dwelling unit

The City currently waives fees for accessory dwelling units construction in order to incentivize the use of these structures for affordable housing. In June 2018 Council voted that to qualify for the waiver of these fees, the unit may not be used for short-term rental for 10 years.

The exact number of these units currently used as short-term rentals is unknown, because the City does not have an exact number of accessory dwelling units, and data on the total number of short-term rentals with accessory dwelling units is not available.

Other cities have attempted to study the effect of short-term rentals on housing affordability and availability. In May 2015 the City and County of San Francisco concluded that commercial hosts using Airbnb affect the city's neighborhood supply of long-term rental housing units. On average, hosts earned more money renting to short-term visitors than they would in the long-term rental market. New York and Seattle have also concluded that their growing short-term rental market is affecting availability of long-term rental housing. These conclusions have inherent data limitations, because in many cases they used incomplete Airbnb data obtained from third parties and may rely on assumptions about the rental market. The conclusions and their limitations demonstrate the need for a thorough analysis and monitoring of Portland's housing market, and for the City to continue pursuing valid and comprehensive data.

Recommendations

To effectively regulate short-term rentals and enforce rules, we recommend the Bureau of Revenue and Financial Services and the Bureau of Development Services:

1. Obtain data on active short-term rental hosts, listings, and occupancy from booking agents or from other publicly available sources, and use it to enforce the City's zoning and tax code.
2. Use proactive, risk-based enforcement to target hosts with multiple listings and potential commercial activities in residential zones.
3. Revise the permitting process to meet intended safety and neighborhood livability goals.
4. Use host data to enforce booking agents' compliance with City Code.

To assess the impact of short-term rentals on the housing market, we recommend the Housing Bureau:

5. Work with Council to add measuring the effect of short-term rentals on housing goals to short-term rental City Code and regulations.
6. Obtain short-term rental data from booking agents or from other publicly available sources, develop a monitoring process of the market, and evaluate effects on housing. Report short-term rental market data in the State of Housing annual report.

Objectives, Scope and Methodology

Our audit objectives were to determine the effectiveness of the City's short-term rental regulations and how the City evaluates the effects of short-term rentals on housing.

Our methods included:

- Reviewing City Code, state laws, existing studies, and other audits
- Reviewing the permitting and inspection processes and interviewing staff from the Bureau of Development Services and Bureau of Revenue and Financial Services
- Analyzing permitting and enforcement data
- Analyzing tax activity data
- Interviewing stakeholders
- Analyzing data on Airbnb listings obtained from Murray Cox/ Inside Airbnb and housing stock from the American Community Survey

We performed analyses to conclude that city data was reliable for our audit objectives. We relied on the work of Murray Cox of Inside Airbnb for webscraped Airbnb data sets, and we concluded this data to be reliable for our audit objectives. The Airbnb listings data presented are monthly one-time snapshots of listings available between 2014-2017. We also relied on the work performed by the Bureau of Planning and Sustainability to determine which properties in the city had an associated accessory dwelling unit.

Auditing standards require auditors to be structurally independent of the audited organization to avoid any actual or perceived relationship that could impair the audit work performed or findings reported. The City Auditor is responsible under City Charter to conduct audits of the City, which are performed by the Audit Services Division. Under City Code, the City Auditor also has a role in appeals of City enforcement decisions and the collection of City liens. This work is conducted by units separate from the Audit Services Division. Given this audit's scope and focus on activities at the Bureau of Development Services and Office of Management and Finance's Revenue Division, we do not believe the City Auditor's other non-audit responsibilities constitute a threat to our independence.

We conducted this audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

RESPONSES TO THE AUDIT

Office of Mayor Ted Wheeler
City of Portland

August 7, 2018

Mary Hull Caballero
City Auditor
1221 SW Fourth Ave, Room 140
Portland, OR 97204

Dear Auditor Hull Caballero:

Thank you for your audit and the short-term rental regulations enforcement and effects on the housing market. As the Commissioners-in-Charge of the Bureau of Development Services, the Bureau of Revenue and Financial Services and the Portland Housing Bureau we take the results of your audit very seriously.

In terms of additional enforcement mechanisms, we are dedicated to increasing our oversight and enforcement of the city regulations. Specially, the Bureau of Development Services will be working with the Office of Management & Finance to ensure that the regulatory regime most effectively deploys city resources and focuses on accomplishes the goals of the City. Continued refinement of regulatory requirements to ensure that they are appropriate will be a key priority of this effort. Specifically, the Bureau of Revenue and Financial Services will continue to finalize agreements with industry so that we have access to up to date data from the platforms. With this data, which has been lacking, the Office of Management & Finance will be able to more effectively enforce City Council's direction on Short Term Rentals. This will effectively respond to the issues brought forward by the audit.

While the full effects on the housing market are at present unknown, your audit's preliminary analysis shows some very concerning trends, especially in inner-city neighborhoods. It is concerning to us that short-term rentals may be exacerbating the accessibility, availability and rentability of these neighborhoods.

Our offices are confident that negotiations with Short Term Rental companies will result in a new regulatory structure that will enable the City of Portland to effectively enforce its policy that limits the number of days a non-owner-occupied unit can be rented on a short-term basis. These "commercial" short-term rentals not only could reduce the supply of long-term housing, but could also subvert the zoning code by converting residentially zoned properties into commercial uses.

Thank you again for your team's thoughtful and timely analysis.

Sincerely,

Mayor Ted Wheeler	Commissioner Chloe Eudaly

City of Portland, Oregon
Bureau of Development Services
Office of the Director
FROM CONCEPT TO CONSTRUCTION

Chloe Eudaly, Commissioner
Rebecca Esau, Director
Phone: (503) 823-7300
Fax: (503) 823-6983
TTY: (503) 823-6868
www.portlandoregon.gov/bds

August 3, 2018

To: Mary Hull Caballero, City Auditor
Audit Services Division

From: Rebecca Esau, Director RE
Bureau of Development Services

Cc: Elshad Hajiyev, Business Operations & Finance Services Manager
Dan Coté, Interim Portland Online Permitting Services & Inspection Services Manager
Dave Tebeau, Residential Inspections Manager
Mike Liefeld, Enforcement Program Manager

Subject: BDS Response to Short-term Rental Regulation Audit

Thank you for the opportunity to review and respond to your audit, **Short-term Rental Regulation.** We appreciate the time that the audit team spent assessing this issue and its impact on housing, especially in a time when housing is at the forefront of policy conversations regionally and across the country. We acknowledge that the current regulation and enforcement system is not perfect and needs improvement. The Bureau of Development Services (BDS) has consistently administered the policies adopted by City Council and these audit recommendations relate to policy issues beyond BDS. BDS is committed to administering any changes to Short-term Rental (STR) issues as directed by the City Council.

In response to your recommendations to both the Bureau of Revenue and Financial Services and the Bureau of Development Services:

1. *Obtain data on active short-term rental hosts, listings, and occupancy from booking agents or from other publicly available sources and use it to enforce the City's Zoning and Tax Code.*

BDS supports the City's efforts to enter into agreements with STR booking agents to share host information. This recommendation is addressed by the Bureau of Revenue and Financial Services in their audit response letter.

2. *Use proactive, risk-based enforcement to target hosts with multiple listings and potential commercial activities in residential zones.*

The City Council adopted STR regulations in 2014. At that time, the City Council was very clear that enforcement would continue to be complaint driven, and no additional resources were allocated for STR enforcement. Additionally, City Council was clear on what should be inspected at these sites, due to concern from the public that the inspectors would cite homeowners with violations unrelated to the STR, and the inspection requirement would become a deterrent to getting host sites permitted. City Council limited those bedroom inspections to three things: a) that they met the building code requirements for a sleeping room at the time they were created or converted, with an exemption for bedrooms in multi-dwelling structures and in triplexes; b) that each bedroom to be rented have a smoke detector that is interconnected to a smoke detector in an adjacent hallway in the dwelling unit; and c) that the bedroom(s) to be rented are on the floor of a dwelling unit equipped with a functioning carbon monoxide alarm. If the dwelling unit does not have a carbon monoxide source, then the alarm is not required.

In an effort to increase permit compliance rates, in 2017, BDS developed a citation-based enforcement process specific to STRs. Information on this system and current enforcement penalties are found here: https://www.portlandoregon.gov/bds/article/628271

City Council will need to provide clarity on the level of enforcement they wish to see for STR regulation violations and provide additional resources to implement a proactive risk-based enforcement, targeting hosts with multiple listings and potential commercial activities in residential zones. Current revenue collections from registration and inspection fees are not sufficient to implement proactive, risk-based enforcement to target these hosts. Funding sources such as General Fund and/or new fees could possibly fill that funding gap. Policy discussion is needed with City Council regarding appropriate funding sources to support an expanded enforcement program, and whether host-paid permit fees should be increased to pay for enforcement beyond the current complaint-based system. Consideration should also be given to the impact that higher fees could have on achieving the goal of hosts seeking the required permits.

3. *Revise the permitting process to meet intended safety and neighborhood livability goals.*

When adopted in 2014, City Council was very clear that the scope of the safety inspection was limited to the three existing standards in Title 33, Chapter 33.207. City Council will need to revise the adopted zoning code language if they wish to set a new inspection scope. In addition, if the inspection scope is revised, the cost of these inspections would need to be covered by additional fees to applicants, or paid for through an alternative funding source. Current revenue collections from inspection fees are not sufficient to implement an expanded inspection scope. Funding sources such as General Fund and/or new or increased fees could possibly fill that funding gap.

4. *Use host data to enforce booking agents' compliance with City Code.*

This recommendation is addressed by the Bureau of Revenue and Financial Services in their audit response letter.

A point of clarification regarding fee waivers for accessory dwelling units (ADUs), the City does not waive fees for ADUs. However, System Development Charges (SDCs) are waived for ADUs if the owner records a covenant on the property stating that they will not rent any of the bedrooms on the site as an STR for a period of ten years. BDS is supportive of this recent change in City policy from providing SDC waivers for all ADUs to only those that won't use their property as an STR for ten years, thereby incentivizing the use of the units/bedrooms on-site as long-term rentals.

BDS shares the concern that STRs are impacting the supply of long-term rental housing units due to them often being a more lucrative option for a property owner. That income may also make it feasible for lower income homeowners to remain in their homes, avoiding displacement. Affordable housing, gentrification and displacement are layered and complex issues. More data from booking agents, etc. will help the City as we move forward to refine our policies to better address the housing crisis. BDS appreciates the work that the audit team has done and is committed to the City's goals of effectively regulating short-term rentals and mitigating the housing crisis.

Portland Housing Bureau
Mayor Ted Wheeler • Interim Director Shannon Callahan

421 SW 6th Avenue, Suite 500
Portland, OR 97204
503-823-2375 PHONE
503-823-2387 FAX
portlandoregon.gov/phb

August 3, 2018

Mary Hull Caballero
City Auditor
1221 SW Fourth Ave, Room 140
Portland, OR 97204

Dear Auditor Hull Caballero:

Thank you for the opportunity to provide feedback on the Short-Term Rental Regulation Audit report. The report makes two recommendations to the Housing Bureau.

1. Work with Council to add measuring the effect of short-term rentals on housing goals to short-term rental City Code and regulations.

   Our understanding is that this recommendation would add a requirement to measure the effect of short term rental on housing goals into City regulations, i.e. the Ordinance. The Housing Bureau understands and accepts the recommendation to monitor the market, and to evaluate short-term rentals effects on the housing market.

2. Obtain short-term rental data from booking agents or from other publicly available sources, develop a monitoring process of the market, and evaluate effects on housing. Report short-term rental market data in the State of Housing annual report.

   As stated above, the Housing Bureau agrees with the recommendation to monitor and evaluate short-term rentals effects on housing. We would propose to conduct a baseline analysis and report. Periodic follow-up reports could be published as necessary. We believe we would it would be prudent to establish a baseline to determine the effects on the market before making a commitment regarding the frequency of reporting.

We appreciate your office's work to help the City and the Housing Bureau adapt to emerging market trends which may affect housing accessibility and affordability of housing in Portland.

Sincerely,

Shannon Callahan

CITY OF PORTLAND

OFFICE OF MANAGEMENT AND FINANCE
BUREAU OF REVENUE AND FINANCIAL SERVICES

Ted Wheeler, Mayor
Jennifer Cooperman, Chief Financial Officer
Thomas W. Lannom, Revenue Division Director

Revenue Division
111 SW Columbia Street, Suite 600
Portland, Oregon 97201-5840
(503) 823-5157
FAX (503) 823-5192
TTY (503) 823-6868

MEMORANDUM

TO: Mary Hull Caballero, City Auditor

FROM: Jennifer Cooperman, Chief Financial Officer

SUBJECT: Response to Audit of Short-Term Rental Regulation

DATE: July 30, 2018

Thank you for the opportunity to comment on your audit titled "Audit of short-term rental regulation."

The City of Portland has been a national and international leader in the areas of short-term rental regulation and taxation. Portland was among the first cities to legalize short-term rentals and was also the first U.S. city to collect hotel/motel taxes from short-term rental platforms beginning in 2014.

We generally agree with the recommendations in the audit, especially the recommendation to obtain data on short-term rental hosts and listings. As noted in the audit, the Bureau of Revenue and Financial Services, Revenue Division has already secured an agreement for data-sharing from HomeAway.com, Inc., and soon expects to reach an agreement with Airbnb as well. Once obtained, this data will be used to enforce regulatory and tax provisions of the City Code.

Audit Services Division

Office of the City Auditor

1221 SW 4th Avenue, Room 310

Portland, OR 97204

503-823-4005

www.portlandoregon.gov/auditservices

Short-Term Rental Regulation: Enforcement is lax and effect on housing crisis unknown

Report #499, August 8, 2018

Audit Team: Alexandra Fercak, Tenzin Gonta, Minh Dan Vuong

Mary Hull Caballero, City Auditor

Kari Guy, Director of Audit Services

Other recent audit reports:

Private Stormwater Management: City reliance on property owners requires review of risks and results (July 2018)

Portland Police: Improvements made to training program (June 2018)

Regional Arts and Culture Council: Clear City goals aligned with strong Arts Council strategy will improve arts and culture services (May 2018)

This report is intended to promote the best possible management of public resources.

This and other audit reports produced by the Audit Services Division are available for viewing on the web at: www.portlandoregon.gov/auditservices.

Printed copies can be obtained by contacting the Audit Services Division.

CITY OF NEWPORT
169 SW COAST HWY
NEWPORT, OREGON 97365

COAST GUARD CITY, USA

phone: 541.574.0629
fax: 541.574.0644
http://newportoregon.gov

mombetsu, japan, sister city

April 2019

City of Newport Short-Term Rental Code Update
Ordinance No. 2144: Summary of Key Changes

Requires Annual Licensing

- Short-Term Rental (STR) operators will be required to annually renew business license endorsements.
- Licensing is expanded to include new requirements, such as proof of liability insurance and the submittal of records showing that a vacation rental unit has been rented at least 30 days in the fiscal year.

Rationale: *Annual license will keep short-term rental operators more engaged with City, improving accuracy of designated contact information and ensuring that insurance is in place for guests. Proof of rental requirement is intended to ensure licenses issued under a "license cap" are actually being used.*

Creates Different Categories of Short-Term Rentals

- Distinguishes "home shares" where an owner rents rooms in the dwelling unit where they reside, and Bed and Breakfast (B&B) establishments where an owner or manager lives on the premises, from Vacation Rental Dwellings (VRDs) where the entire unit is rented for transient purposes.
- Subjects home shares and B&Bs to annual licensing but exempts them from location and density limits.

Rationale: *The presence of a permanent resident does not result in a dwelling unit being removed from the city's supply of long term housing and mitigates potential nuisance issues because someone is present to monitor guests.*

Refines Approval Standards

- Establishes STR maximum occupancy as (2) persons per bedroom plus two additional persons per property.
- Limits B&B and VRD rentals to a maximum of five (5) bedrooms and home shares to a maximum of two (2) rented rooms.
- Retains parking standard of one space per bedroom, but require applicants show that spaces are sized such that they meet City parking stall dimensional standards. Allows off-street parking to extend into undeveloped public right-of-way with stipulation that license will be revisited if street is improved.
- Updates safety standards to reflect current building and fire code requirements.
- Maintains requirement that STRs in residential areas maintain 40% of the lot and 50% of the front yard area in landscaping.
- Requires STR operators post a sign, between one (1) and two (2) square feet in size, in plain view of the street identifying the unit as a STR with a phone number of the designated contact.
- Provides that those units relying upon use of shared access and parking areas demonstrate that they possess legal and exclusive right to required off-street parking spaces.
- Prohibits special events that exceed occupancy limits.

Rationale: *Changes are intended to address nuisance impacts associated with transient rental uses and to ensure that guest safety in short-term rental units is comparable to that of a hotel or motel.*

Establishes License and Density Limits for Vacation Rental Dwellings

- Creates a Vacation Rental Overlay Zone (the "Overlay Zone") that restricts vacation rental dwellings to areas proximate to the City's major tourist commercial districts.
- Limits the total number of vacation rentals within the zoning overlay to not more than 200, with a specific cap number to be set by Council resolution. The City Council has asked that 180 be the limit set by resolution.
- Institutes spacing standards (i.e. proximity limits) to avoid concentration of vacation rentals along any given street segment.

Rationale: The transient nature of vacation rentals is akin to hotel/motel uses and should be concentrated in areas where there are significant tourist attractions in order to protect the character of residential neighborhoods more removed from the City's commercial districts. This is accomplished with the Overlay Zone. The license cap and spacing standards will prevent undue concentration of vacation rentals in residential areas within the overlay, protecting the character of those neighborhoods, and the overall license limit preserves the supply of long-term housing by restricting the number of dwelling units that can be converted to transient use.

Puts in Place Rules for Pre-Existing Short-Term Rentals

- Short-term rentals approved under prior City land use rules are acknowledged as non-conforming, meaning that they can continue to operate under land use requirements in effect when they were licensed, except:
- Non-conforming VRDs located outside of the Overlay Zone may continue until the property is sold or transferred or vacation rental use is voluntarily terminated for a 12 month period.
- Vacation rentals located within the Overlay Zone, that are within or adjacent to a commercial or water-related zone, may continue provided the VRD use is not voluntarily terminated for a 12 month period. These units count toward the license cap that applies within the overlay, but are not otherwise subject to the density limit or wait list provisions.
- All other VRDs within the Overlay Zone count toward the license cap and must comply with the density limit and spacing standards when sold or transferred. Such units must comply with all other land use requirements if vacation rental use is voluntarily terminated for a 12 month period.

