THE FRONTIER NEXT DOOR: HOW SHORT-TERM RENTALS AFFECT HOUSING IN WESTERN MOUNTAIN TOWNS

By Brendan O'Brien

A Thesis Submitted in Partial Fulfillment of the Requirements

for the Degree of Master of Science in

Applied Geospatial Sciences

Northern Arizona University

April 2021

Approved:

Brian Petersen, Ph.D., Chair

Jessi Quizar, Ph.D.

Jessica Barnes, Ph.D.

ABSTRACT

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BRENDAN O'BRIEN

Short-term rental (STR) platforms like Airbnb increasingly offer entire homes for most of the year. Mounting evidence in large U.S. cities shows that this places them in competition with long-term housing options. To examine the impact of STRs on smaller, tourism-driven cities, this research uses Flagstaff (Arizona), Bozeman (Montana), and St. George (Utah) as case studies.

This research utilizes a political ecology theoretical framework to examine these three cities as part of the "New West" economy, a trend in which municipalities in the 11 contiguous western states protect natural amenities to grow their economies. Through extensive interviews with officials in each city, this research shows that STRs have seen limited restrictions despite widespread acknowledgement that they have exerted significant pressure on local housing markets.

Although digital STR platforms are relatively new, this research argues that STRs should be understood as part of a long-standing frontier imaginary whereby blank spaces are created for outsiders willing and able to pay more, in this case tourists and second homeowners. This research traces five distinct frontiers throughout U.S. history which opened previously settled places to outside wealth, identifying STRs as part of the current "financialization of home."

Building on proposals from interviewees and strategies of other cities, this research closes by arguing for a change in attitudes and policies which ensure locals are benefiting from, not competing with, outside visitation.

Acknowledgements

In completing this thesis, I'm grateful to far too many people to name here, but I will name a few. First, I'd like to thank some of the many past teachers and professors who instilled the research and writing skills I relied on in getting to graduate school and undertaking this endeavor, especially Mrs. Wahl, Mrs. Tompkins, Dr. Breault, Dr. Palmer, Dr. Hurst, Dr. Regan, Dr. Barron, and Dr. Benevento. Spanning so many years and so many areas of study, I don't think I could ever articulate just how large of an impact many of you had. I've also been lucky to have some very influential professors in my two years at Northern Arizona University, especially Dr. Kerry Grimm and Dr. Diana Stuart. I sincerely appreciate the passion you brought to your classes and your emphasis on conducting meaningful and rigorous social science research.

I've benefited greatly from the expertise, insights, and patience of my committee, which consisted of Dr. Jessica Barnes, Dr. Jessi Quizar, and my advisor Dr. Brian Petersen. I've learned an incredible amount from classes and conversations with each of you, particularly as it relates to navigating uneven economic landscapes, the long tendrils of history, and the endless interplay of power relations, respectively. You all served as guides for keeping my research goals within reach while also striving to address major societal issues. I know I did not make it easy to find that balance. Special thanks to Dr. Petersen for our many conversations—sometimes debates—on the thesis process and how best to meld the theoretical and practical.

To the many interviewees and others who participated informally in this research, thank you so much for giving up your time and offering up personal and professional insights. This thesis is better for your involvement. I'm so thankful to all my friends and family who served as such strong support during this trying two years. To my immediate family—Dad, Mom, Kat, Bridget, Steve, Mackenzie, Kevin, and Tim—and many friends from afar—Kopat, Jared, and others—, I really appreciate all your support throughout the last two years and for attending my defense remotely. Special thanks to Mom and Kevin in particular for spending countless hours reading and editing my thesis. Some of you probably heard more about short-term rentals and housing than you ever wanted to, but please know it means more than I can say.

Last, but definitely not least, I want to say thank you to the friends who have endured many of the same struggles as we've navigated our way through a master's program in a pandemic, especially to Patrick, Weldon, Erica, Will, Paul, Caleb, Jillian, Ethan, Taylor, Amy, Sarah, Katie, Cara, and many others beyond graduate school including Rosie, Mark, Diane, Corina, Indrakshi, Anna, and Jess. I could not have made it to this point without each of you.

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affordable housing, frontier, gentrification, public lands, short-term rental (STR), West

affordable housing – Housing which costs 30% or less of household income (HUD, 2020).

frontier – A blank space amidst or alongside an occupied one, oftentimes producing or resulting from uneven regulation.

gentrification (as defined for this research)- The government- and capital-driven process by which 1) a neighborhood is made "blank" 2) to create space for wealth, to the exclusion of residents of lower perceived economic value.

public lands – Land owned and maintained by the federal government and accessible, by law, to all people within the United States (Note: "Public" land in the United States can be owned and operated by the municipal, district, country, and state governments as well. This research will focus exclusively on federal land for the sake of its national tax base and access.).

short-term rental (STR) – A housing unit rented for less than 30 days.

West – For the purposes of this research, the West and Western States are used to refer to the 11 western-most states in the continental United States (WA, OR, CA, NV, ID, UT, AZ, NM, CO, WY, and MT).

To all the neighbors I’ve had throughout my life, especially Jim Dexter (1930-2021), who taught me that a “home” is more than brick and mortar.

1. Introduction

In the fall of 2007, two roommates seeking to afford rent in San Francisco “thought of a way to make a few bucks” (Gebbia cited in Aydin, 2019) by renting out a room in their apartment during a major design conference. When the idea worked, the roommates started wondering if they’d stumbled onto something bigger. Relying upon their own design background and a publicly visible mutual ratings systems, the two created a website which allowed “hosts” to rent out space to “guests.” After initial failures to attract investors, the site soon took off. By 2011, the numbers spoke for themselves: Airbnb, deriving its name from the air mattresses used by the first visitors, was present in 89 countries and had facilitated more than a million stays (Aydin, 2019).

The founders had timing on their side. The 2008 housing and stock market crash would result in the worst economic recession since the Great Depression. In its wake, guests were willing to forgo professional cleaning, hotel brand accountability, and the security of private rooms for the sake of cheaper lodging. With 8.8 million jobs and $19.2 trillion in U.S. household wealth lost between 2007 and 2009 (U.S. Treasury, 2012), hosts were willing to welcome strangers into their homes as a supplement or alternative to traditional income.

Smartphones were just becoming commonplace among U.S. adults (Pew, 2020), opening a space for digital platforms to quickly supplant better-known commercial brands. Short-term rental (STR) sites like Airbnb went viral. Their simplicity—the user-friendly website, the digital transaction, the ratings system—gave STR platforms the label of “disruptive innovation[s]” (Guttentag, 2015, 39), new companies or technologies which challenged more established ones in a given industry. Initially, this disruption was expected to be to hotels. But as individual became entrepreneur, traveler became critic, and empty space became financial windfall, the extent of the “disruption” posed by STRs has far exceeded initial expectation. The present study aligns with past research finding that the greatest disruption might not have been to the survival of hotels but rather to the affordability of residential homes (Garcia-López et al, 2019; Wachsmuth and Weisler, 2018; Lee, 2016).

The sudden prevalence of STRs, although emerging from the uncertainty of the Great Recession, built upon a long tradition of travelers trusting strangers as hosts and hosts trusting strangers as guests. Hospitality toward outsiders has been a core tenet of major religions, with teachings like, “The foreigner residing among you must be treated as your native-born” (Leviticus, n.d., 19:34). It’s likely the informal sharing of homes has existed as long as humans have walked the earth. The internet, however, formalized and rapidly expanded this potential in order to provide cheaper lodging for the burgeoning tourism industry. In 2004, it was given an official name and website in the United States: Couchsurfing (Couchsurfing International, 2017). Four years later, Airbnb officially launched. Though both were understood to operate within the “sharing economy,” the scale and commercialization of the latter made it clear that something had radically shifted in the perception of staying with or hosting a stranger (Jung et al, 2016, 2857; Molz, 2014).

That shift was money. Whereas Couchsurfing emphasizes social connections and explicitly forbids monetary payment, Airbnb facilitates payment from guest to host and maintains a portion of each transaction (Klein et al, 2017, 2). In the wake of The Great Recession, a report by the UN Special Rapporteur on Adequate Housing articulated that the spate of foreclosures and evictions made clear that housing was a commodity in the United States, not a right (Farha, L., 2017, 3). With the growth of Airbnb, the use value of home as a place of refuge or connection was subsumed by the exchange value. What a place was worth on the market was the only metric that mattered (Marx, 1867, 130).

This is a trend, part of what Manuel Aalbers (2008) called the “financialization of home.” The same 2017 UN report placed the value of global real estate at $217 trillion, 60% of all global assets, with residential housing making up the vast majority. For this reason, she identifies housing “at the centre of an historic structural transformation in global investment” (Farha, 2017). At the same time, “Tourism around the world has been growing fast with total visitor spending now in excess of $7 trillion USD and 11% of global GDP” (Adams, 2018). STRs lie at the fusion of these two trends.

Dozens of other large STR platforms exist today—from Vacasa to FlipKey to VRBO—, but none come close to Airbnb. In fact, estimated at $31 billion dollars in 2019, it is the most profitable hospitality company in the world, all without owning a single property (Aydin, 2019). But in the process, Airbnb seems to have broken one of the few initial rules articulated by its founders: that ‘“rooms can’t be a commodity, which excludes most hotels”’ (Chesky cited in Botsman and Rogers, 2010, xi). As traditional hotels and booking sites have entered the STR business, with Marriott beginning to offer “Homes and Villas” in 2019 and Expedia operating what is now VRBO since 2015, Airbnb purchased the discounted room site HotelTonight in 2019. Once understood as outliers, entire-home STRs have now become the norm, frequently available for more than half the year (AirDNA, 2021; Murray and Slee, 2016).

But while the market has blurred the line between homes and hotels, regulations have not kept pace (Sadowski, 2020; Bivens, 2019; Wachsmuth et al, 2018). Large cities from New York (Greenberg, 2018) to Barcelona (Bennett, 2016) to San Francisco (Lawler, 2014), the site of Airbnb’s founding and headquarters, have begun to fight back, with many entering protracted legal battles with STRs over the platforms' perceived impact on housing affordability. Meanwhile, many smaller cities with large STR populations have escaped similar robust study or major regulations despite being more vulnerable to changes in local housing stock.

This study seeks to address this knowledge gap by focusing on the smaller cities of Bozeman (Montana), St. George (Utah), and Flagstaff (Arizona). Each is situated along major highways in an amenity-rich, tourism-heavy locale. These factors have resulted in high numbers of STRs, with per capita rates which dwarf those of the largest cities (AirDNA, 2021). As recent years have seen the three cities' populations (Census, 2019) and tourism numbers (Bozeman Chamber of Commerce, 2018; NAU College of Business, "Visitor profile," 2018; Leaver, 2020) continue to grow, Airbnb's slogan—"helping anyone belong anywhere"—and the ideology behind it merit further attention. Namely, have STRs allowed tourists to "belong" in these spaces at the expense of locals?

Bozeman

Lying within the expansive Gallatin Valley of Montana, Bozeman boasts a population of 49,831 (Census, 2019). Interstate 90, traversing the northern part of the United States between Seattle, Washington, and Boston, Massachusetts, passes through, making Bozeman one of the last major towns before passing west over the Continental Divide. With summers bringing mild temperatures and winters bringing heavy snowfall, it has become a major tourism and seasonal residency destination. Outdoor recreation is particularly important to Bozeman, with everything from fishing to mountain biking to skiing and snowboarding accessible not far beyond city limits and the North Entrance to Yellowstone National Park just 80 miles south.

Like St. George and Flagstaff, Bozeman has seen rapid growth in recent years. Much of this growth has been driven by the technology sector, second homeownership, and rising Montana State University (MSU) enrollment. The university alone has gone from 12,764 students in 2009 to 16,902 in 2018, a more than 32% increase (Office of Planning and Analysis, 2018). All combined, the amount and type of housing built has failed to prevent skyrocketing housing costs, with vacancy rates routinely between one and three percent (Sullivan and Walker, 2019, 2). Citing 2017 American Community Survey data, a 2019 Housing Needs Assessment identified 55% of Bozeman residents renting and 24% of those owning as housing cost-burdened, which the Department of Housing and Urban Development (HUD) defines as spending more than 30% of income on housing (Sullivan and Walker, 2019, 73).

In this context, STRs are one more factor putting pressure on local housing affordability. According to AirDNA, one of the most prominent vacation rental management sites spawned by the proliferation of STRs, Bozeman had approximately 359 distinct properties listed on Airbnb or VRBO as of February 3, 2021. While more detailed breakdowns do not tease out those listed on both STR platforms, the 88% listed as entire home rentals and 48% listed as available for at least half the year signal major trends. Of the three cities, Bozeman has by far the most rigorous, public-informed STR regulations.

St. George

St. George is at the heart of Southern Utah's red rock country and just off I-15, the primary north-south highway connecting the Canadian border with Salt Lake City (Utah), Las Vegas (Nevada), and Los Angeles. With its population ballooning to 89,587 people, St. George is experiencing the most rapid growth of the three case studies. Forty miles from Zion National

Park, its year-round warm weather have made it a popular place for retirees and second homeowners for quite a while. This has expanded in recent years along with education and health services as well as professional and business services. Tourism-based service industries remain large parts of the economy (Office of Policy Development and Research, 2018, 5).

Similar to Bozeman, St. George's growth has been mirrored by general county growth. And likewise, St. George housing has failed to keep pace. As of 2019, roughly one in four homeowners and one in two renters was considered housing cost-burdened (American Community Survey, 2019). While the city has made efforts to build housing and identify different options to increase affordability, both the population and housing prices are expected to continue rising (Louis, 2019).

All this is to say that STRs present a further challenge. St. George initially had major restrictions in place but has softened its policy in recent years. A large part of this is due to a 2016 state law limiting enforcement of local policies (HB 253, 2017). In the wake of this law, 516 distinct STRs can be identified on the main STR sites (AirDNA, 2/3/2021). Once again, further statistics are not calculated to remove the 37% which are listed on both sites, but 96% of the 819 total listings are listed as entire home rentals, with 57% of these 819 available at least 180+ days.

Flagstaff

Situated at the foot of the San Francisco Peaks, including the highest point in Arizona, Flagstaff is home to a population of 75,038 people (Census, 2019). The city lies along I-40, which spans from Los Angeles, California to Wilmington, North Carolina, and is just a two-hour drive north of Phoenix along I-17. At an elevation of 7,000 feet, Flagstaff consistently averages temperatures 25-30 degrees below those experienced in Phoenix. These factors, combined with its proximity to high-visitation public lands like Grand Canyon National Park approximately 90 miles further north, have made tourism and seasonal housing highly sought after.

In addition to a bustling tourism industry and the growth of second homes, Flagstaff has recently paralleled Bozeman in the growth of its local university. Northern Arizona University's (NAU) Flagstaff campus grew from 14,766 in fall of 2008 to 23,140 in the fall of 2018, a nearly 57% jump (Office of Institutional Research and Analysis, 2019). All three cities have shown an increase in new residents able to telecommute, or work remotely, and this has been a major, although perhaps difficult to measure, factor in Flagstaff's growth. These factors translate collectively to minimal vacancy and high housing costs.

While state action has limited St. George's ability to regulate STRs, Flagstaff's has been almost entirely restricted (Rau, 2016). The two exceptions to this are its partial ability to respond to complaints on nuisance properties and the regulatory rights of homeowners' associations (HOAs). This results in the city's current total of 1,068 different STRs. Allowing for the fact that the cumulative total of 1,463 does not factor in those listed on both Airbnb and VRBO, 91% are entire-home rentals and 52% are available at least 180 days of the year (AirDNA, 2/3/2021). With these operating alongside American Community Survey (2019) data which identifies 45% of all Flagstaff households as housing cost-burdened, the city recently declared a "Housing Emergency" (SignalsAZ Staff, 2020).

The "New West"

This research uses these tourism-dependent cities as case studies to investigate how the sudden prevalence of STRs has affected housing access in the Western United States. Operating within what has been referred to as the “New West” economy, these cities adhere to an “economically diverse postindustrial regime of services, IT, light manufacturing, tourism, and retirement” (Travis, 2007, 3). Winkler et al (2007) identify in-migration, particularly of college-educated residents, increased seasonal housing, rising housing costs, and reduced dependence on extractive industries like mining and logging as some of the defining features of the transition to a so-called “New West” economy. In 2007, they examined this transition in the five states most closely identified as the Intermountain West: Idaho, Montana, Wyoming, Utah, and Colorado. Of special interest to this study, they identified Montana, Utah, and Colorado as the states seeing the most communities transition to the new economic drivers (492).

Winkler et al demonstrate that the preponderance of “New West” expansion is happening near to high-amenity, high-visitation public land sites. Of Model New West communities, for instance, 26% were within an hour of a national park. Only 4% of Classic Old West communities met that criteria (496). In these ways, the case study cities are representative of an increasing number of municipalities in the 11 contiguous Western states seeking to protect natural amenities for the sake of growing their economy. But while new jobs, new residents, and a new desire to protect natural spaces seem to herald a truly “new” West, this research makes the case that this economic system is not all that unique. Instead, it is linked to the gentrification seen in cities with “new economies” focused on knowledge production (Gibbs and Krueger, 2007) as well as part of a longstanding tradition of creating empty spaces to attract outsiders willing and able to pay more.

If there is one thing which distinguishes the West, it is the vastness of land and the continual plundering of non-renewable resources. The region has traditionally been associated with a boom-and-bust cycle reliant on extractive industries. The boom would last until resources ran out, producing scarred landscapes and ghost towns in its wake. That land and resource protection have come to be central to the "New West" may be partially driven by their aesthetic, recreational, and spiritual value to locals, but the economic value cannot be stressed enough. Although the region's economic viability could be considered more stable than its past dependence on singular commodities, its newfound revenue stream—outside dollars—requires the city to act as "growth machine" (Molotch, 1976), with large infrastructure projects to attract more tourists, partial-year residents, and new residents "passed off as simply 'catching up'" (Travis, 2007, 59).

Tourism, housing, and their collision as STRs do not, at first glance, seem to be ecological issues. This underlies the urgency in identifying them as such. After all, one of the first formalized delineations of the modern-day West—the one promoted to the U.S. House of Representatives in 1878 by explorer and General John Wesley Powell—identified the 100th meridian as the line separating the humid from subhumid land in the United States (cited in Worster, 1987, 145). This line, running roughly through Abilene, Texas in the South and Bismarck, North Dakota in the North and excepting much of the Pacific Coast and isolated pockets of heavier rainfall, marked out a West where traditional intensive agriculture became exceedingly difficult and thereby invited more extractive industries to develop. This lack of water has served as a continual challenge in the West but has been heightened in recent years by rapid development.

Yet, while the ecological impacts of development are implicit in any discussion of the vast West—with 46% of land protected in some fashion by the federal government (Congressional Research Service, 2020, 20)—, a full assessment is beyond the scope of this research. The political ecology theoretical framework relied upon for this research ties in closely with any analysis of the "New West" economy, challenging the imaginary which creates a rift between city and wilderness in the first place (Peet and Watts, 1996, 37). The protection of local nature in these three cities must be understood in the context of the regional goal of luring visitors—and the necessary food, water, energy, and infrastructure to support them—from across the country and world. Suffice it to say, this economic rationale has profound ecological consequences. Rather, this research highlights the social impact of this influx of outside money and presence. It posits that STRs represent one of the clearest indications that local housing has been placed on a national, and even global, market. In other words, local residents have been forced to compete on an untenable scale.

The latest frontier

Utilizing a political ecology theoretical framework, this research does not view these cities in isolation. They exist as part of the larger, "pro-growth" environment fostered by the "New West." In this context, the prevalence of STRs in Bozeman, St. George, and Flagstaff is neither an aberration nor the result of a learning curb in dealing with a new, "disruptive innovation" (Guttentag, 2015). Instead, they can and must be understood in the context of the frontier. The term "frontier" has oftentimes been taken to mean simply the western part of the United States, or "the West," and the three case study cities' geographic location does indeed help make this connection more salient. This conception of the West, however, exists in the East just the same. Similarly, the 1890 Census statement that "there can hardly be said to be a frontier line" which would spur historian Frederick Jackson Turner's well-known 1893 frontier thesis (cited in Nash, 1980), failed to see how a frontier so inseparable from a particular geography had grown from and would reappear in new forms. As Turner himself wrote, "The West, at bottom, is a form of society, rather than an area. It is the term applied to the region whose social conditions result from the application of older institutions and ideas to the transforming influences of free land (Turner, 1893)."

From the "New World" of the 1400s to the proliferation of STRs today, every successive frontier has been fundamentally about providing access to that space for some at the expense of others. This research argues that understanding the deregulated environment in which STRs operate, particularly in the West, can only result from rooting this seemingly novel development to the long history of frontier-building in the United States. Building on conceptions of "The West" as frontier, this research traces a frontier imaginary which envisions space as empty, free, and full of unbounded potential. This imaginary has been at work across five distinct frontiers, with STRs merely part of the most recent iteration: the "financialization of home" (Aalbers, 2008). Each of these is part of a pattern found throughout U.S. history and observed quite acutely in STRs today which privileges outside capital over community autonomy.

Particularly in the West, frontier imaginaries have involved the intentional unsettling of pre-established populations, which has overwhelmingly fallen upon racial lines. Supplementing political ecology, this research applies George Lipsitz's (2011) concept of the white spatial imaginary (WSI) to demonstrate how the "New West" economy creates white enclaves, of which the three case study cities are representative. Altogether, this research shows that the "New West" has prioritized growth and the short-term visitation of wealthy outsiders over the needs of locals, a trend which coalesces in the STR market.

Problem statement

The United States has a housing problem. Nowhere is this more visible than the West. Nationwide rental vacancy in October 2019 had dropped to 6.4%, the lowest rate since 1985. In the West, the rate was 4.4%. Outside of one Quarter in 2016, this is the lowest it's been since the Census began collecting this data in 1956 (Census rental vacancy, 2019). At the same time, national and Western homeowner vacancy rates were an exceedingly low 1.4 and 1.2% respectively, with the West's also among the lowest seen since 1956 (Census homeowner vacancy, 2019). Additionally, people continue to move West, making it the only region in the last decade in which every state's population grew by at least 0.4% (Pew, 2019). There is simply not enough housing available in the West, let alone affordable housing.

Lower-income and vulnerable populations have increasingly found themselves competing with wealthy newcomers in metropolitan areas. In this setting, the rise of STR companies like Airbnb and VRBO placed long-term residents in competition with short-term visitors. While this has certainly included large cities across the country (Garcia-López et al, 2019; Wachsmuth and Weisler, 2018; Lee, 2016), it has also meant that smaller cities in the West—with nearly 50% of its land federally owned—have attracted high numbers of STRs for travelers to public lands including national parks, forests, and monuments. In the space of the 12 years since Airbnb was first founded, an influx of short-term visitors has forced cities already facing a housing shortage to reckon with the effect on housing options for long-term residents. Ever-vulnerable across the U.S. West's racialized history, housing instability hits residents of color, particularly Black and Native Peoples, especially hard.

This study focuses on three small cities in the Intermountain West: Bozeman (MT), St. George (UT), and Flagstaff (AZ). Each of these cities has a population between 45,000 and

95,000 people, is the largest city within 100 miles, and lies upon a major Interstate. They are also major launchpads for area attractions, with each less than 90 miles from some of the most highly visited national parks in the country: Yellowstone, Zion, and Grand Canyon, respectively. As such, STRs have a major presence in each, further challenging housing availability as each city grows despite being at least partially bound by public land.

Research questions

1. How do short-term rentals (STRs) affect housing in Bozeman (MT), St. George (UT), and Flagstaff (AZ)?
2. Does the perception of STR impact on the housing market and local economy match the reality?

Outline

This introduction has sought to explain the context in which STRs rose to prominence and how they have been regulated, or not, in the three case study cities. While their standing as amenity-rich, high-visitation locales may seem to make them unique, Bozeman, St. George, and Flagstaff are like a lot of cities throughout the West and entire country which suffer from severe housing shortages. The “Problem statement” examined this larger landscape, explaining why STRs deserve scrutiny for their practical impact on housing affordability. In this context, the “Research questions” focused on 1) understanding the impact of STRs on housing trends in the three cities, and 2) determining the perception of this impact.

Perhaps just as importantly, STRs warrant discussion as a means of conceptualizing the housing issues faced today as a continuation of a frontier logic. Chapter two, “Literature review,” discusses how political ecology is well-equipped to examine this frontier logic, shining a light on the varied actors and justifications which have maintained it since long before the country was founded. Tracing each successive frontier—from the "New World" to the West to the suburbs to the city and finally to STRs—reveals that these spaces have been continually produced to allow for outside wealth to enter previously settled spaces. Racial exclusion is identified as a fixture in each successive frontier, often propped up by violence or the threat thereof. This has had the cumulative effect of producing what Lipsitz (2011) refers to as "the racialization of space and the spatialization of race." STRs are positioned as part of the most recent frontier, the "financialization of home" (Aalbers, 2008), through which economics function to reproduce blank spaces for transient guests at the expense of long-term residents.

Chapter three, "Methods," details the choice of case study cities as well as the use of semi-structured interviews. It identifies the logic behind certain methodological decisions as well as my overall interest in the topic of STRs in the West. Furthermore, this section details how decisions were made throughout the study and the reasoning behind them. .

In chapter four, "Findings," are split into four sections: "Bozeman," "St. George," "Flagstaff," and "General trends," through which commonalities between the three cities and across the whole landscape are discussed. Each of these cites direct quotes from interviews while relying on both city-specific and general research. In the spirit of political ecology, chapter five offers "Solutions and suggestions." This section articulates alternatives to the current STR landscape. In this, tangible recommendations build on ideas from interviewees and outside research in an effort to mitigate the negative effects of STRs on the three cities and beyond. The research is then summarized in a brief "Conclusion" and complete "Works Cited." Altogether, the cities of Bozeman, St. George, and Flagstaff highlight that STRs fit into both the current and enduring struggle in the United States to determine who gets to call a place “home.”

2. Literature review

Political ecology theoretical framework

Although this research focuses on the present-day cities of Bozeman, St. George, and Flagstaff, the circumstances existing in each city today result from political and geographical history. Their individual histories are incomplete without a broader history of the region, a fact which can be illustrated by the political ecology concept of chains of explanation (Blaikie and Brookfield, 1987). Just as each town's history is nested within a larger Western U.S. and colonial spatial history, so too should the recent arrival of STRs be understood within the economic and political history of the United States. Individual decisions—and the decisions of individual cities—regarding the use and regulation of STRs are made within a political landscape. For this reason, political ecology is the guiding theoretical framework to this research.

Political ecology gained prominence in reaction to a simplified narrative of environmental degradation. In the decades after World War II, rapid technological advances and population growth produced a more globalized economic system. With this expansion came more drastic and far-reaching environmental impacts as well as a growing acknowledgement that development could not continue on the same path unimpeded (UN World Commission on Environment and Development, 1987, 26). The WCED first declined to place blame on individual nations but then goes on to state four symptoms and causes of global environmental degradation: 1) Poverty, 2) Growth, 3) Survival, and 4) The economic crisis. The WCED cited the economic crisis of the 1980s as affecting global trade and having an outsized effect on developing countries, especially those most debt-ridden (35). Similarly, the WCED links the processes those in poverty engage in to survive with environmental degradation:

> "Those who are poor and hungry will often destroy their immediate environment in order to survive: They will cut down forests; their livestock will overgraze grasslands; they will overuse marginal land; and in growing numbers they will crowd into congested cities" (29)."

This summary largely failed to analyze how people got into poverty or found themselves competing over limited resources and being rewarded economically for "destroy[ing] their immediate environment." Political ecology entered the picture to acknowledge the political and historical reality in which this degradation occurred (Blaikie and Brookfield, 1987). In other words, it came about to identify the structures and institutions responsible for creating this dichotomy between human survival and environmental survival (Klein, 2013). Rather than placing the responsibility on poor people, especially in the Global South, political ecology sought to situate environmental disturbance in the larger political landscape, considering where demand for resources originates and the underlying power structures at play (Bryant, 1997, 6; Schroeder et al, 2006).

Despite this emphasis, political ecology research remained largely confined to the Global South in the years that followed. It is only recently that political ecology has moved increasingly toward examining the Global North, the minority nations which have dominated globalized economic relations. Scholars operating in this theoretical framework have increasingly chosen to delve into issues in their own countries, what Louise Fortmann (1995) refers to as "the long intellectual journey home" (11), instead of examining issues abroad. The United States, with its size and spatially dependent wealth of natural resources, has proven a ripe area for the application of a political ecology lens.

Political ecology is especially appropriate as a tool for interrogating the political nature of seemingly apolitical narratives (Robbins, 2011, 19). This is crucial to understanding the development of the western United States. In describing the country's westward expansion and violent removal of Native Nations under the banner of Manifest Destiny, Anders Stephanson (1995) strikes a common, ambivalent tone. "I have tried to avoid moralizing. Perhaps it had to happen the way it did" (xiv). The present research makes no such claims. Rooted in the political ecology tradition, this research is normative, or "value-based." It is fundamentally about believing a better world is possible. It is not enough for this research to ask how short-term rentals (STRs) are affecting housing. Instead, this research seeks to identify ways in which negative effects can be mitigated.

Value-based research is not new. Pyotr Kropotkin, an early Russian geographer and philosopher who lived in the late 1800s and early 1900s, was one of the first to articulate a vision of a science which seeks to change the radical inequalities that exist in society (Robbins, 2011, 28). When political ecology was first formally developed in the 1980s, it seemed perfectly suited to steer geography toward confronting problems like these and proposing solutions. A political ecology framework has a propensity for revealing oft-obscured power relations. It asks questions ranging from 'Who gets to frame the narrative?' to 'Who doesn't get heard?' Further questions flow from these basic observations. 'How did these people gain their power?' 'Lose their power?' 'How did the current structure come about?' And, at the heart of political ecology, 'Who wins and who loses?'

Robbins (2011) refers to this approach as the hatchet and the seed method. The hatchet is used to tear down so-called apolitical explanations and the seed is used to grow something new, attempting to bring the imagination of a better world to fruition. Much of early geography was rooted in environmental determinism, the belief that the particular aspects of one's geography—the climate, topography, available resources, proximity to other settlements, and so forth—dictated the structure and success of one's society (Cox, 2013). While a deep contextualizing of on-the-ground human practices within global policies and demands has been present since the beginning of modern geography, it was far less widespread than that which exists today.

Today, political ecology is just one of many geography-linked theoretical frameworks which seeks to provide "chains of explanation (Blaikie and Brookfield, 1987, 27) or "progressive contextualization" (Vayda, 1983, 265) for existing conditions. Even still, these approaches are counter-arguments to apolitical narratives like environmental determinism, which continue to exert tremendous influence over how society operates. Even as it becomes more mainstream, political ecology's legitimacy stems from its skepticism of the organizations and institutions in which it operates (Robbins, 2011, 85).

A major part of political ecology is understanding that the separation believed to exist between the human and natural world is artificial. As Peet and Watts (1996) explained, "The environment is an active construction of the imagination […]" (37). Boundaries are created, observed, and controlled by humans, making them inherently political. And yet, these lines of demarcation and jurisdiction have been accepted as natural and inevitable to the point that this political nature has become forgotten. On this point, Robbins (2011) pointed out that "[…] by rendering colonial domination an environmental inevitability, the practice of colonialism comes to appear apolitical" (26). Political ecology is not about returning to any specific social or environmental state but rather about articulating unequal power dynamics and envisioning alternatives (121).

For the present research, the explanatory framework of political ecology offered a lens through which to situate policy and power imbalances in the Western United States. The approach uncovered the many ways new wealth is transforming the region from one of production to consumption (Walker, 2003, 17; Robbins, 1999, 285). It expanded the scope of research to include the financial, legal, and ecological factors underpinning the founding of the West. On its own, however, the political ecology framework was insufficient to identify the settler logic which decided who belonged and who did not. It left the racial element at the core of the West's construction as a frontier—the privileging of white money, bodies, and mobility—largely unexamined. For this reason, political ecology was complemented by George Lipsitz's concept of the white spatial imaginary.

White spatial imaginary

The white spatial imaginary (WSI) was developed by Black Studies scholar George Lipsitz as a theory of *How racism takes place*, a title which he uses figuratively, to describe how racism happens, and literally, to describe how racism touches down in physical space. Lipsitz writes, "The white spatial imaginary portrays the properly gendered prosperous suburban home as the privileged moral geography of the nation" (2011, 13). With this imaginary firmly in place, "Widespread, costly, and often counterproductive practices of surveillance, regulation, and incarceration become justified as forms of frontier defense against demonized people of color" (13).

Built upon and still bordering Native land, infused with generations of low-wage Black and immigrant labor, the western mountain towns at the heart of this study have become enclaves of whiteness and wealth. For this research, the WSI has been applied beyond the suburbs to understand how that happened. As these cities have been settled, “the market” has been allowed to dictate who is allowed in. STRs are more profitable than long-term rentals, so long-term residents can only look on as investors buy up homes and vacationers occupy them. That strangers replace neighbors and housing becomes unaffordable are viewed as both regrettable, but unavoidable, consequences. That the least benefited and most vulnerable to displacement are people of color is scarcely given mention.

It is important to acknowledge that this does not simply “happen.” Lipsitz’s concept operates through an imaginary because it requires a very selective view of history, one that prizes individual achievement and adheres to a belief in individual destiny while ignoring unearned advantages (245). The gaps between whites and non-whites in education, employment, homeownership, wealth, and so many more material categories are not accidents (6). The WSI concept transforms the whiteness and unaffordability which mark Flagstaff, Bozeman, and St. George from inevitable accidents of geography into the results of a race-based settler logic which has informed the taking of the West from the time of gold mines to present-day Airbnbs. In doing so, Lipsitz points to an alternative imaginary which prioritizes human need over the accumulation of wealth.

The five frontiers

The STR market’s continued growth and shift toward offering entire homes should not be surprising. After all, Airbnb’s mantra of “Helping anyone belong anywhere” (Airbnb, 2020), providing a vacant space for people from across the country and world, is a business plan. If there is more profit incentive in providing space for short-term visitors over long-term residents and no restriction on doing so, it seems obvious what property owners with vacant spaces will choose.

Chapter 4 delves into the question of STRs' effect on housing in Bozeman, St. George, and Flagstaff specifically, but this Chapter asks and responds to a critical question in light of evidence of the STR market's negative impact on housing beyond these three cities. Simply put, 'Why have STRs escaped more far-reaching regulation?' This research makes the case that, although STRs are new, their use is consistent with a very old frontier logic.

STRs are framed as part of the "financialization of home," the most recent of five frontiers which stretch back to before the founding of the United States. The years demarcating one from the next are based on specific events or the identification of new trends, but these are of secondary importance to the frontier logic which connects them. The stated justification of each frontier has ranged from religious mandates to the "invisible hand" of the market (Nozick, 1974), from the primacy derived from guns to that derived from funds. Each has been fundamentally built around creating empty space for outsiders.

1. The New World and the Doctrine of Discovery (1455 – 1845)
2. The West and Manifest Destiny (1845 – 1933)
3. The Suburbs and Homeownership (1933 – 1980)
4. The City and Gentrification (1969 – present)
5. The Financialization of Home (2000 – present)

The first frontier: The New World and the Doctrine of Discovery (1455 – 1845)

A frontier is at once a geographic area and an entire philosophy of living. By its nature, it engenders a border between the regulation and precision of society and the untamed world beyond. Throughout the history of the United States, the "frontier" has been synonymous with "The West," but this should not be viewed as a static region. "The West, as a phase of social organization, began with the Atlantic coast, and passed across the continent" (Turner, 1896). Every advancement beyond this line—into the frontier—was viewed as a chance to reset the rules which had previously governed everyday life.

European settlers' perception of the "New World" of North America was inseparable from the reality of the "Old World" they had left. An economic system had arisen that centered power in cities. Nation-states from Great Britain to France to Portugal had developed sophisticated trading systems amongst themselves and given rise to markets for scarce and luxurious items. They sought to gain competitive advantages by controlling far-off land and resources.

The problem was that these frontiers, like future frontiers, were not empty. To justify forced and permanent access to foreign occupied land, these nations turned to the divine proclamation of the Catholic Pope. Issuing the papal bull Romanus Pontifex in 1455, he granted the first Christian nation arriving in a land the "right to 'grant,' 'discover,' 'subdue,' 'acquire,' and 'possess' and permanently control non-Christian indigenous peoples, along with their lands, territories, and resources…" (UN, 2010, 7). This international legal pact later became known as the Doctrine of Discovery (3).

This philosophy has taken different forms and invoked different terms. In 1827, Francis Lieber used the term *terra nullus* to describe land inhabited by non-Christians as "unoccupied lands" or occupied invalidly. This was a slight change from *terra nullius*, which were truly unoccupied, and oftentimes unusable, lands like deserts (Dunbar Ortiz, 2015, 4). This allowed for "conquering" nations to remove any sign of Native Peoples' presence, what Anishinaabe Ojibwe historian Jean O'Brien refers to as "firsting and lasting" (Dunbar Ortiz, 9). In simpler terms, "finders, keepers" was valid only for Christian Europe.

The logic of the Doctrine of Discovery nullified non-Christians' claim to territory, no matter their numbers or the extent of their settlement. Europeans found it easier to justify the taking of land that had been left unplowed or "unimproved" by their standards, applying a "framework of dominance" based in property (UN, 2010, 4). This attitude only strengthened in the unregulated frontier of the "New World." John Winthrop, the first governor of the Massachusetts Bay Colony in the 1630s, was one of many who argued Native Peoples had no civil right to land since they had not enclosed it, settled it, or had in any way improved it (Getches et al, 2017, 56).

John Locke, whose *Two treatises of government* was extremely influential in establishing the U.S. system of government, argued a man's property was made up of the land he improved. He stated that "a king of a large and fruitful territory [in several nations of the Americas], feeds, lodges, and is clad worse than a day-labourer in England" (1689, Ch 5). This would be echoed by 18th century legal mind Emerich de Vattel, who established the idea of *vacuum domicilium*. By this, he claimed people had an "obligation to cultivate the earth" (Stephanson, 1995, 25).

Implicit in these ideas is that land and resources deemed "unimproved" could be forfeited to those who would improve them. Up until the early 1700s, when Native Tribes were larger than the British colonies, every New England settlement had been made through treaty or purchase (Getches et al, 2017, 57). But as the U.S. population grew exponentially following the

Revolutionary War, '"The American right to buy always superseded the Indian right not to sell"' (Rosenthal, H. qtd. in Wolfe, 2006, 391). This idea was enshrined for all time in the Supreme Court's 1827 *Johnson v. McIntosh* ruling. While continuing the previous British prohibition of private sale of land—tribally owned land—west of the Appalachian Mountains, the Court gave exclusive purchasing rights to the federal government.

Evidence shows this was not a typical case. . The plaintiff attorneys had hired the defense attorneys, manufacturing this courtroom conflict. The Supreme Court ruled that Native Peoples could not buy or sell land privately—only through the federal government (Getches et al, 2017, 35). Chief Justice John Marshall, despite holding large real estate in the territory, did not recuse himself. Instead, he wrote the unanimous decision, arguing that the Doctrine of Discovery gave '"an exclusive right to extinguish the Indian title of occupancy, either by purchase or by conquest"' (37).

Advanced societies like the Cherokee—with sophisticated systems of government, thriving economies, and a written language—challenged the common justification of taking land for the purpose of civilizing people. Indeed, the Cherokee—along with the Creek, Choctaw, Chickasaw, and Seminole—were commonly referred to as the "Five Civilized Tribes" (Wolfe, 2006, 396). By the 1820s, however, Cherokee land once covering five states had been reduced to mostly within Georgia state lines (Getches et al, 2017, 96). Then gold was found in 1827.

While its absolute and exclusive power to terminate tribal claims became law, the federal government claimed it was incapable of holding back encroaching settlers (Getches et al, 2017, 3). In 1830, President Andrew Jackson signed the Removal Act in 1830, paving the way for what would later be known as "The Trail of Tears" (Wolfe, 2006, 395). Alexis de Tocqueville caught sight of this policy in action as he traveled the United States gaining insights for his highly acclaimed book *Democracy in America* (1835). In no uncertain terms, he described seeing a large band of Choctaws seeking to cross the Mississippi River in wintertime. “I saw them embark to pass the mighty river, and never will that solemn spectacle fade from my remembrance. No cry, no sob, was heard amongst the assembled crowd; all were silent. Their calamities were of ancient date, and they knew them to be irremediable” (372-3).

De Tocqueville takes pains to describe how the societal value placed on education and religious devotion allowed the United States to prosper (65, 227). From the first pages, he marvels at the equality achieved amongst people across the United States and cites this as the reason for democracy’s spread in Europe (13). But Native Peoples were not part of this equation. Besides that, all these positive attributes fell away in the face of free land.

> “It was not long before waves of immigrants encountered Indian country in their quest for a new life in the West. They coveted tribal lands and natural resources that were legally off-limits to settlement. So more lands were demanded by homesteaders. The U.S. lacked both the tactical ability and the political will to hold the boundaries of the large western reservations” (Getches et al, 2017, 140).

From these early examples, a contradiction emerges. The federal government repeatedly claims an inability to protect local populations from outside settlement and then invokes its overwhelming force to clear that space. More moderate politicians like former Presidents Adams and Monroe epitomized this contradiction, paying lip service to a policy of limited settlement decades before while quietly speaking favorably of Native removal. While it was Jackson who ultimately signed the bill and ordered “The Trail of Tears,” the policy had been made possible by the inaction of prior administrations. (Wolfe, 2006, 395).

That settlers wanted the land for themselves—and believed it their birthright—was laid bare in these instances (Stephanson, 1995, 26). The religious zeal for new land goes back to the United States' separatist roots. Founded in part by English Protestants who saw the New World as a fresh start, away from the wickedness of Old England, westward movement offered "a new and sacred beginning in a new and sacred land" (Stephanson, 1995, 19). It was this mindset that allowed John Winthrop back in the 1630s to describe the smallpox decimation of Native populations as an act of divine intervention (11). Winthrop was no small player in U.S. history. His influence in the direction of the U.S. government would later lead him to be regarded as "America's forgotten founding father" (Bremer, 2003).

Two centuries later, Senator Benjamin Leigh of Virginia took up this separatist rhetoric. In advocating for removal of Native Peoples, he argued whites were never content to live with another race (Stephanson, 1995, 27). Decades of military campaigns and coercive economic treaties followed, almost entirely clearing unsettled country of Native Nations and foreign powers. The Doctrine of Discovery marched west.

The second frontier: The West and Manifest Destiny (1845 – 1933)

In 1845, reporter John L. O'Sullivan dubbed movement west to be the "…fulfillment of our manifest destiny to overspread the continent allotted by Providence for the free development of our yearly multiplying millions." The "New World" offered to Europe through the Doctrine of Discovery had given way to U.S. expansion "allotted by Providence." Increasing in military might, the United States fought and gained control of Texas, purchased today's Pacific Northwest from Great Britain, and successfully challenged Mexico's claim to all land west of the

Rio Grande. In the span of just a few years, the United States had grown by more than 50%. The once-fledgling nation seeking escape from empire had become an empire itself.

Manifest Destiny, with origins in the idea of a Promised Land for God's chosen people, provided a justification for westward expansion (Stephanson, 1995, 5). This was hardly needed. As "Father of Texas" Stephen F. Austin had once said, stopping expansion would be like trying to dam the Mississippi River (Grandin, 2019, 3). Settlers sought new lives and "extend[ed] the sphere" of influence west, just as James Madison had argued for in the nation's founding (8). It is no coincidence that the decades-brewing battle over slavery finally bubbled to the surface. Slavery, however, was only part of this equation. With the prospect of free land, the fight over how that land would be regulated boiled over and nearly led to the dissolution of the country (Grandin, 2019).

When the Civil War ended in 1865, however, it was that same frontier that allowed the nation to recover. Confederate leaders brought the idea of merging forces and seizing Mexico directly to Lincoln (Grandin, 2019). While Lincoln declined the offer, it was the opportunity for westward expansion which served as a "safety valve" (48) for the powder keg still threatening to explode in the East.

While the West can be understood as a release for this pressure, its continued settlement was neither random nor inevitable but rather was made possible by specific policy and enforcement. The Homestead Act of 1862 offered 160-acre parcels of land to any individuals willing to manage them (NPS, 2018). With the region secured by soldiers, white U.S. settlers moved west en masse (Stephanson, 1995, 68). By removing Native Peoples from the land, a blank space was created. A group of people was chosen to fill it.

The frontier also may have prevented the U.S. from ever truly confronting the racial inequality at the core of its economic system. In the period of Reconstruction after the Civil War, General Sherman developed a far-reaching land redistribution policy only to have this program reversed by President Andrew Johnson. This move is largely viewed in retrospect as dooming the possibility of some level of economic equality for Blacks (Gottesdiener, 2013, 10). The caveat to the Thirteenth Amendment allowed slavery to persist in cases of crime. This ensured many Blacks were released from the bounds of slavery into a system of low-wage sharecropping and convict leasing for petty, often manufactured, crimes (Alexander, 2013).

This period had similarities with "the enclosure period of the English countryside in which large landowners converted peasants' common lands into private pastures in order to raise sheep for the burgeoning textile market" (Stuart, 2011, 199-200). Whites saw in the West an alternative to increased industrialization and concentration of wealth. But in the South, new anti-vagrancy and anti-loitering laws were used to police Black behavior within a year of Emancipation (200).

Just as Sherman's land redistribution policy offers a glimpse into an alternate history, the 1869 Board of Indian Commissioners offered two potential ways forward in federal-tribal relations. Issuing their report in the same year the transcontinental railroad was completed, the bitter division of the Civil War prompting reflection, the Board seemed ready to break with tradition. They wrote, '"The history of the government connections with the Indians is a shameful record of broken treaties and unfulfilled promises"' (Getches et al, 2017, 149).

But they quickly added, "When upon the reservation, [Native Peoples] should be taught as soon as possible the advantage of individual ownership of property…"' (150). The Board went on to discuss the importance of divesting tribes of communal lands. Whereas taking Native lands had previously been justified on the grounds of converting Native Peoples to Christianity (UN, 2010, 3), this marked a shift. Land theft was being justified to convert Tribal Members to a different creed: the preeminence of property. As more and more settlers moved west, it would not be long before the Board's stated intentions would find their way into policy.

In 1887, Congress passed the Dawes Act, or what would become known as the General Allotment Act. Under this policy, tribes were forced onto far smaller reservations, with much of their land being made available for private ownership by those settlers pushing west (Getches et al, 2017, 140). This would lead to the loss of approximately 90 million acres of tribal lands in less than 50 years. This was just slightly less land than is now contained in Montana, the fourth-largest state. It is no coincidence that this started almost precisely at the time the West was beginning to "fill up" (165) and the frontier would soon be pronounced "closed" in the 1890 Census.

With Native Tribes divested of their land holdings in the years that followed, the primary question was who would fill that space. Like each of the five frontiers, race was a central determinant. Slavery had been formally abolished decades prior, but the economic and residential landscape did not reflect this. In 1915, the NAACP's 6th Annual Report highlighted the segregation which still existed in neighborhoods and entire cities (Meyer, 2000, 23). Starting the following year, with immigration halted in the early days of World War I, what became known as the "Great Migration" began. By 1919, 500,000 Black people had left the South for better employment and legal protections, largely in the North. In the 1920s, a million more would do the same (30). Racial prejudice throughout the 1900s was often obscured by reference to areas with more overt racism, like the South, but it was clear to many that the discrimination simply changed forms.

Much of this can be understood by looking at the economic engines of the North and South. In 1890, the year the frontier was formally recognized as "closed" (Turner, 1914), 87% of Blacks worked in agriculture or domestic and personal service. Whites in the agriculture-dependent South did not fear that Blacks would compete for their jobs, because whites owned the land. Whites in the North did not initially fear Blacks competing for their jobs, because they were few in numbers and worked in separate industries (Bonilla-Silva, 2018, 19).