Rationale: A phase out of VRDs located outside of the Overlay Zone, at time of sale or transfer, strikes a reasonable balance between the affected operators, who may rely upon transient rental income to recoup investments in the property or as part of a long term plan to retire to Newport, and residents of these neighborhoods that view transient rental use as inherently incompatible in a residential setting. Many VRDs within the Overlay Zone are located in commercial or water-related zones that have a long history of transient rental use, and were built for that express purpose, so it is reasonable they be allowed to continue as non-conforming uses. Other VRDs within the Overlay Zone are in more residential areas where units were converted to transient use. It is appropriate to allow these units to continue as non-conforming under current ownership, with the expectation that upon sale they satisfy the density limit and spacing standards. This will more broadly disperse VRDs in these residential areas over time.

Supplements Enforcement

- Commits the City to making location and contact information for STR operators available online.
- Requires STR operators have a local contact that can respond to the premises in 30 minutes.
- Allows City to require valet trash collection service in cases where trash cans are not being stored out of view.
- Retains progressive enforcement philosophy to achieve "three strikes you are out" within a 12 month period.
- Establishes a two (2) year cooling off period before an individual with a revoked license can reapply.

Rationale: Changes facilitate transparency, responsiveness on behalf of the operator, and provide city staff with additional tools to achieve compliance. Fees will be adjusted, with Resolution No. 3849, to provide additional funds for enforcement.

The design and effects of short-term rental regulation

Article *in* Current Issues in Tourism · July 2019

DOI: 10.1080/13683500.2019.1638892

Norrie Furukawa

The University of Tokyo

CURRENT ISSUES IN TOURISM
https://doi.org/10.1080/13683500.2019.1638892

The design and effects of short-term rental regulation

Norikazu Furukawa and Motoharu Onuki

Graduate Program in Sustainability Science - Global Leadership Initiative (GPSS-GLI), Division of Environmental Studies, Graduate School of Frontier Sciences, the University of Tokyo, Kashiwa City, Japan

ABSTRACT

Socioeconomic disruptions of short-term rentals have instigated heated debates. Critics have accused short-term rental of various nuisance and gentrification; local governments around the world have imposed regulatory measures from outright ban to taxation on them. As the latest literature has pointed out a lack of studies on the effectiveness of such regulations, this paper attempts to formalize a general taxonomy which renders short-term rental regulations in different cities comparable for the assessment of their effectiveness. Following an investigation of seventeen American cities, six approaches to the regulation were identified. A quantitative measure called STR Friendliness was formed to draw hypotheses on the relationships between the regulation and relevant socioeconomic indicators. The paper hypothesizes that (1) the regulation has negative impacts on the proliferation of short-term rentals and housing occupation (2) but not necessarily on the increase in home prices and rents, and that (3) the regulation tends to be stricter in cities where the lodging industry contributes to the local economy to greater extents (4) as well as in cities where the criticism of short-term rentals as a cause of rent increase is louder regardless of the actual rent increase. These hypotheses will facilitate future empirical studies of the regulation.

ARTICLE HISTORY
Received 8 April 2019
Accepted 26 June 2019

KEYWORDS
Short-term rental; Airbnb; gentrification; urban tourism; sustainability; regulation

Introduction

Short-Term Rental (STR), the renting out of a furnished property for a period shorter than the conventional residential rental, typically less than one month, has been becoming popular worldwide since the establishment of Airbnb, an online platform that match STR hosts and guests, in 2008. Along with ridesharing which allows people to help one another move around, STR is a main component of the so-called 'the sharing economy' (Heylighen, 2017; Mulcahi, 2016; Sundararajan, 2016; Botsman and Roger, 2011). Although known for its potential benefits including the provision of economic opportunities and more sustainable mode of consumption, sharing economy has proven to be disruptive to the existing socioeconomic systems (Martin, 2016), and STRs exemplify this reality (Guttentag, 2015).

There is a body of literature discussing benefits generated by STRs (Quattrone, Proserpio, Quercia, Capra, & Musolesi, 2016). First, tourists who are looking for authentic local experience (Kolar & Zabkar, 2010) in places not catered to tourists can find and enjoy what they seek in their accommodation by staying at residential areas using STRs instead of at hotels. Second, the local residents living in such destinations of 'new urban tourism' (Füller & Michel, 2014) can generate additional income by providing accommodation to those visitors as an STR host (Farronato & Fradkin, 2018). Midgett, Bendickson,

CONTACT Norikazu Furukawa furukawa@s.k.u-tokyo.ac.jp
The data that support the findings of this study are openly available in 'figshare' at http://doi.org10.6084/m9.figshare.7823696.v1, reference number 7823696.

Muldoon, and Solomon (2018) argue that STRs act as a more sustainable alternative to hotels, i.e. accommodation which consumes less energy and resources, produce less waste, and foster social ties between the users.

On the contrary, STRs have been criticized for several reasons. Some STR guests cause various kinds of nuisance such as noise and litters during their stay while others may contribute to traffic congestion and parking area scarcity (Espinosa, 2016; Gurran & Phibbs, 2017). Moreover, critics have pointed out that STRs might have contributed to gentrification in cities around the world by accelerating the transformation of neighbourhoods into tourist enclaves (Coelho et al., 2016; Gotham, 2005). Wachsmuth and Weisler (2018) theorized how local residents can be displaced by tourists, as property owners seeking higher profits convert existing housing stock to STRs at the expense of housing affordability in their neighbourhoods. Barron, Kung, and Proserpio (2018) studied the impact of Airbnb on the US housing market and estimated that a 1% increase in Airbnb listings results in a rent increase of 0.018% and a home price increase of 0.026% at the median owner-occupancy rate zip code. However, it must be noted that isolating STRs' impact on gentrification from other factors is very difficult (Ioannides, Röslmaier, & van der Zee, 2018; Stors and Kagermeier, 2017) and further investigation is necessary to draw a solid conclusion.

Figure 1 summarizes positive and negative relationships between major stakeholders of STRs. Platforms like Airbnb form a symbiotic triad with the hosts and guests that support and influence each other (Ikkala & Lampinen, 2015; Yannopoulou, Moufahim, & Bian, 2013) while competing with establishments in the lodging industry (Farronato & Fradkin, 2018; Varma, Jukic, Pestek, Shultz, & Nestorov, 2016; Zervas, Proserpio, & Byers, 2017). The hosts and guests can conflict with neighbours living close to STRs by creating nuisance or exacerbating gentrification respectively. Yet, STR guests contribute to the local economy of their destinations (Edelman & Geradin, 2016) from which considerable benefits accrue to the neighbours. This picture attests the equivocal nature of the net socioeconomic impact of sharing economy in general pointed out by Martin (2016).

Nevertheless, the conspicuous lack of affordable housing in cities around the world has called for public policies that ensure people's 'right to housing' in cities around the world (Interian, 2016; Mendes, 2016; Oskam & Boswijk, 2016). Requirement of an STR license for annual fees, limitation of days STRs can operate, specification of properties that are allowed to host STRs, taxation, etc. have been placed by municipal governments (Jefferson-Jones, 2014, 2015). These measures are employed to let the sharing of excess housing capacities flourish while curtailing the negative

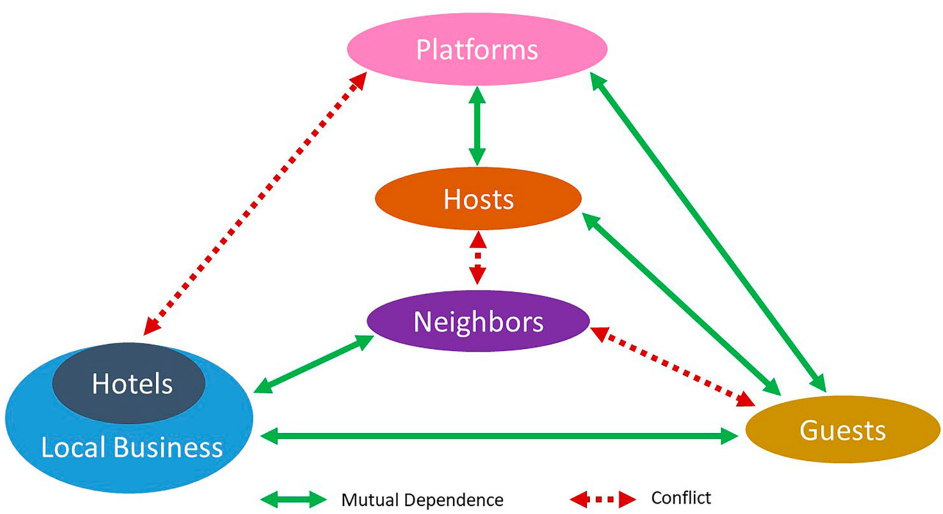


Figure 1: Stakeholders of STRs and their relationships.

externalities that threaten the livelihood of local residents (Aloni, 2018). Nieuwland and van Melik (2018) examined STR regulation in 11 American and European cities and concluded that while most cities share the same purposes for the regulation, namely the protection of affordable housing and quality of life, the implications of STR promulgation varies depending on the characteristics of the city. They also raised the need to find a way of assessing the effectiveness of those regulations and the difficulty of the enforcement due to the elusive nature of P2P (*peer-to-peer*, meaning 'between individuals') transactions in comparison with traditional B2C (*business-to-consumer*, exemplified by traditional service delivery) cases. Although some studies have deciphered how STRs have been disrupting land use management of various cities and drew insightful policy recommendations (DiNatale, Lewis, & Parker, 2018; Wegmann & Jiao, 2017), empirical analysis of the regulations actually placed remains a task for the future.

To contribute to filling this wide knowledge gap, this study investigates how the placement of regulation is associated with the data related to STRs and other socioeconomic factors by examining cases of 17 American cities. These cities were selected by the availability of data on the usage of Airbnb, which are provided for public debates by Inside Airbnb (http://insideairbnb.com), an open source data tool. Inside Airbnb provides data of 22 locations in the US. Five among those locations, namely Clark County, Hawaii, Rhode Island, Santa Clara County and Santa Cruz County, have multiple sub-regions that have separate STR regulations, which would hinder a consistent study of the effects of the regulations, and therefore were excluded from the list. The remaining 17 cities used for the investigation are: 1. Asheville, North Carolina; 2. Austin, Texas; 3. Boston, Massachusetts; 4. Chicago, Illinois; 5. Columbus, Ohio; 6. Denver, Colorado; 7. Los Angeles, California; 8. Nashville, Tennessee; 9. New Orleans, Louisiana; 10. New York City; 11. Oakland, California; 12. Portland, Oregon; 13. Salem, Oregon; 14. San Diego, California; 15. San Francisco, California; 16. Seattle, Washington; and 17. Washington D.C.

Most of the cities have an official website where prospective STR hosts can find information about the local regulations and how to obtain a license if necessary. From these websites and other online sources, the following information was collected for each municipality:

(A) Types of STRs

Each municipality defines STRs in its own language and some of them categorize them in a unique manner. But across all of the 17 cities, STRs fall under one of the following 3 categories.

(i) Primary Hosted STRs: Rentals of this type are operated in the primary residence of the host while the host stays at home with the guests. In other words, only part of a home is offered to the guests.
(ii) Primary Unhosted STRs: Rentals of this type are operated in the primary residence of the host. The host is absent and the entire home is rented to the guests.
(iii) Nonprimary STRs: Rentals of this type are operated in properties other than the primary residence of the host. Renting out of second homes and other properties for commercial purposes fall under this category.

(B) Requirement for a License

Whether it is necessary for the host to obtain a license in order to operate STRs. Most of the municipalities require the hosts to have a license.

(C) License Fees

How much the license acquisition costs. Theoretically, an expensive fee can act as a deterrent.

(D) Zoning

Whether STRs are prohibited in certain areas. Many municipalities restrict STRs in some districts.

(E) Limitation of Guests

How many guests can stay at an STR property at a time. Typically, the number of guests allowed to stay is twice the number of the bedrooms.

(F) Limitation of Days

How many days of STR operation is allowed at a property in a year. Most municipalities allow the operation for 365 days.

(G) Fines for Violation

How costly the penalty for illegal STR operations is. Many municipalities have set a certain amount of fine per day with violation while others would charge a large sum at once.

(H) Occupancy Tax

Whether or not and how much tax is levied on STRs. Most cities tax STRs as they do the traditional lodging industry.

Requirements for parking space, property insurance and safety measures such as fire extinguishers and alarms are very common across cities and therefore not considered here.

In the cities studied, STR regulation started quite recently. Many of them started regulating STRs since 2017 while in Boston, Columbus, Los Angeles and Seattle the regulation is to start in 2019. Therefore, a few more years have to pass for the impacts of these regulations on gentrification and quality of life to become subject to empirical assessment. That said, the effectiveness of the regulation can be forecasted by contrasting the measures employed by each city and issues they are facing and examining whether the former is designed proportionally to the latter. If the intensity of gentrification in a city is greater than in other cities, that city would need a stricter regulation of STRs, under the assumption that STRs cause gentrification. On the contrary, cities facing only mild gentrification would miss out the benefits of STRs if their regulations were too restrictive. In the following sections, the relationships between STR regulation and several socioeconomic indicators in the 17 cities are examined to discuss the effectiveness of their regulatory measures. To do so, both qualitative and quantitative measures of the rigour of STR regulation were formed and compared with socioeconomic indicators from various sources, as explained in the next section. As will be seen in the last section, a clear typology of STR regulatory structure as well as a framework to examine the impact of STR regulation have been established as a result of this analysis.

Research design

Data

For assessment of the effectiveness of STR regulation, unique cases across cities must be formalized in terms of a group of variables to be comparable with each other. This task was executed by constructing qualitative and quantitative measures of the strictness of STR regulation. STR regulations of the 17 cities can be classified into 6 approaches (the qualitative term) and rated by their friendliness to STRs (the quantitative term). These values are then compared with several socioeconomic indicators including the data of Airbnb in order to draw hypotheses on how STR regulation and socioeconomic factors are related to each other which will motivate future empirical studies.

Six approaches to STR regulation

As already discussed, each municipality has a unique scheme to regulate STRs. For example, New Orleans distinguishes Primary Hosted STRs, Primary Unhosted STRs and Nonprimary STRs (Accessory, Temporary and Commercial STRs in their vocabulary) and place restrictions for each category whereas Seattle regulates all types of STRs equally. There are, however, some patterns across the 17 cities and their regulatory approaches can be grouped into 6 approaches:

I. Laissez-Faire approach

This approach does not place any specific regulation for STRs. San Diego and Washington D.C. do not have STR regulation despite their legislative efforts for reasons discussed later.

II. General approach

This approach does not differentiate the categories of STRs and regulate them indiscriminatingly. Chicago, Columbus and Seattle take this approach and allow all types of STRs for 365 days.

III. Residence Oriented approach

This approach restricts Nonprimary STRs strictly: indeed, Boston, Denver, Los Angeles and Portland do not allow this type of STRs at all while Nashville allows them only in designated districts.

IV. Host Oriented approach

This approach places stricter measures for STRs where the host would be absent, i.e. Primary Unhosted STRs. New Orleans and Salem cap the days their operation is allowed at around 90 days per year.

V. Hybrid approach

Austin and San Francisco have separate measures to restrict both Primary Unhosted STRs and Nonprimary STRs. Austin allows these types of STRs in only a half of its zoning districts whereas San Francisco allows the former for only 90 days a year and prohibits the latter completely. Ashville and New York also take this approach.

VI. Prohibitive approach

This approach of regulation is the strictest of all types and makes the operation of STRs very difficult or almost impossible. In the 17 cities, only Oakland takes this approach.

Table 1 summarizes which city takes which approach to their STR regulation. It is remarkable that cities focus on different elements of STRs such as the presence and the residential primacy of the host while other do not.

Table 1. Six Approaches to Regulating STRs and the Seventeen Cities.

Laissez-faire	General	Residence oreiented	Host oriented	Hybrid	Prohibitive
San Diego	Chicago	Boston	New Orleans	Ashville	Oakland
Washington D.C.	Columbus	Denver	Salem	Austin	
		Los Angeles		New York	
		Nashville		San Francisco	
		Portland			

STR friendliness of the regulation

As discussed in the introduction, there are multiple factors that characterize STR regulations. Nonetheless, a few of them are not suitable for comparison across cities. First, although tax amount would be a good indicator to assess how friendly the regulation is to STRs in theory, it is not the case. The existing hotel tax is applied to STRs in most of the cities. Since hotel tax rate had been determined independently from STR regulation, the tax rate cannot be used for comparison (all of the 17 cities, except for San Diego and Washington D.C. which take the Laissez-Faire Approach, tax STRs, eliminating qualitative difference about the taxation). The fines for violation of STR regulation are practically impossible to normalize for comparison due to the following complications. First of all, some cities set fines per day, i.e. a certain amount for every day STR is operated illegally, whereas cities like Chicago and Columbus stipulate fines of a much larger amount regardless of the duration of violation. Secondly, in Los Angeles, platforms like Airbnb and HomeAway will be fined instead of hosts, and Seattle fines various amounts from $150 to $500 per day. To complicate the issue further, the amount of fine can vary significantly according to the degree of violation like in the case of New York. Therefore, the fines were not incorporated into the model. Similarly, the number of guests allowed to stay is limited explicitly in some cities while others demand the operators to observe the building code, making the number depend on the structure of the property.

With these situations considered, comparative types of data are days allowed to operate STRs per year, fraction of zonings districts where STRs are allowed (e.g. 0.5 if STRs are allowed in 5 out of 10 districts), and licensing fees per year (the fees are charged annually in most of the cities). Their values vary with the types of STRs, i.e. Primary Hosted, Primary Unhosted, or Nonprimary STRs, in cities taking approaches other than Laissez-Faire, General, and prohibitive Approaches. Thus, first, the friendliness of regulation toward each type of STRs is calculated individually. The sum of their values, then, is *STR Friendliness* of the city.

The friendliness of regulation for a particular type of STRs, denoted F, is calculated as follows:

$$F = \delta z - \varphi$$

where: δ is the days the type of STRs is allowed; z is the fraction of zoning districts where the type of STRs is allowed; and φ is the fees in USD charged for the type of STRs annually.

For example, the friendliness of the regulation of Primary Hosted STRs in Austin is $365 \times 1 - 285 = 80$ (Primary Hosted STRs are allowed for all year in all districts and the licensing fee costs $285). While F is set to be an increasing function of δ and z, it is set to decrease as φ increases, following basic economic assumptions.