Segregation in the North, however, was highly enforced. Baltimore passed a law in 1910 preventing Blacks from buying homes on blocks with white majorities. Whites, similarly, were not allowed to move into majority-Black blocks, although they would have no economic incentive for desiring to do so in the first place (Rothstein, 2018, 44). Facing judicial and public pressure, the city merely revised the law to apply to blocks already made up of one race. This law would be emulated to varying degrees in many Southern and border cities. It would also provide the blueprint for economic zoning plans championed by then-Secretary of Commerce Herbert Hoover in 1921 (51). With Black people facing so many institutional barriers to economic success, these zoning laws effectively stymied any potential integration in the North. As stated by a common folk axiom at the time, '"The South doesn't care how close a Negro gets just as long as he doesn't get too high; the North doesn't care how high he gets just so he doesn't get too close"' (Johnson, 1965, 17).

The West seemed resistant to either. As the West "fill[ed] up" (Getches et al, 2017, 165), it was changing from a place of homesteading to a region of cities resembling the size and structure in other parts of the country. Whereas white settlers had previously enjoyed exclusive access to the land and economic opportunities—the frontier—offered by the West, they were wary of competing with a larger pool of people. This should not, however, be understood as strictly a fear of economic repercussions. Between 1880 and 1920, 23 million people entered and spread to every region across the country. As of 1910, 58% of all factory and mining workers were immigrants (California Newsreel, 2003). Immigrants from Ireland, Eastern Europe, and Southern Europe faced extensive discrimination but eventually gained acceptance as "Americans." People from outside these regions oftentimes found it far more difficult. The Johnson-Reed Immigration Act of 1924 set quotas for immigrants, effectively banning Asian immigration altogether (Lee, 2006, 12). Whiteness continued to be constructed.

The West, with its stated promise of equal opportunity, maintained its racialized space through acts of violence, laws, real estate policies, and a mountain of interpersonal slights combined to encourage if not altogether mandate segregation. Whites placed bombs in the homes of new Black residents in Kansas City in 1910 and 1911 (Meyer, 2000, 20). In Denver at the same time, white residents sent a slew of threatening letters to a Black doctor and the white contractor constructing his house in a white neighborhood. When these tactics failed to stop the steady influx of Black migrants, cities—especially smaller ones wary of large population increases—often turned toward legislation and outright bans. Like Baltimore and St. Louis, Denver and Los Angeles passed segregation laws (20).

Facing economic prospects similar to many immigrants, Black people oftentimes worked in similar industries. For this reason, Black people were similarly instrumental in building railroads and laboring in extractive industries across the West (Rothstein, 2018, 42). But as towns were settled, Blacks faced institutionalized discrimination to a degree not felt by other immigrants, oftentimes on a very local level. From sundown laws to anti-intermarriage laws, the overarching message in the West was that Black labor was needed but settlement would not be tolerated. Some places banned Black people altogether. One of the most blatant examples is the state of Oregon, which was founded as an all-white state in 1859 and resisted Black residents until 1926 (Novak, 2015). That message has continued to hold sway. Just 2.2% of the Oregon population today is Black. in Montana, as the town of Helena was built in 1910, 3.4% of the population was Black. As of 2010, the state capital was less than 0.5% Black. Despite population growth, the city in 2010 had less than a third of the number of Black residents (113) as it had a century before (420).

Industry was oftentimes in lockstep with government and prevailing white opinion when it came to segregation. The National Association of Real Estate Boards (NAREB), for instance, had rules against residential mixing in 1913 (Meyer, 2000, 7). "[T]he weight of evidence demonstrates that [policies] reflected a popular unwillingness on the part of whites to have African Americans living in their midst" (8). The same year, Woodrow Wilson approved segregation across federal offices (Rothstein, 2018, 42). Trying to decipher whether policies led to white racial animus or white racial animus led to policies obscures the fact that they reinforced each other.

Senator Benjamin Leigh of Virginia, backing the removal of Native Peoples in 1830, may have been accurate in describing the prevalence of white resistance to living with another race (Stephanson, 1995, 27). Similarly, real estate companies a century later may have been accurate in saying prices could drop in suddenly integrated neighborhoods because some white residents would flee (Meyer, 2000, 7). But Leigh's policies favoring removal and realtors' policies favoring segregation cannot be understood as simply reflecting the will of the masses. Instead, these statements belie the influence of these entities in shaping the will of the public and, in so doing, continuing to shape the racial landscape.

What cannot be disputed is that the policies enforcing segregation came directly from the highest places in the federal government. In the early 1920s, future U.S. President Herbert Hoover served as President of the nominally private Better Homes in America, with powerful figures like sitting U.S. Vice President Calvin Coolidge serving as Chair of the advisory council and future President Franklin D. Roosevelt, then President of the American Construction Council, serving as a member (Rothstein, 2018, 61). The Supreme Court in 1926 upheld a Cleveland suburb zoning rule which restricted apartments from an area of single-family homes (52). Without ever directly invoking race, Better Homes in America promoted "'restricted residential districts"' as a way to ensure homeowners '"protection against persons with whom your family won't care to associate…"' (61).

Homeownership after WWI had become a badge of patriotism (Rothstein, 2018, 63). The racial element of this homeownership push had been blunted, however, by the economic reality: even for whites,it was prohibitively expensive. At the time, a 50% down payment was standard. With full loan repayment typically required within just five and seven years, homeownership was all but out of reach for much of the population (Rothstein, 2018, 63; Carliner, 1998). The Stock Market Crash of 1929 and the ensuing Depression only heightened this difficulty. The federal government responded with an unprecedented and massive program to catalyze homeownership. In the suburbs—literally "small parts" around "cities"—, a frontier was about to be born.

The third frontier: The suburbs and homeownership (1933 – 1980)

In the decades after the closure of the frontier, technological and demographic changes altered the landscape of the early-20th century United States. Industrial jobs supplanted agricultural jobs as the main economic engine for the country. The automobile's invention allowed for people to travel longer distances with ease. Combined, this meant that people could live further from work. With 23 million people entering the country between 1880 and 1920, (Lee, 2006) and work being concentrated in industrial areas of cities, it could be argued they had to live further from work.

The suburbs began to take shape in 1934 as the Federal Housing Administration (FHA) provided a system for backing up mortgages and vastly increased the possibility of homeownership (Rothstein, 2018, 63). As part of this program, the FHA mapped areas deemed worthy or unworthy of credit. Those dubbed most hazardous or the biggest credit risks were outlined in red, or "redlined." With race as a primary feature, this "codified patterns of racial segregation and disparities in access to credit" (Badger, 2017). Between 1934 and 1962, the U.S. government underwrote $120 billion in loans, of which less than 2% went to non-white people (California Newsreel, 2003). Whiteness had now been constructed to include suburban homeownership.

Despite this structural advantage, these maps and many racialized policies surrounding housing were deliberately obscured from the public eye (Lipsitz, 1995, 372). This further fostered the belief amongst white people that homeownership marked success in a "free" market (Lipsitz, 2011, 26). The cultivation of this already-long-standing ideal of individualism was a powerful force. As Turner (1914) had said regarding its impact on the frontier, "We cannot lay too much stress upon this point, for it was at the very heart of the whole American movement."

Similar to calls for the removal of Native Peoples on grounds that they had not "improved" the land, white people in the mid-20th century would oftentimes point to urban "slums" as reasons why Black people were not fit for homeownership. And similarly, these justifications fell apart with the slightest examination. In the mid-19th century, tribes with advanced governments, languages, and economies were viewed as the greatest threat and some of the first to be sought out for forced removal (Wolfe, 2006, 396; Stephanson, 1995, 26). More than a hundred years later, it was common to see documents like the 1943 national real estate manual, which advised against what it viewed as the three biggest threats to neighborhoods: "prostitution houses, bootleggers, and a colored man of means who was giving his children a college education and thought they were entitled to live among whites" (Lipsitz, 2011, 4).

Success of non-whites, particularly in close proximity to whites, demonstrated an ability to overcome systemic obstacles and laid bare that even poorer whites had been granted priority over wealthier Blacks. The "market" was not simply based on who could afford it but on what has been referred to as "racial capitalism" (Robinson, 1983). These examples punctured the myth of the "self-made man" that was so central to the frontier imaginary for white settlers and homeowners alike.

But the lure of perceived autonomy over one's life was not restricted to white settlers. Between December of 1941 and March of 1945, 15 million people in the United States changed their county of residence. Especially for Blacks, much of this migration was for cities with war plants such as Detroit, Baltimore, Los Angeles, and San Francisco (Meyer, 2000, 65). This period of migration during and after World War II dwarfed the already-massive number of Blacks who had moved three decades before, at the start of World War I.

Instances arose across the country of whites blocking temporary housing for Black war workers (64). It was common at the time for whites to argue that Blacks didn't want integration either. President Truman, speaking to the National Colored Democratic Association in the late-1940s, attempted to strike a balance, saying, "'I wish to make it clear that I am not appealing for social equality of the Negro.'" He continued, opining that Black leaders wanted "'justice, not social relations"' (Berman, 1970, 55). With Supreme Court rulings in *Shelley v. Kramer* (1948) and *Barrows v. Jackson* (1953) banning racially restrictive housing deeds and covenants, this argument was put to the test.

Despite Truman's rhetoric, Black families continued to seek affordable housing irrespective of the neighborhood's racial composition. In a 1956 Urban League poll, 84% of 678 polled Black families in Los Angeles said they would move to nonminority neighborhoods if they could (Sides, 2004, 586). In Los Angeles suburbs like West Adams, Crenshaw, and Compton—like many across the nation—, entrance of Black residents triggered racist responses ranging from vandalism to bomb threats to beatings of whites who sold to them (586). The resistance to integration was not universal; housing, perhaps more than any other facet of U.S. society, crystallized the ways race and class had been fused together (Robinson, 1983). Integration represented a threat to a system predicated on the basis of white supremacy.

In many areas, this resulted in mob violence which sent warnings through the neighborhood and entire city that it was reserved for whites only. The judicial rulings which had opened the door for integrated neighborhoods were given little enforcement to back them up. That the police were on hand in some instances but did not intervene only served to reinforce past narratives (Freund, 2010). This white vigilantism was so widespread and yet is now so sparsely spoken of that it has been described as the "hidden violence" of post-World War II (Hirsch, 2003, 299; Meyer, 2000, 6). This trend was not restricted to suburbs but to most areas outside of certain parts of cities. In a practice described as "whitecapping," whites routinely used terror tactics to force Blacks from homes in the country and take possession of these spaces (Lipsitz, 2011, 61).

Eventually whites moved from many of these integrating areas en masse, what's commonly referred to as "white flight" (Sides, 2004, 588). Many claimed fears of plummeting property value as their reasoning. The prevalence of violence and migration, however, pointed toward racial animus instead of their purportedly economic fears (Freund, 2010, 8). As was true prior to this period of homeownership, the real estate industry both reinforced and fostered these fears. Realtors engaged in "blockbusting" practices of reiterating these concerns and creating an urgency for white residents to leave. When they did, the price was raised for incoming Blacks who had few other options (Rothstein, 2018, 12). Real estate agents also held their own internal codes. If an agent sold to non-white buyers in white neighborhoods, they were punished with restricted access to listing services, or "blackballed" (13).

This internal code did not simply materialize from within the real estate industry. As head of the Public Works Administration (PWA) and Secretary of the Interior, Harold Ickes instituted a "neighborhood composition rule" which emphasized maintaining the existing racial makeup of areas. Such a rule was almost identical to the one espoused shortly after by the FHA's 1935 *Underwriting Manual* (Rothstein, 2018, 65). Ickes created an interracial workforce which built trails, dams, bridges, schools, and other infrastructure projects across the Depression-Era United States, especially the West. He would then commonly determine whether an area was white or Black and ordered segregated workforce housing to match his perception (Rothstein, 2018, 21).

When Congress ended the PWA in 1937 and localities established their own agencies and construction plans, it remained federally funded by the United States Housing Authority (USHA). One of USHA's primary stipulations was that, '"The aim of the [local housing] authority should be the preservation rather than the disruption of community social structures which best fit the desires of the groups concerned"' (23). The 1940 Lanham Act financing housing for workers in defense industries echoed this effort to maintain segregation. Ickes' "neighborhood composition rule" continued.

Every push toward integration seemed to be met with backlash. A 1949 Housing Act passed Congress only after proposed amendments to integrate any newly built public housing had been removed (31). Despite the sea of policies slowly moving to prevent housing discrimination in cities and states across both the North and West, most lacked enforcement and many seemed to offer mixed federal support at best (Meyer, 2000, 159-61). The federal government seemed to offer the same response as they had to the rampant encroachment of settlers on Native land 180 years prior (Getches et al, 2017, 3). That the federal government had created the frenzy for land in both instances did not force a strong affirmation of change. Whether complicit or feeble, the result was the same: a federal statement of not condoning such actions with little to no effort to alter them.

Sometimes these efforts to continue racializing space were formalized with policy. The 1950s, for instance, saw a combined 330,000 Black migrants moving to the three largest West Coast cities: Los Angeles, San Francisco, and Seattle (Meyer, 2000, 116). Despite the homeownership boom, public housing, or government-built or -sponsored housing, had remained a common residential option across races up until that time. It had also remained segregated. In 1954, however, the California Supreme Court decided in *Banks v. Housing Authority of San Francisco* that the same standards must apply to all who eligible for public housing, regardless of race (142; Rothstein, 2018, 19).

Almost overnight, public housing became taboo and politically unpopular, synonymous with where Black people lived (Meyer, 2000, 143). Twelve states passed constitutional amendments requiring local referendums for building low-income family public housing. The

Supreme Court upheld the practice (Rothstein, 2018, 32). The real estate industry, always opposed to public housing, was quick to draw attention to the government costs in public housing while further obscuring the far more massive government subsidies involved in suburbanization (Meyer, 2000, 143; Moskowitz, 2018). Homeownership was reinforced as the model of success in U.S. society, for those who were white.

Cases like this and shifts in the economy also underscored the U.S. population's continued movement West. By this point, Native Peoples had largely been forced to give up their lands or were relegated to far smaller and less fertile reservations. The Hoover Commission of 1949 called for '"complete integration"' and termination of tribes and federal recognition. This resulted in the termination of 109 tribes and bands, especially smaller ones, but even those not formally terminated were deeply affected. Most tribes endured intrusive assimilation policies, leading to the "continued relocation programs to encourage Indian migration from the reservations to urban areas" (Getches et al, 2017, 230).

New laws were ostensibly opening the West to non-whites, a phenomenon leading one reporter to refer to the region in the 1950s as the '"New Frontier' of racial tension" (Mankiewicz, 1954, 129). It should be noted that this statement came as Blacks and other people of color, especially immigrants, entered majority-white cities in the West. When the 1887 General Allotment Act had wiped out two-thirds of Native land, reducing reservations from 138 million collective acres in 1887 to 48 million acres in 1934, race had scarcely been mentioned as a factor. With much of the remaining acreage poor for farming, Native Peoples were left with few options but to seek out work in increasingly urbanized areas (Collier, 1934).

The 1968 Fair Housing Act, passed in the days following Martin Luther King's assassination, signaled a monumental shift. No longer would housing discrimination on the basis of race be tolerated (Rothstein, 2018; California Newsreel, 2003). But even this was to be tempered by a lack of enforcement. Housing and Urban Development (HUD) Secretary Robert Weaver requested $11.1 million to hire 850 investigators, white and Black "housing testers" who would compare treatment in home-buying efforts and address discriminatory practices. For a national population of 205 million people, the 1969 budget instead allocated funds for 42 (Meyer, 2000, 214-5). As King said himself in 1967, '"There is a tragic gulf between civil rights laws passed and civil rights laws implemented"' (Lipsitz, 2011, 5).

As suburban homeownership became more legally accessible to non-white residents in the 1970s and 1980s, it ceased to be financially accessible. The massive subsidies given to suburbs were redirected toward large cities and a "back-to-the-city" movement gained prominence across the country (Moskowitz, 2018). From the Great Depression to the 1980s, Black Studies scholar George Lipsitz (2011) argues that, "The white spatial imaginary portray[ed] the properly gendered prosperous suburban home as the privileged moral geography of the nation" (13). Increasing deregulation and globalization in the 1970s and 1980s led people, overwhelmingly white, to reconsider their home in the suburbs. The suburbs, as a national frontier, could no longer be sustained.

The fourth frontier: The city and gentrification (1969 – present)

British sociologist Ruth Glass developed the term 'gentrification' to describe the movement of the more affluent "gentry" into working-class neighborhoods in London. In 1969, five years later and on the heels of the 1968 Fair Housing Act's passage, a white Brooklyn man named Everett Ortner brought the term to the U.S (Moskowitz, 2018, 28). The founder of the

Brownstone Revival Committee, Ortner touched off a debate which rages on today: what does gentrification "revive"? Or, invoking a political ecology approach, who wins and who loses?

The topic has received widespread attention in U.S. media (Brown-Saracino and Rumpf, 2011). With some heralding its ability to bring new investment to an area and others bemoaning the displacement of long-time residents, gentrification has been characterized as "the most politically loaded word in urban geography" (Tolfo, 2019, 25). Yet, most people understand gentrification in terms of its effects—whether that is fedora-donned, coffee-drinking hipsters, Armani suits in high rises, or any number of other stereotypes—no matter where they actually align in this debate. In this way, how gentrification actually occurs often remains obscured from the public eye.

For the sake of this research, gentrification is defined as the government- and capital-driven process by which 1) a neighborhood is made "blank" 2) to create space for wealth, to the exclusion of residents of lower perceived economic value. In contrast to popular beliefs on the subject, this process is neither natural nor accidental. As Neil Smith (1988) points out in his rent gap theory, "The economic geography of gentrification is not random…" (21). Beneath the veneer of new businesses, less crime, and cleaner streets, this process is primarily about new residents moving in, which usually means former ones being displaced (Moskowitz, 2018, 23).

Gentrification is an intentional, oftentimes systematic process of change which begins long before individuals of higher perceived value ever enter a neighborhood. As was true for previous frontiers, on-the-ground changes began with policies and actions far removed from the neighborhoods. It is common to understand gentrification in terms of the taming of a frontier (Wyly, 2015, 5; Smith, 1996; Heidkamp and Lucas, 2006). It is even compared to colonization, a reminder that the space suddenly occupied was not previously empty (Hubbard, 2016, 1;

Denevan, 1992). The physical violence that allowed the United States to settle the western part of the "New World" is rarely present in the gentrification of a city block, excepting the threat of force in the case of potential eviction. But these "frontiers" are neither inevitable nor happenstance; they are built. And, as author Naomi Klein states, "…the reason you build a frontier is always the same: nothing is more profitable" (Cusack, 2011).

The frontiers of gentrification result from liberal ideology within a postindustrial economy: an aesthetic of place and community juxtaposed with increasingly planned neighborhoods and technology-dependent jobs (Ley, 1980, 254). In this environment, individuals are making choices about where to live, but these decisions are being guided and prompted by both the options which are economically available and the ideal which is internalized. This does not happen from brave developers or "pioneers" to a previously undesirable space. Rather, in gentrification, spaces are made desirable as the result of policies which favor growth and wealth over community stability (Moskowitz, 2018, 9).

The 1970s and 1980s saw the federal government cut massive amounts from social services, transportation, and affordable housing, leaving cities and states to make up the gap (Moskowitz, 2018, 40). Unable to pay for road maintenance, social services, and a host of other issues, cities competed to attract residents who would spend more and contribute to a higher tax base (Rothstein, 2018). This resulted in severe disinvestment to poorer areas, especially those home to more people of color. Disinvestment often paves the way for what Moskowitz refers to as Stage 0: the use of real estate, tax, and zoning policies to clear previously disinvested areas to make room for new development. This often translates into poorer, marginalized residents leaving and wealthier ones entering (Moskowitz, 2018, 35).

Nowhere was this process more visible than the fight over public housing. In the early 1970s, the Supreme Court ordered HUD must build public housing in predominantly white areas of Chicago as well. The city's response was to stop building public housing entirely (Rothstein, 2018, 35). This change signaled the collapse of one of the most significant defenses against rising housing costs. Public housing had been brought into existence by the refusal of the real estate industry to build adequate housing for working- and middle-class residents when wealthier, more profitable homes could be built (40). When cities ceased to build public housing units or restricted them to the poorest residents, the message was clear: the market had free reign.

As was the case in past U.S. frontiers, this led to racial segregation which directly implicated government. Settlements and federal court rulings found HUD and local government practices responsible for segregation in cities ranging from Baltimore to Dallas to San Francisco (Rothstein, 2018, 36). Parts of cities—sometimes entire cities—were being intentionally cleared for outside wealth. Through tax breaks and zoning allowances, more affluent, overwhelmingly white, populations flocked back to the city. This process has continued, not so different from that seen in 1980. As Schaeffer and Smith (1986) state, "We are witnessing not a curious anomaly but a trenchant restructuring of urban space" (362).

The West and Gentrification (1969 – present)

In most instances, frontiers have strayed far from the forests described by Turner (1914). Yet, what is normally understood as gentrification—the changing demographics of city blocks—has parallels outside dense metropolitan areas. When geographer Neil Smith (1996) said gentrification was producing a "new urban frontier," he was seeing a similarity between the blank, unregulated landscape of the West and the blank, unregulated landscape of the city. This was more than an abstract comparison. As towns and cities across the West embraced technological innovation and transitioned to a service-based economy, the region began saw rapid growth. The new development and investment which spurred an overwhelmingly white and more affluent population to return to cities also spurred their movement west. This westward trend continues to this day.

The frontier is inherently a political determination involving who is included and who is excluded. It bestows power to some individuals to make the rules—or escape the rules—in particular demarcated territory. And in each case, the frontier did not begin as a blank slate but instead was made into one (Cusack, 2011; Denevan, 1992). The need to protect nature has often been used as justification to make a place "blank." In fact, it could be argued this logic was present in each of the frontiers previously identified (Wolfe, 2006, 396; Stephanson, 1995, 26). In some instances, nature has been viewed as something needing "improvement," justifying its seizure by those willing or able to do so (Getches et al, 2017, 56; Locke, 1689, Ch 5). In others, it is something to be preserved, justifying land seizure by those who claim a desire to protect it. This is known as the "conservation and control thesis" (Robbins, 2011). The determining factor in which logic is used— "improvement" or "protection" of nature—is who stands to gain.

Westward expansion may have been driven by ideals of freedom, individualism, and new beginnings, but it was always grounded in something far less noble and far more tangible: it was profitable (Cusack, 2011). Each successive push west was enabled by federal governmental policy. Technology, labor, and the "discovery" of new material facilitated new ventures, and therefore new ways to accumulate profit (Moore, 2011, 26). "Commodity frontiers" followed the same westward march as towns grew around western U.S. outposts for timber, mining, and large-scale agriculture (19). In this way, the western frontier has always created lines between development and nature, operating on an illusion of separation between the human and natural world. Still, the ecological impact of these extractive industries was never far from view. Clear-cut forests, strip-mined mountaintops, or dynamited rail tunnels were constant reminders of development.

As extractive industries in the western United States relied on increasingly powerful technology and competed within a global market, however, they produced fewer jobs for surrounding areas. In their stead, the “New West” economy seemed to offer a viable alternative. This was “an economically diverse postindustrial regime of services, information technology, light manufacturing, tourism, and retirement” pursued with the express purpose of maintaining and growing local populations (Travis, 2007, 3). For much of the West, tourism is at the heart of this system.

The “New West” is built not simply upon the idea that these mountains, rivers, fields, and forests should be protected but that protecting them is more profitable than pillaging them. For locals and those taking solace in their preservation, there is no discernible difference. But for the long-term health of plants, animals, and ecosystems within and beyond these fast-developing areas, this distinction could not be any more profound. The fragmented environmentalism of the “New West” is caught up with notions of an ecological footprint which seeks to identify specific, individual actors and specific, localized impacts (Moore, 2011, 3, 22). In this way, the environmental impact of the city—especially a tourism-dependent one—is pushed out of sight.