Adding the scores of friendliness for all of the three types of STRs, with some modification, the STR Friendliness of a particular city is calculated as follows:

$$STR\ Friendliness = \frac{F_h + F_u + F_n + C}{\theta}$$

where: F_h is the friendliness of the regulation of Primary Hosted STRs; F_u is the friendliness of the regulation of Primary Unhosted STRs; F_n is the friendliness of the regulation of Nonprimary STRs; C is the constant added to keep STR Friendliness of all cities non-negative; and θ is the factor to render all STR Friendliness values between 0 and 5.

After calculating the STR Friendliness for all of the cities, C turned to be 1095 and θ to be 500. Table 2 shows STR Friendliness of the 17 cities. The maximum values are found for San Diego and Washington D.C., for the lack of regulation in these cities with Laissez-Faire Approach. Oakland has a zero value since it bans STRs.

Table 2. STR Friendliness of the Seventeen Cities.

City	STR Friendliness
Asheville	1.72
Austin	1.94
Boston	2.47
Chicago	4.14
Columbus	3.47
Denver	2.82
Los Angeles	1.58
Nashville	3.43
New Orleans	1.47
New York	1.46
Oakland	0.00
Portland	2.57
Salem	1.78
San Diego	4.38
San Francisco	1.87
Seattle	3.93
Washington D.C.	4.38

Other variables

Independent variables related to STRs, the housing market, the lodging industry and people's awareness or perception of STR-led gentrification were constructed as follows. First, *Airbnb Popularity Growth* shows how fast the popularity of Airbnb has been growing in a given city. For each city they survey, Inside Airbnb has monthly historical data of the number of reviews Airbnb guests had left about rooms they stayed. However the percentage of guests who leave reviews after their stay may be, the change of the number of reviews is presumably proportional to the change of the number of guests visiting the place. Therefore, the annual growth rate of Airbnb reviews can be used as a proxy of the annual growth rate of the popularity of Airbnb. For each city, Airbnb Popularity Growth was calculated as:

$$\left(\frac{1}{5}\right) \times \ln\left(\frac{\text{number of reviews in 2018}}{\text{number of reviews in 2014}}\right).$$

Due to the lack of data, the values of November and December 2018 for all cities, June to October 2018 for New York, and July to October 2018 for Salem were forecast with the data from January 2014, the month where clear seasonal and annual patterns of growth emerged in all of the cities.

Second, to study how STR Friendliness is associated with home prices, rents and home occupancy rates, the annual growth rates for each of these were calculated using the data from American Community Survey available at the US Census Bureau website. For the inherent error of the survey results based on sampling, 5-year-average data prepared by the Bureau instead of annual raw data were used: e.g. the average of the 2008–2012 period was used for the year 2012. The same formula used for Airbnb Popularity Growth was used to calculate the annual growth rates of home prices and rents, while for the occupancy rates simply the difference between the values of 2017 and 2012 was divided by the number of periods: 6.

Third, *Airbnb Density* of each city was calculated as the number of existing housing units rented entirely on Airbnb (i.e. Primary Unhosted or Nonprimary STRs) as of February 2019 estimated by Inside Airbnb divided by the number of total housing units estimated by the aforementioned American Community Survey 5-year-average data for the 2013–2017 period. For example, Denver had 3,843 Airbnb listings which rent the entire unit while there were 306,714 housing units, and thus its *Airbnb Density* was 1.3%.

Hong and Lee's (2018) empirical study found evidence that the higher the hotel tax rate of the city, the more restrictive the STR regulation tends to be. As discussed in the introduction, STRs can act as competitors and be disruptive to the traditional lodging businesses (Farronato & Fradkin, 2018; Varma et al., 2016; Zervas et al., 2017). In this study, the ratio of the lodging industry in the total payroll of a city in 2016 derived from U.S. Census Bureau's 2016 County Business Patterns data is used to represent the weight of the industry to local economy. For example, the payroll of the lodging industry in Asheville in 2016 was $76,643,000 and this is 1.51% of the total payroll of the city in the year: $5,085,185,000. In relation to the lodging industry, the tourism attraction of the 17 cities, as a factor that could potentially influence STR Friendliness, had been examined using NAICS Code 713, an indicator of local amusement, gamble, and recreation industries within US Census database. However, no correlation between STR Friendliness and the indicator was observed.

Finally, for the awareness of the association between STRs and gentrification, the word frequency of 'rent' in webpages discussing STR issues was used as a proxy. The procedure is as follows: (1) search 'name of city, name of state Airbnb problem' on Google ('problem' was added in order to exclude a large number of pages that simply advertise STRs from the search results); (2) scrape and list the URLs of the top 100 search results; (3) using R Studio, extract the texts from every webpage the URLs lead to and save them as separate documents (since some URLs lead to PDF documents and due to other errors, the number of documents can be lower than 100 and the least number was 86 for New Orleans); (4) finally, using RapidMiner, tokenize all words contained and obtain the average word frequency of 'rent' across the documents. The word frequency was the highest for New York (5.3%), then San Francisco (4.6%), and the lowest for Chicago (2%).

Results

As noted at the end of the introduction, the variables elucidated in the previous section were compared with each other, especially STR Friendliness with other variables, to explore the relationships between the rigour of STR regulation and socioeconomic factors. Since the number of observations in this investigation is only 17, 'eyeball estimation' of scatter plots was used instead of regression analysis.

First, the relationship between the qualitative and quantitative aspects of STR regulation is shown in Figure 2; the vertical axis represents STR Friendliness, the horizontal the 6 approaches. As expected, the more restrictive the approach, the lower STR Friendliness becomes. It may be counter intuitive that Austin and San Francisco, taking the Hybrid Approach, are more Airbnb friendly than those

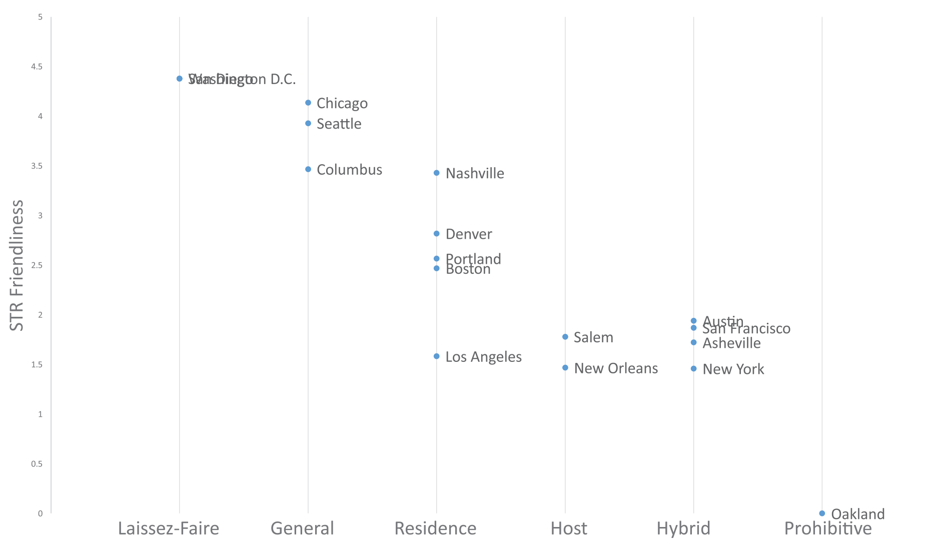


Figure 2. STR friendliness and the six approaches.

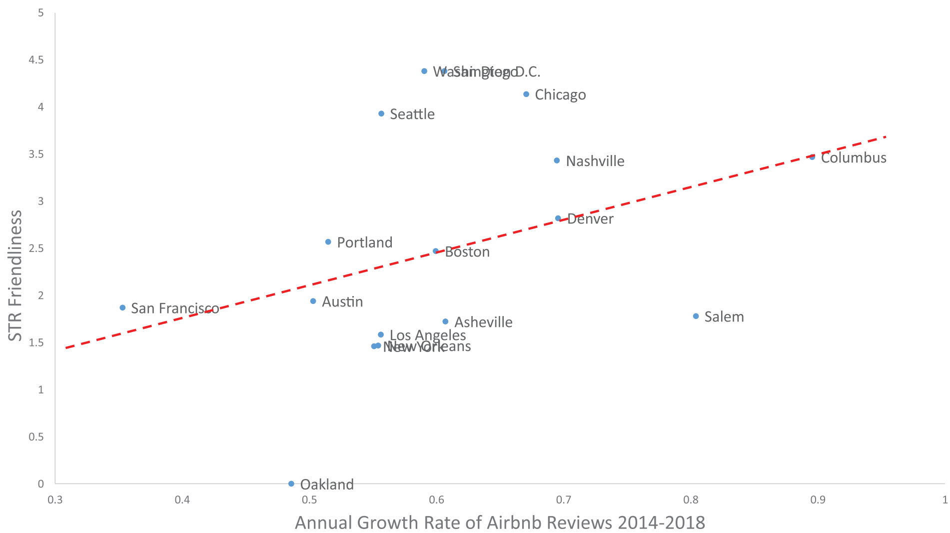


Figure 3. STR friendliness and Airbnb popularity growth from 2014 to 2018.

taking Host Oriented Approach, i.e. New Orleans and Salem, and Los Angeles which takes Residence Oriented Approach. This result is due to the fact that the former do not have zoning restriction while New Orleans and Salem do, and Los Angeles caps the days both Primary Hosted and Primary Unhosted STRs are allowed at 120 days a year. Despite such intricacy, Figure 2 shows the general positive relationship between the qualitative and quantitative measures of strictness. Thus in the following discussion, STR Friendliness is used solely as the indicator of strictness of STR regulation.

Can STR Friendliness of the cities be explained by data related to STRs, the housing market and the lodging industry? Let's examine the relationships between the variables one by one. Figure 3 shows how STR Friendliness and Airbnb Popularity Growth are associated. There may be a linear relationship between the variables, and if there is, the implication would be that STR regulation tends to be strict where the popularity of STRs grows fast, and/or STR regulation has negative impacts on the promulgation of STRs. This result encourages future empirical studies with panel data to identify the direction of causality.

Figure 4 shows the correlation between STR Friendliness and the growth of home prices. No linear relationship is seen in the graph: cities with various annual home price growth rate are found to be close in terms of friendliness to STRs. The result is similar for the correlation between STR Friendliness and rent growth [Figure 5]. This result represents the difficulty in isolating the effects of STRs from other factors influencing the housing market, the problem pointed out in existing studies (Stors and Kagermeier, 2017; Ioannides et al., 2018). However, the correlation with occupancy rate growth shown in Figure 6 might be significant. In the area where the value of the horizontal axis is below 0.5%, a linear positive correlation seems to exist between STR Friendliness and the growth of occupancy rate, which may indicate that in cities that are more friendly to STRs, the occupancy rate grows faster because STRs promulgate faster. Moreover, the data of Columbus, New Orleans and Oakland may imply the opposite causality: when the occupancy rate grows 'too fast', such as 0.6% annually, then a city will regulate STRs strictly. In other words, the relationship between STR Friendliness and occupancy rate might be parabolic and a two-way causality. Empirical studies with a large panel data will be able to test this hypothesis. The regulatory impact on occupancy rate is crucial for policy evaluation since the issue of housing affordability is the major discourse for STR regulation for every city while the issue of noise and nuisance can be but not necessarily a major reason for regulation, except for places such as Austin and Nashville. Even in the case of San Francisco, which as a model case for STR regulation has caught the attention of

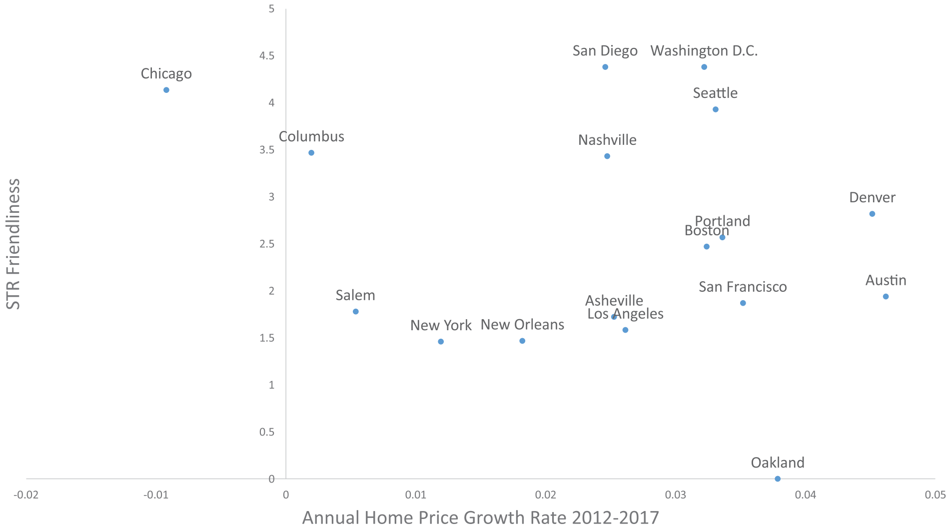


Figure 4. STR friendliness and home price growth from 2012 to 2017.

stakeholders in cities around the US, the raison d'etre was solely protection of housing affordability. However, the relationship between STR related issues and the regulation needs to be clearly understood, and a thorough discourse analysis of relevant policy documents is recommended for future studies in order to draw a solid conclusion on this matter.

As seen in Figure 7, there seems to be no linear correlation between STR Friendliness and Airbnb Density. Like in the case of comparison with home prices and rents, cities with varying degrees of the density are found to be similar in terms of the friendliness. The ratio of the lodging industry in the payroll of the city, on the other hand, suggests a potential correlation with STR Friendliness [Figure 8]. For cities where the contribution of the lodging sector to economy is under 1%, the ratio seems to have little to no effect on STR Friendliness. However, those the ratio of which exceeds 1% tend to have lower friendliness to STRs, treating San Diego as an outlier. Again, future

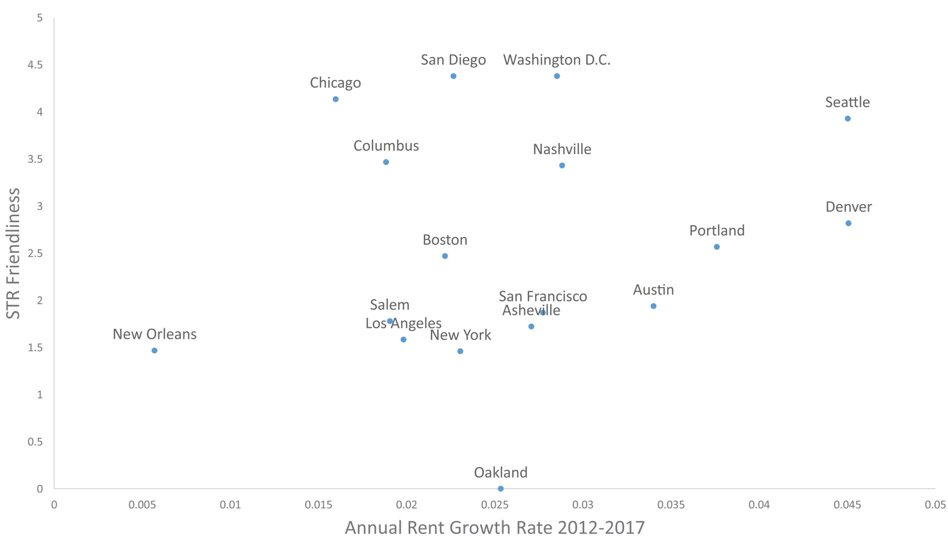


Figure 5. STR friendliness and rent growth from 2012 to 2017.

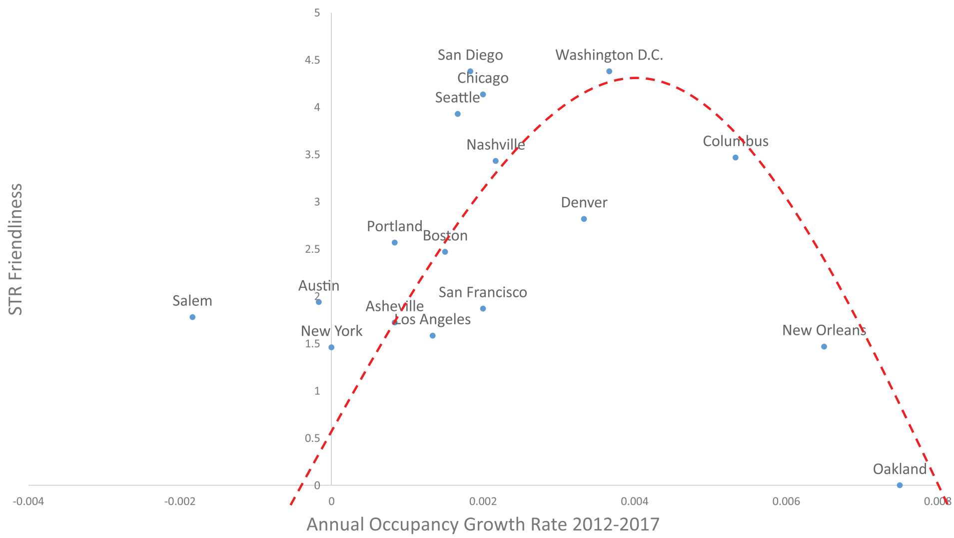


Figure 6. STR friendliness and occupancy rate growth from 2012 to 2017.

empirical studies are necessary to draw a solid conclusion, but STR Friendliness and the significance of the lodging industry may have a hyperbolic relationship, i.e. the effect of lobbying by the industry stays negligible as long as they constitute below 1% of the local economy.

Finally, the most significant and interesting relationship in this investigation can be found between STR Friendliness and the awareness or perception of links between STRs and gentrification [Figure 9]. There seems to be a negative linear correlation between STR Friendliness and how often the issue of rent, the increase of which causes displacement of lower income population and therefore is one of the most typical indicators of gentrification, are mentioned in websites on 'Airbnb problems' that appear on the top 100 Google search results as of February 20th, 2019. Furthermore, if the two hypotheses discussed above, i.e. a parabolic relationship between STR Friendliness and occupancy rate and a hyperbolic relationship between STR Friendliness and the ratio of the lodging

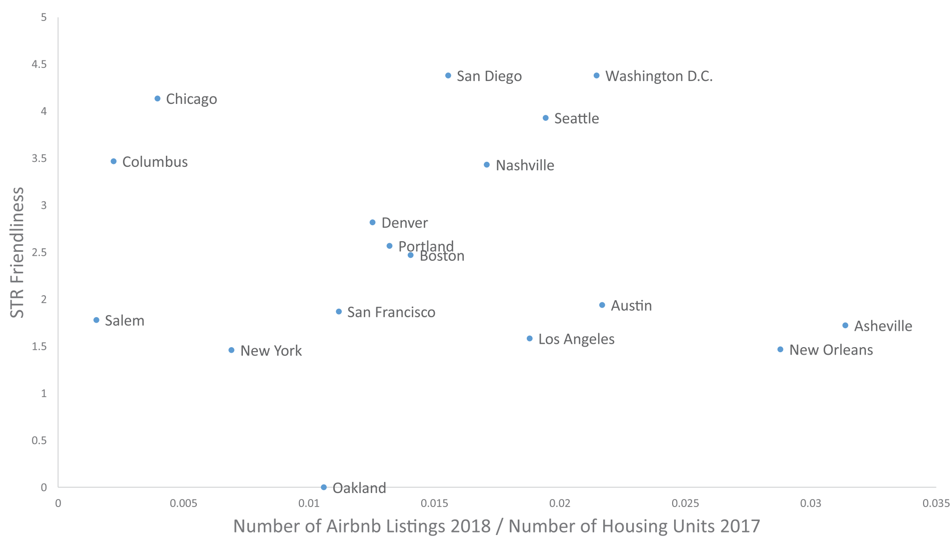


Figure 7. STR friendliness and Airbnb-home ratio.

Figure 8. STR friendliness and the lodging industry.

industry in local economy, are assumed to be true, this linear relationship would become clearer: New Orleans and Oakland are found to be much less friendly than expected because of their fast growth of occupancy rates, and the STR Friendliness of Asheville, New Orleans again, and Salem are far below expectation due to the significance of the lodging industry in these cities. What about extremely high friendliness of San Diego and Washington D.C.? There are potential explanations for them. San Diego was expected to take the Residence Oriented Approach to their STR regulation from July 2019, but facing a referendum demanding the repeal of the proposed regulation, the city council voted to rescind the ordinance (Weisberg, 2018). Also in Washington D.C., the mayor declined to sign the unanimously approved bill for regulation due to its similarity to the bill enacted in New York which then was blocked from taking effects by a federal judge; the mayor implies the regulatory measures need to be more friendly to STRs in order to take effects (Glambrone, 2019). These

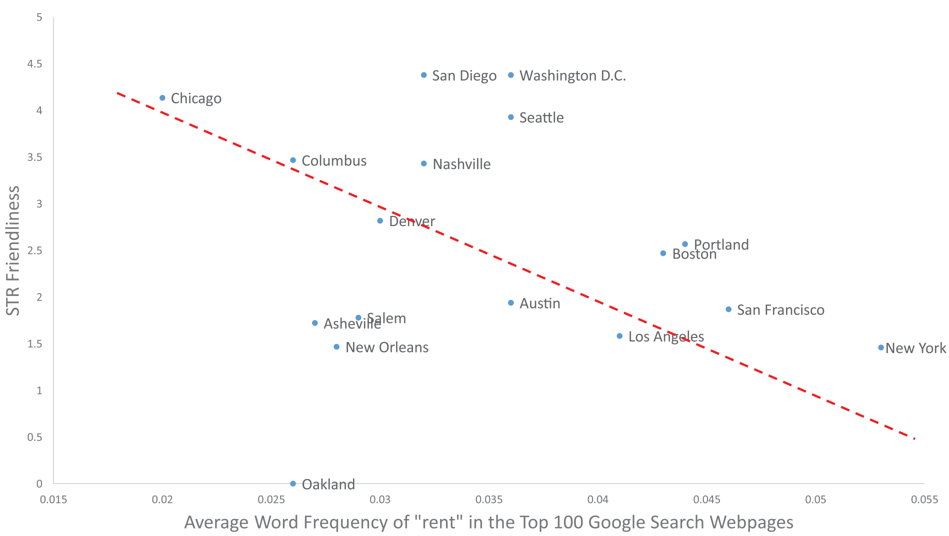


Figure 9. STR friendliness and the word frequency of ‘rent’.

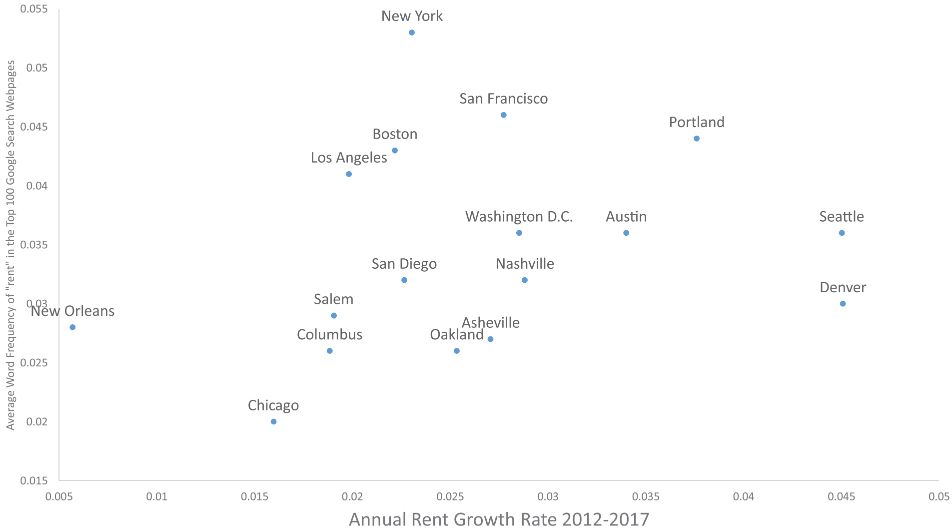


Figure 10: Word frequency of 'rent' and actual growth of rent.

special political circumstances might have raised the STR Friendliness of the two cities far above than it would have been otherwise. Thus, given the linear relationship drawn in Figure 9, it is possible to hypothesize that the awareness or perception of rent increase in relation to STRs is a very strong and significant determinant of STR Friendliness: in cities for which the association of STRs and rents is discussed more frequently, the STR regulations tend to be more stringent. It is also important to note that the awareness or perception of STR-led gentrification does not seem to be proportional to the actual progression of gentrification [Figure 10]. There may be independent factors that determine people's awareness of socioeconomic issues like gentrification other than the intensity of those issues itself (Bernal, 2019; Isin, 2004). This is another topic that future studies can investigate with a larger number of observations.

Conclusion and discussion

As already suggested in the literature, STR regulations must differ according to the kinds and degrees of issues cities are facing. In the investigation of 17 American cities, the study proposed ways to rank the rigour of STR regulation both qualitatively and quantitatively: the regulations can be classified into 6 approaches and measured by numerical values of variables such as days and districts allowed for STR operation, and licensing fees. The study also showed how the rigour of STR regulation is potentially correlated with socioeconomic indicators, leading to the following hypotheses:

Hypothesis I: STR regulation has negative effects on STR promulgation [Figure 3]: STR regulation slows down the growth of STR's popularity.

Hypothesis II: The rigor of STR regulation has a parabolic relationship with housing occupation rate [Figure 6]: occupancy rate grows faster in cities where STR regulation is mild; STR regulation becomes strict when occupancy rate grows too fast, possibly beyond 0.5% per year or so.

Hypothesis III: The rigor of STR regulation has a hyperbolic relationship with the significance of the lodging industry in local economy [Figure 8]: STR regulation tends to be strict in cities where the lodging industry constitutes more than approximately 1% of the local economy.

Hypothesis IV: The awareness or perception of gentrification in relation to STRs are more potent as a determinant of the rigor of STR regulation than the actual degree of gentrification is [Figure 9]: regardless of the rate at which rent actually increases, STR regulation tends to be strict in cities for which the issue of rent increase is discussed in association with STRs frequently on the internet.

As Nieuwland and van Melik (2018) have argued, STR regulation targets gentrification and nuisance allegedly caused by STRs. If *Hypothesis I* holds true, the regulations will be able to address the problem of nuisance such as noise by slowing down, if not stopping, the growth of STRs.

Addressing the issues of gentrification, however, is far more complicated. *Hypothesis IV* suggests that STR regulation tends to be restrictive in cities where criticism of STRs as a cause of gentrification is vocal like the cases of Los Angeles, New York and San Francisco. But the growth of the popularity of Airbnb in these cities is not particularly faster than in other cities. Nor is their Airbnb Density higher than in other cities. As researchers such as Stors and Kagermeier (2017), Ioannides et al. (2018) have implied, it is very likely that a major part of the general trend of gentrification in the post-Great Recession period has been driven by factors other than STRs.

The causes of gentrification have been debated over 40 years. Hamnett (1991) pointed out that the phenomenon of gentrification can be explained from both of supply and demand sides: Neil Smith (1979) tried to explain gentrification from the supply side with his *rent gap theory* while David Lay's (1978) *social restructuring theory* was an account from the demand side. In San Francisco, for example, the housing prices kept falling for a few years following the Great Recession possibly giving developers opportunities to invest on properties for lease or sale to then thriving IT companies within the city (Stehlin, 2016) including Airbnb (the supply side). At the same time, numerous employees working in Silicon Valley started to move to the Bay Area (Moskowitz, 2017; Zuk & Chapple, 2015) looking for higher quality of life (the demand side). If such socioeconomic trends are largely accountable for increases in rent and occupancy rate, STR regulation as a means to tackle gentrification is unlikely to be effective: unless gentrification is chiefly caused by STRs, which was not confirmed to be the case in this study as the growths of rent and Airbnb' popularity do not show a clear correlation [Figure 11], such regulation can never meet the expectation.

The limitation of this study is its focus on the issue of gentrification. As already mentioned, it has been doubtlessly the most prominent issue in terms of STR regulation. However, other issues such as noise, drunken behavior, traffic congestion, security, etc. must be addressed as they have been major issues in some cities. A study similar to this but with a strong focus on those issues are warranted in order to fully grasp the system of STR regulation.

The most difficult problem inherent to STR regulation is its enforcement. The nature of P2P transactions makes monitoring the hosts' conducts and the guests' behavior very costly. Many municipal governments and civilians started to collaborate with organizations such as Host Compliance and

Figure 11: Rent growths of rent and Airbnb popularity.

Airbnb WATCH in order to enforce existing rules and discuss how to deal better with negative externalities of STRs. This is a very important agenda for future studies of STR regulation.

Currently, STR regulation is still in its infancy in many cities and not ready for impact analyses with panel data. A company called AirDNA sells data of STRs across 80,000 cities in the world targeting property managers, real estate investors and the tourism industry. With access to such big data and the passing of a few more years, studies to test the hypotheses generated from this investigation will be possible and strongly recommended.

Acknowledgement

We would like to express here his gratitude for the tremendous insights he received at The Fourth AP-PPN Annual Conference held in March 2019 held at The Hong Kong University of Science and Technology, especially from Mr. Zhu Jiamin, Ms. Lyu Jing and Mr. Athar Mansoor who also study STR regulation and shared their knowledge with him, and from Ms. Marie N. Bernal who introduced Engin F. Isin's concept of 'neurotic citizen' to participants of the conference.

Disclosure statement

No potential conflict of interest was reported by the authors.

References

Aloni, E. (2018). Pluralism and regulatory response to the sharing economy. In N. Davidson, F. Michele, & J. Infranca (Eds.), *Cambridge handbook of the law of the sharing economy* (pp. 101–120). Cambridge: Cambridge University Press.

Barron, K., Kung, E., & Proserpio, D. (2018). *The sharing economy and housing affordability: Evidence from Airbnb*. Retreived from SSRN https://ssrn.com/abstract=3006832 or http://dx.doi.org/10.2139/ssrn.3006832

Bernal, M. N. (2019). *"Neurotic citizens" and "neurotic governance": The impact of "risk society's" decision making*. A presentation at The Fourth AP-PPN annual conference, The Hong Kong University of Science and Technology.

Botsman, R., & Roger, R. (2011). *What's mine is yours: How collaborative consumption is changing the way we live*. New York, NY: HarperCollins Business.

Coelho, M., Glaudemans, M., Marko, I., Mendes, L., Seixas, J., Lestegás, L., … Dias, J. (2016). *Stadslab European urban design laboratory Lisbon city-making & tourism gentrification: Master class 2016*. Tilburg: Fontys School of Fine and Performing Arts, Stadslab European Urban Design Laboratory.

DiNatale, S., Lewis, R., & Parker, R. (2018). Short-term rentals in small cities in Oregon: Impacts and regulations. *Land use Policy*, *79*, 407–423.

Edelman, B. G., & Geradin, D. (2016). Efficiencies and regulatory shortcuts: How should we regulate companies like Airbnb and Uber? *The Stanford Technology Law Review*, *19*(2), 293–328.

Espinosa, T. P. (2016). The cost of sharing and the common law: How to address the negative externalities of home-sharing. *Chapman Law Review*, *19*, 597.

Farronato, C., & Fradkin, A. (2018). *The welfare effects of peer entry in the accommodation market: The case of airbnb*. Cambridge, MA: National Bureau of Economic Research. No. w24361.

Füller, H., & Michel, B. (2014). 'Stop being a tourist!' new dynamics of urban tourism in Berlin-kreuzberg. *International Journal of Urban and Regional Research*, *38*(4), 1304–1318.

Glambrone, A. (2019, January 18). D.C. mayor declines to sign unanimously approved bill regulating Airbnb activity. *Curbed Washington DC*. Retrieved from https://dc.curbed.com/2019/1/18/18188751/dc-airbnb-short-term-rentals-bowser-council

Gotham, K. (2005). Tourism gentrification: The case of New Orleans' vieux carre (French Quarter). *Urban Studies*, *42*(7), 1099–1121.

Gurran, N., & Phibbs, P. (2017). When tourists move in: How should urban planners respond to Airbnb? *Journal of the American Planning Association*, *83*(1), 80–92.

Guttentag, D. (2015). Airbnb: Disruptive innovation and the rise of an informal tourism accommodation sector. *Current Issues in Tourism*, *18*(12), 1192–1217.

Hamnett, C. (1991). The blind men and the elephant: The explanation of gentrification. *Transactions of the Institute of British Geographers, New Series*, *16*(2), 173–189.

Heylighen, F. (2017). Towards an intelligent network for matching offer and demand: From the sharing economy to the global brain. *Technological Forecasting & Social Change*, *114*, 74–85.

Hong, S., & Lee, S. (2018). Adaptive governance, status quo bias, and political competition: Why the sharing economy is welcome in some cities but not in others. *Government Information Quarterly*, *35*(2), 283–290.

Ikkala, T., & Lampinen, A. (2015). *Monetizing network hospitality: Hospitality and sociability in the context of Airbnb*. Proceedings of the 18th ACM conference on computer supported cooperative work & social computing (pp. 1033–1044). ACM.

Interian, J. (2016). Up in the air: Harmonizing the sharing economy through Airbnb regulations. *Boston College International and Comparative Law Review*, *39*, 129–161.

Ioannides, D., Röslmaier, M., & van der Zee, E. (2018). Airbnb as an instigator of 'tourism bubble' expansion in Utrecht's Lombok neighbourhood. *Tourism Geographies*, 1–19.

Isin, E. F. (2004). The neurotic citizen. *Citizenship Studies*, *8*(3), 217–235.

Jefferson-Jones, J. (2014). Airbnb and the housing segment of the modern sharing economy: Are short-term rental restrictions an unconstitutional taking. *Hastings Constitutional Law Quarterly*, *42*(3), 557–576.

Jefferson-Jones, J. (2015). Can short-term rental arrangements increase home values? A case for Airbnb and other home sharing arrangements. *The Cornell Real Estate Review*, *13*(1), 12–19.

Kolar, T., & Zabkar, V. (2010). A consumer-based model of authenticity: An oxymoron or the foundation of cultural heritage marketing? *Tourism Management*, *31*, 652–664.

Lay, D. (1978). *Inner city resurgence and its societal context*. Paper presented to the association of American Geographers annual conference, New Orleans.

Martin, C. J. (2016). The sharing economy: A Pathway to sustainability or a nightmarish form of neoliberal capitalism? *Ecological Economics*, *121*, 149–159.

Mendes, L. (2016). What can be done to resist or mitigate tourism gentrification in Lisbon? Some policy findings & recommendations. in Coelho et al. (2016).

Midgett, C., Bendickson, J. S., Muldoon, J., & Solomon, S. J. (2018). The sharing economy and sustainability: A case for Airbnb. *Small Business Institute Journal*, *13*(2), 51–71.

Moskowitz, P. (2017). *How to kill a city: Gentrification, inequality, and the fight for the neighborhood*. New York: Nation Book.

Mulcahi, D. (2016). *The gig economy: The complete guide to getting better work, taking more time Off, and financing the life You Want!*. NY: Amacom Books.

Nieuwland, S., & van Melik, R. (2018). Regulating Airbnb: How cities deal with perceived negative externalities of short-term rentals. *Current Issues in Tourism*, 1–15.

Oskam, J., & Boswijk, A. (2016). Airbnb: The future of networked hospitality businesses. *Journal of Tourism Futures*, *2*(1), 22–42.

Quattrone, G., Proserpio, D., Quercia, D., Capra, L., & Musolesi, M. (2016). *Who benefits from the sharing economy of Airbnb?* Proceedings of the 25th international conference on world wide web (pp. 1385–1394). International World Wide Web Conferences Steering Committee.

Smith, N. (1979). Toward a theory of gentrification: A back to the city movement by capital, not people. *Journal of the American Planning Association*, *45*(4), 538–548.

Stehlin, J. (2016). The post-industrial "shop Floor": Emerging forms of gentrification in San Francisco's innovation economy. *Antipode*, *48*(2), 474–493.

Stors, N., & Kagermeier, A. (2017). The sharing economy and its role in metropolitan tourism. Tourism and gentrification in contemporary metropolises. *International Perspectives*, 181–206.

Sundararajan, A. (2016). *The sharing economy: The end of employment and the rise of crowd-based capitalism*. Cambridge, MA: MIT Press.

Varma, A., Jukic, N., Pestek, A., Shultz, C. J., & Nestorov, S. (2016). Airbnb: Exciting innovation or passing fad? *Tourism Management Perspectives*, *20*, 228–237.