The West is typically understood through a boom-and-bust cycle dependent entirely on non-renewable, extractive industries. The “New West” economy is built largely upon a fear of towns finally busting if they cease to take in outside money or cease to grow their tax base through tourism and higher-income residents (Moore, 2011, 32; Travis, 2007). But the apparent rise and fall of industries in the West fails to take stock of the larger picture: western state populations in the last century have continued to grow far more rapidly than the rest of the country (Travis, 2007, 1). Even in the 1980s, when the oil industry prominent in the West suffered severe losses, “All eleven western states…ended…with more people (and less open space) than they had at its start” (21).

It is hard to pinpoint when the “New West” economy emerged. Some say as early as the 1930s while others point to the rise of ski towns in the 1960s and 1970s (Travis, 2007, 3). It is clear, however, that a massive change occurred in the last decades of the 20th century. The 1980s wage stagnation and collapse of extractive industries did leave a gaping hole in the economies of western states. Between ski towns, the growth in popularity of national parks, and the passage of a series of paradigm-shifting public land acts in the late-1960s and early 1970s, recreation and tourism emerged as clear candidates to fill the gap.

In 1981, reporter Joel Garreau wrote extensively about the “Empty Quarter” of the Intermountain or Interior West, the slice of the West containing the three case study cities in the present research. Just ten years later, he described the incredible growth of cities like Tucson, Salt Lake City, Denver, Boise, and Phoenix in *Edge city: Life on the new frontier* (1991). This influential book was followed up with *Time Magazine*’s 1993 cover with a headline of “Boomtime in the Rockies.” A few years later came *Newsweek*’s emphasis on “Pacific Northwest Paradises” (Travis, 2007, 25).

That Garreau used the term “frontier” should not be surprising, as this has frequently been used to describe areas or industries seeing rapid growth. But the coverage of growth in frontiers must be understood as inseparable from the frenzy of future growth. Recent research, for instance, found an enormous impact to tourism when towns in Europe simply updated their

Wikipedia pages (Hern, 2020). With cities using expansive, intentional advertising campaigns to attract more tourists, the scale of the promotional impact is difficult to quantify.

The field of geography in the first half of the 20th century largely embraced environmental determinism. Under this theory, an area's topography, resources, climate, and other geographic factors served as its destiny in terms of whether it grew in population (Robbins, 2011; Cox, 2010). Political ecology is just one of many frameworks centering the roles of policy and city marketing, or "boosterism," in altering the landscape of where people live (Travis, 2007, 91).

It does not take much to debunk the environmental determinism theory in the western United States. Much of the growth in the West does not make a great deal of sense in terms of resources needed for survival. The rapidly expanding metropolises of Phoenix, Denver, and Las Vegas, for instance, all require massive diversions of water to sustain their populations. The city itself can be understood as a "growth machine" (Molotch, 1976) and "growth itself attracts water" (Travis, 2007, 31). In this way, the city does not simply shape itself around existing resources; rather, existing resources are shaped by the city. Especially for smaller, public land-bound cities like Bozeman, St. George, and Flagstaff, a contradiction emerges. Resources like food, water, timber, steel, and a host of others are imported from hundreds and sometimes thousands of miles beyond the city to preserve the aesthetic of untouched wilderness at its edges.

Propagated on fears of the boom-and-bust cycle seen in extractive industries, this amenity-driven migration shows no signs of slowing down (Power and Barrett, 2001). Sparsely populated residential areas beyond cities and suburbs, what are often referred to as "exurbs," blur the boundaries of where development ends and expansive natural spaces begin. People hungry for the wild, untamed West run into others hungry for the same thing (Rudzitis, 1996; 1999, 13).

Ironically, "the one force that might defeat the [western] region's success in the postindustrial economy is, simply, a loss of that regional charisma" (Travis, 2007, 29-30). In other words, it becomes more difficult to maintain a frontier imaginary—a conception of standing at the edge of vast, uncharted space—when surrounded by everything from interstates to RVs to flying drones to gift shops.

In the 1970s and 1980s, many who had previously taken up residence in suburbs were spurred to relocate in city centers receiving massive investment. With striking advances in transportation, communication, and land development easing the "friction of distance" (Travis, 2007, 27), others sought out the original escape: the West (Grandin, 2019, 68). The "small-town atmosphere and proximity to public lands" (Travis, 2007, 57) of "micropolitan" western towns like Flagstaff, Bozeman, Bend (OR), and Boulder (CO) (32) easily evoked the frontier imaginary which was so embedded in the creation of the suburbs.

Similar to large metropolitan areas orchestrating a "back-to-the-city" movement, the "New West" economy reversed the traditional calculus from jobs attracting people to one of people attracting jobs. The "New West School" sought to attract many of the same populations as cities: well-educated, monied or potentially monied, and mostly white. Before people, however, it added one more step: tourism (Travis, 2007, 53). Cities branded themselves as tourism hubs, even before the capacity for the influx of people existed. Touting the climate, recreation opportunities, and aesthetic appeal of the surrounding area, a frontier imaginary was firmly entrenched in "New West" thinking. This would offer the bridge to the spatial and ideological frontier which continues to this day.

The fifth frontier: The financialization of home (2000 – present)

In 1896, Frederick Jackson Turner wrote, “For nearly three centuries the dominant fact in American life has been expansion. With the settlement of the Pacific coast and the occupation of the free lands, this movement has come to a check.” He correctly predicted this frontier would not cease but instead expand abroad. A century later, in 1993, President Bill Clinton signed the North American Free Trade Agreement (NAFTA). With a reference to former President John F. Kennedy, Clinton declared “this new global economy is our new frontier” (Broder, 1993). Expansion remained “the dominant fact in American life” (Turner, 1896).

Within this “new frontier,” local producers would compete with multinational corporations and everyone would be enmeshed in the same system. Just as the General Allotment Act had pitted Native Peoples against wealthy white settlers more than a century before, NAFTA pitted small farms, or campesinos, in Mexico against multinational corporations in the United States (Grandin, 2019, 240). Goods would come from whichever place could provide them cheaper. Whether that was from lax environmental, labor, or human rights rules was beside the point; the dollar was the only metric which mattered.

The widespread financialization of other goods and services paved the way for industries which had long been understood as requiring some level of government stabilization to maintain reasonable prices. With further deregulation of the banking and housing industries in the 1990s and 2000s, housing in the United States was set to follow suit. In the eyes of the market, it was simply another commodity (Farha, 2017, 3), a process Manuel Aalbers (2008) termed the “financialization of home.” When the housing market crashed in the late 2000s, it sent shockwaves through the economy. By the time the dust settled, an estimated 10 million people had been forced from their homes and more than $19 trillion in household wealth lost

(Gottesdiener, 2013, 7). Altogether, this triggered the worst economic downturn since the Great Depression.

Perhaps this "financialization of home" should not be surprising given the history of housing in the United States. But neither should it be seen as inevitable. The federal government has been instrumental in shaping housing policy across the United States. It passed laws and granted loans with the intent of increasing segregation. It redlined, employed eminent domain, created the suburbs, and created zoning laws restricting smaller houses, certain businesses, and mixed-income properties. Altogether, this has arguably eliminated any sort of "right" to a home that may have existed previously. (Farha, 2017).

Much of this was not part of any formalized policy or process but resulted from an utter lack of policies relating to housing. Time after time, the federal government has ceded its role in housing policy to the whims of the market. UN Special Rapporteur on Adequate Housing Leilani Farha pointed to the U.S. Department of Housing and Urban Development (HUD) heavily discounting the auction of 180,000 delinquent mortgages in the wake of the Great Recession as evidence of a larger trend, which overwhelmingly went to private equity firms. Arguing for changes, it is no chance event that her two most unsparing letters in the U.S. were reserved for the Blackstone Group, "one of the largest real estate private equity firms in the world" (Farha, 2019a, 1-2) and the federal government itself (Farha, 2019b).

When policy has been implemented, it has often been designed to "encourage the institutional investment in housing as an asset class" (Farha, 2019b, 1). This is part of an ongoing trend by which "the United States of America has disconnected housing from its core social purpose of providing people with a place to live in with security and dignity," a trend which has been especially harmful to minority groups (1). This entire philosophy can be identified as the federal government's embrace of the "financialization of home." State and local governments have often followed suit. What becomes clear from previous frontiers—the "New World," the West, the suburbs, the city, even public lands themselves—is that the frontier is another name for blank space. While this frontier logic has changed forms, it has always followed a similar pattern of producing blank spaces and systematically privileging the access of outside wealth.

The financialization of home can be understood through geographer David Harvey's (2004) concept of "accumulation by dispossession" (74). First, housing is privatized and made available solely based on who can afford it. Since 1976, for example, public housing has received progressively less funding, although the cost of its maintenance has grown (Rothstein, 2018; Lipsitz, 2011). This has resulted in housing being available and affordable for less than one in three extremely low-income people (NLIHC, 2015, 10).

Second, through financialization, banks and concentrated wealth grows more dominant in these spheres (Harvey, 2004, 74). Those who can afford the property are given preference over lower-income residents, regardless of whether it will be their primary home. Individuals buying second—or third, or fourth—homes or those looking to hold property temporarily and sell it for higher value have the same right to this space as a year-round resident. In a global market, low-income and middle-class residents are not simply competing with other full-time residents but instead with wealthy individuals across the world (Paris, 2009).

Next, in the wake of perceived crises, powerful entities use the urgency of the moment to enact previously untenable practices. For example, the housing crash of 2008 led to a $700-billion bailout of many of the very banks which were implicated in causing the economic recession (HR 1424, 2008, 3). Labeled "too big to fail," Wall Street banks' flawed and outright criminal practices made visible by the financial crisis were excused in the name of stemming the tide of greater economic repercussions.

Finally, State redistributions favor the creation of capital to make up for budget shortfalls (Harvey, 2004, 80). In the 2008 housing crisis, local and state governments found themselves short on funds and cut social services and education expenses, relying on private funds to fill the gaps (Mitchell et al, 2019). In the absence of government assistance and infrastructure, individuals, companies, and local governments are left with limited options but to rely on investors and funding sources which have unforeseen consequences.

Naomi Klein refers to these last two steps as “the shock doctrine,” the method by which those in power push through previously untenable policies and defund social services in the wake of disasters and chaos (Klein, 2007, p4). While many of the banks most responsible for the housing crash saw massive bailouts from the federal government, most people saw cuts to social services on which they had relied. None of this was new, just a new form of “frontier capitalism, with the frontier constantly shifting location, moving on as soon as the law catches up” (242). This system depends on the continual creation of frontiers (Moore, 2011, 21).

Political ecology requires a deep dive into the policies and histories that have helped produce on-the-ground conditions, because these local conditions are tied into a system with far-reaching consequences (Robbins, 2011; Marx, 1867). The effects of one action are typically obscured by the immensity of the web. The shock doctrine, however, shortens the time span of cause and effect. By shining a light on the rash of policies pushed through in a chaotic time, the intended and unintended impacts become easier to identify.

The Great Recession was rife with examples of this type of crisis narrative at work. In 2009, for example, The UN Special Rapporteur on Adequate Housing visited Los Angeles. After studying the situation in the context of the national crisis, the Special Rapporteur pointed to both gentrification and the wave of foreclosures as main reasons for increases in homelessness (Camp, 2012, 668; Rolnik, 2010, 8). As stated previously, nearly 180,000 delinquent mortgages were sold by the U.S. government at greatly reduced prices, with "as much as 95 percent of these […] bought by private equity firms" (Farha, 2019b, 1). Many of these were then made into real estate investment trusts (REITs) (2).

The disparities resulting from crisis-induced policies are both profound and predictable. The single and multi-family dwellings organized as REITs were worth more than $1 trillion on the New York Stock Exchange. They were being traded actively in almost precisely the same way as mortgages had previously been packaged together and "securitized" without a thought for whether payments made by homeowners, or in this case tenants, could be sustained (Farha, 2019b, 2). In other words, the rental market was seeing the level of outside investment recently seen in the homeownership market, investment levels which were directly implicated in the housing crash.

As of October of 2019, the national homeownership rate stood at 65.1%, an improvement from five years prior but still among the lowest rates since 1996 (Census homeownership rates, 2019). With these diminished rates resulting in millions more people renting, affordable rentals became increasingly scarce, and therefore unaffordable. Between 2006 and 2016, there were 1.8 million more people making under $26,000 but 500,000 fewer affordable units (Joint Center for Housing Studies, 2016), with "affordable" defined as costing less than 30% of total income (HUD, 2020). As of 2017, 31.5% of all households were considered cost-burdened, spending more than 30% of income toward housing costs (Veal and Spader, 2018; HUD, 2020;). At the same time, 26.9% of households were owned outright, with no mortgage or debt (American Housing Survey, 2019). An already-stark fissure between classes was becoming a chasm.

Within all this, an examination of laws and policies across the country today will yield few explicitly racialized policies, perhaps especially related to housing. At the same time, the 2010 Census found Black isolation or segregation to be 55% nationally and more than 70% in Northern cities with large Black populations like Detroit, Cleveland, and Chicago (Bonilla-Silva, 2018, 24). Evidence points to much of the perceived integration as fleeting and resulting merely from gentrification in process (25). In 2013, whites' median net worth ($141,900) was 13 times that of Blacks ($11,000). This was the largest gap recorded since the late 1980s (49). Understanding affordable housing crises in the U.S. today requires unifying these two seemingly disparate facts: ostensibly non-racial policies and rampant racial inequality (Bonilla-Silva, 2018, 2).

Just as political ecology is used to push back against the innately apolitical nature of environmental determinism, providing a deep history of the racialized structure of the United States helps confront a purportedly post-racial society. "The white spatial imaginary (WSI) is innately ahistorical. It accepts the prevailing imbalances of wealth and power between racialized spaces as a baseline reality that should not be disturbed, as an accurate register of the achievement and worth of the people who live in those spaces" (Lipsitz, 2011, 245). The WSI, like environmental determinism, cannot imagine the world existing in any other way. Each perceives this reality to be the inevitable result of hard work and circumstance. Squaring race-neutral language with highly racialized space requires challenging the politics and history that produced this modern U.S. society.

First, it is important to understand the absence of racial language in policies does not mean race is no longer a consideration in housing today. Race is invoked through reference to habit, economic status, immigration status, procedural knowledge, and a whole host of other signifiers. Second, and perhaps most importantly, the entire history of land, housing, and race in the United States has produced a highly “racialized space” (Lipsitz, 2011; Aaronson et al, 2017; Maney and Abraham, 2008, 66-8; Aliprantis and Carroll, 2019, 2). Such spaces, once produced, oftentimes remain stubbornly in place, no matter the harm done. The U.S. government has consistently argued that its racialized policies were necessary to appease the virulent racism of the masses and that it cannot be held responsible for the racialized landscape (Rothstein, 2018). Attempts to address even the most egregious racial inequality face stiff opposition, as was evidenced when the Supreme Court ruled in 2007 that “modest school desegregation programs in Seattle and Louisville violated the rights of white children” (Lipsitz, 2011, 48).

Homeowners’ associations (HOAs) provide another prime example. The power of HOAs today can be traced back to 1964 (Rothstein, 2018). New civil rights laws were sweeping the country which would have opened recreation centers and parks everywhere to all races. Rather than enforce these laws, the FHA favored private HOA control over these areas. With the power to enact racially restrictive rules, the number of HOAs skyrocketed from a mere 500 to the 250,000 that exist today for the express purpose of maximizing property values within an area (Lipsitz, 2011, 32).

From the removal of Native Nations in the 1600s to the Federal Housing Administration’s refusal of homeownership to Black people, the U.S. has continually expanded because of a series of frontiers, expressly for the wealth of outside, overwhelmingly white, settlers. This history has produced what Charles Mills refers to as the ‘“geography of whiteness”’

(Lipsitz, 2011, 35). That this history has been forgotten or distorted is not evidence of present-day racial prejudices but instead of something far more difficult to track: racialized power structures (Lipsitz, 2011).

Crises, and narratives of crisis, often produce decidedly racialized impacts. The housing market crash in 2008 was no exception. As Gottesdiener (2013) relayed in her book, *A dream foreclosed*, The Center for Responsible Lending saw the danger in subprime mortgages and issued a statement in 2006 which "predicted that unless the government intervened, it was likely that bankers would directly cause 'the largest loss of African-American wealth that we have ever seen, wiping out a generation of home wealth building"' (Gottesdiener, 4). Warnings were everywhere. They were simply not heeded until the housing bubble finally burst and the stock market crashed.

As Harvey and Klein demonstrate, government oftentimes cedes its regulatory role to market forces during a perceived crisis. This is nothing new. In reiterating his argument regarding the implications of the United States' western frontier back in 1896, Turner quoted French Professor Emile Boutmy, who argued:

> '"[The United States'] one primary and predominant object is to cultivate and settle these prairies, forests, and vast waste lands. The striking and peculiar characteristic of American society is that it is not so much a democracy as a huge commercial company for the discovery, cultivation, and capitalization of its enormous territory. The United States are primarily a commercial society, and only secondarily a nation."'

The height of the housing market crash coincided with the spread of Smartphones, allowing apps and digital platforms to further take hold. The Great Recession, in this vein, has been labeled "The Great Disruption" for further clearing space for the dominance of platform capitalism (Sadowski, 2020, 563). When Airbnb was founded in 2008, STRs seemed to meet a demand for cheaper travel accommodation options and provide supplemental income for residents unable to make ends meet in the unstable Recession times. The number of Airbnbs, Vacation Rentals By Owner (VRBOs), and other STRs quickly skyrocketed. The frontier had gone digital.

The financialization of home and short-term rentals

STRs were promoted as a win for everyone involved. Hosts could earn extra income. Visitors could have more space and get the feeling that they "belong[ed] anywhere" (Airbnb, 2020). Amidst dim economic prospects, any additional income or cheaper amenities were welcomed. Hotels might lose some business, but what wasn't to love for everyday people? In just over a decade, for instance, Airbnb, had become the largest, most profitable hospitality company in existence despite not owning a single property (Aydin, 2019).

The pervasiveness of STRs across the U.S. and the world demonstrates they are still popular for hosts and guests. A 2016 study showed that those who had stayed in Airbnbs—which likely extends to STRs generally—did not desire to return to hotels (Verhage, 2016). In addition to the impact on guests and hosts, STRs also have an impact on the communities in which they operate, with one of the biggest factors being housing. Although STRs have many impacts, those related to housing—especially housing affordability—are at the heart of the present study. With this in mind, the literature review was primarily focused on studies which connected STRs and housing.

STRs purportedly raise prices on other homes primarily in two ways. First, they remove properties from the long-term residents' market, whether that is homeownership or rental.

Second, by catering to short-term visitors who spend more nightly on lodging, they make it difficult for long-term residents to compete. These issues are intertwined and a basic way of approaching them is by determining how many STRs there are in a community and how many potentially take housing off the market. In other words, does the supply of STRs impact that of long-term options? If so, how much?

While any empty room being offered as an STR within an owner-occupied home could potentially be offered as long-term housing, this would be incredibly difficult to measure. Involving surveys of hosts offering spare rooms as STRs, such an inventory is beyond the scope of the present study. Analysis of the number of entire-home rentals, however, is much more feasible. Information from vacation rental management site AirDNA was especially useful in this regard.

The first signal that investors and non-primary homeowners—not just those looking to rent spare rooms—also saw a boon in STRs comes from the wide array of new businesses—and entire industries—which have sprung up around them. Vacation rental-related sites are now everywhere, creating entirely new industries to promote, manage, and internally regulate this market. Industries have exploded in vacation rental management, cleaning services, noise monitoring, and many more to complement the STR platforms themselves.

If these seem unnecessary for STRs with hosts in the house able to monitor noise, clean their space, and "manage" the room(s) being rented, it's because they are not designed for that purpose. These digital platforms eliminate the "friction of distance" (Travis, 2007, 27), allowing investors to identify new markets and pursue profit in the STR industry without necessarily requiring them to ever step foot inside a place. In this way, STR owners can easily "host" without ever making contact with their guests. While the couch surfing or room rental model often promoted as the norm still exists, the norm in many places has become entire-home rentals, oftentimes available for more than half the year. The below chart, showing the five largest cities in the U.S., offers a snapshot.

	*Census Estimate, 7/1/2016	**AirDNA Snapshot 8/19/2020		
City	**Population***	**Current number active****	**% entire home****	**% available full-time****
New York	8,537,673	25120	58	27
Los Angeles	3,976,322	10362	72	26
Chicago	2,704,958	6320	74	40
Houston	2,303,482	5322	74	30
Phoenix	1,615,017	3066	81	34

Table 1: Breakdown of STRs in the largest U.S. cities (individual).

In interpreting this data, it is first important to note that STRs operate in varied landscapes. They have been highly contested within large cities in the U.S. and across the globe, which impacts their prevalence and regulations. Many cities are entrenched in legal battles, with New York offering one example of a city passing a law to curtail the prevalence of STRs (Levine, 2016). Perhaps this is part of the reason why it has the lowest entire home percentage and is nearly equal with Los Angeles for the lowest full-time percentage. Second, as stated previously, it’s important to note that these numbers are based upon Airbnb and VRBO only, with a significant amount—oftentimes between 5% and 10% of the totals for large cities like these—appearing on both sites (AirDNA, 2020). Although these numbers do not remove those rentals that are dually listed, the active number also only reflects the number of rentals listed as available at some point during the month prior to the date searched, in this case 8/19/20. The total available within the year oftentimes adds thousands to this snapshot.

With this in mind, the “Current number active” can be used to determine major trends in the absence of exact data from STR companies themselves. Cumulative totals for the five cities can be derived as well, by multiplying each city’s total by its percent offering an entire home and then its percent available full time. These are given in the chart below.

	**AirDNA Snapshot 8/19/2020		
City	**Current number active****	**# entire home****	**# available full-time****
New York	25120	14570	6782
Los Angeles	10362	7461	2694
Chicago	6320	4677	2528
Houston	5322	3938	1597
Phoenix	3066	2483	1042
Total	**50190**	**33129**	**14643**
Percentage		**66%**	**29%**

Table 2: Breakdown of STRs in the largest U.S. cities (composite).

The trends are staggering. The percent of homes being offered as entire homes is exceedingly high, with a portion available for much of the year. Based on the numbers from this 8/19/2020 snapshot, 66% of Airbnb and VRBO listings in the country’s five largest cities offer entire-home rentals while 29% are listed as available for more than half the year. These numbers do not validate the notion that hosts are renting out spare rooms and present during guests’ stays.

Instead, they seem to point to tens of thousands of long-term residential options becoming unavailable to serve the lodging needs of a visitor.

All of this deserves an asterisk with COVID, but a major past study offers similar analysis. It also demonstrates that the supposition that individuals could be living in many of these places at all is likely overly generous, if trends have continued. Murray and Slee (2016) summarized their analysis of Airbnb's New York City data.

> "Airbnb's New York City 2014-2015 data set, which runs to November 1, shows that multiple-lister hosts earned 41% of the complete Entire Home revenue during the 2014-2015 year. This number is in line with what critics have been claiming for the last two years: a disproportionate amount of Airbnb's revenue is gained from commercial operators offering listings that are more likely to disrupt neighbors and displace long-term residents, and many of which are illegal under New York State law (for rentals under 30 days where the primary resident is not present)" (4).

This also fits with the product offered by market analysis sites, like AirDNA. These companies continually identify new areas— "frontiers"—for investment while highlighting stories like "The Airbnb expert's playbook: Secrets to making six-figures as a rentalpreneur" (Shatford, 2020). In this example, the author starts with a familiar story of finding freedom by leaving a "lucrative" business job to "explore the world" in 2012 (5). But instead of selling his possessions or relying on savings, he "snapped a few photos with [his] iPhone, created a[n Airbnb] listing, recruited a friend to manage the apartment in exchange for free use of [his] car," and was soon gone on a one-way ticket.