Wachsmuth, D., & Weisler, A. (2018). Airbnb and the rent gap: Gentrification through the sharing economy. *Environment and Planning A: Economy and Space*, *50*(6), 1147–1170.

Wegmann, J., & Jiao, J. (2017). Taming Airbnb: Toward guiding principles for local regulation of urban vacation rentals based on empirical results from five US cities. *Land use Policy*, *69*, 494–501.

Weisberg, L. (2018, October 22). San Diego rescinds tough Airbnb regulations, reopening debate on how to rein in short-term rentals. *The San Francisco Union-Tribune*. Retrieved from https://www.sandiegouniontribune.com/business/tourism/sd-fi-airbnb-regulations-council-20181022-story.html

Yannopoulou, N., Moufahim, M., & Bian, X. (2013). User-generated brands and social media: Couchsurfing and AirBnb. *Contemporary Management Research*, *9*(1), 85–90.

Zervas, G., Proserpio, D., & Byers, J. W. (2017). The rise of the sharing economy: Estimating the impact of Airbnb on the hotel industry. *Journal of Marketing Research*, *54*(5), 687–705.

Zuk, M., & Chapple, K. (eds.). (2015). *Case studies on gentrification and displacement in the San Francisco Bay area*. UC Berkeley Retrieved from http://www.urbandisplacement.org/case-studies/ucb

Land Use Policy 79 (2018) 407–423

Contents lists available at ScienceDirect

Land Use Policy

journal homepage: www.elsevier.com/locate/landusepol

Short-term rentals in small cities in Oregon: Impacts and regulations

Sadie DiNatale[a], Rebecca Lewis[a,*], Robert Parker[b]

[a] University of Oregon, USA
[b] Institute for Policy Research and Engagement, University of Oregon, USA

ARTICLE INFO

Keywords:
Short term rentals
Housing supply
Housing affordability
Rural housing
Local regulation
Sharing economy

ABSTRACT

Governments across the country struggle to manage the impacts of short-term rentals (STRs), like Airbnbs, and the sharing economy more generally. Existing research is sparse and tends to focus on large cities or metropolitan areas. Focusing on 237 small cities in Oregon, this study relies on descriptive data from Airbnb, AirDNA, Oregon Department of Revenue, and the U.S. Census to examine the prevalence and characteristics of Airbnbs, revenue potential from lodging taxes, and the impact on long-term housing supply. This study also summarizes the findings from a statewide survey of city managers and planners on regulation and perceptions. We find that the prevalence of Airbnbs varies drastically across cities and is highest in tourist areas. Airbnbs are present on over five percent of the housing stock in 16 cities. While hosts generated $82 million in revenue, only 11 cities and four counties charge lodging taxes. In total, 38% of Airbnbs are whole homes that are rented more than 30 days in a year, signaling potential impacts on long-term rental supply. Finally, while cities perceive Airbnb to be an issue, only 35% of survey respondents are currently regulating Airbnbs. We find that cities need to understand prevalence and characteristics of STRs and respond with appropriate regulatory controls. Airbnb provides lodging and tourism where hotels have not been available in some cities, but in other cities, Airbnbs place pressure on tight housing markets and draw complaints from residents.

1. Introduction

Short-term rentals (STRs) are often defined as housing units that are rented or leased for less than 30 days, although they are not officially defined by state or federal authorities. Part of the sharing or access economy, STRs are representative of a phenomenon in which people are opting to share goods and services traditionally owned.[1] Access economy activities are often compensated by a monetary exchange, trade, or in-kind offering. For STRs facilitated though internet platforms like Airbnb, Vacation Rental By Owner (VRBOs), or HomeAway rentals, access is granted through a monetary exchange which provides the STR's host with supplementary income. This trend has been understood to offer both benefits and costs to communities across the country.

As the role of STRs differs by community (influenced by the physical, geographic, social, economic, and political state of the jurisdiction), STRs impact communities diversely. While some communities see STRs as an opportunity to reap the benefits of increased tourism, employment opportunities, and economic development—other communities desperately try to reduce or mitigate the onslaught of unintended consequences brought on by STRs. Identified concerns range from the perception that STRs are unsafe or dangerous to the reality that many are operated illegally potentially causing strain on public services. Many local governments are concerned that STRs could reduce the availability or affordability of housing for existing residents, causing displacement, created through the "hotelization" of neighborhoods. While recent academic studies have examined the policy and planning implications of STRs in large cities, there is little work on the impacts of STRs in small cities. (Gurran and Phibbs, 2017; ECONorthwest, 2016; Sheppard and Udell, 2016; Wegmann and Jiao, 2017)

In this study, we address this gap by focusing on small cities in Oregon. We rely on data from Airbnb and AirDNA as a proxy for short-term rental because Airbnb is the most extensive platform and data was readily available. Here, an Airbnb is any listing on the Airbnb website as of February 2017 and includes a range of property types (e.g. house, apartment, villa, tent, bed and breakfast, etc.) across three listing types (entire home, private room, and shared room). Oregon is a state with a fast-growing population and an active tourist economy where 237 of 241 cities are under 100,000 people in size. There are Airbnbs in all of the state's 36 counties and in 75% of the cities in the state. The small cities account for 8,000 Airbnbs, or roughly 44% of the total Airbnbs in

* Corresponding author at: 1209 University of Oregon, Eugene OR, 97403-1209, USA.
E-mail address: rlewis9@uoregon.edu (R. Lewis).

[1] The practice of renting homes for short-term use is not new (particularly in tourist areas) but Airbnb and other companies have created a platform to make the process easier and more globally accessible in what was predominantly a local industry.

https://doi.org/10.1016/j.landusepol.2018.08.023
Received 17 January 2018; Received in revised form 20 July 2018; Accepted 15 August 2018

the state. Airbnbs are most prevalent in areas that attract high rates of tourism. We are interested in the positive and negative impacts of Airbnbs in small cities in Oregon. We are also interested in how small cities are regulating Airbnbs. To understand how small cities are impacted by Airbnbs, we (1) examine the prevalence and characteristics of Airbnbs; (2) examine the revenue potential for Airbnbs; (3) study the impacts of Airbnbs on the supply of housing; (4) gauge the perceptions of local planners; and (5) describe the current regulations used in small cities in Oregon. Our data sources include descriptive data from AirDNA and Airbnb, Transient Lodging Tax (TLT) data from the Oregon Department of Revenue, American Community Survey data, and a survey administered to city staff in Oregon that gauged perceptions and gathered data about the regulatory structure for STRs. While we focus on small cities in Oregon, our findings are relevant to other small cities across the United States and internationally.

This paper proceeds as follows. We begin with a discussion of previous studies on short-term rentals and potential benefits and impacts to the community. Then we describe our research questions and methodology. Next, we describe the prevalence of Airbnbs, potential for tax revenue, potential impacts on housing availability, and perceptions and regulations of STRs. Finally, we offer recommendations to small cities for regulating STRs.

2. Impacts and benefits of short-term rentals

While short-term rentals operated through online platforms like Airbnb are a relatively recent phenomenon, scholars have begun to study the economic and social impacts of short-term rentals. Some researchers have also studied and discussed potential policy frameworks to better manage these rentals.

2.1. Short-term rental's impact

STRs can impact communities both positively and negatively. STRs impact on housing, local economies and how STRs represent the sharing economy are the most commonly cited issues.

2.1.1. Impact on housing

A scan of applicable literature shows the impact of STRs on housing. In describing the negative externalities of Airbnb, Edelman and Geradin (2016) hypothesize that Airbnb may remove housing inventory from long-term markets, which can exacerbate the shortage of rental housing or increase rents further. Most reports comment on the fact that there are very clear limitations in the availability of data to fully understand the impact STRs have on housing markets or housing stock (ECONorthwest, 2016; Rees Consulting, Inc., 2016). While speculation and inherent assumptions about housing supply and costs are widespread, academics and practitioners are eager to learn about the true effects. Because there is no standard or agreed upon definition for STRs, the ability to draw clear conclusions on causality across space becomes especially difficult (ECONorthwest, 2016).

A study that analyzed the impact of HomeAway rentals in Seattle found that (1) STRs did not have a significant impact on home values, (2) properties were not on the STR market for a long period of time during a year, and (3) STRs were located in traditionally higher income areas (ECONorthwest, 2016). A study of STRs in New York City and New Orleans found STRs were associated with increased property values (Sheppard and Udell, 2016 and Kindel et al., 2016). This suggests that STRs' impact on housing will differ between geographic regions and local economy types. Other research suggests that STRs also have the potential to help "preserve property values by providing income to homeowners that can be used to offset mortgage and maintenance costs – in other words, by allowing owners to share the burdens of ownership" (Jefferson-Jones, 2015).

Some reports looked at the impact STRs had on specific housing types. A white paper looking at four small cities in Colorado (populations under 7000) found that STRs did lead to the reduction of homes and bedrooms previously used by employees, increasing the demand for workforce housing and reducing its supply (Rees Consulting, Inc., 2016).

Wegmann and Jiao (2017) study what types of neighborhoods have the most Airbnbs by using a webscraping methodology to examine five large cities: Austin, Boston, Chicago, San Francisco, and Washington, DC. Across cities, the research suggests that Airbnbs are concentrated in neighborhoods with a higher share of non-family households and a lower share of individual automobile work commute share. While the authors explored the characteristics of neighborhoods and concentration of Airbnbs, the research did not consider housing tenure within the neighborhood. It was beyond the scope of the research to examine how Airbnbs impact the supply of rental housing. (Wegmann and Jiao, 2017)

2.1.2. Impact on local economy

Proponents of STRs argue that they have positive economic impacts. The literature shows STRs can potentially impact local government revenue, increase tourism-related activity, provide income to hosts, and may disrupt the traditional lodging industry.

Short-term rentals have the potential to positively affect municipalities through increased tax revenues. A report assessing the impact of STRs in San Diego, Los Angeles, Monterey County, Santa Barbara, and St. Joseph (Michigan) found that taxing the STR industry generates substantial revenue for the municipality and supports job growth (TXP, Inc., 2014a, b; TXP, Inc., 2015).

A primary reason that property owners operate STRs is the income operators' can earn. However, operator revenue from STRs varies widely. In a 2016 study of HomeAway rentals in Seattle, ECONorthwest found that STRs did not generate sufficient income for owners to justify shifting from the long-term rental market or ownership market for economic reasons alone —potentially unveiling other value-drivers for operating STRs beside purely economic gains (ECONorthwest, 2016). The study found that social and sustainability benefits may also motivate property owners to continue operating these rentals. Operator effort and motivation also makes a difference; an assessment of Airbnb hosts found that the annual expected profit is approximately $20,000, but "'hands-off' Airbnb hosts can expect occupancy rates (and revenue) at least 15% lower" than more involved hosts (Wallace, 2016).

Literature attests that "with proper regulation and enforcement, citizens and communities can benefit from the increased tourism" that short-term rentals bring (Binzer, 2017). Despite localized economic benefits, the STR industry can disrupt formal industries in the accommodation sector by attracting visitors away from conventional lodging and accommodation companies (Guttentag, 2013; Fang et al., 2016). This disruption becomes exacerbated in that many STRs marketed through web-based platforms are often illegal (e.g. being operated without a license/permit, without paying proper taxes/fees, in violation of zoning ordinances, or without having proper inspections). This gives traditional, regulated lodging businesses an economic disadvantage (Guttentag, 2013). Continued studies evaluating occupancy rates, revenues per available room, rates of use and rental price, predicted non-lodging spending from short-term renters, and estimates on potential revenue earnings for municipalities will assist in the development of knowledge in this area.

2.1.3. Short-term rentals and the sharing economy

STRs often operate by property owners leasing their unused space to tourists and visitors, prospective or existing residents in search of long term homes, or businesspeople on extended stays. The ways in which STRs represent the sharing economy is still open to interpretation. The growth of STRs offered through web-based platforms indicates that there is at least additional capacity in existing housing stock and that property owners are willing to share their excess space in exchange for monetary compensation (Ellen, 2015). Outside of this observation, there is a range of perspectives about whether home sharing, through web-based platforms, negatively or positively influences the sharing economy.

In theoretical debates, policy makers have considered adapting the Airbnb home-sharing model to house lower income individuals as a new form of housing assistance (Ellen, 2015). The idea that people are interested in providing access to their space to strangers, suggests that sharing economy activities might be operated in capacities other than short-term rentals, providing different social and economic benefits therein (Martin, 2016). STR hosts can also reap economic benefits by participating in the sharing economy, reinforcing their desire to participate in that economy. Specifically, hosts can distribute their assets to supplement their income which has the added benefit of materializing the collaborative use of resources (Daunoriene et al., 2015). Social impacts are realized from public relations perspectives in which, the incremental shift towards home-sharing "has engendered visions of renewed forms of collective urban life" involving sustainability, symbolic interaction, and communication that empowers trust (Gregory and Halff, 2017).

Other perspectives describe how STRs and home-sharing through web-based platforms may bring detrimental impacts on the sharing economy, or at least diminish its reputation. For instance, intermediary businesses that "provide the infrastructure necessary to sustain the sharing community" (Gregory and Halff, 2017) often enable, or intensify, the evasion of local laws and regulations (Interian, 2016). These businesses can also displace companies that are regulated, and often do not hold themselves accountable to the negative externalities their business models can create (Interian, 2016). Home sharing platforms are evolving more quickly than cities and researchers can keep up. New companies are quickly finding ways to use home sharing as a means to generate profit innovatively. For example, a service known as Loftium provides prospective homeowners with the down payment they need to become homeowners with the requirement that the homeowner would rent their unused space on Airbnb and provide Loftium a cut of profits (Bernard, 2017). Changing perceptions of home sharing can be understood to come with endless possibilities if permitted to evolve in line with innovative ideas.

2.2. Policy framework considerations

Integrating STRs into the formal accommodations sector through regulations and enforcement has been cited as an important next step to correct some of the negative impacts of STRs (Guttentag, 2013). However, policy makers continue to grapple with the rationales, processes, and practices of how to best regulate STRs. During the economic recession, some raised questions about whether it is beneficial to regulate the STR market at all—in the chance it inhibits homeowners from making ends meet on their mortgages or housing payments (Gottlieb, 2013). In general, however, the literature seems to agree that STRs should be regulated in some fashion, the extent to which is unclear and controversial (Gottlieb, 2013; Goodman, 2016, and Hood River County Community Development, 2016).

2.2.1. Policy approaches

There appears to be no single best way to regulate the STR market that fits the needs of all communities across space. One report suggested a three-part solution:

1 Launch a standard of safety and accountability (strengthening nuisance laws, ensuring hosts have appropriate insurance, etc.);
2 Move past a yes or no debate on short-term rentals (consider the nuances of individual communities and tailor regulations to those nuances); and
3 Enforce what is on the ground and online (to cut down on opportunities to evade laws) (Goodman, 2016).

Another report articulated these alternatives: develop public nuisance abatement ordinances, ban short-term rentals outright, enact time restrictions (i.e. allowing short-term rentals for a period of 30 days or less), or enact performance-based standards (Gottlieb, 2013). The American Planning Association (APA) suggests that jurisdictions require licenses, fees and taxes, and insurance. APA also suggests consistency with land use controls and to determine whether inspections are necessary (Sullivan, 2017).

In a guidebook on the equitable regulation of short-term rentals, suggestions to proper management include clear definitions, active record keeping, protections for housing (supply and affordability), protections for guests, procedures for oversight, protections for neighborhood preservation, and imposition of taxes (Sustainable Economies Law Center, 2016).

Others argue that STRs, as part of the sharing economy, need special or "innovative" regulatory treatments "precisely because the business model is so new" (Katz, 2015). Gurran and Phibbs (2017) provide some recommendations to planners to examine and monitor the impacts of STRs on the availability and cost of long term permanent rentals stating that "ongoing research and analysis to fully understand implications for local neighborhoods and housing markets" is integral. Wegmann and Jiao (2017) outline four guiding principles for regulating urban vacation rentals, (1) emphasizing the need for better data, (2) considering concentration limits, (3) suggesting meaningful enforcement mechanisms, and (4) distinguishing types of short-term rentals to treat commercial operators differently than "mom-and-pop" operators.

2.2.2. Transient lodging tax

Transient lodging taxes (TLT) are a local option tax levied on lodging facilities (hotels, motels, bed and breakfasts, etc.). While all jurisdictions do not levy a tax of this kind, "taxing tourism is an appealing option for governments facing budgetary constraints and pressures to decrease reliance on a variety of taxes" (Gooroochurn and Sinclair, 2005). For instance, taxes levied to hotels offset burden onto tourists, which is especially advantageous in areas with "superior or unique natural resources" as to "capture the 'rent' of these resources through taxation" (Oakland and Testa, 1996).

TLTs, and other tourism taxes, are considered efficient relative to taxing other sectors (Gooroochurn and Sinclair, 2005). TLTs are useful in curbing negative impacts of certain businesses and in improving fairness by recovering service costs from those who benefit from those services (Oakland and Testa, 1996). In Oregon, House Bill 2267 passed in 2003 established a state lodging tax. The revenues generated by the tax fund Oregon Tourism Commission programs. The tax applies to transient lodging providers and transient lodging intermediaries. STRs are specifically called out as transient lodging under the regulations. The state rate is 1.8% as of 2016; local governments can adopt additional lodging tax; the revenues become available for the local governments. Under current regulatory structures, some jurisdictions require that TLTs are collected from STRs while others have not assessed TLTs on STRs.