Shatford did not just break even. He describes how he streamlined his process and soon had a monthly income of $6,500 with less than four hours of weekly work (5). When he did the same with four other properties to create an annual profit around $200,000, he maintains that this was a small operation. Other "rentalpreneurs" he spoke to had between 20 and 50 Airbnb rentals with a few having more than 100 (Shatford, 2020, 7). The rest of the narrative is a how-to guide for real-estate investors looking to maximize profit in the STR business. Just as was said nearly 200 years ago, "The men of capital and enterprise come. The settler is ready to sell out and take the advantage of the rise in property, push farther into the interior and become, himself, a man of capital and enterprise in turn" (Peck, 1837).

This, of course, is not true for everyone. Many STR hosts do not rent out an entire place and, of those who do, many rent out one and only one. While every location is different in terms of regulations, tourist preferences, and alternative lodging options, trends can emerge by looking at individual cities as case studies. In a working paper, Fabo et al (2017) analyze the income of STR hosts in Vancouver, Canada. They conclude that, "[…] Airbnb is not a viable option for replacement income in Vancouver. Yet, it can certainly be considered an added source of income, especially for the most sought-after neighbourhoods. In these cases, roughly 10% of the costs of living can be covered by renting or sharing rooms, which is not a negligible amount" (16).

On its surface, this seems to back a common argument: that STRs allow hosts to make income to put toward rising housing costs. But it's important that this be interrogated further. First, not all neighborhoods are equal. Just as more desirable areas have higher prices when it comes to housing and hotels, the same is true for STRs. This means hosts able to afford housing in these more financially rewarding areas can make more. Second, not all STRs are equal. Widespread availability of entire-home rentals would presumably also drive down the amount which can be charged by individuals offering only a private room, which means those able to vacate their space entirely can make more. Third, and perhaps most importantly, it's extremely common for leasing agreements or homeowners' associations (HOA) for permanent residents to restrict the ability of individuals to operate STRs on the property.

The important caveats in who can make a large income from STRs greatly diminish the potential for it being used widely by long-term residents struggling to afford increasing housing costs. While many can—and do—earn supplement income from STRs, those able to offer entire-home rentals for more of the year and those who already live in desirable areas stand to gain the most. Many, like those under leases or HOA covenants, conditions, and restrictions (CC&Rs) which forbid STR hosting, cannot directly benefit at all.

This ability to make money off one's home as an STR host can have unintended consequences for the community. If a home can—or is expected to—directly generate income, that potential will likely be reflected at the point of sale. Data on this is sparse, but one study finds exactly that. Wyman et al (2020) summarize their main finding: "Using home sales data from the City of Isle of Palms, SC, we find short-term rental properties sell at a price premium relative to long-term rentals and owner-occupied properties…" (1). Although more data would be needed to demonstrate this finding holds true elsewhere, the principle holds up to general market logic. This is the same reason why a commercial space in a highly trafficked area costs more than that available in a lightly trafficked area: the initial difference in price is expected to be offset by the increased revenue.

With STRs, properties owned and not within restricted areas such as certain permanent-residents HOAs have access to an income stream that most long-term renters and many HOA members do not. In other words, invoking the frontier definition utilized by this research, an unregulated space operates amidst or alongside a regulated one. The biggest complaint of STRs on housing, however, is largely based upon supply and demand—an argument that potential long-term housing is instead being utilized as STRs. Especially in areas with both a housing shortage and extensive visitor lodging options, the use value of home seems to be subsumed by the exchange value (Marx, 1867, 130).

An August 19th, 2020, snapshot showed 66% of all STRs listed on Airbnb and VRBO in the five largest U.S. cities offer entire homes (AirDNA). Additionally, 29%—nearly three in every ten—of those listed were available more than half the year (2020). To determine the true impact on housing supply, however, the number of entire-home and full-time STRs would have to be determined in relation to the total number of housing units available. Researchers at FiveThirtyEight undertook an analysis of this type several years ago. Using AirDNA data to study Airbnb's 25 largest markets between June 2015 and May 2016, the study found 9.7% of the 91,200 active Airbnb listings were commercial—whole units rented out more than half the year (Stulberg, 2016).

The commercial share varied greatly across cities, with 21.1% of Honolulu's (HI) 1,400 active listings during the year being entire homes actually rented at least 180 days of the year compared to 5.4% of Philadelphia's 2,100 active listings (Stulberg, 2016). But FiveThirtyEight's major conclusion, as stated in the article title, is that "Airbnb probably isn't driving rents up much, at least not yet." The "not yet" points to the high percentage of total revenue stemming from commercial listings. Of the 25 markets, the median percentage of STRs that researchers labeled commercial was 9.1%. The median percentage of total revenue which came from commercial STRs, however, was 28.5%. The highest city percentage was Los Angeles, with 46.4%, while the lowest was again Philadelphia but this time with 20.6%.

As Stulberg (2016) states, "[FiveThirtyEight's analysis] suggests the absolute number of commercial units on Airbnb is relatively low, representing well below 1 percent of all rental units." A very rough estimation of this effect can back this up, but there are several important changes to note in relying on data from the charts above. Instead of FiveThirtyEight's year-long data taken between the summer of 2015 and summer of 2016, the charts above show only those rentals available in the month leading up to August, 19, 2020, during a pandemic. It also includes VRBO data in addition to Airbnb data. Finally, the STRs in the chart above mark those listed as *available* at least 180 days of the prior year while FiveThirtyEight's data relies on those *booked* at least 180 days. Still, the data can be useful in identifying trends.

Taking the total 2016 population of these five cities—19,137,452—and dividing that by the national average household size—2.61 people per housing unit—, gives an estimate for the number of units in each city. Of these 7,332,357 units, 50,190 total Airbnb and VRBO units is a mere 0.6845%, with the 33,129 entire-home rentals representing just 0.4518% and those listed as available—not necessarily rented—at least 180 days representing 0.1997% of all units. Before making the conclusion that STRs have a small impact on housing, however, it's important to note the limitations in the data. As the article states, this gives cumulative data and does not give neighborhood impacts. As was repeatedly stated in the "Gentrification" section of chapter two, the neighborhood scale is where changes are seen. While someone may feel forced to leave New York if the city-wide price of housing increases, that housing price touches down when they feel forced to leave their block.

Furthermore, although these effects may seem small, every change in housing has a critically outsized effect when taking place in tight, low-vacancy markets. As Stulberg wrote for FiveThirtyEight, "Dependence on commercial operators complicates Airbnb's claims that it represents homeowners and renters making extra money "sharing" their living spaces, and strengthens the hand of critics who say that cities should treat the services more like traditional hotels, which are generally far more tightly regulated" (Stulberg, 2016). All this is to say that the uproar over STR-caused pressure on housing affordability in the country's largest cities is not misplaced. But it does beg the question of how the introduction of hundreds and sometimes thousands of STRs affects far smaller housing markets. In this vein, the STR frontier has followed the well-trod trail of other frontiers: back to the West.

3. Methods

Research method selection

This research utilized a case study approach, focusing on specific cities to elucidate short-term rental (STR) trends. Such an approach has come to be one of the dominant methods when addressing questions for questions of how and why events happen as they do (Yin, 1994, 1). Case studies were particularly relevant for this research, which employed a political ecology theoretical framework. Furthermore, one of the primary methods of data collection for this study was the use of semi-structured interviews. As will be discussed within "Interviewing and interviewee selection," these interviews provided guideposts for understanding relevant trends, policies, and competing values.

Social science research can rely upon both natural and artificial experiments, but STRs on housing operate on large scales and are embedded into complex political and economic structures which resist being reduced to experiment. Archival data and document analysis are important ways to corroborate trends and identify patterns. These were critical in completing this research. a fact which will be discussed in "Coding and themes." As STRs and housing are dynamic issues, however, it was important to gauge the ways in which people talk and think about them in the context of real places. Additionally, surveys can be useful, but distilling individual people and responses down to grouped data loses the rough edges which are so critical in discussing why people believe and act as they do.

This speaks to a larger issue within academia, which is the preference for "hard" data and numbers over description and nuance. On the surface, numbers appear "cleaner" and more objective, but this research makes a strong case that both are needed. If this research had relied exclusively on observations and semi-structured interviews, there would be no way to understand how widespread trends in behavior and thinking truly were. But given the wealth of data on population, income, housing supply and pricing, and tourism, repeating that data analysis was unnecessary. Data from the Census, American Community Survey, and both city and regional studies were repeatedly cross-referenced throughout this research.

Yet, particularly for a subject so laden with normative value as housing, simply providing numbers is insufficient to show how STRs actually touch down in these communities. A fitting analogy for this joint reliance on quantitative and qualitative methods, both for these cities and the larger schism which exists in the field of geography, would be trail navigation. Geospatial technology, or quantitative methods, can give a bird's eye view, offering a map for getting there and estimation on what to expect. This, however, would be useless if not corroborated with on-the-ground, in-the-moment information, the qualitative methods of observing one's surroundings and talking to people on the trail. Quantitative can point to macroscopic trends and offer models and predictions, but it is the qualitative which gives an idea of how these pieces touch down.

Case study selection

This research focuses on three cities: Bozeman (Montana), St. George (Utah), and Flagstaff (Arizona). Each has a population between 45,000 and 95,000, making it the largest city within a 100-mile radius. Each is partially land-bound, making its limitations to growth fairly representative of the rugged, public land-flecked West. Proximity to these public lands is one of the primary drivers of tourism to each city, with each less than 90 miles from the most-visited national parks in the country: Yellowstone (Bozeman), Zion (St. George), and Grand Canyon (Flagstaff). Each city is home to the adjacent Park's closest commercial airport and a common point of departure for the 4 million+ annual visitors each Park receives (NPS, 2020). In addition, all three cities lie along major highways: I-90 (Bozeman), I-15 (St. George), and I-40 (Flagstaff). Given these factors, both tourism and overall populations have boomed in each city.

With the increasing numbers of both tourism and population, this study identified a high prevalence of STRs in each city, something representative of similar cities across the West. One major caveat in what "representative" means is how individual cities regulate—and enforce regulations for—STRs. After determining the aforementioned city characteristics, this study honed in on these particular cities because each appeared to take a different path in regulating these hosting platforms.

Researcher positionality

When conducting research, particularly when it involves interpersonal communication, it is important to take stock of one's own identity, or positionality (Galletta, 2013; Glesne and Peshkin, 1992, 95). I possessed a raft of qualities which may have affected the research. Although it is beyond my ability to truly articulate *how* these qualities affected the research, they are important to note. In addition, they speak to my reasons for being interested in this subject.

I've spent most of my life in the Midwest, growing up in Iowa. Given the substance of the literature review, it is also important to note that I am white as well as a renter. While I grew up in a stable, owner-occupied home, I have never owned a home myself. I lived in places of extremely varied populations, including towns of less than 20,000 people and metropolitan areas of several million, before I first moved to the West in 2017. Since then, I have worked three seasons for federal public land management agencies, a fact shared during the course of conversations with interviewees. Between work for the U.S. Forest Service (2017 California, 2018 Montana) and National Park Service (2019 New Mexico), significant regional travels, and

Flagstaff residence since the fall of 2019, I have been struck by the growth in both tourism and overall population in the West. Throughout this time, STRs gained prominence in number and media attention.

Interviewing and interviewee selection

In addition to extensive research on tourism, housing, policy, and demographic trends related to the three cities, I conducted semi-structured interviews with city officials, housing advocates, real estate representatives, and other involved parties who could speak to the impact of STRs on each city. I used semi-structured interviews, which made certain topics or established questions as the crux of the interview but allowed me to stray from this "script" based on the interviewee's responses (Galletta, 2013). This approach is commonly used in political ecology research to ensure that interviewees give sufficient responses on particular topics while also encouraging less formal structure and more honest discourse (Collins, 2008, 27; Walker and Fortmann, 2003, 472, 488; Siciliano, 2016, 4).

I conducted 22 interviews related to individual cities: 6 for Bozeman, 7 for St. George, and 9 for Flagstaff. In addition, I interviewed two researchers regarding overall housing and tourism trends, focusing particular attention on the impact of STRs in the West. Interviewing city officials falls into anthropologist Laura Nader's (1972) concept of "studying up," which means shining a light on power structures and the mindsets of those in positions of power (1). This concept found a home within political ecology. As political ecology research began to turn its attention on the Global North, Paul Robbins (2002) called for scholars to avoid "looking *near* without looking *up*" (1). By interviewing a wide range of officials related to each city, this study was able to look beyond the local, on-the-ground conditions to the policies which have helped determine them.

As a result of COVID-19, most interviews—21 of the 24—were conducted remotely during the summer months. Although many of those contacted were unable to meet, the majority were and the sudden normalcy of remote interaction seemed to allow for more flexibility in timing as well as fairly substantial engagement.

Outside research

To study the number, type, and impact of STRs, this study relied upon data corroborated by both city visits and countless sources of data. Some would have deemed visits to each city unnecessary with COVID making remote interviews more practical and accepted. Despite this, I felt that living in Flagstaff allowed for more consistent observation and warranted a visit to both Bozeman and St. George in the interest of applying some level of observation to match. I visited Bozeman in July and St. George in October of 2020, taking notes of growth patterns, trends, and sites typically attracting major tourism activity.

This study was bolstered by data available through outside sources, especially AirDNA, the U.S. Census Bureau, and various city studies. As one of the largest vacation rental management sites, AirDNA "scrapes" data from the two largest STR sites—Airbnb and VRBO—and offers detailed analysis of STR trends within individual cities. It has been used by other studies as a reliable data source, including one conducted on behalf of Bozeman (Sullivan and Walker, 2019). As was mentioned previously, Census data was also relied upon extensively throughout the study, providing analysis of population, demographics, and housing trends in each of the three cities as well as more broadly. City studies are cited in each section of the "Results" and were discovered through independent research and by suggestion of interviewees.

Throughout the course of the study, a trend became clear through interviews, data, and research into the West's history. STRs were operating within a greater economic paradigm, one which created economic incentives toward market expansion. In this context, STRs were theorized as part of a new iteration of the frontier, defined for this research as *a blank space amidst or alongside an occupied one, oftentimes producing or resulting from uneven regulation*. This connection and theoretical framework became coherent only after interviews were complete. The history of city, state, and federal policy in regard to land use and housing formed the bulk of Chapter Two, helping situate STRs within a broader frontier imaginary. Such linkages again draw attention to the importance of engaging narratives to complement quantitative data. When it comes to housing, this approach of relying exclusively on quantitative analysis, coupled with permitting and encouraging the accumulation of excess profits, is what has led to the current "financialization of home" (Aalbers, 2008).

Coding and themes

Individual names and specific positions of anyone interviewed for this research are being kept confidential. Instead, codes have been applied in the following format: CITY-Government employee?-General position-Month and order of interview. A government planner interviewed in May and third overall, for example, would appear like this:

Case study city – St. Louis

Is this person a government employee? – G (if yes) or left blank (if no)

General position – Planners

Month of interview – 5 (May, the fifth month)

Order of interview – C (third letter, signifying this was the third overall interview)

All of this would come together in this format: *STL-G-Plan-5C*. Furthermore, the singular "they" was used in place of gender-specific pronouns to avoid potentially identifying individuals. So, if the St. Louis planner cited was a man, this would be omitted. A statement made by this individual could be cited in this format: *The St. Louis planner spoke broadly about housing trends they noticed (STL-G-Plan-5C).*

All interviews were recorded and written notes taken during, which allowed them to be transcribed with a high degree of accuracy. Any inaudible portions were transcribed as [indec.], meaning "indecipherable." Although interview questions were added, altered, or removed throughout the process based on perceived utility and clarity, the formal analysis of themes was only undertaken after all interviews were complete. Once all were transcribed, they were then analyzed for themes which stood out per the interviewee or city as well as those common to multiple cities (Deterding and Waters, 2018).

Themes extracted from interviews varied according to city and interviewee role but were primarily determined and analyzed according to two versions of content analysis. Both of these could be understood as "a progressive process of sorting and defining and defining and sorting those scraps of collected data […]" (Glesne and Peshkin, 1992, 133). I first conducted a manifest content analysis to assess what was verbally stated. This technique examines generally more quantifiable aspects of interviews such as what words were used, in what order, and how often.

Next, I conducted a latent content analysis to identify ideas and more nuanced responses (Dunn, 2000, 76). As sociologist William Bruce Cameron (1963) said, "Not everything that counts can be counted, and not everything that can be counted counts." It was important to undertake this latent content analysis after first completing the interviews and pulling out common trends in wording. Every interviewee citation or quote considered for use in the thesis was required to pass a test: ‘Does this accurately represent the views articulated by the interviewee?’ (Dunn, 2000, 77). When I could answer this question affirmatively, it was integrated into “Chapter 4: Results” within the section devoted to that particular city. If it was common across cities or spoke to a larger trend identified through outside research, it was integrated into the “General trends” section.

4. Results

The intensive literature review underscores a simple point: rather than viewing short-term rentals as an aberration, a new and "disruptive innovation" (Guttentag, 2015), they must be understood in the context of the frontier. In this regard, they are a recent iteration in the financialization of home (Aalbers, 2008). Identifying STRs in this light allows for a clearer picture of how they emerged and became so widespread. It also fits regulatory attempts, or lack thereof, into a historical context.

All this is built around answering two primary research questions:

1. How do STRs affect housing in Flagstaff (AZ), Bozeman (MT), and St. George (UT)?
2. Does the perception of STR impact on the housing market and local economy match the reality?

In short, STRs make housing less affordable in these three cities, although the degree is difficult to measure without better data. And, among those the researcher spoke to, most officials seemed to understand that STRs have *some* impact on both the housing market and local economy. After these findings, most STR impacts must be qualified with the central political ecology questions: who wins and who loses?

In other words, whether particular STR regulations are good or bad depends on who is being talked about. What is clear is that STRs, and the policies surrounding them, are not neutral. Their prevalence is shaped by on-the-ground factors ranging from the proximity of public lands to the number of second homeowners. They have far-reaching consequences, which is oftentimes by design.

Political ecology emphasizes a long view, taking into consideration who has shaped the narrative of places and resources. While STRs may have had noble intentions—helping hosts make ends meet and saving guests some money—, the chart below shows near-permanent, entire-home STRs to be prevalent in each case study city (AirDNA, 2020). As was stated repeatedly by interviewees, this places STRs in direct competition with the long-term residential housing market. In this vein, how STRs are regulated and promoted offers direct evidence about whether a government prioritizes long-term residents or short-term visitors. By extension, this demonstrates who these places—both the cities and surrounding land—are intended for.

	***Census Estimate, 7/1/2019**	****AirDNA Snapshot 8/19/2020**		
City	Population*	Current number active**	% entire home**	% available full-time**
Flagstaff	75,038	1361	91	55
St. George	89,587	855	97	62
Bozeman	49,831	553	88	47

Table 3: Breakdown of STRs in the three case study cities (individual).

The findings of this research will be divided into four sections: 1) Bozeman, 2) St. George, 3) Flagstaff, and 4) General trends. These findings will be followed by a 'Solutions and suggestions' Chapter dedicated to identifying solutions which have worked in mitigating negative housing affordability effects rising from STRs and describing others which could.

Bozeman

Research into Bozeman involved six interviews consisting of three government and three non-government officials. There were three planners, one elected official, a compliance official, and one real estate agent.

The findings related to Bozeman were the result of speaking to these individuals, researching relevant policies and documents, and a July 2020 visit to the city and surrounding area.

STRs do affect affordability in Bozeman's tight housing market. Interviewees, however, identified three factors which have lessened concern over this impact. First, the city lies in the expansive Gallatin Valley and has room to grow, especially to the west. Second, Bozeman is home to Montana State University, whose rapid growth has put far more of a strain on the city's housing stock than STRs (BOZ-G-Elec-7S). Last, but not least, the city passed nuanced STR regulations in 2017 after taking extensive feedback from the public.

When asked about how the city balances growth with current residents, a Bozeman elected official laughed. They explained that "Before COVID, that was the only question." The city, however, is not as constrained in growth as other cities. "You know, it's a wide-open valley and it's all private property, so we can fill up" (BOZ-G-Elec-7S). Traveling to Bozeman, this growth is evident. Construction is being undertaken throughout the city. The three main strategies for growth—infill, vertical construction, and expansion—are all visible. But this construction, especially on single-family homes, is overwhelmingly taking place in the western part of the city (BOZ-Real-8V).

This room to expand lies in striking contrast to many other western cities. The "New West" economy, with its emphasis on natural amenities and public land access, both drives and limits its own growth (Travis, 2007, 64). The Bozeman elected official accurately drew a distinct contrast with Jackson, Wyoming, which is tightly bound by public land. Until development reaches these boundary lines, land is open. While the city still grapples with the best way to manage its relatively recent discovery as an “amenity-rich, resort-style destination” (BOZ-Plan-7R), its affordable housing shortage has been buffered by this space. As another planner said, “The city is approving new development about as fast as they can get in the door. So there has—the city has been in a very accommodating development posture for a long time” (BOZ-G-Plan-6Q).

This same planner mentioned a common theme for the three case study cities: the affordable housing shortage is not new. In fact, they said it’s cited as an issue in city documents dating back to 1972 (BOZ-G-Plan-6Q). That the shortage remains, however, is telling. Interviewees consistently rated the influx of tourism and second homeowners during the last two decades as a factor in Bozeman’s current affordability issues, but they also said this was compounded by the growth of another entity: the university. Four of the six interviewees, with a separate planner and the compliance officer not touching on the subject, emphasized the pressure that the university’s growth had placed on the housing market. Between 2010 and 2018, the university grew from 13,559 to 16,902 (Montana State University, 2021). Enrollment has since leveled off and even decreased slightly in accord with national trends, but 3,343 new residents is no small amount for a city of fewer than 50,000.

All these new residents—not to mention new staff, faculty, and employees of companies meeting the needs of an increasing population—need somewhere to live. The real estate agent interviewed said, “30% of the deals I'm doing now are, are working with parents that live somewhere else that kids are going here and they want to—they want to give them—you know, buy them an investment property where they can live in and then rent out to other college students. So starting to see that a lot, a lot more." With the university located just south of downtown and therefore more expensive, much of this housing is spread far beyond the urban core (BOZ-Real-8V). Add to this the fact that the university cannot even house all freshmen, let alone all students looking to rent (BOZ-G-Elec-7S). In this context, the off-campus rental and homeownership market are both greatly affected by this population.

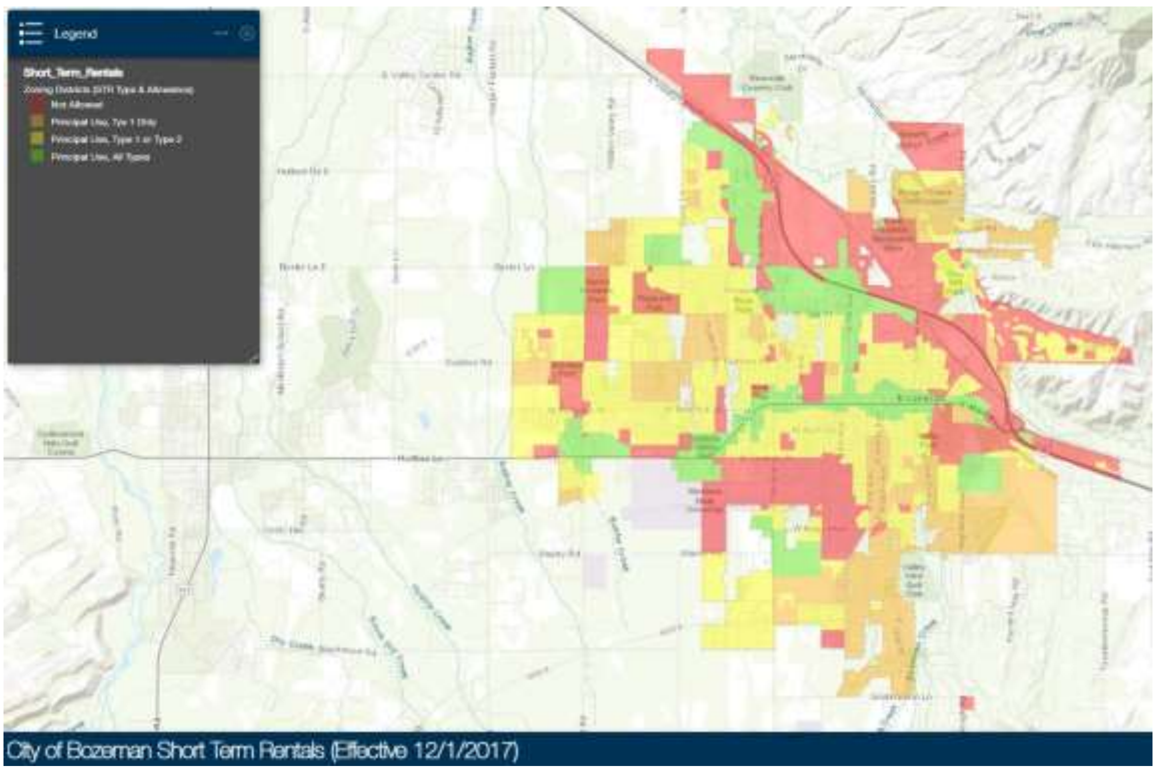
This student population is a major reason why Bozeman's vacancy rate for long-term rentals hovers around 1% (BOZ-Plan-7R; BOZ-G-Plan-6Q; BOZ-G-Elec-7S)
and the housing stock for home sales rarely extends beyond a few months (BOZ-G-Elec-7S). Bozeman is a seller's market. This does not bode well for maintaining affordable housing. The nearly 3,500 new students in the last decade serve as further competition for the existing residents (Montana State University, 2021). At first glance, comparing this number to the roughly 500 entire-home rentals listed between Airbnb and VRBO (AirDNA, 2020) seems to back up the claim that the university puts more pressure on the housing market than STRs. Growth in outside visitation and the university, however, work in tandem. As one planner said, visiting professors or families coming for university graduation will oftentimes opt to stay in STRs that provide more space (BOZ-G-Plan-6Q). One's presence reinforces the other's.