2.3. Summary

Limited data exist on the impact that short-term rentals have on governments and local economies, hosts and residents, accommodation sector businesses, and the sharing economy. The literature suggests positive and negative impacts will vary across space and time (particularly in regard to housing supply and affordability). Additionally, STRs have and will likely continue to disrupt traditional lodging options but likely will not replace these businesses altogether. Mixed perceptions about how home sharing will affect the sharing economy at large has created a dichotomy around the topic (expected to remain until more research can occur). In short, while there has been some research of large cities in the US and internationally (ECONorthwest, 2016; Gurran and Phibbs, 2017; Wegmann and Jiao, 2017), no research exists on smaller cities. STRs may be of even greater concern to smaller communities which may be more dependent on TLTs, lack staff capacity to address the negative impacts, and have a smaller amount and share of long-term rental housing available. This research seeks to fill that gap

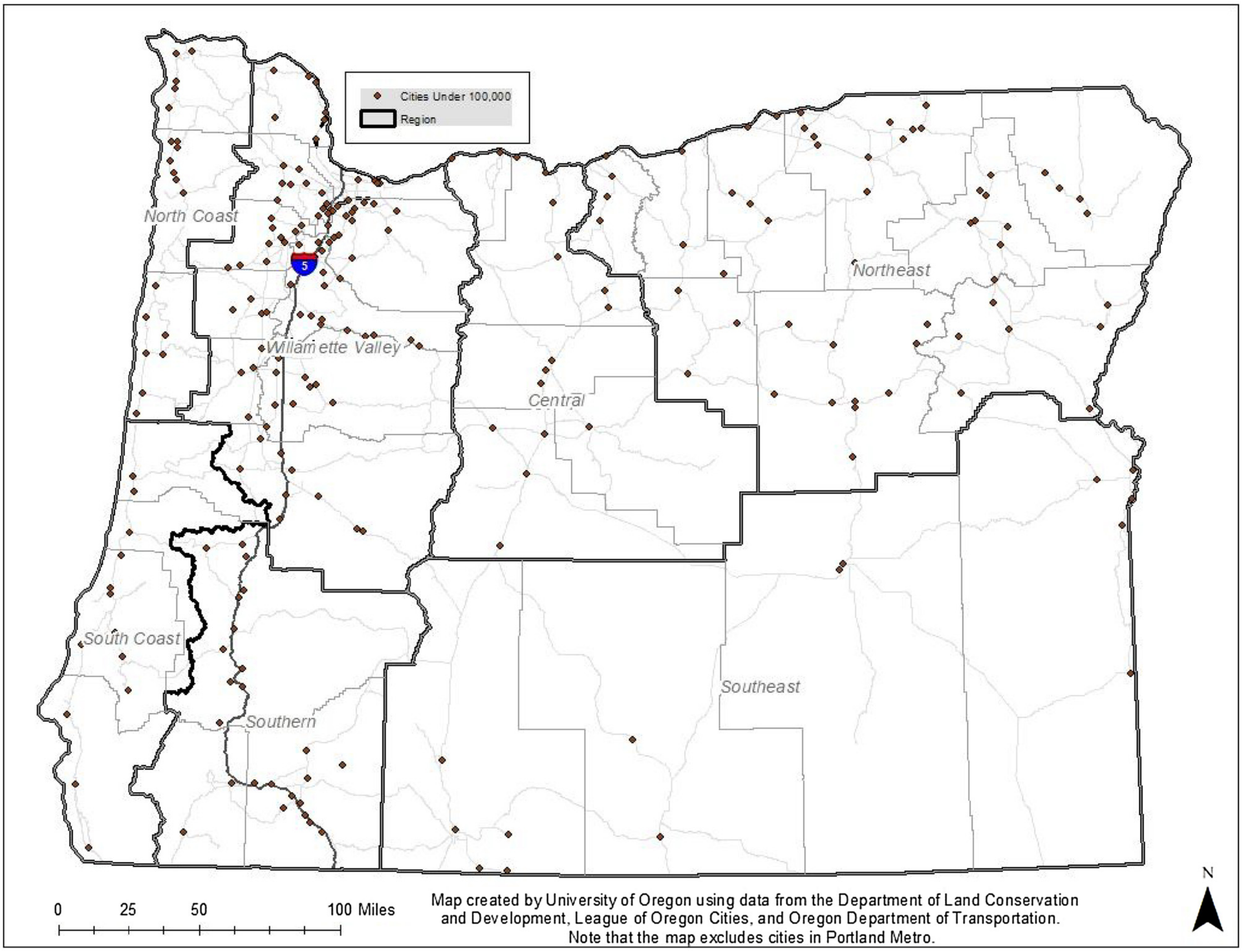


Fig. 1. Location of Cities Under 100,000 in Population and Regions.
Source: University of Oregon Community Service Center, 2017.

by examining the prevalence and impacts on small cities and understand the current regulatory framework for STRs in small cities.

3. Research questions and methodology

The scope of this study was confined to smaller cities in Oregon, a state that has only four cities with over 100,000 people – Portland, Eugene, Salem, and Gresham. For the purpose of this study, we define small cities as cities under 100,000 in population. Because smaller cities are typical in Oregon, we chose to study their unique perspectives and approaches to policy.

To examine how STRs impact small cities, we pursued five primary research questions. Our research questions and the data and methods to address each research question follows:

1) What is the prevalence of short-term rentals in small cities? What are the characteristics of these rentals?
   - Method: Descriptive Analysis
   - Data source: AirDNA, Airbnb
2) What is the revenue potential for short-term rentals in small cities?
   - Method: Descriptive Analysis
   - Data source: Oregon Department of Revenue; AirDNA; Airbnb
3) To what extent do short-term rentals constrain the supply of housing in small cities?
   - Method: Descriptive Analysis
   - Data source: American Community Survey; AirDNA, Airbnb
4) What are planners' perceptions of short-term rentals in small cities?
   - Method: Survey Analysis
   - Data source: Survey administered to Oregon Planning Directors and City Managers
5) What are the current regulations affecting short-term rentals in small cities?
   - Method: Survey Analysis
   - Data source: Survey administered to Oregon Planning Directors and City Managers

To obtain descriptive information to address the first three research questions, we obtained market summary and property performance reports for the state of Oregon from AirDNA – a proprietary web scrubbing service that uses technology to pick up and aggregate Airbnb data and sells access to the data. While Airbnb is not the only STR platform, we only examine Airbnb in this study because we were able to obtain data on Airbnbs from AirDNA and Airbnb. Further, Airbnb is the market leader in the STR industry. We obtained high-level aggregate industry data by city from Airbnb that we used to verify AirDNA data. We gathered data on TLTs from the Oregon Department of Revenue to address our second research question. And we relied on American Community Survey (ACS) data to compare Airbnb data to housing characteristics like unit type and rent to assess how STRs potentially impact housing cost and affordability.

Our fourth and fifth research questions rely on data from a survey of planners and city managers examining perspectives on STRs in smaller cities in Oregon (with populations less than 100,000, thereby excluding responses from Portland, Eugene, Salem, and Gresham). Respondents

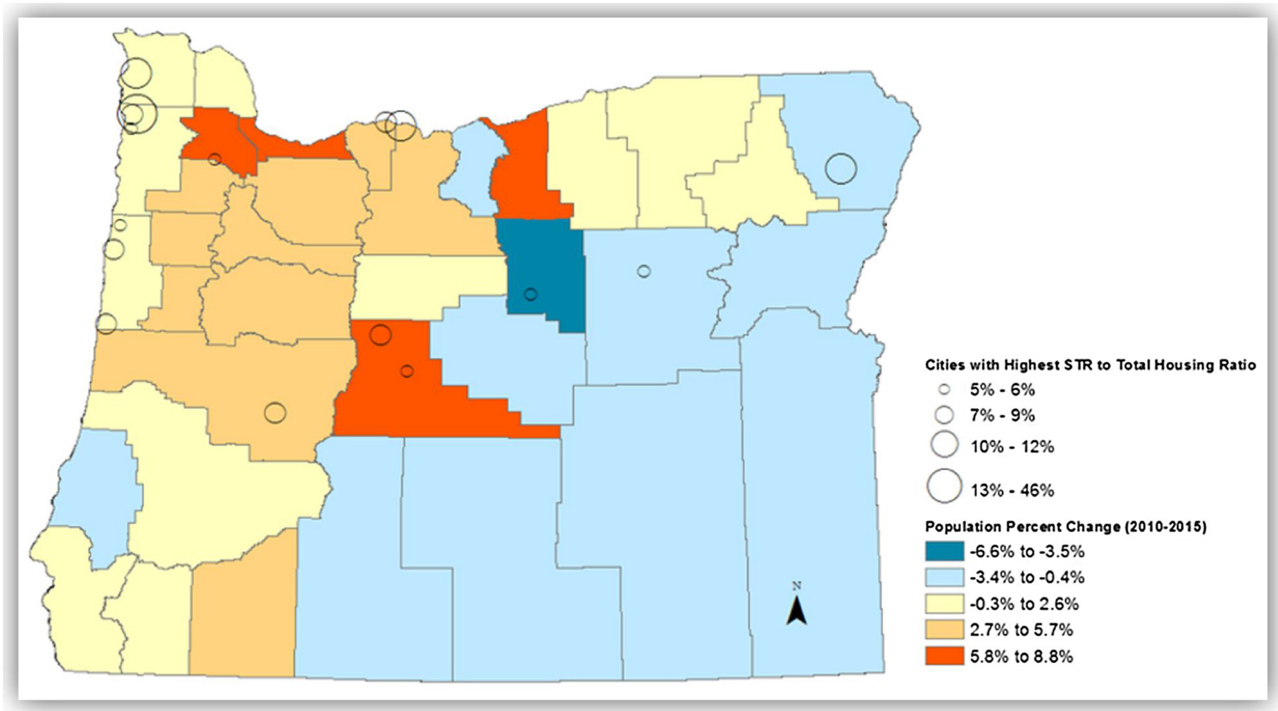


Fig. 2. Cities with Highest Share of STR (of Housing Units) v. Population Change by County between 2001–2015.
Source: AirDNA Property Data, Retrieved 2017. United States Census, American Community Survey, Population Data, 2011-2015. (Excludes Portland, Eugene, Salem, and Gresham).

were recruited by email using the League of Oregon Cities email list of planning directors and city managers. Respondents were initially contacted in March of 2017 and sent two follow-up emails between March and April of 2017. Researchers developed and disseminated a survey to gauge views of STRs in cities of different sizes and regions. The survey focused on how city staff perceive STRs and how cities are currently regulating STRs. Of the 237 cities in the state of Oregon under 100,000 in size, we received a survey response rate of 39% (92 accepted responses). We eliminated multiple responses for a single city (keeping only the first response) and removed responses where the participant represented more than one city in their responses. Fig. 1 shows a map of cities under 100,000 and the regions used in this analysis. The survey instrument is attached in Appendix A.

Ultimately, the researchers sought to answer: what are the impacts and benefits of STRs in small and rural cities? Are jurisdictions in Oregon regulating STR in such a way as to reap their benefits and mitigate impacts? As existing studies tend to skew toward analyzing STRs' impact on large cities and metropolitan areas, the aim was to provide vital and timely information for smaller cities. While examining our research questions, we find that STRs offer innovative solutions to several problems that persist in rural and small cities.

4. Findings of impact and perceptions in Oregon

In this section, we describe the prevalence and characteristics of STRs in small cities and then look at the revenue potential of STRs. Following is information on how STRs impact the supply of housing. We conclude by offering information related to perceptions and regulations.

4.1. Prevalence and characteristics of STRs

To understand how STRs impact small cities, we examine the prevalence of Airbnbs in cities and examine characteristics including: the share of housing units in a city with STRs; the regional distribution of STRs; the neighborhood characteristics of Census tracts with STRs; the type of STRs (entire home; private room in home, or shared room); the property type of STRs; and average revenues generated.

Region	First Quintile	Second Quintile	Third Quintile	Fourth Quintile	Fifth Quintile
Central Oregon	0%	19%	65%	15%	0%
North Coast Oregon	0%	14%	75%	11%	0%
Northeast Oregon	0%	6%	90%	4%	0%
Portland Mero	1%	16%	45%	36%	2%
South Coast Oregon	0%	14%	80%	6%	0%
Southeast Oregon	0%	8%	77%	15%	0%
Southern Oregon	0%	14%	67%	18%	0%
Willamette Valley	1%	21%	51%	27%	0%
Total	0%	17%	65%	18%	0%

Fig. 3. Distribution of Airbnb Properties in Census Tracts by Income Quintile.
Source: AirDNA Property Data, Retrieved 2017. ACS 2011–2015, Median Income by Census Tract and Income Quintile by County. (Excludes Portland, Eugene, Salem, and Gresham).

Cites with less than 100,000 people (from this point further: cities) encompass approximately 8,000 Airbnb STRs; roughly 44% of total Airbnbs in Oregon. Airbnbs are located within every county and in 75% of all cities. The prevalence of Airbnbs is computed by dividing the total number of Airbnbs (including shared rooms, shared homes and whole homes) by the total units in housing stock. This measure shows the percentage of housing units with an Airbnb.

In Oregon, Airbnbs are most prevalent in areas that attract high rates of tourism. The North Coast and Central Oregon are the most prominent regions for STRs. In Central Oregon, Airbnbs account for approximately 4% of the region's total housing stock. In the North Coast, Airbnbs account for 5% of the region's total housing stock. For cities in the remaining six regions, Airbnbs account for approximately 1% of the total housing stock.

In 16 of the 237 cities under 100,000 in population in Oregon, more than 5% of the housing stock has an Airbnb on the property, indicating that short-term rentals are not widespread in most jurisdictions (see Fig. 2). We note that not all STRs are equivalent to one dwelling unit,

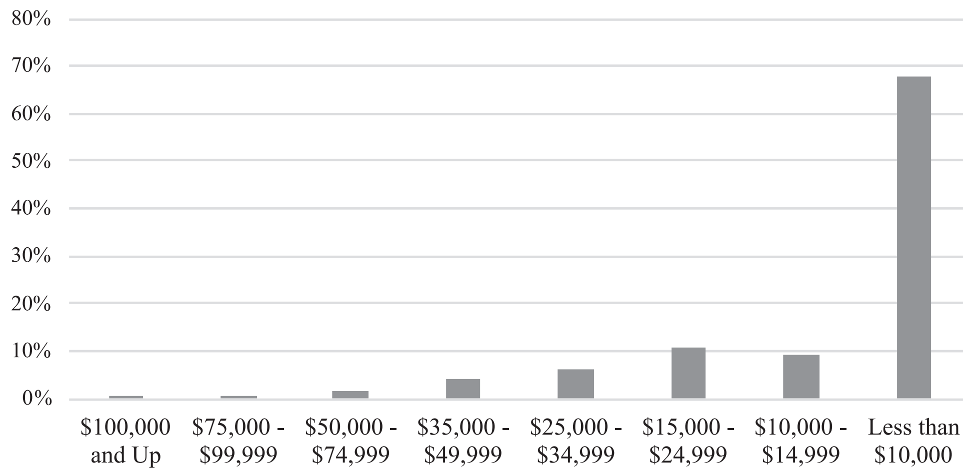


Fig. 4. Percent of Airbnbs by Annual Revenue Earned.
Source: AirDNA, Property Data, Retrieved 2017. (Excludes Portland, Eugene, Salem, and Gresham). Note: Due to rounding, percentages do not add up to 100%; n = 8132.

for instance, some STRs are private rooms in homes and some are sections of land (advertised for tent camping) on properties with excess acreage. Nevertheless, for these 16 jurisdictions (Bend, Depoe Bay, Gaston, Hood River, Joseph, Lincoln City, Long Creek, Manzanita, Mitchell, Mosier, Nehalem, Rockaway Beach, Seaside, Sisters, Westfir, and Yachats), the ratio of Airbnbs to housing units could suggest a potential housing supply constraint, as we discuss further below.

Fig. 2 shows that the cities with the highest share of Airbnbs are not necessarily located in the fastest growing areas of the state. While Central Oregon (Bend and Redmond) have both a high share of Airbnbs and high population, many other Airbnbs are located in stagnant or declining counties. This signals that concentrations of STRs can occur amid various demographic context of rising, stagnant, and declining populations.

The researchers were also interested in where STRs were located relative to household income. Fig. 3 shows that most Airbnbs are found in middle income neighborhoods. In this figure, we classified the location of census tract the Airbnb is in by the county income quantiles to examine the distribution of Airbnbs by income group. Across all regions, Airbnbs are rarely found in the lowest income neighborhoods or the highest income neighborhoods. Approximately two-thirds of Airbnbs are found in the middle income neighborhoods.

Approximately 4,400 hosts operate an Airbnb in small Oregon cities. Most Airbnb hosts (78%) operate a single STR and most hosts (70%) list their unit as their entire home (as opposed to just a shared or private room). This data reveals that it is most likely that these hosts operate a STR out of their primary dwelling unit. However, 970 hosts (or 22%), operate more than one STR.

Hosts that rent out a private/shared room (approximately 30%) appear to be interested in making supplementary income solely off some of their extra space. This is an important distinction about the use of short-term rentals. As of 2015, the average household size for all housing units was approximately 2.5 people while almost 60% of housing units had 3 or more bedrooms.[2] Accordingly, many short-term rental operators are capitalizing on the efficient use of space.

Most STRs are traditional property types—approximately 60% of all listed properties are houses and another 13% are apartments. Other common STR property types also remain more traditional including: condominiums (5%), bed and breakfasts (4%), cabins (3%), and townhouses (2%). While 6% was identified as "other," additional less common STR property types were also identified. Campers/RVs, guesthouses, villas, bungalows, and lofts each represented 1%, respectively (totaling 5%). Boutique hotels, tents, chalets, yurt, tipis, timeshare, hostels, castles, boats, dorms, nature lodges, treehouses, trains, huts, islands, and lighthouse each represented less than half a percentage point, respectively (totaling 7%).

4.2. Revenue potential

Fig. 4 shows that 68% of Airbnbs generate less than $10,000 per year and 32% of Airbnbs are generating more than $10,000 per year. Further, 32% of all Airbnbs are generating less than $600 per year.

Nine of the 15 cities with the highest grossing revenue as well as the highest revenue per property are located in the North Coast region (see Fig. 5).

While Airbnb has gained popularity for putting money in hosts' pockets, the potential for cities to generate fiscal revenue is also meaningful. However, many cities are not taking advantage of this opportunity. Only 20% of surveyed cities impose a transient lodging tax (TLT) on STRs and survey responses range from 1.8% (the City of Sisters) to 10.4% (the City of Bend). Region by region, it is most common for cities in the North Coast (67%), South Coast (44%), and Central Oregon (43%) to collect this tax. This is likely due to the higher prevalence of STRs in these areas, which create greater potential for revenue generation. Accordingly, while any community with STRs would generate added revenue by levying a TLT, areas with a high capacity for tourism stand the best chance for reaping TLT benefits. Smaller cities that cannot attract traditional lodging types (hotels, motels) to their cities may also find new opportunities to generate revenue through STRs and attract tourism.

The state of Oregon imposes a 1.8% TLT on STRs. With STR hosts generating an estimated annual revenue of $82 million, the State should be collecting approximately $1.5 million annually (see Fig. 6). Approximately 67% of U.S. states including the District of Columbia levy one or more state taxes on Airbnbs. The state level rates range from 1.8% to 14.5% and average about 8%.[3] Oregon is on the low end of the spectrum of states imposing TLTs on STRs.