The tight housing market underlies most issues in Bozeman, as it does in most cities across the West. Whether for permanent residence, school, or a secondary home, people are moving to Bozeman faster than new housing can be built. But that does not mean newcomers—or especially long-time residents—want to see this door remain wide open forever. As the elected official said, "Most of the residents love Bozeman because of, you know, what it is at the moment. They're not, you know, wanting to see it grow. So it's a huge political challenge" (BOZ-G-Elec-7S).

This is a difficult balance for a tourism community in the West. The same boom-or-bust fears present in extractive industries permeate “New West” economies like Bozeman’s (Travis, 2007, 6). The prevalence of STRs—especially given the extent they devote entire-home, full-time rentals to incoming visitors—is part of the housing market equation. For this reason, it is perhaps not too surprising that STRs became a contentious issue in Bozeman, finally rising to the level of public debate. Led by Assistant City Manager Chuck Winn, city officials solicited feedback from across the city and garnered more than 1,000 distinct public comments. One planner called this, “to the best of my knowledge, the single-highest amount of public comments we've received on any single subject ever” (BOZ-G-Plan-6Q).

They went on to describe the split in how the public viewed STRs. Although people fell into two general camps of seeing them as a net positive or net negative, the vast majority of people seemed to agree that “they can have a purpose, but they can be out of control” (BOZ-G-Plan-6Q). In December 2017, Bozeman’s new STR policy went into effect. It required annual registration, a state tax license, a county health inspection, and a fire safety inspection (City of Bozeman, “Short-term rentals,” 2017; BOZ-G-Plan-6Q; Boz-G-Comp-7T). As STRs are built around one party accepting payment from another party in exchange for a good or service, the city classified them largely as businesses and subjected them to many of the same rules (Boz-G-Comp-7T).

In addition to requirements for inspections and licenses, two far-reaching regulations emerged from this period of public comment which shaped the future of STRs in Bozeman. The first was the expansion of accessory dwelling units (ADUs) such as garages or other secondary structures. The idea behind this was to increase in-fill, allowing for occupants in semi-separate spaces without contributing to further sprawl (City of Bozeman, “Accessory dwelling units,” 2018; BOZ-Plan-7R). The second was breaking down the term short-term rental into three types and identifying zones for each across the city. Type 1(orange), the most restrictive, allows for short-term rental of bedrooms in an owner-occupied dwelling. Type 2 (yellow) allows for the short-term rental of a host's primary residence, opposite duplex, or ADU whether or not they're home. Type 3 (green), which was largely centered in commercial areas, allows for the short-term rental of any housing unit which is not owner-occupied (City of Bozeman, "Short-term rentals," 2017; BOZ-G-Plan-6Q).



Three years after implementation of these regulations, there have been few official complaints related to health (Boz-G-Comp-7T) or nuisance. As far as police responses, one planner stated that only 2 of nearly 100,000 total police responses in a given year were listed as related to STRs (BOZ-G-Plan-6Q). Although the four interviewees involved in planning or legislating agreed that STRs affect Bozeman's housing, opinions diverged on the scale of that impact. Three interviewees were asked, "On a scale of 1 to 10 (1 being not at all, 10 being an extreme amount), how much would you say short-term rentals have affected housing in Bozeman?" Both the city elected official and planner rate it as a 2. Each acknowledged the "extremely tight" housing market, which the planner referred to as "frankly, an unhealthy condition" which "has been that way for a long time" (BOZ-G-Plan-6Q), to say that, yes, any houses taken off the market in this context strain overall affordability. But they emphasized that other factors like growth in the university, second homeownership, and the general population all loom larger in discussions on housing (BOZ-G-Elec-7S; BOZ-G-Plan-6Q). The links between STRs and each of these other, more pervasive forces will be discussed in "General trends."

One planner from an area nonprofit saw STRs as a much more significant factor, rating their impact on the housing market as a "6, maybe 7" (BOZ-Plan-7R). While stating the 2017 city regulations had halted the STR issue from getting worse, they stated that this had by no means alleviated the problem. They described the many strategies Bozeman has used to tackle the housing gap—smaller lot sizes, incentives to developers who allow for some affordable housing, and minimizing setbacks—in a positive light (BOZ-Plan-7R). They spoke at length about the possibilities arising from the city's increased approval of ADU construction and in-fill projects.

But these are tempered. While the city and renters saw the housing potential of ADUs, real-estate investors saw the profit potential (BOZ-Plan-7R). The planner questioned whether these ADUs were primarily used for short-term or long-term rent and, more generally, whether these measures can truly act as bulwarks against rising real estate on the "free market." After all, this is part of the city growth that the elected official referred to as "defying gravity" (BOZ-G-Elec-7S). The planner explains how the problem is not simply an inability to meet demand, but reflective of builders "focusing on a higher, higher-end segment of the market than our workforce can afford" (BOZ-Plan-7R). When it comes to STRs, this links to a fundamental point. As they put it, "I think you can't discount the amount of people who are enticed into short-term renting over long-term renting just because of the potential of the income that it produces."

Despite the additional fees from regulations, STRs remain popular in Bozeman. Whether this is as high as a 6 or 7 in terms of impact on the housing market cannot be accurately determined based on available data, but a rating of a 2 seems low. It seems the 2 rating was largely based on the perception that other housing sectors have larger impacts on affordability. But for a city with a median income of $55,569 and a median home value of $365,600 (Census, 2019), even a small negative impact on housing affordability can translate to more people being priced out of the area altogether. Every interviewee besides the compliance officer cited the high cost-of-living compared to wages in the city, with both a planner and real estate agent pointing to the rapid rise in housing prices among nearby towns (BOZ-Plan-7R; BOZ-Real-8V). When asked if there were still options available for small- or medium-income households—more blue-collar jobs—the real estate agent discussed this trend in greater depth.

> "You know, five years ago I would have said, there are still options, but you know, just, just as you said, you know, Bozeman's kind of white-collar and blue-collar kind of gets pushed to the edge. That edge is continuing to get pushed. So, Belgrade, 7 miles away, and Manhattan, you know, 16, 17 miles away […] as far as appreciation goes, they're, […] keeping track with Bozeman and it's getting harder and harder for the blue-collar person to be able to afford living in even those towns" (BOZ-Real-8V).

These towns lie to Bozeman's west. In the east, they added, Livingston is growing rapidly as well. The planner noted, "[…] we're starting to see some of the affordability issues that were present here in Bozeman—they're kind of starting to drift over […] the pass that separates Bozeman and Livingston and they're starting to see some upward pressure […]" (BOZ-Plan-7R).

STRs have played a part in this housing shortage in the greater Bozeman area, but the STR impact is most pronounced in smaller towns oftentimes viewed as "gateway communities" to high-visitation public lands. Jackson, WY, gateway to Grand Teton National Park, has a population of 10,559 (Census, 2019) and, by one count, 364 active rentals (AirDNA, 2021). Of these, 88% are listed as being the entire home. Whitefish, MT, gateway to Glacier National Park, has 8,295 people (Census, 2019) and 1,102 active rentals, with 97% for the entire home (AirDNA, 2021; BOZ-G-Plan-6Q). To know where people are staying in STRs, one only has to know where there are tourists and where there are empty homes.

The same three individuals—the two aforementioned planners and the elected official—were also asked to rate the impact of STRs on tourism and all saw it as a relatively minor factor. All interviewees minus the compliance officer were asked about what drives tourism to Bozeman. They cited a range of issues from the restaurant and nightlife scene (BOZ-Real-8V) to the university and tech industry fueling travel beyond official reasons (BOZ-G-Plan-6Q), but every interviewee spoke about the lure of outdoor recreation and, specifically, of Yellowstone National Park. Yellowstone, or "the Park" as one planner noted it's called in local parlance (BOZ-Plan-7R), is a main driver of this. Another planner notes their most recent statistics in June 2020 as 1.6 million annual room rentals within Bozeman (BOZ-G-Plan-6Q). This planner makes clear that outside visitors' stays in STRs are "going to be a small fraction of that." Overwhelmingly, outside visitors to Bozeman still stay in hotels.

The STR impact on housing in Bozeman is not insignificant but does appear to be outweighed by general population growth. The linkage between growth and STRs will be discussed in “General trends.” The impact in Bozeman is nuanced and complex, which cannot be said of that faced by the small, unincorporated town of Gardiner, MT, the true gateway community to the north end of Yellowstone National Park. While Bozeman’s relative proximity to Yellowstone is just one of the main factors that bring people to the city, and thereby one factor in the build-up of STRs, the high number of STRs in Gardiner is a direct result of its adjacency to the Park. The argument could be made that both Jackson and Whitefish had traditionally operated as resort communities, but Gardiner was like Bozeman in having a history of being a residential community prior to the arrival of STR platforms (BOZ-Plan-7R). A third planner, scarcely mentioned up until now, touches on relevant research about the 971-person town (BOZ-Plan-7U; Census, 2019).

This planner describes the situation several years ago, citing the town’s population at 850 with around 120 STRs. Active rentals by one count have maintained these levels, even in Yellowstone’s offseason, with 91% offering an entire home (AirDNA, Jan. 2021). In the summer of 2020, STR numbers hovered closer to 250 (AirDNA, Sep. 2020). Both Q2 (April – June) and Q3 (July – September) in 2020 were higher than the year prior. Whether this is despite or because of COVID-19 will be discussed in greater detail in “General trends,” but Gardiner seems to reflect broader trends that STRs in western tourism-based towns have thus far fared okay during the pandemic.

The planner describes Gardiner’s housing shortage as a “crisis […] created largely by Airbnb and by second homes” which spawned “not just a housing affordability problem, but a housing availability problem” (BOZ-Plan-7U). They illustrate this with the story of how the former Gardiner School Superintendent was not able to find any housing for their family during their first summer, resorting to a large tent before finally getting into longer-term housing. The

Superintendent moved on after a couple years, an individual decision that the planner describes as a far more widespread issue. They note that Gardiner's school system used to be a major point of pride for the community, both in terms of being one of the top rated across the state (U.S. News and World Reports, 2021) and of simply connecting people for events and news (BOZ-Plan-7U). They state, however, that the Gardiner School District enrollment has dropped in recent years with fewer families being able to afford the cost-of-living.

In some ways, Gardiner offers one extreme of the "New West" economy at work, perhaps a warning in how using tourism to keep a place afloat can go too far. For larger communities like Bozeman, the typical question is how to balance growth with existing community, but perhaps this dichotomy of growth vs. existing community is too simplistic. As both the Bozeman planner and real estate agent say, there is a sense in the community that much of the vertical construction in the downtown corridor is going toward "snowbirds" or "second homeowners" (BOZ-Real-8V; BOZ-Plan-7R). The planner states, "[…] there's some pushback on projects, there's some pushback on policies. But I don't think it's pushback against the additional density; I think it's […] pushback against the benefactors of those policies" (BOZ-Plan-7R).

Primary takeaways

The two questions this research set out to answer—1) how STRs affect housing in the case study cities and 2) how well the perception of STR impact on housing and the economy match the reality—could both be summed up on scales of 1 to 10. On the first question, 1 would mean "no effect on housing" while 10 would mean "extreme effect on housing." For the second question, 1 would mean "perception does not match impact at all" and 10 would mean "perception matches impact perfectly." While any quantitative measure would require a more exhaustive study with exact data provided by STR companies, it is possible to come up with estimates of STR impact and perceived impact.

Based on available interviews, analysis of city documents, policies, and maps, and extensive outside research, Bozeman would receive a 5 for impact and a 6 for accuracy of perception of this impact. Measures implemented in the past were intentional and far-reaching and the city continually monitors the prevalence of STRs, allowing for enforcement of regulations. Bozeman failed to receive a higher score in accuracy of perception because few officials interviewed made the connection between STRs and second homeowners as well as STRs and general population growth. With little effort to curb these populations, STRs will continue to be a factor in driving up housing costs in Bozeman. This is true of both St. George and Flagstaff as well.

When it comes to STRs in Gardiner, a non-governmental planner identified one of the biggest problems as investors that function as “a new set of competitors for the existing housing that's driving up prices” (BOZ-Plan-7U). Bozeman, with room to grow, other factors influencing housing, and a nuanced policy at work, has seemed to stem the impact of STRs on housing affordability. These towns, however, do not exist in a vacuum. The Bozeman-based planner spoke at length about this:

> “[T]here's a standard cast of characters who have implemented policies that have had—that they've had marginal effects on affordable housing and the affordability of specific cities. What I haven't seen and what I would love to see is regional approaches to affordable housing that account for things like: what is this impact of this rapidly escalating real estate market in this one community? What is the impact on all of the satellite communities […] and this entire region? […] as long as you're operating in a

silo, all you're really doing when you implement these strategies is passing the buck on to another community to deal with it" (BOZ-Plan-7R).

A high price or regulation in one town creates a frontier in the next town over. This bears great similarity to what has been described at the neighborhood level, what geographer Neil Smith (1988) identified in his "rent gap theory." Wachsmuth and Weisler (2018) related this to STRs in their article "Airbnb and the rent gap: Gentrification through the sharing economy." In the "New West" economy, cities and towns compete to attract high-income residents, especially by way of tourists, retirees, and second homeowners, sometimes creating rent gaps for cities and even entire counties (Travis, 2007, 6). If Bozeman has been "kind of defying gravity" in terms of growth (BOZ-G-Elec-7S), the next case study city seems untethered by gravity altogether.

St. George

St. George, Utah—like all of Washington County—is one of the fastest-growing places in the country. Like Bozeman and Flagstaff, this growth is one of the main reasons St. George was chosen for this research in addition to its location in the West and high STR population. In terms of having room to grow and a nuanced policy on STRs, St. George and Bozeman have a great deal in common. The similarities do not end there and many of these will be discussed in "General trends." Research into the impact of STRs on housing in St. George involved seven interviews consisting entirely of government officials but with three operating in St. George, one in a nearby community, and three for the county or state. There were three planners, two elected officials, one housing official, and one tourism official.

The findings related to St. George were the result of speaking to these individuals, researching relevant policies and documents, and an October 2020 visit to the city and surrounding area.

STRs have had a sizable impact on the housing market in the St. George area. Interviewees articulated this to varying degrees. Altogether, the four officials who were able and willing to speak to this rated the impact "On a scale of 1 to 10 (1 being not at all, 10 being an extreme amount) […]," as an average of 6. As one of the elected officials—who rated the impact as a 5—stated, STRs "have a different valuation" (STG-G-Elec-7L). While they explain that entire-home, full-time STRs are largely allowed only in St. George in certain areas, the fact remains that there is an affordable housing shortage in the city. This is not aided by having a significant portion of homes no longer an option for long-term residence.

The other elected official rated the impact as a 3. They explained that St. George is "kind of a resort community already" (STG-G-Elec-7N), but that it does not meet State of Utah definitions and does not collect Transient Room Tax (TRT) for being a true resort community like Park City or Moab. While dependent on tourism, the city still has a high proportion of full-time residents and so is always engaged in the debate of how to attract outside visitors while maintaining the existing community. The elected official said this is “probably why we've taken this kind of hybrid approach to allowing [STRs] but not allowing them anywhere and everywhere” (STG-G-Elec-7N).

Like the other two cities, tourism is a huge driver of the economy in St. George and all of Southern Utah, with much of this driven by the warm weather and outdoor recreation. While many specifically mentioned the impact of being in close proximity to Zion and the North Rim of Grand Canyon National Park, every interviewee emphasized outdoor recreation more generally and the climate. Several spoke specifically to outdoor recreation like sand dunes and lakes which often involves extra vehicles or large equipment (STG-G-Hous-7K; STG-G-Tour-6J; STG-G-Plan-7M). With STRs far more conducive for ATV or boat storage than a hotel, the five asked gave an average of 7.2 for the STR impact on tourism.

While most overnight visitors to St. George still stay in hotels, STRs appear to provide an option for people who desire additional storage. One St. George elected official said, “There's a different market for hotels and for short-term rentals” (STG-G-Elec-7L). Whether the same volume of people would visit St. George without these options is uncertain, but recent studies on STR tourism impacts are mixed. Recent survey data suggests overall STR stays may be largely taking the place of hotel stays rather than increasing the number of people traveling (Bivens, 2019, 2). But another study states that many people who have used STR sites claim to be less likely to go back to hotels (Verhage, 2016). Regardless, many officials perceive STRs to be meeting a need in St. George and argue that their continued presence is needed in the city’s tourism-driven economy.

STRs constitute a frontier by opening up local areas to outside wealth. But, just as Bozeman's affordable housing woes are inseparable from the growth of neighboring areas, it's clear that cities do not exist in isolation. In the years after STR platforms took off, from approximately 2008 to 2016, St. George policy was fairly restrictive toward STRs. This created a frontier of uneven regulation, allowing nearby cities—especially in the direction of Zion National Park—to be seen as STR havens.

Area cities have experienced rapid growth, in part due to this tourism boon. One local city planner explained that STRs "absolutely have their place" but have recently been met with mixed reactions amongst community members (STG-G-Plan-7M). Proponents cite the tourism dollars and the ability for some to offset the cost of their house with STR visitors. The planner talks about receiving frequent calls from residents interested in renting out a room or accessible dwelling unit (ADU) on their property. This is relatively straightforward, involving an inspection and registration fee. In contrast, the city places strict limitations on the number of entire-home STRs per capita within residential zones. Despite the relatively low number of permits allowed for this—producing an estimated four to six year waiting period—the planner identifies these as the source of the most vocal STR opposition. Complaints often focus on STRs being "party houses" and producing excess noise or garbage.

In addition to these, the city also has "resort zones" which allow for high-density STR complexes to operate in specific commercial areas exempt from the per-capita limits. With pools, clubhouses, and on-site management, these resorts are more spacious than hotels and can be rented out through STR platforms. Airbnb co-founder Brian Chesky once said that listings on their site would not be like hotels. As he put it, '"A Marriott in New York City and a Marriott in Ireland will look exactly the same"' (Botsman and Rogers, 2010, xi). STR companies may have started out trying to be something different, but they have not put up too much of a fight as the market has fused the two together.

The pushback faced by outlying cities and the introduction of a 2017 state policy restricting local regulation of owner-occupied units have led to a convergence in city policies throughout the area. St. George remains more restrictive than surrounding cities but now has an overlay map which permits entire-home STRs in "resort overlay zones" outside of areas with single-family homes (St. George City Code, 2019). While cities themselves have sought to monitor the number of entire-home STRs and cite those which operate illegally, these efforts are hindered by the same 2017 state law. In this law, cities cannot use a property being listed on a STR site as evidence that it is operating as a STR, citing this as a breach of an individual's right to free speech (HB 253, 2017).

With this law in place, city STR policies become extremely difficult to enforce. Even if the rental is booked and even if there are reviews stating when individuals stayed there, a listing is not enough. In this context, one St. George elected official stated, "I couldn't tell you how many we have. But we probably have thousands. Some of them are operating probably without a business license and not per our ordinance" (STG-G-Elec-7N). While interviewing the planner for a nearby city, a STR-tracking site was discussed. They laughed and shook their head as they looked over the map, saying many listed were operating illegally (STG-G-Plan-7M).

The law prevents municipalities from using an STR site listing as evidence that the property is intended to operate as an STR. An outsider wondering whether the intent of this law is simply to prevent STR regulation entirely would have to look to the organization which championed it: the Libertas Institute. "Founded in 2011 as a 501(c)3 non-profit 'think tank' and education organization," the Libertas Institute claims an 82% success rate in its proposals becoming law (Libertas, 2020). On the surface, the STR law seems to fit closely with their vision: “A future where individuals are unleashed from restrictions that prevent them from peacefully building the lives they want.”

Examining this statement from a political ecology lens, it is important to ask which “individuals” will be “unleashed from restrictions” and what that means. Both elected officials in St. George as well as the planner in the nearby city articulated a divide among residents in their view of STRs. All three said that individuals had a right to rent out their privately owned property but also that neighbors had a right to clean, quiet, and safe neighborhoods. One elected official argued it was important to have enforcement and limitation of STRs, so that people know what they were getting into when they bought a house (STG-G-Elec-7L). Residents’ complaints were not in relation to the relatively few owner-occupied places but rather from the litany of entire-home rentals. Despite city policy restricting entire-home rentals to specific zones, STRs are scattered across St. George, with 57% listed as full-time and 95% offering the entire home (AirDNA, Jan. 2021). In this context, the law seems most beneficial to the city’s high percentage of second homeowners.

Examining the impact of STRs on these two groups—property owners seeking to maximize their house’s exchange value versus neighboring property owners seeking to maximize their house’s use value (Marx, 1867, 130)—ignores the largest housing impact of STRs: driving up the cost of housing. As was mentioned in relation to Bozeman, STRs in St. George increase housing costs by decreasing the supply of potential homes and increasing the price point desired for rent or sale in order to compete with what could be made on the STR market. With St. George median home values at $286,000 and median household income last estimated to be

$58,259 (Census, 2019), anything which further cuts into housing affordability requires undivided political attention.

Unlike Bozeman and Flagstaff, a majority of St. George's population—65.6%—lives in owner-occupied homes. While this is often seen as a measure of stability, the city is unaffordable for many. The oft-cited affordability ratio for median home value to median household income is 2.6. St. George's ratio is 4.9, placing it among the 20 least affordable cities if it was larger, just behind Boise and Miami (Zillow, March 2019). Homelessness has risen in recent years and a St. George housing official said the Section 8 Housing Voucher program is overflowing, with a wait list between 1 and 3 years (STG-G-Hous-7K). Two large affordable housing projects have recently been built, but the official explains that this is not enough. Housing is not keeping pace with demand in the fast-growing city, especially for lower-income individuals (STG-G-Hous-7K).

A major theme for St. George—as well as Bozeman and Flagstaff—is that rapid growth is putting pressure on the housing market. This phenomenon and where it stems from will be a major topic of discussion in ”General trends,” but one St. George elected official cited two major challenges to affordability: building costs and land cost. With rapid growth, local builders charge more. With factors ranging from the need for employee overtime, securing necessary materials, and expedited builds, the elected official brings up that builders might realistically be required to charge more if they are going to get projects done in a timely manner (STG-G-Elec-7L).

Perhaps the greater factor, invoking the role of investment and speculation, is the cost of land. As this elected official says, “People know that it's worth money, so they're not letting it go for a lower price, so the land prices are going up quite a bit. And that has directly translated to housing costs” (STG-G-Elec-7L). When land is held solely for the sake of increasing profit, it benefits anyone seeking to sell land in the area and puts others at a disadvantage, namely those seeking to remain in the area with a vested interest in land remaining affordable. It also expands the market beyond the local area, a feature at the heart of the “New West.”

When it comes to the expansion of the local housing market, retirees and second homeowners were a consistent thread in conversations around St. George’s housing. The housing official spoke of the growing number of 55 and older communities in the St. George area when asked about the impact of retirees. They connected this directly into the city’s housing costs. “Homes are on the rise here. And, you know, California's even worse. So people sell a million-dollar home in California, come to St. George and buy a $500,000 home, I mean, they're putting 500,000 in their pocket right off the bat” (STG-G-Hous-7K).

St. George-specific second home data is not easily found, but the County Assessor’s office identified 14,961 non-primary residential parcels in Washington County (Jan. 2020). Primary and non-primary homes are taxed differently under Utah law. The County Assessor website gives the example of a home with a $350,000 (Washington County Assessor, 2021).

Property tax **with** residential exemption:

$350,000 market value x .55% taxable portion = $192,500 assessed value

$192,500 assessed value x 1.1% tax rate = **$2,117.50 property tax**

Property tax **without** residential exemption:

$350,000 market value = $350,000 assessed value

$350,000 assessed value x 1.1% tax rate = **$3,850 property tax**

Amounting to more than $1,700 annually for each home listed at this rate, this difference is not insignificant. But two critiques emerge. First, if this measure is meant to privilege primary residence over secondary, is it working if 14,961 of the 74,129 homes in the county (Census, 2019)—20.18%—are identified as non-primary? Second, what happens to the money raised from this tax? Using the county median value, $283,800 (Census, 2019) of owner-occupied homes as a standard, this additional tax for non-primary residences would generate $21,017,362.41 for the county over what would be taken in if these were primary residences. Every year. If housing affordability is a subject of concern in the area, it seems logical that the first place to look for ways of addressing it would be the money already coming in from the sources contributing to affordability issues.

This is an issue which will be returned to in “Solutions and suggestions.” In the meantime, communities are left to address their revenue shortfalls with limited tools at their disposal (STG-G-Plan-7M). Two planners who could speak to rural communities in Southern Utah, one for the state’s Community Development Office (CDO) and one for the region’s Association of Governors (AOG), spoke about the guidance their respective offices give and how they have seen regulations change. The CDO planner said their office worked in conjunction with the Utah Chapter of the American Planning Association (APA) to address growing STR concerns by creating a “best practices” guide (STG-G-Plan-9O; Workforce Housing, 2019). They mentioned the state law which prevents municipalities from using listings on STR sites as evidence that properties are being used as STRs but emphasized that the CDO provides only guidance, not regulation or enforcement.

The CDO planner said many Southern Utah cities were looking to revise previous STR policies when they met at a planning meeting in the summer of 2020, “trying to craft [STR] policies in a mindful way that will allow them to harness [tourism] dollars while still […] trying to get the lowest impact on those neighbors” (STG-G-Plan-9O). Both the CDO and Association of Governors (AOG) planner said accessory dwelling units (ADUs) were at the heart of many of these policy changes (STG-G-Plan-9O; STG-G-Plan-9P). The AOG planner explained that many existing ADU laws had limited rentals to immediate family or short-term laborers and that new laws are opening this up to both long-term residents and short-term tourists (STG-G-Plan-9P).

Primary takeaways

Similar to Bozeman's openness toward ADUs, St. George and surrounding towns have renewed efforts to expand ADUs, seeking to carve out space for long-term residents by allowing them to benefit from tourism more directly. But, as the CDO planner said, "[…] it's difficult because community leaders are trying to bring in money to their community, but they're also trying to maintain the integrity of their community" (STG-G-Plan-9O). Cities in Washington County have struggled with this, with the data making clear that STRs and second homes do bring in a great deal of revenue, but this comes at the expense of housing affordability for many. While St. George's size and previously restrictive STR policy had allowed the city to weather some of this strain on affordability, the state's 2017 STR law and swelling population have called into question whether being "the Palm Springs of Utah" (STG-G-Elec-7L) is compatible with "having residential neighborhoods maintain that [residential] feel" (STG-G-Elec-7N).

In this context, St. George would receive a 6 for impact and a 4 for accuracy of perception of this impact. Official city measures have helped prevent STRs from having a larger impact and past restrictions opened a market for several nearby cities who welcomed the increased tourism presence. But state law requiring impractical levels of proof for violations has prevented local regulations from being taken seriously. This has also created less accuracy in the perception of the impact, with St. George and other area officials handicapped in enforcement of city policy. In St. George, the impact of second homeownership and general population growth on housing affordability are acknowledged, but the link to STRs was rarely brought up.

The “boom or bust” rhetoric which dominated extractive industries in the West has also come to dominate the “New West.” In areas with booming populations like Southern Utah, this creates an ever-present fear: is this place about to bust? Rather than divesting from growth-centered strategies, towns in the “New West” lean into existing economic strongholds, in many cases the trifecta of tourism, second homes, and residential growth. But what the boom-bust binary misses is that places generally do not “boom” or “bust” on the whole; rather, they “boom” for selected groups—tourists, second homeowners, and more affluent new residents—while others—including many long-term residents—feel the “bust.” In the third case study city, STRs have produced a space where these “boom” and “bust” outcomes differ by neighborhood.

Flagstaff

The nine interviews conducted as part of the research into Flagstaff involved seven officials at varying levels of government: three elected officials, three planners, and one economic development official. This was rounded out by two non-government officials—one in housing and one in tourism—who could speak to general trends in the city and surrounding area. Some details surrounding specific departments of those interviewed are obscured to protect individual privacy.

These findings related to Flagstaff were the result of speaking to these individuals and researching relevant policies and documents. As a Flagstaff resident since August 2019, I have corroborated many details reported in interviews, but I have also made every effort to report the findings of this research in an even-handed manner similar to those reported for Bozeman and St. George.

Flagstaff is an example of what happens when STRs go almost entirely unregulated in an amenity-rich, tourism-heavy city. And local officials know it. There was a great deal of focus in interviews on the city's lack of ability to regulate STRs or other private development as the result of 2016 and 2006 state laws, respectively (Rau, 2016; Arizona Legislature, 2006). These both pose major barriers in addressing affordable housing. Yet, they also seemed to foster a diffusion of responsibility around housing affordability. City officials repeatedly expressed that STRs were out of their hands (FLG-G-Elec-6B; FLG-G-Plan-6C; FLG-G-Plan-6D; FLG-G-Elec-6H) and failed to address the ways in which city policies had fostered tourism dependence, second home proliferation, and the growth of Northern Arizona University. More importantly, they largely failed to address how these factors are intricately linked to the prevalence of STRs. These factors will be elaborated on in “General trends,” with the “Solutions and suggestions” section putting forth specific ideas for easing their impact.

Situated along Interstate 40 and between the winter haven of Phoenix and the world-renowned Grand Canyon, Flagstaff’s popularity as a destination is not that surprising. When asked what drives visitation to Flagstaff, one elected official half-joked, “Oh my gosh, have you gone outside your window?” (FLG-G-Elec-6H). Respondents continually cited the relatively mild temperatures for most of the year and outdoor recreation as main catalysts for tourism. Most specifically cited the Grand Canyon, which matches other data. In a 2017-18 study, half of visitor groups listed Flagstaff as just one stop on a longer trip, with the Grand Canyon named as the biggest attraction for 30.6% of these respondents (NAU College of Business, “Flagstaff visitor study,” 23).

Grand Canyon National Park has consistently been the nation’s second-most visited national park, behind only Great Smoky Mountains in the East (NPS, 2020). Even 20 years ago, its economic impact on the local area had made it a significant part of the region’s growth (Stynes and Sun, 2005, 11). This fits into one of the central, but oftentimes overlooked, motivations of public land protections which will be discussed further in “General trends”: they bring people who spend money (2). But this remains only one of the major reasons for visits to Flagstaff. The tourism official interviewed referred to the city as “a basecamp of Northern Arizona” (FLG-Tour-6A). As they put it, “So not only can, one, you do things right here in town—you know, and kill a whole week easily—but you can do anything around us and you don’t have to check in and check out all the time. Come back, there’s home… [they laugh] Even if it’s a room.”

For most visitors to Flagstaff, “home” while in the city is just a room. Like other cities, the vast majority of overnight visitors still stay in hotels. In the 2017-18 Flagstaff visitor study cited previously, 78.8% of survey respondents —nearly 4 in every 5—listed a hotel or motel as their lodging while just 8.6% marked “Airbnb-VRBO” (NAU College of Business, “Flagstaff visitor study,” 24). This, however, should not be understood as a small impact. If these numbers are representative of the 5.5 million annual visitors seen by the city in 2017-18 and the average party size listed was accurate at 3.2 (NAU College of Business, “Visitor profile,” 5), that means there were 1,718,750 separate parties visiting Flagstaff. Taking the study’s estimate of 74% of these being overnight visitors and calculating 8.6% of these to spend at least part of their stay at an Airbnb or VRBO, the 2017-18 annualized number of different groups staying in STRs in Flagstaff would be around 109,381.

This number also adds evidence to the number of STRs in Flagstaff. The vacation rental management site AirDNA lists 1,463 active rentals as January 30, 2021, with 91% of these offering the entire home. With 24% marked as being listed on both Airbnb and VRBO, this leaves 1,068 different STRs if only accounting for these two sites, with the vast majority offering the entire home. If the total number of estimated stays in Flagstaff STRs (109,381) was divided equally across all 365 nights and the 3-night average stay (NAU College of Business, “Visitor profile,” 5) was factored in, 899 entire-home STRs would be required to account for this. Since all of these would have gaps between stays, with many not offered as STRs for months at a time, it’s quite possible that the 1,068 STRs listed separately on the AirDNA website is an accurate portrayal—if not an understatement—of the total number in Flagstaff.

The difficulty in finding good data on the number of STRs—and therefore the impact of STRs—is something which arose often throughout this study and will be explored more in

“General trends.” Particularly in Flagstaff, city officials cite the scarcity of solid data as making it difficult to make decisions. Interviewees seemed to converge, however, on an estimate of STRs being 25-30% of the housing stock (FLG-G-Elec-6B, FLG-G-Elec-6H, 6:30;), but multiple mentioned they were pulling this number from second homeownership estimates from several-year-old economic studies (FLG-G-Plan-6C; ECONA, 2017) to extrapolate the STR numbers. The reasons for this scarcity of data are varied, but there appears less incentive to monitor the issue due to state law restricting local policies from being enacted.

One elected official laughed when asked if there were specific policies or cities which Flagstaff would use as models for its own STR policies:

> “It's a funny question because, you know, it's so frustrating. Because here in Arizona, we're so...our hands are tied as local municipalities when it comes to zoning, and, and regulation of private property, and there's a lot of consequences if you overstep as a government entity. […] our housing staff will go to their conference, like national conferences, and a lot of great things discussed and presented our staff laugh about and just kind of chuckle because they're like, 'Yep, can't do any of that’” (FLG-G-Elec-6H).

This is because of a 2016 bill which passed, and actually sailed through, the state legislature. Senate Bill 1350 had bipartisan support and enacted a moratorium on city-level regulations of STRs as well as allowing for state lodging taxes to be collected directly by STR companies (Rau, 2016). Whereas the Utah law made enforcement of local STR laws more difficult, this Arizona bill made the passage of local STR laws outright illegal. Some cities which had previously outlawed or severely limited them like Phoenix suburb Scottsdale or red rock vista Sedona were suddenly forced online. Sedona, which had banned rentals of less than 30 days since 1995, suddenly found thousands of outside visitors within former neighborhood homes

(2016). With 87% of STRs offering entire homes, the city of 10,000 people was most recently host to 1,869 distinct STRs (AirDNA, Mar. 9, 2021).

The 2017 Utah STR law was put forward as an attempt to loosen restrictions by making enforcement of code violations far more challenging. In Arizona, the resistance to regulating STRs was so strong that even a so-called "party house" bill passed by the Arizona Legislature in 2019 was scaled back to the point where enforcement was exceedingly difficult. Similar to in Utah, an advertisement—or even seeing far more people on the property than were permitted—was not sufficient to show that the rental was short-term (Longhi and Randazzo, 2019). When signing this bill into law, Governor Doug Ducey issued a statement, a part of which read, "In Arizona, we respect the right to do what we want with our property without undue government interference. I am open to corrective action if this bill is applied too broadly" (2019).

In the nearly two years since its passage, that does not seem to have been the case. For cities like Scottsdale, Sedona, and Flagstaff, the law has done little to address the biggest impacts of STRs, especially those related to housing affordability. Scottsdale itself has more STRs than Phoenix, despite being approximately 15% of its size (AirDNA, Jan. 2021; Census, 2019). When asked why regulation of STRs has been so difficult, a Republican in the Arizona State Legislature said that "it appealed to the conservative deregulation instinct and it appealed to the Democrats" who argued that their "financially struggling constituents can make extra cash renting a room" They go on to say, "It was very, very popular. And it still is popular to a degree. One of the frustrations is the only legislators that have pressure to change this are those that live in areas that people want to go to" (FLG-G-Elec-8I).

The Arizona legislator also cites the Goldwater Institute's role in passing the original law, which describes itself as "a leading free-market public policy research and litigation organization that is dedicated to empowering all Americans to live freer, happier lives" (Goldwater Institute, 2021Similar to the Libertas Institute's advocacy for the Utah law, a political ecology framework demands some scrutiny for the claim that the Arizona law allows "all Americans to live freer, happier lives." For starters, the law had the support of Airbnb and came in the months following Governor Ducey's 2016 State of the State Address calling for Arizona to "become to the sharing economy what 'Texas is to oil and what Silicon Valley used to be to the tech industry'" (Rau, 2016). The law was opposed by the League of Arizona Cities and Towns and representatives on behalf of cities across the state which felt they would be negatively affected (Rau, 2016).

Different elected officials spoke about some of the reasons for this opposition. The Arizona state legislator argued that the law had violated zoning rules, essentially creating hotels in residential spaces. "I believe that when people make the biggest investment of their life, which is their home, they have a right to certain guarantees about the character of the area it's in. And we basically—we instill, or we set, those beliefs in zoning laws" (FLG-G-Elec-8I). These more tangible negative impacts on local residents are echoed by other officials in Flagstaff (FLG-G-Elec-6B; FLG-G-Econ-6E; FLG-G-Plan-6G; FLG-G-Elec-6H). Many officials in Flagstaff and elsewhere spoke personally about the impact of STRs, something common amongst interviewees related to all three cities and a subject which will be explored in "General trends."

The legislative priorities being voiced at the time this law was passed are also worth noting. Governor Ducey followed his 2016 State of the State up with the creation of a Governor's Council on the Sharing Economy. The first justification listed for the Council's formation is the economic impact of the "sharing economy," with mention of a PricewaterhouseCoopers report estimating global revenues would increase from $15 billion to

$335 billion by 2025 (Ducey, 2016). An important aspect of the 2016 bill made it so any tax on STRs must be approved by and collected by the state (Rau, 2016).

Multiple officials argued that much of this revenue was simply cutting into hotels' revenue, the result of an uneven playing field in which STRs did not have to follow the same rules (FLG-Tour-6A; FLG-G-Elec-6B; FLG-G-Econ-6E). The economic development official interviewed also challenged how far this profit actually extended. With specific mention of the lack of job creation and lack of commercial property tax, they argue that most of the economic benefit of STRs is confined to "individual homeowners who have these properties and a few select property investors" (FLG-G-Econ-6E).

As has been said previously, the term "sharing economy" is a misnomer for digital platforms like STRs (Jung et al, 2016). Even ignoring the fact that the spaces considered "shared" are being rented, the "sharing" which happens in STRs—especially entire-home rentals—is almost indistinguishable from hotels. All this comes back to one of the biggest impacts of STRs in Flagstaff: they make housing both less available and less affordable to local residents. With the Coconino National Forest almost encircling the city, Flagstaff is limited in how much it can grow (FLG-Hous-6F). With this major limiting factor, one official stated that "any small change in our market is going to affect our housing supply" (FLG-G-Plan-6D), a fact which directly implicates the STRs.

While every interviewee expressed that STRs lead to a rise in housing costs, a couple also mentioned that STRs could help some to afford their mortgages (FLG-G-Econ-6E; FLG-G-Plan-6D). The problem with this is that homeownership is already unaffordable to many in Flagstaff, the most-populous and most-expensive place in what the economic development official called the "most expensive county" in Arizona (FLG-G-Econ-6E). A $58,748 median household income cannot afford a $351,600 median home value (Census, 2019). In fact, Flagstaff's price-to-income ratio is 5.98, which would make it less affordable than all but six large cities, slightly less affordable than Seattle and Sacramento (Zillow, 2019).

Despite this price-to-income gap, the ability of STR hosts to earn supplemental income and afford the increasingly high local cost-of-living was cited as a positive among interviewees in all three case study cities. This topic will be touched on more in "General trends," but there is a peculiar logic at work here. On one hand, the prevalence of STRs—and the prevalence of high-income visitors and partial-year residents more generally—leads to far higher housing costs for all year-round residents. On the other, a minority of year-round residents can supplement their income through STRs to afford these far higher costs.

Although the city cannot create local regulations for STRs, there is one entity in Flagstaff, and across all Arizona, which can: homeowners' associations (HOAs). While existing HOAs typically require a high-percentage of residents to agree to a major change of their Covenants, conditions, and restrictions (CC&Rs), such as restricting STRs, new HOAs can establish CC&Rs from the start. The housing official called it "insane" that HOAs within Flagstaff can regulate what the city cannot, but noted how the city is attempting to adapt (FLG-Hous-6F). Both this housing official and an elected official said the city is more open to quickly approving developments with STR restrictions, a major incentive for developers (FLG-G-Elec-6B; FLG-Hous-6F).

On the surface, the state permitting HOAs to regulate STRs while preventing cities may not seem to make a great deal of sense. The difference between HOAs and municipalities, however, are two-fold. First, HOAs require individuals living there to agree to a specific contract, the CC&R. Second, the goal of an HOA is expressly to maintain high property values.

This ability of HOAs to determine for themselves whether STRs are a net positive or negative relates to past HOAs' ability to determine who is allowed into the neighborhood at all, a subject discussed further in "General trends" (Lipsitz, 2011, 32).

One potentially unforeseen aspect of this rule is that it erases one of the common positives attributed to STRs: that they distribute tourists more evenly around cities. HOAs restricting STRs may not have any impact on the total number within Flagstaff; rather, this may just concentrate more within a smaller area. Such a result would put even greater pressure on year-round residents in non-HOA neighborhoods, both in terms of potential nuisances from STR houses and diminished affordability.

Interviewee after interviewee cited STRs as having a negative impact on housing affordability in Flagstaff. Even the tourism official, whose interview primarily focused on how STRs affect tourism-dependent industries like lodging, restaurants, and retail, said their role went beyond that of a "business advocate for Flagstaff." As they put it, "I also look at how to make Flagstaff a better place for people to live in, 'cause if you can't afford to live here, you can't afford to be working here" (FLG-Tour-6A).

Primary takeaways

Flagstaff would receive a 9 for the impact of STRs on housing and a 5 for accuracy of perception of this impact. A 2016 Arizona state law almost entirely prevents municipal regulation of STRs. This, in addition to the market preference for tourists over long-term residents, has allowed Flagstaff's STR totals to be nearly on par with Boston's (AirDNA, Aug. 2020), a city 10 times its size (Census, 2019). With most of these rentals offering the entire home and adjacent public land limiting growth, STRs are one of several factors severely curtailing

Flagstaff's housing affordability. The only direct STR regulations permitted in Flagstaff are a pared-down state bill attempting to limit "party houses" and Homeowner Association (HOA) restrictions beyond the city's control.

When it comes to accuracy of perception, Flagstaff officials realize STRs have a huge impact and they have little power to directly regulate them. This was a topic of immense frustration. They also realize the city has other major issues which put pressure on housing affordability. Yet, like Bozeman and St. George, officials interviewed also failed to either recognize or address the revolving door which exists between tourism and partial-year residents.

Most who went in depth on this issue came back to it being primarily a supply and demand issue—that the city lacks the supply of housing units necessary to meet the demand, so affordability suffers (FLG-G-Plan-6C; FLG-G-Plan-6D; FLG-G-Econ-6E; FLG-Hous-6F; FLG-G-Elec-6H). As affordable vacancies in Flagstaff are extremely limited, this seems accurate. But officials in Flagstaff, just as those in Bozeman, stated that concern over housing affordability predated STRs. In 1990, it spurred citizens in Flagstaff to create a nonprofit housing organization originally founded as the Affordable Housing Coalition (Housing Solutions, 2021). And in 2006, an NAU Social Research Lab study found housing costs to be the biggest issue for 26% of the population, by far the highest total (cited in Kerney, 2007, 18).

Housing has not always been regarded as the biggest issue in Flagstaff, with only 6% deeming it so in a 2001 version of the above study (cited in Kerney, 2007, 18). But the fact that this issue keeps rising to the surface in Flagstaff and elsewhere is evidence that local wages have repeatedly failed to match local housing prices. This has been due to what the housing official refers to as "external demand" (FLG-Hous-6F) from growth in NAU enrollment and second homeownership. With a growing population and tourists now increasingly opting to stay in STRs instead of hotels (Verhage, 2016), the Flagstaff housing market appears far more responsive to this “external demand” and largely untethered from the affordability concerns of locals. In this way, Flagstaff mirrors the current and historic situation across the West.

General trends

From the 22 interviews and site visits conducted in relation to Bozeman, St. George, and Flagstaff, patterns begin to emerge. While each city and tract of land in the West is governed by different laws and geographies, these patterns meld into those discovered through interviews with two researchers and extensive outside research. All this coalesces to illustrate a simple fact: the frontier did not close in 1890; it merely changed forms. The frontier—where regulated civilization meets unregulated wilderness—does not take the form of a line across the country as it once did, but it continues to create and sell blank spaces to lure outside wealth. STR platforms are simply the latest version, with their digital format belying the very real spatial consequences.

Across each city, housing affordability was continually identified as an issue of not having enough supply to meet the demand. But as the Flagstaff housing official explained, "If supply is limited, demand is extensive, then the market is going to move in that direction. […] and the only way you address it is through regulation then because the market's not going to fix itself" (FLG-Hous-6F). If there is one theme which cuts across each of the five frontiers identified, it is that the market will not offer a cheaper product without a profit incentive. And land—from the New World to STRs—will always be made available to those who will pay more.

In the Bozeman "Results," the impact of STRs is understood to be outweighed by other factors, especially general population growth. This is a common refrain in the West, mentioned across each of the case study cities. It was common to hear acknowledgements stating something to the effect of, 'It's true that tourism is growing and some of these tourists stay in STRs which could instead be used as residential spaces, but we have bigger issues.' Oftentimes, this was framed as a "supply and demand" issue. For many, it could be framed as an equation:

Supply – Demand = Affordability

If supply is greater than demand, housing is more affordable. If demand outpaces supply, housing is less affordable. The impact of STRs, in this equation, is simply the number of entire homes that are made into STRs.

The reality is more complicated. For one, a landlord or developer who can make more money listing a place as a STR is hard-pressed to justify a lesser amount for long-term rent or home sales (STG-G-Plan-9P). The Flagstaff housing official, for instance, said that a developer stated "they can make three times more money if they allowed VRBOs" (FLG-Hous-6F). This is especially true when they might be paying more initially because of the perceived potential for short-term rental income (Wyman et al, 2020). But if STRs blur the line between tourists and residents by allowing tourists to "belong anywhere," that separation becomes even less clear when examining where the influx of new residents come from. In multiple interviews, people pointed to anecdotal evidence that many new residents actually first get the idea of moving to the area after vacationing there.