4.3. Influencing the supply of housing

This section considers how short-term rentals may impact the

[2] United States Census. American Community Survey, 2011-2015, Selected Housing Characteristics for Oregon (DP04).

[3] Airbnb. In what areas is occupancy tax collection and remittance by Airbnb available? Retrieved May 5, 2017. https://www.airbnb.com/help/article/653/in-what-areas-is-occupancy-tax-collection-and-remittance-by-airbnb-available.

Cities	Region	Annual Revenue	Annual Revenue per Property (Max)	Annual Revenue per Property (Mean)	Annual Revenue per Property (Std Dev)
Bend	Central Oregon	$32,207,439	$157,773	$14,801	$18,642
Seaside	North Coast	$7,198,080	$198,425	$16,285	$27,235
Lincoln City	North Coast	$4,145,729	$117,250	$12,265	$14,601
Cannon Beach	North Coast	$2,876,320	$203,617	$35,077	$39,131
Hood River	Central Oregon	$2,426,970	$81,215	$7,537	$10,428
Ashland	Southern Oregon	$2,160,243	$59,876	$8,309	$10,923
Rockaway Beach	North Coast	$1,688,036	$98,481	$15,925	$16,170
Depoe Bay	North Coast	$1,650,062	$59,288	$13,866	$16,207
Beaverton	Portland Metro	$1,620,761	$64,717	$4,739	$7,833
Manzanita	North Coast	$1,368,957	$90,051	$16,105	$16,773
Newport	North Coast	$1,322,513	$63,141	$9,380	$11,142
Redmond	Central Oregon	$1,036,179	$42,518	$6,642	$8,796
Tillamook	North Coast	$1,014,970	$69,780	$11,941	$13,862
Yachats	North Coast	$1,000,579	$62,675	$14,714	$11,232
Joseph	Northeast Oregon	$996,192	$64,846	$17,176	$13,523

Fig. 5. Annual Revenue Generated for Highest Revenue Grossing Cities.
Source: AirDNA Property Data, 2017. (Excludes Portland, Eugene, Salem, and Gresham).

Regions	Average Daily Rate per Property	Total Annual Bookings	Revenue (Annual)	State Levy (1.8%) Annual Earnings
Central Oregon	$209	$46,391	$37,539,776	$675,716
North Coast	$206	$38,927	$24,875,499	$447,759
Willamette Valley	$97	$14,026	$5,315,475	$95,679
Portland Metro	$72	$11,172	$4,937,697	$88,879
Southern Oregon	$98	$13,209	$4,886,800	$87,962
South Coast	$132	$5,710	$2,335,541	$42,040
Northeast Oregon	$129	$3,307	$1,738,663	$31,296
Southeast Oregon	$125	$2,977	$1,143,628	$20,585
Total	**$134 (average)**	**$135,719**	**$82,773,079**	**$1,489,916**

Fig. 6. Estimated Annual Revenue Earned by Airbnb Hosts and Associated State Tax Revenue.
Source: Airbnb property level data provided by AirDNA, retrieved 2017. (Excludes Portland, Eugene, Salem, and Gresham).

availability of housing. To examine the potential impacts on supply we study how many days STRs are rented in a year, the type of unit they are (whole home versus private/shared room), the share of housing units with a STR that are an entire home and rented for more than 30 days, and how revenue generated from STRs compares to average rents. Following Edelman and Geradin (2016), we compare the revenue generated from Airbnb rentals to revenue generated from long-term tenants.

Most STRs are listed as an entire home (69%) and 37% are reserved for more than 30 days in a calendar year (see Figs. 7 and 8). It is less likely that these STRs, rented as the entire home and reserved more than 30 days, are on the market as long-term rental housing and it is more likely that these STRs are operated by homeowners with more than one home. Also, it is more likely that STRs, rented out as the entire home and reserved in excess of 91 days, only serve as STRs and are operated more like a commercial hotel than as an opportunity for home sharing.

Interestingly, in regions with higher populations, like the Portland Metro and Willamette Valley, STRs are operated as private rooms slightly more often than as entire homes. This provides some indication of the types of spaces that are available and the ways in which hosts are using STRs.

Cities with more than 5% of the housing stock in STRs may experience impacts on housing supply.[4] Housing supply is possibly compromised in very few cities (defined by total STRs making up 5% or more of total housing stock). Further, when looking at STRs rented as the entire home to total housing stock, we find an even smaller share. Using this formula for addressing local housing supply constraints at a regional level, the North Coast and Central Oregon are again most severely constrained with STRs at approximately 2% of the regions' total housing units. We note that it is difficult to tell whether STRs were rented as vacation rentals before the Airbnb technology platform existed, or whether they are long-term rentals that have been converted to Airbnbs. The number of vacant seasonal units grew by 28% between 2005–2009 and 2012–2016 (Fig. 9). In most regions, the share of units that are classified as vacant or seasonal was less than 5% from 2005 to 2009 (with the exception of Central Oregon and North Coastal Oregon. But, vacant units as seasonal, recreation or occasional occupancy as a percentage of total units grew in all regions. From data available from American Community Survey, we cannot tell whether this growth is

Region	Entire Home	Private Room	Shared Room	Total
Central Oregon	78%	21%	1%	2,905
North Coast Oregon	86%	13%	1%	1,720
Northeast Oregon	64%	34%	1%	233
Portland Metro	41%	56%	3%	1,052
South Coast Oregon	75%	25%	0%	309
Southeast Oregon	79%	20%	1%	170
Southern Oregon	57%	41%	1%	769
Willamette Valley	49%	50%	1%	974
Total	**69%**	**30%**	**1%**	**8,132**

Fig. 7. Airbnbs by Listing Type and Region.
Source: AirDNA, Airbnb property level data, Retrieved 2017. (Excludes Portland, Eugene, Salem, and Gresham).

[4] We use the threshold of 5% because most regions showed seasonal vacancy rates as a share of total housing of less than 5% before Airbnb was launched in 2008 (see Fig. 9).

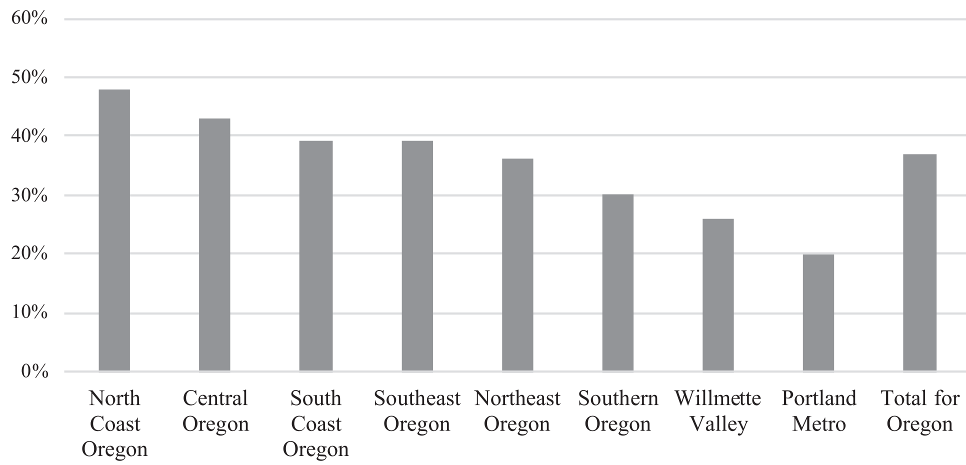


Fig. 8. Percent of Airbnbs by Listed as Entire Home and Rented for 30 Days or More per Year.
Source: AirDNA, Airbnb property level data, Retrieved 2017. (Excludes Portland, Eugene, Salem, and Gresham).

Region	All Vacant Seasonal Units			Share of Vacant Seasonal Units as % of Total Housing Stock		
	# Units (2005-2009)	# Units (2012-2016)	% Change in # of Units (2005-2009 to 2012-2016)	Share of Units (2005-2009)	Share of Units (2012-2016)	Difference in Share (2005-2009 to 2012-2016)
Central Oregon	11,798	15,631	32%	7%	9%	2%
North Coastal Oregon	17,247	19,402	12%	25%	27%	2%
Northeast Oregon	3,285	4,113	25%	5%	6%	1%
Portland Metro	5,582	7,844	41%	1%	1%	0%
South Coastal Oregon	1,620	2,469	52%	4%	6%	2%
Southeast Oregon	2,097	2,921	39%	5%	6%	2%
Southern Oregon	2,049	2,761	35%	2%	2%	0%
Willamette Valley	4,062	5,949	46%	1%	1%	0%
Total	47,740	61,090	28%	3%	4%	1%

Fig. 9. Change of Vacant Units for Seasonal, Recreational, or Occasional Use by Region.
Source: American Community Survey, Vacancy, 2005–2009 and 2012–2016 by county (aggregated to region).

attributed to Airbnb or other factors. But the increase in the share of total units that are seasonal suggests that long-term rental supply is becoming more constrained while population in these regions grow.

We analyzed whether revenue generated from STRs (operated as an entire house or whole unit) exceeds rents of long-term rentals or mortgage costs, focusing on the 10 cities for which Airbnbs are most prevalent in the state. Fig. 10 shows property owners in seven of the 10 cities (Bend, Depoe Bay, Joseph, Lincoln City, Manzanita, Rockaway Beach, and Seaside) can generate more annual revenue from STRs than they can from standard long-term rental units. Therefore, in these cities, there may be motive for property owners to operate STRs rather than renting properties as long-term rentals. It is important to note that the average unit with an STR may differ from the average rental or mortgaged unit in terms of quality and location.

Cities in Oregon	Airbnb		ACS	
	Average Annual Revenue	Average Annual Revenue (Max)	Average Annualized Rent	Average Annualized Mortgage
Ashland	$10,185	$59,876	$12,456	$20,208
Bend	$17,184	$157,773	$12,972	$18,648
Depoe Bay	$14,357	$59,288	$12,264	$18,636
Hood River	$9,572	$81,215	$13,488	$20,016
Joseph	$18,206	$64,836	$7,980	$14,232
Lincoln City	$12,494	$117,250	$10,080	$18,804
Manzanita	$17,208	$90,051	$10,548	$24,432
Rockaway Beach	$16,704	$98,481	$8,316	$14,556
Seaside	$17,886	$198,425	$10,704	$19,356
Sisters	$11,335	$48,000	$12,312	$19,068
Average	**$15,707**	**$198,425**	**$11,112**	**$18,796**

Fig. 10. Indication of Competition between Short-Term Rentals (whole unit) and Long-Term Housing.
Source: AirDNA, Property Data for whole unit rentals, Retrieved 2017. U.S. Census, American Community Survey, 2010 and 2015.

4.4. Perceptions of short term rentals

The survey of city managers and planners asked about perceptions of STRs held by residents, local elected officials, and businesses. Among other things, we asked respondents to discuss the benefits and costs of STRs in their cities. In this section, we summarize perceptions of STRs by survey respondents.

In general, survey respondents indicated that while residents shared mixed perceptions about STRs, local elected officials and businesses within the accommodation sector viewed STRs as less problematic. Respondents who indicated that STRs may be more problematic in their own community (compared to other Oregon cities or comparable cities across the U.S.) tended to agree or strongly agree that STRs impacted the availability of affordable and workforce housing (78% of respondents), long-term rental housing (78% of respondents), and owner-occupied housing (56% of respondents).

Cities in regions with the highest prevalence of STRs do not necessarily believe they have too many STRs. Only 14% of respondents from Central Oregon believed they had too many STRs and no jurisdiction from the North Coast believed this. In the South Coast however, 13% of the cities surveyed believed they had too many STRs.

Respondents indicated that the benefits of STRs include: providing economic development benefits, encouraging tourism spending in new areas, generating increased tax revenue to areas with few traditional lodging types, filling a market gap, and ensuring better maintenance of homes. STRs provide benefits including their ability to provide TLT revenue, to support tourism activities, and to support cities that rely on tourism. For instance, they serve a market need by providing additional lodging options (especially for cities without any traditional accommodation types) and thus, STRs bring in tourists that might not have otherwise visited. Furthermore, they provide income and employment opportunities, allowing homeowners to get extra use out of their properties (thereby making homes more affordable).

Survey respondents indicated that STRs economically weaken cities by impacting resources such as the availability of housing (especially affordable and rental housing) and police and city staff time who deal with complaints from neighbors and business owners. Over half of survey respondents indicated that residents have raised nuisance issues within the last five years. Some of these cited nuisance complaints include: parking concerns (78%), noise concerns (67%), garbage and outdoor clutter concerns (56%), and high occupancy levels (48%). Furthermore, respondents indicated concern over the possibility that hosts could be individuals or companies from out of the state that take their revenue with them. Finally, respondents indicated that STRs tend to be operated seasonally, leading to a fluctuation in the economic impacts.

4.5. Addressing short-term rentals

The survey asked whether cities were currently regulating STRs or considering regulation in the next five years. Thirty-five percent of cities responded that they already have an adopted legal framework to manage STRs. These cities' primary motivations for addressing STRs were to mitigate potential impacts before STRs became a burden, to safeguard becoming overrun by STRs, and to reap benefits of increased TLT revenue. Cities that have yet to address STRs but plan to develop regulations in the next five years indicated the desire to formalize the activity and rules associated with it (legitimize existing situations, develop clear and objective standards, and promote fairness).

Sixty-five percent of surveyed cities have yet to address STRs (or commonly, transient rentals or vacation rentals) through regulation. Of the 35% that have adopted a policy, only 20% impose a TLT (with a mean tax of 7.5%) and only 18% impose fees for a STR license or permit (with a mean fee of $735). See Fig. 11.

Responding cities commonly regulate STRs by relying on concentration caps/limits or occupancy requirements. Restricting STRs to certain zones, adopting guest behavior standards, or making properties subject to review and inspection (making determinations on case-by-case basis) have also been put into place to mitigate nuisance and promote health, safety, and wellbeing.

We asked respondents about whether their current regulations were effective at reaping benefits of STRs while mitigating negative impacts of STRs. Most respondents (60%) find their regulations for STRs, or lack thereof, to be neither effective nor ineffective in managing the economic benefits or negative impacts of short-term rentals. Approximately 21% found their regulations, or lack thereof, to be very or somewhat effective and 18% found them very or somewhat ineffective. It is notable that 76% of those that found their policies/lack of policies to be neither effective or ineffective did not actually have any regulatory framework (see Fig. 12). This can be explained in that many smaller cities in Oregon still do not have many STRs (if any) and thus, do not have many of the same concerns as other cities (e.g. around nuisance issues or housing supply concerns). Noting that STRs are uncharted territory for many cities, it may take time to adopt the appropriate regulatory framework that works best for each community.

In considering how cities are enforcing STRs, ordinances were most commonly enforced by issuance of administrative citations (62%) and fines (58%). In addition, many respondents commented that enforcement was a challenge.

Frequency	Fee Rate	Tax
Mean	$735	7.5%
Median	$550	8.0%
Standard Deviation	$739	2.4%
Range	$2,200	8.6%
Min	$50	1.8%
Max	$250	10.4%

Fig. 11. Frequency for Fee and Tax Rates.
Source: Responding to Short-Term Rentals in Oregon Survey, y-Q20 and y- Q21, 2017.

5. Discussion

As jurisdictions begin to assess the impacts of STRs and understand how different community members perceive STRs, more consider the adoption of policy. Integrating STRs into the formal sector through regulations and enforcement has been cited as an important, often crucial next step.

Using best practices as a guide and planning director/city manager testimony as support, we find that the development of STR policies is useful while extensiveness lies in the hands of each community. Literature and survey responses indicate that a centralized, top down approach to defining, taxing, and regulating STRs from the state level may not be appropriate or the most effective approach to managing STRs. The prevalence and impact of STRs varies across cities and regions, where resort communities face more severe issues than others. Further, cities more severely impacted by STRs still may have a more positive perception of STRs than cities less impacted. Accordingly, coupled with the use of real STR data, cities looking for advice on how to best regulate STRs should initiate a community conversation on the topic. Ideally, this would involve informing community members about the impacts STRs are having in the community and greater region while addressing questions about STRs, and the sharing economy more generally. At minimum, all cities (whether unfazed or not impacted by STRs) should understand the extent to which they are willing to influence and be influenced by STRs and the sharing economy.

Once planners gain a foundational understanding of the community's viewpoint, regulation of the industry can commence. If the community is relatively unfazed or indifferent (potentially stemming from a lack of STRs or harsh impact), it is recommended they construct loose and minimal regulations: define them, tax them, and require registration.

The small cities we surveyed face issues with capacity and staffing to address the negative impacts posed by STRs and to enforce regulations. Small communities stand to benefit from tax revenue and economic impacts of tourism. But, small communities may lack the capacity to mitigate the negative impacts of Airbnbs. After this study was completed, the state passed a bill (HB 2064) that mandates that Airbnb collect TLTs for all cities beginning June 1, 2018. This statewide effort will ensure that individual cities do not have to fight individual battles with Airbnb and ensures that local communities will recoup the TLTs from Airbnbs. TLTs could generate revenue to cover the administrative costs of monitoring and enforcing regulations so that small cities can reap the benefits of STRs while minimizing the negative impacts.

Cities wishing to adopt stronger controls to mitigate certain impacts, may adopt restrictive zoning measures that limit the total number of STRs there are in certain areas, or in the community as a whole. Measures that allow STRs to be a resident's primary dwelling unit may diminish "hotelization" in cities or across an entire region. Capping the total amount of STRs allowed in a particular neighborhood may have a

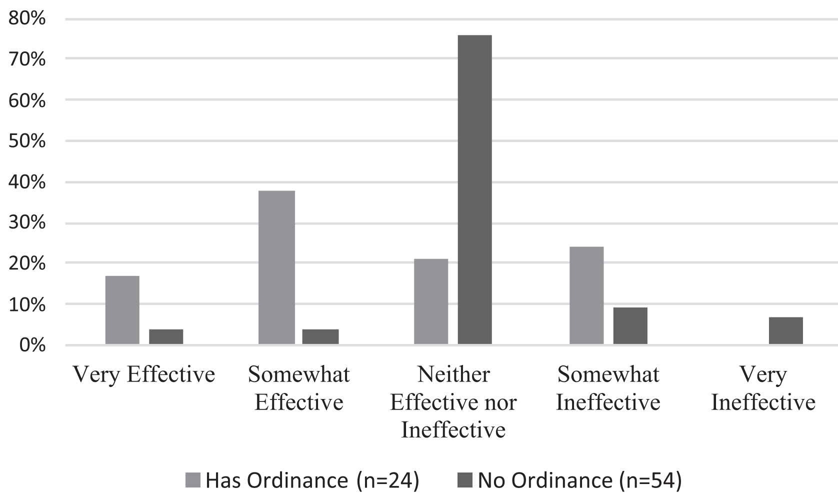


Fig. 12. Perceived Effectiveness of City Efforts to Manage Short-Term Rentals, by Ordinance or Lack of Ordinance.
Note: 65% of responding cities (n = 54) have not adopted an ordinance related to STRs.
Source: Responding to Short-Term Rentals in Oregon Survey, Q25, 2017.

similar effect. Along these lines, some cities have opted to develop a buffer distance between STRs (i.e., one STR may not be within 250 ft. of another). Implementing a clause that revokes a STR permit for properties that receive more than five nuisance complaints in a calendar year can also mitigate similar concerns. Levying a higher TLT may make visitors less inclined to using the service in a particular community.

6. Conclusions

This study examined how STRs are affecting small cities in Oregon. This growing phenomenon has been studied in large cities and metropolitan areas, but the impacts on small cities have not been examined. STRs may be of even greater concern to smaller communities which may be more dependent on TLTs, lack staff capacity, and have a smaller amount and share of long-term rental housing compared to larger cities. Airbnbs are pervasive: all 36 counties and 75% of the 237 cities with populations of under 100,000 have Airbnbs in their cities. Airbnbs constitute over 5% of the housing stock in 16 cities. While hosts generated $82 million in revenue, only 11 cities and four counties charge TLTs, but the state levies a 1.8% tax on all Airbnbs in the state. By imposing TLTs (as now required by HB 2064), cities can generate revenue needed to regulate the some of the negative impacts of STRs. In total, 38% of rentals are whole homes and rented more than 30 days in a year, signaling potential impacts on long-term rental supply, particularly in a few cities with tourist economies and housing affordability issues. Finally, while cities perceive Airbnb to be an issue, only 35% of survey respondents are currently regulating STRs. The regulations imposed vary drastically, even within smaller cities in the same state. Some regulations included requiring permits, imposing TLTs, and limiting the concentration or location of STRs.

The perceived positive and negative impacts of STRs vary across cities. Some cities indicated that STRs provide great benefits in their ability to provide lodging taxes and support tourism. In some cities, they serve a market need by providing additional lodging options (especially for cities without any traditional accommodation types) and thus, they bring in tourists that might not have otherwise visited. In other cities, planners feel that STRs negatively impact the availability of affordable housing, long-term rental housing, and owner-occupied housing. Further, several planners noted nuisance issues including parking, noise, garbage and clutter, and high occupancy levels. For small cities in Oregon, it's clear that STRs have both positive and negative impacts. But cities struggle to effectively regulate STRs – only 35% of cities are regulating STRs and many of the regulating cities (45%) find their regulations are not effective at addressing the issue. For the 65% of cities that are not regulating, 92% of the cities reported that their approach is not effective at addressing the issue. Further, respondents noted that enforcement is a challenge. This is particularly problematic for these smaller cities that lack resources and administrative capacity.

As cities consider regulations, they must consider how to mitigate the negative externalities (protect neighborhoods, preserve needed housing, and maintain affordable rents), all the while using STRs as a solution to some of the challenges local governments face today. We find that the answer lies in the crafting of effective and equitable STR policies.

Potential policy responses are vast. Despite which regulatory framework is implemented, it is important to start with fairness and flexibility in mind. Revisiting existing regulations is important to ensure equitability and to ensure the community is not squandering benefits that STRs and the sharing economy provide. A necessary step for any community is the development of performance metrics to evaluate how their policy strategy works. Evaluation of policies on an ongoing basis should be expected in any scenario of regulation. At minimum, this will offer cities the opportunity to compile much needed data and hard evidence on STRs, which is of critical importance today. At best, this will allow cities to improve their management techniques and/or better respond to community questions regarding the balance between property rights and the right to decent, affordable housing.

As Airbnb and similar platforms continue to grow and shape our built environments and perceptions of housing equity, having a handle on this activity is parallel to having a handle on the impact technology has on our future. Cities should employ purposeful regulations that allow innovative activities to solve problems. Respecting the sharing economy, while paying attention to its influence and adapting appropriately, is key.

Declaration of interest

None.

Acknowledgments

This research received funding support from a University of Oregon Department of Planning, Public Policy and Management Graduate Student Research Award. AirDNA provided data at a discounted price for academic purposes. Airbnb provided data as well. The League of Oregon Cities assisted with survey dissemination.

Appendix A. Survey Instrument

Greetings,

Thank you for participating in the Responding to Short-Term Rentals in Oregon survey! Please note the following:

Short-term rentals can be characterized as housing units rented or leased for less than 30 days; however, they are not defined by state or federal authorities. If you feel like you are not the best person in your community to answer questions about short-term rentals, please forward this survey to the appropriate City staff person.

The purpose of this survey is to better understand existing perceptions of and perspectives on short-term rentals in Oregon. We also want to gauge existing policy frameworks. Completing this survey should take you approximately 15–20 min. There are 32 questions.

By continuing you consent to this survey.

First, we would like to understand how residents in your community generally perceive short-term rentals.

Q1: In the last five years, have residents raised the issue of short-term rentals?

- ○ Yes
- ○ No
- ○ I Don't Know

Q2: What issues have they raised? (check all that apply)

- ☐ Parking Concerns
- ☐ Excessive Traffic
- ☐ Noise Concerns
- ☐ High Occupancy Levels
- ☐ Garbage or Outdoor Clutter Concerns
- ☐ Other: ______________________________

Q3: How have residents raised the issue of short-term rentals? (check all that apply)

- ☐ They have come to city council or commission meetings.
- ☐ They have called in to make verbal testimony or sent in written testimony.
- ☐ They have written nuisance complaints.
- ☐ They have provided written statement (not nuisance).
- ☐ They have raised the issue to city staff.
- ☐ They have raised the issue to the police.
- ☐ Other: ______________________________

We would also like to understand YOUR perspective on short-term rentals and YOUR understanding of how various actors generally perceive short-term rentals in your community.

Q4: From your perspective, in what ways, if any, do short-term rentals provide **economic benefit** to your community? [open-ended]

Q5: From your perspective, in what ways, if any, do short-term rentals **economically impact (or weaken)** your community? [open-ended]

Q7: From your perspective, please indicate your level of agreement or disagreement with the following statements.

	Strongly Agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree	I Don't Know
Our residents perceive short-term rentals to be a problem.	○	○	○	○	○	○
Our local elected officials perceive short-term rentals to be a problem.	○	○	○	○	○	○
Businesses within the accommodation sector perceive short-term rentals to be a problem.	○	○	○	○	○	○
Our issues with short-term rentals are more challenging than other Oregon communities.	○	○	○	○	○	○
Our issues with short-term rentals are more challenging than other comparable communities across the United States.	○	○	○	○	○	○

Q8: From your perspective, please indicate your level of agreement or disagreement with the following statements.

	Strongly Agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree	I Don't Know
Our community has too many short-term rentals.	○	○	○	○	○	○
Our community has a shortage of hotel, motel, and bed and breakfast-type accommodations.	○	○	○	○	○	○
Our community has a shortage of hotel, motel, and bed and breakfast-type accommodations **sometimes** (during certain seasons or events, etc.).	○	○	○	○	○	○

Q9: From your perspective, please indicate your level of agreement or disagreement with the following statements.

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree	I Don't Know
In our community, short-term rentals fill a gap in the market.	○	○	○	○	○	○
In our community, short-term rentals increase tourism.	○	○	○	○	○	○
In our community, short-term rentals create nuisances.	○	○	○	○	○	○
In our community, short-term rentals evade policies and regulations.	○	○	○	○	○	○
In our community, short-term rentals impact the availability of **long-term rental housing**.	○	○	○	○	○	○
In our community, short-term rentals impact the availability of **owner-occupied** housing.	○	○	○	○	○	○
In our community, short-term rentals impact the availability of **affordable and workforce housing**.	○	○	○	○	○	○

We would also like to ask you some questions about policy and regulations.

Q10: Does your community incentivize short-term rentals?

○ Yes

○ No

○ I Don't Know

Q11: In what ways does your community incentivize short-term rentals? [open-ended]

Q12: Please indicate how permissive your community's land use ordinances are to short-term rentals.

- ○ Very permissive. Short-term rentals are allowed in all residentially-zoned areas
- ○ Somewhat permissive. Short-term rentals are allowed in some residentially-zoned areas.
- ○ Not permissive. Short-term rentals are banned outright in all residentially-zoned areas.
- ○ Other: ______________________

Q13: Does your community have an adopted, legal framework (e.g. ordinance, set of rules, procedural steps) for regulating short-term rentals?

- ○ Yes
- ○ No

If Yes – to Q13:

Q14: How does your community officially define short term rentals? [open-ended]

Q15: When did your community create its policy for regulating short-term rentals? (enter year or date) [open-ended]

Q16: If possible, please provide a web-link to your policy's location. [open-ended]

Q17: Briefly, why did your community choose the particular policy or policies it did to regulate short-term rentals? [open-ended]

Q18: Does your community's policy distinguish between different types of short-term rentals? (e.g. short-term rentals in apartments vs. single-family dwellings; short-term rentals that are a single room vs. the whole home; short-term rentals that are within primary dwellings vs. secondary dwellings, etc.).

- ○ Yes
- ○ No
- ○ I Don't Know

Q19: Does your community require short-term rental operators to get a license or permit? If yes, how much do they cost?

- ○ Yes: ______________________
- ○ No

Q20: The State of Oregon requires short-term rental operators to pay an occupancy tax of 1.8%. Does your community place a city-specific tax obligation (e.g. transient room tax) on short-term rental operators? If yes, please describe what that obligation is.

- ○ Yes: ______________________
- ○ No

Q21: What enforcement strategies does your City use for short-term rentals? (check all that apply)

- ☐ None
- ☐ Issuance of administrative citation
- ☐ Fine
- ☐ Court Mandate
- ☐ Other(s): ______________________

If no to Q13:

Q14: Has your community ever considered adopting a legal framework (e.g. ordinance, set of rules, procedural steps) to regulate short-term rentals?

- ○ Yes, in the past (but decided against pursuing)
- ○ Yes, currently (but not yet adopted)
- ○ No
- ○ I Don't Know

Q15: What policy options have you considered? (check all that apply)

- ☐ Application and collection of an occupancy or trade tax
- ☐ Annual registration
- ☐ Permit requirement
- ☐ Business license requirement
- ☐ Time period restriction
- ☐ Guest limit restriction
- ☐ Banning in some residential zones
- ☐ Banning in all residential zones
- ☐ Adherence to dispersion requirements
- ☐ Adherence to quite hours
- ☐ Requirement to notify neighbors
- ☐ Operated by principle owner only
- ☐ Permitted in owner-occupied buildings only
- ☐ Requirement of liability insurance
- ☐ Requirement of signed declaration that unit is up to code
- ☐ Other: ____

Q16: What are the reason(s) your community chose/chooses not to regulate short-term rentals? [open-ended]

Q17: How does your community unofficially define short-term rentals? [open-ended

Q18: From your perspective, what is preventing your community from adopting a policy framework for short-term rentals? (If nothing, write N/A) [open-ended]

Q19: From your perspective, what is encouraging your community to adopt a policy framework for short-term rentals? (If nothing, write N/A) [open-ended]

Q20 (N) Q20: From your perspective, do you perceive your community has a need to develop policies regulating short-term rentals?

- Yes
- No
- I Don't Know

Q21: Does your community expect to develop or adopt short-term rental policies in the next five years?

- Yes
- No
- I Don't Know

Q22: What is your community's motivation for potentially developing or adopting policies in the next five years? [open-ended]

Q23: If residents and elected officials do not bring the conversation about short-term rentals up, would your community still consider putting policies in place to address them?

- Yes
- No
- I Don't Know

Q24: What resources or tools, if any, would be helpful for starting or completing the process of developing policies for short-term rentals? [open-ended]

Q25: Do you think your community's policies for short-term rentals, or lack thereof, have been effective or ineffective in managing the economic benefits or negative impacts of short-term rentals?

- Very effective
- Somewhat effective
- Neither effective nor ineffective
- Somewhat ineffective
- Very ineffective

Q26: Is there anything else you would like to comment on about the topic of short-term rentals? [open-ended]

Before you go, we would like to know a little bit about you.

Q27: What city do you work for?

Q28: What is your role at the City?

- City Manager
- Planning Director
- Staff Planner
- City Administrator, Recorder, or Clerk
- Other: ____________________

Q29: If you would like to receive a copy of the final report, enter your email address below (this will be kept anonymous).

____

Q30: Has your community gathered any information on short-term rentals (generally or specific to your community)?

- Yes
- No

Q31: What kind of information have you gathered? [open-ended]

Q32: Are you willing to be interviewed or contacted if we have a question about any of the responses you have provided? If so, please enter an email address below.

References

Bernard, T.S., 2017. A down payment with a catch: you must be an airbnb host. The New York Times, Mortgages. Retrieved December 6, 2017 from. https://www.nytimes.com/2017/09/18/your-money/mortgages/loftium-airbnb-down-payment.html.

Binzer, U., 2017. What to do about airbnb. Planning 83 (2), 44.

Daunoriene, A., Draksaite, A., Snieska, V., Valodkiene, G., 2015. Evaluating sustainability of sharing economy business models. 20th International Scientific Conference Economics and Management Procedia – Social and Behavioral Sciences Vol. 213, 836–841.

ECONorthwest, 2016. Housing Affordability Impacts of Homeaway in Seattle. July. ECONorthwest., Seattle, WA.

Edelman, B.G., Geradin, D., 2016. Efficiencies and regulatory shortcuts: how should we regulate companies like Airbnb and Uber? Stanf. Technol. Law Rev. 19 (2), 293–328.

Ellen, I.G., 2015. Housing low-income households: lessons from the sharing economy? Hous. Policy Debate 25 (4), 783–784.

Fang, B., Ye, Q., Law, R., 2016. Effect of sharing economy on tourism industry employment. Ann. Tour. Res. 57, 264–267.

Goodman, J., 2016. Could you BnB my neighbor? A planner's take on the sharing economy. February. Planning 29–33.

Gooroochurn, N., Sinclair, M.T., 2005. Economics of tourism taxation: evidence from Mauritius. Ann. Tour. Res. 32 (2), 478–498.

Gottlieb, C., 2013. Residential short-term rentals: should local governments regulate the' industry'? Plan. Environ. Law 2, 4–9.

Gregory, A., Halff, G., 2017. Understanding public relations in the 'sharing economy. Public Relat. Rev. 43, 4–13.

Gurran, N., Phibbs, P., 2017. When tourists move in: how should urban planners respond to Airbnb? J. Am. Plan. Assoc. 83 (1), 80–92. https://doi.org/10.1080/01933464.2016.1249011.

Guttentag, D., 2013. Airbnb: disruptive innovation and the rise of an informal tourism accommodation sector. Curr. Issues Tour. 18 (12), 1192–1217. https://doi.org/10.1080/13683500.2013.827159.

Hood River County Community Development. (2016, April 13). Short Term Rental ("STR") Background Information. Retrieved October 15, 2016, from http://hrccd.co.hood-river.or.us/images/uploads/documents/+_Staff_Memo_Issues_Exhibits_4.13.16.pdf.

Interian, J., 2016. Up in the air: harmonizing the sharing economy through AirBnB regulations. Boston College Int. Comp. Law Rev. 39 (1), 129–161.

Jefferson-Jones, J., 2015. Can short term rental arrangements increase home values? A case for Airbnb and other home sharing arrangements. Cornell Real Estate Review 13 (5), 12–19.

Katz, V., 2015. Regulating the sharing economy. Berkeley Technol. Law J. 30 (4), 1067–1126.

Kindel, N., Butler, K., Cramer, P., Descrocher, B., Massey Jr., L., Young, M., Zucker, D., 2016. Short Term Rental Study, City of New Orleans. Retrieved December 6, 2017 from:. City of New Orleans, New Orleans, LA. https://www.nola.gov/city-planning/major-studies-and-projects/short-term-rental-study/final-short-term-rental-study/.

Martin, C.J., 2016. The sharing economy: a pathway to sustainability or a nightmarish form of neoliberal capitalism? Ecol. Econ. 121, 149–159.

Oakland, W.H., Testa, W.A., 1996. State-local business taxation and the benefits principle. Econ. Perspect. 20, 2–19.

Rees Consulting, Inc, 2016. Short-Term Vacation Home Rentals Impacts on Workforce Housing in Breckenridge. June. Rees Consulting, Inc., N. Montrose, CO.

Sheppard, S., Udell, A., 2016. Do Airbnb Properties Affect House Prices? Retrieved December 6, 2017 from:. Williams College Department of Economics, Williamstown, MA. https://econpapers.repec.org/paper/wilwileco/2016-03.htm.

Sullivan, E., 2017. Regulating Short-Term Rentals, Legal Lessons. American Planning Association, Chicago, IL.

Sustainable Economies Law Center, 2016. Regulating Short-Term Rentals: A Guidebook for Equitable Policy. Sustainable Economies Law Center, Oakland, CA.

TXP, Inc, 2014a. The Local Economic Impact of Participating Short Term Rentals in Los Angeles. Retrieved December 6, 2017 from:. TXP, Inc., Austin, TX. http://stradvocacy.org/wp-content/uploads/2016/01/LosAngeles-STR-Report-Final-v2-100214.pdf.

TXP, Inc, 2014b. The Local Economic Impact of Participating Short Term Rentals in Monterey County. Retrieved December 6, 2017 from:. . http://stradvocacy.org/wp-content/uploads/2016/01/Monterey-STR-Report-Final-103114.pdf.

TXP, Inc, 2015. The Local Economic Impact of Participating Short Term Rentals in Santa Barbara, CA. Retrieved December 6, 2017 from:. http://www.strsantabarbara.org/wordpress/wp-content/uploads/2016/02/STR_EIR_021716.pdf.

Wallace, N., 2016. Where Do Airbnb Hosts Make the Most Money? SmartAsset. Retrieved December 2, 2017 from:. https://smartasset.com/mortgage/where-do-airbnb-hosts-make-the-most-money.

Wegmann, J., Jiao, J., 2017. Taming Airbnb: toward guiding principles for local regulation of urban vacation rentals based on empirical results from five US cities. Land Use Policy 69, 494–501.