One Bozeman non-governmental planner put it this way:

> "Tourism's impact is it brings in dollars for sure. But it also brings people who look around. You know, they come to Bozeman […] on a trip and they think, 'Wow, this is really cool. You know, we should look at if we could live here.' And those folks, […]—some people call them 'footloose entrepreneurs'—they can live anywhere. They can create their own jobs when they get here and then they […] invest in the community. They bring capital with them. And that in turn creates jobs" (BOZ-Plan-7U).

A St. George official describes a similar phenomenon. "[…] many of the people that I talk to and meet that come into St. George, they say, 'Yeah, I just drove through St. George one day. We went and got gas and then we said, 'We want to live here!'' And, you know, they […] bought a home and they've loved it ever since" (STG-G-Hous-7K).

The frequency or breezy nature of this stated motivation for in-migration may be overblown, but it raises an important question: if someone can get an idea of moving to a place like St. George while simply passing through, how much stronger is this pull when someone is able to stay in a house and made to feel they "belong" (Airbnb, 2020) for a couple days? Determining the exact reasons driving in-migration is beyond the scope of this study, but there is plenty of non-anecdotal evidence to support the claim that tourism helps spur residential growth in certain areas of the West. The "New West" economy, after all, does not see jobs as attracting people, but rather people attracting jobs (Travis, 2007, 53).

It's important to remember that this side effect of tourism is not simply incidental, but rather is built into the design of amenity-rich towns in the West. As one researcher said, "You know, the first thing that everyone thinks about is tourism dollars, but I think what's really underappreciated is the impact of thinking about tourism as basically a marketing tool to recruit new residents" (GEN-Res-7X). More research is required to examine the strength of this connection, but this researcher cited a past study they conducted where a similar trend was realized among businessowners in an Idaho town. Especially for a city like Bozeman, with no sales tax, or a city like Flagstaff, with no ability to levy fees on STR bookings, this ability to turn tourists into future residents is a powerful motivator for continuing to weight the impact of tourism favorably.

Growth was continually identified as the factor putting the greatest pressure on housing costs. In St. George, it was identified as the reason for rapidly rising land and building costs. One elected official stated that, "People know that [the land's] worth money, so they're not letting it go for a lower price […]" (STG-G-Elec-7L). The trend that they're describing is the same one Travis (2007) referred to as the West's "oldest industry": land speculation (22). As long as there is another buyer—as long as demand remains high—the supply of land and homes for sale will be limited. Scarcity equates to value.

Especially in the West, riddled with ghost towns of former extractive industry hubs, warning signs abound of what happens when revenue streams dry up (GEN-Res-7X). This environment, with cities competing to lure money to their door, creates a sort of myopia. Everything becomes focused on simply maintaining this growth. The booming town itself is the sought-after commodity. As author Naomi Klein stated, "[…] every frontier is a gold rush" (Cited in Cusack, 2011), creating a scramble as long as the commodity lasts. Business booms, existing homeowners receive a boost in prospective home value, and the influx of money makes it easier to govern.

Growth fosters more growth, creating a challenge for cities like Bozeman, St. George, and Flagstaff to maintain their "regional charisma" (Travis, 2007, 29)—the "ambiance," as one Flagstaff elected official referred to it (FLG-G-Elec-6B). Issues like the reduction in affordable housing—which nearly every official described as a major priority for their city—are almost to be expected. One researcher explained this simply, "[…] if there are a lot of people who live in your town whose main source of income comes from investments, you are very likely to have unaffordable housing. And that's definitely the case of the three communities that you mentioned" (GEN-Res-7X).

When the income of newcomers or visitors is far beyond that of the local market, this creates a perverse incentive to cater to outsiders. In Bozeman, St. George, and Flagstaff, these are oftentimes not small differences. Flagstaff's 2017-2018 "Visitor Study" showed the average annual household income for visitors was $100,543, approximately $40,000 more than that of Flagstaff's own citizens (3). This factor is kept more in check when it relates primarily to price hikes for restaurants and retail, but STRs facilitate the emergence of parallel housing systems. The first, with higher prices, offers city amenities and choice location to tourists, second-homeowners, and wealthier residents. The second, with lower but often still burdensome (HUD, 2020) prices, offers further commutes, fewer amenities, and less community connection to many of the same people whose work drives the "New West" economy.

At its most extreme, this lack of affordability can push people outside of the area altogether. For a place like Bozeman, space to grow west of the city seems to allow for a delay when it comes to scaling back growth. As one elected official said, "So we're not Jackson. You know […] we have an entire valley" (BOZ-G-Elec-7S). When it comes to having the space to grow, they may be right, because Jackson, Wyoming's ability to grow is strictly limited by surrounding public lands. But as one researcher stated, "[…] so many places think like, 'Oh, we're not going to be a Jackson, we're never going to be like that.' And then, you know, the problem gets sort of—it gets out of hand because communities aren't anticipating, you know, and then it takes […] time to build new housing stock and to expand things" (GEN-Res-7X).

Jackson itself, identified by a recent report as the most unequal place in the country, likely never thought it was going to become a Jackson (Sommeiller and Price, 2018). Travis (2007) describes this in detail.

> "One commonality among western places swept up in the resort boom is the surprise and grief that residents express as their towns are 'discovered.' […] The swift run-up in real estate prices, the second homes built by newcomers that dwarf traditional architecture, new businesses displacing locally owned shops, the growth of service jobs and the

service workforce, and a host of other economic changes associated with resort growth […]" (132) are all hallmarks of sudden outside investment.

It should be noted that, in 2007, Travis himself described the purchase and holding of open land by his own place of residence, Boulder, Colorado, as making it "an island of restraint in a sea of unbridled development" (44). As of 2019, Boulder's median home value was $795,000 (American Community Survey), requiring a median household income of approximately $306,000 to meet the 2.6 : 1 ratio of affordability.

Public lands are major draws to each of the three case study cities, making them representative of the "New West." These also "act as one of the few solid constraints on land use" (Travis, 2007, 64). One of the most striking themes to emerge from interviews is how much people love where they live. The small-town feel and proximity to public land were oftentimes voiced as being central to this attachment. In this regard, each city's path to growth strikes at the heart of why many have chosen to make a home there.

Cities have three general options in growing their population: growing out, growing up, or in-fill. In other words, sprawl, tall buildings, or less open space. But there is a fourth option: not growing. Whenever the topic of potentially not growing was broached in interviews, a familiar refrain was heard. In addition to nearby public lands being a constraint on growth, the Flagstaff housing official explained, "[…] there's also a desire quite honestly from our constituents in our public to not grow even if we could. 'I've got mine. Let's shut the doors. We don't need this to—'Don't Phoenix Flagstaff.'' We hear that all the time" (FLG-Hous-6F).

Interviewees likened opposition to growth as a desire to 'close the gates,' a thought which seemed especially unfair for interviewees not originally from the community in which they now reside. Nobody closed the gates on them, the logic went, how could they then do this for someone else? Ambivalence toward growth was a common theme throughout interviews. One researcher talked about Venice, Italy as one of the most extreme examples. "[I]t's just, just a husk of, you know, this former community that's really only being propped up by tourists. You know, there's nothing left of the people who actually built it [as] what it is. And so, I think it's—you know, it really is kind of inevitable" (GEN-Res-7X). They applied this to their own amenity-rich, tourism-heavy community and talked about struggling with the growth. "But, I don't know, I'm really reluctant to jump on the bandwagon of people who go to a community and want to slam the door behind them. 'Fence it off. This is mine. This is my trailhead. This is my park,'" they said with a laugh.

Interviewees cited positives with growth—from more direct airline flights to better healthcare options—, but it also altered the place. Although increased funding from a higher tax base may allow for more options in a city's budget, the Bozeman elected official stated the issue clearly. "The bottom line is that, yeah, nobody either moved here or stayed in Bozeman because of what Bozeman will become. They did it because of what Bozeman was or what Bozeman is now" (BOZ-G-Elec-7S).

Plenty of issues relating to growth provoke a major response in these three cities, with university growth in Flagstaff and Bozeman one of the most highly contested issues. With both NAU's and MSU's campus a half-mile south of each respective city's downtown, the last decade's influx of students has been a major challenge for the cities to navigate. Officials in both cities cited it as one of the biggest strains on the housing market. In Flagstaff, for instance, large-scale housing complexes for university student were referred to more than once as "monstrosities" in the way that the four-, five-, and six-story buildings can worsen congestion, alter existing character, and block the view of the San Francisco Peaks. It's not uncommon to see bumper stickers stating "Flagstaff: A Suburb of NAU."

And yet, there is perhaps nothing which better encapsulates the three cities' struggle to maintain a sense of community than STRs. When Bozeman sought public feedback regarding STRs, they received around 1,000 comments, what one planner believed to be the most on any issue in city history (BOZ-G-Plan-6Q). While large-scale planning and housing projects will oftentimes affect the entirety of a community in some way, STRs touch down at the neighborhood level. Interviewees—while employed as government, housing, compliance, tourism, and real estate representatives—are also residents of these cities. For many, their experience with STRs is intertwined.

Political ecology requires constant narrowing and broadening of scope. Although one of the central questions of this research—how STRs affect housing affordability—requires zooming out to the city level and beyond, many interviewees did not have to consult data to determine how STRs can affect long-term residents. A couple elected officials—one in Flagstaff and one in St. George—spoke of staying in STRs themselves while traveling. Both a researcher and a planner in Utah spoke of being STR hosts as a way of better affording housing costs which have shown no signs of abating. But individuals especially spoke of how they experienced STRs as neighbors. They spoke personally about these issues and their words provide one of the best ways of showing how STRs touch down in each of these communities.

The economic development official interviewed said that one way they know it affects housing is that, living in a town just outside Flagstaff, "9 out of 10 of the houses on the street I live in are Airbnbs" (FLG-G-Econ-6E). This was echoed by another official who spoke to something missing with STRs:

"I think a lot of communities have seen many of their neighbor's houses go up for Airbnb, and we all know which houses in our communities are those Airbnbs, because they don't—those aren't neighbors. You know that they're not. They used to be neighbors, but they're not" (FLG-G-Elec-6H).

A planner in Bozeman spoke about this at length:

"I've seen the conversion of long-term rentals to overnight rentals. And I've seen how that has impacted not only our workforce, but it also impacts and [...] I'm speaking from experience due to where I live—it's also impacted the vibrancy of a lot of the neighborhoods. You know, you have new people walking around the neighborhood every evening and people that you've never seen before. You have houses that go vacant for long periods of time because the owners can afford to leave them vacant because the Airbnb income is so good that they don't have to have it occupied all the time.
And so that has really decreased the number of long-term renters and year-round tenants in the neighborhood where I live [...]. When I got here, you know, it was very common on dog walks to run into half a dozen people that you know, have a chat, continue your walk. That's, that's not as [...] frequent of an occurrence here, and it's because a lot of the houses are—have been converted to Airbnb or short-term rentals" (BOZ-Plan-7R).

One interviewee discussed the impact of STR guests, the "people that you've never seen before." During the course of the interview, they brought up a property near their house several times, referring to is as a "nuisance property":

"When there's no owner, there's like no adult supervision. People can come […] and party and act—completely ignore the fact that they're having an impact on the people around them."

Asked how many STRs they would be comfortable with in their neighborhood, they said it depended on how it was used but that their experience colored their view:

"[…] it depends on how conspicuous the rentals are […]. The one that's by my house, it offers—like the use of that property is so different from any way that the neighbors use it, it's like a blight in the neighborhood […]."

After several references to this property, the interviewee was asked if they thought they would have moved into that house had they known this was part of the living situation:

"If I knew it would be like it was, no."

Explaining that other neighbors have had a major issue with the house as well, they say that they have considered moving and may still:

"If you're not comfortable in your own house or you're not comfortable in your backyard, like what's the point, right? Like, why live there if you can't be comfortable there?"

The previous interviewee explained that their choice—and future choices—in housing were constrained by high costs in the city. For one planner interviewed related to St. George, they described planning to host an STR of their own. Building on family-owned land, they do not live in St. George but draw a link between their tourism-dependent area of Utah and St. George:

"[…] the only reason we're going to be able to afford moving up there is because we're going to build a house on some family property and because we're going to have our own

Airbnb. When we build, we're going to build an Airbnb over the garage. That's almost the only way that you can afford to live in these areas now" (STG-G-Plan-9O).

What's hidden in the question of how to grow—or whether to grow—is who benefits from this growth. In terms of the ratio of median home price and median household income—with the affordability rate typically pegged as 2.6—, Bozeman, St. George, and Flagstaff have ratios on par with the 15 least affordable large cities in the country (Census, 2019; Zillow, 2019). STRs offer a powerful symbol for residents in displaying who a place is "for," but they also have a very tangible impact on housing affordability. With AirDNA data providing numbers for STRs that offer entire homes and those available for at least 180 days of the past year, a rough calculation of impact on long-term housing can be determined.

	***Census Estimate, 7/1/2019**	****AirDNA Snapshot 8/19/2020**		
City	Population*	Current number active**	% entire home**	% available full-time**
Flagstaff	75,038	1361	91	55
St. George	89,587	855	97	62
Bozeman	49,831	553	88	47

Table 3: Breakdown of STRs in the three case study cities (individual).

These can then be used to compile totals across the three cities:

	****AirDNA Snapshot 8/19/2020**

City	Current number active**	# entire home**	# available full-time**
Flagstaff	1361	1239	749
St. George	855	829	530
Bozeman	553	487	260
Total	**2769**	**2555**	**1539**
Percentage		**92%**	**56%**

Table 4: Breakdown of STRs in the three case study cities (composite).

Flagstaff, St. George, and Bozeman had a cumulative 2,769 properties listed on Airbnb or VRBO on August 19, 2020. Of these, 92% were entire-home rentals while 56% were available more than half the year. For a comparison, 66% of the 50,190 STRs listed on Airbnb and VRBO in the five largest cities offered entire homes while 29% were available more than half the year (8/19/2020). The true test of how much STRs diminish the housing stock, however, is what percentage of the total units—which could presumably be used for long-term residents—are instead being used as STRs.

Of the 86,619 units across the three cities (Census, 2019), 2,769 total Airbnb and VRBO units is 3.1968%, with the 2,555 entire-home rentals representing 2.9497% and those listed as available at least 180 days representing 1.7767% of all units. As a comparison, calculations for the five largest cities in the country, which have had long legal battles with STR companies and provoked vociferous protests, Airbnb and VRBO units were a mere 0.6845% of total units when estimating based on the national average household size, with entire-home rentals representing just 0.4518% and those listed as available half the year representing 0.1997% of all units.

These numbers are jarring. The case study cities all have high rental cost and consistently cite low supply as an issue (Census, 2019), with a Bozeman planner referring to the city's sub-1% vacancy rate as "frankly, an unhealthy condition" (BOZ-G-Plan-6Q). They also have little stock of homes for sale (Census homeowner vacancy, 2019). If STRs remove even the low end of these numbers—1.7767%—of possible long-term lodging from these cities, this has a very direct impact on prices. Furthermore, with various areas of these cities—such as college campuses and many HOAs—restricting STRs altogether, those available are concentrated in an even smaller area, and thus compete more directly with long-term residential options there.

Every interviewee who spoke to the impact of STRs on housing cited as least some degree of negative impact on general affordability. Many interviewees, however, said STRs could also give long-term residents an opportunity to rent out space and afford the rising costs of living. It should be noted, however, that this is often restricted to those who can already afford homeownership. Additionally, with the vast majority of STRs offering entire-home rentals, the opportunity to make a large income from offering a spare room is far more limited. This also highlights a common and vexing contradiction of the "New West" economy: one of the only ways to afford these places is investing in what is helping to make it unaffordable in the first place. Too much economic dependence on any one entity—from tourism to universities to second-home buyers—can easily lead cities to defer to these same entities when seeking ways out of economic distress. As this research was conducted in a summer of altered travel and economic uncertainty, the impact of COVID was continually referenced in interviews.

COVID-19 and Tourism

Tourism in these three communities was particularly cut off at the beginning of COVID lockdowns, with uncertainty around the virus' transmission and lethality bringing most travel in March and April of 2020 to a screeching halt (BOZ-G-Plan-6Q; FLG-Tour-6A; STG-G-Tour-6J). Officials in each relied on hotel bookings and visitation to their nearby national park as proxies for estimating how much tourism was coming back (STG-G-Elec-7L; BOZ-Plan-7R). For hotels, one Flagstaff tourism official said that their typical summer average of 5 – 10% vacancy had been flipped to a 90 – 95% vacancy (FLG-Tour-6A). Similar numbers were cited when it came to St. George (STG-G-Tour-6J).

The Flagstaff official explained that most hotels, restaurants, and tourism outlets make the bulk of their income in late spring and summer to sustain them through lulls later in the year, a phenomenon seen in Bozeman as well. Although St. George's tourism is more evenly spaced throughout the year, COVID impacted travel far beyond the initial spring stoppages. The Flagstaff official cited a report by Arizona State University estimating that tourism and business would not return to their prior state for three years (FLG-Tour-6A). The story was similar in St. George, with a tourism official saying, "[…] we're not going to get back to 2019 levels until 2022 and that's if things progress at a fairly positive case. I think it's going to take us a while" (STG-G-Tour-6J).

But each of these cities is economically dependent on tourism and cannot last in its current form without it. A March 2020 Brookings Institute study estimated which communities would be hit hard in a COVID recession, highlighting tourism-dependent jobs as a sector facing the greatest risks. While Bozeman was not on this nationwide list, Flagstaff was number 12 and St. George was number 49 (Muro, 2020). While other places might be better able to endure a prolonged shutdown to prevent the spread of COVID, the economic losses in these communities would be devastating.

The "New West" economy, with tourism at its core, creates an enormous incentive for these places to remain fully open for business. In this context, it is perhaps not surprising that tourists continued to come and each city remained at least partially open through the summer. In Flagstaff and Bozeman, both NAU and MSU opened for thousands of students to return to campus and at least have the option of taking in-person classes. Several officials in St. George explained that nearby closures in other states such as California and Nevada had led their residents to travel to Utah. Although greater research would be needed to document this, the threat of this spillover effect in a pandemic is clear. As the tourism official put it, "[…] we may be doing well health-wise here, but visitors that are coming from somewhere else may not be" (STG-G-Tour-6J).

Many officials were uncertain of how STRs were being affected. Some speculated that property owners would transition these from short-term to long-term housing. Others speculated that STRs would prove more popular and were "even going to be a better bet for desirability" in the age of social distancing (FLG-G-Econ-6E). So far, the data shows that the latter opinion has proven more accurate in places like the three case study cities. Although STRs in these three cities did not see the gains of 2019, they fared far better than their metropolitan counterparts when travel was most limited during the pandemic (AirDNA, August 2020). The following chart shows the number of properties rented through Airbnb and VRBO during Quarter 1 (Jan. – Mar.) and Quarter 2 (Apr. – Jun.) of each year, indicating that lockdowns and COVID uncertainty hurt properties in the country's largest cities much more than those in Bozeman, St. George, and Flagstaff.

	Q1 to Q2 2019 percent change	Q1 to Q2 2020 percent change
Bozeman	11	2

St. George	10	-1
Flagstaff	7	2
New York	-3	-19
Los Angeles	0	-21
Chicago	9	-10
Houston	2	-8
Phoenix	6	-8

Table 5: Comparing Q1 to Q2 % change between 2019 and 2020.

This trend seems to be continuing. An AirDNA report states, "Markets in coastal and mountain destinations generated 64% of all booking value in January [2021], or the total revenue for all reservations made during the month of January for future trips, compared to just 52% in 2017 – 2020" (Lane, 2021). STR offerings in the U.S. were down overall in 2020 from years prior, but markets in places like the amenity-rich, relatively low-density case study cities are rebounding more quickly than either hotels or larger cities. As has been demonstrated, STRs increasingly offer entire homes, generally allowing guests more space than hotels. Particularly in a time of COVID, it should not be surprising that tourists are opting for destinations and lodging which maximize their personal space.

In places with high numbers of tourists and high numbers of empty homes, there will very likely be high numbers of entire-home STRs. This is hardly a surprising takeaway. The previous sections lay out the many reasons why tourism numbers for each case study city are high. But the high number of empty homes—the very reason entire-home STRs are possible in the first place—seems to offer up a contradiction. If affordable housing is a problem in these cities, why are there any homes, let alone hundreds or even thousands of homes, sitting empty? As one researcher interviewed said, this is “a hunger problem when you have big piles of food nearby” (GEN-Res-7W). This is not an accident.

COVID-19 and Non-Primary Homes

Bozeman, St. George, and Flagstaff have an affordable housing issue. As the chart below makes clear, around one in four homeowners and more than one in two renters in each case study city put at least 30% of their income toward housing. This is the definition of housing cost-burdened (HUD, 2020). Interviews with officials in each city backed this up. A Bozeman planner said vacancy is minimal and that this is nothing new (BOZ-G-Plan-6Q). The same could be said in the other two cities. At the same time, each city is home to hundreds of entire-home STRs, with nearly 1,500 in the case of Flagstaff (AirDNA, Feb. 2021).

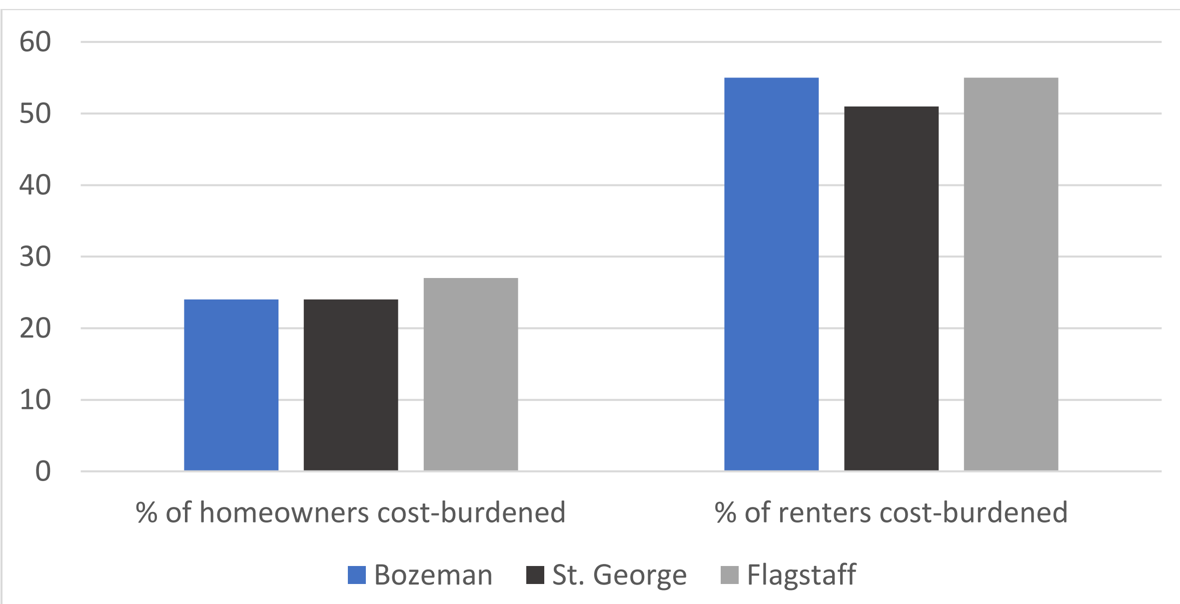


Table 6: Percentage of residents in case study cities who pay more than 30% of their income toward housing.

In answering how this level of vacancy exists for short-term visitors while little exists for long-term residents, it would be a mistake to place the blame squarely on STRs or any specific policies. What this research demonstrates is that the problem is far bigger than that. These three cities are part of a fight for affordable housing which operates on massive spatial scale which cuts across the entire region and country. Not one of the 11 western states ranks in the top 25 for housing affordability (Moody's, 2018). Even more broadly, there is not a single state in the country where a person working full-time for minimum wage can reliably afford a one-bedroom apartment (NLIHC, 2018; Madden and Marcuse, 2016). STRs exacerbate these trends by offering vacancies to temporary residents and short-term visitors, but the fact that these groups compete with locals at all is part of a larger phenomenon, what Aalbers (2008) identified as the "financialization of home."

The deregulated environment in which STRs exist should also not be construed as recent. Rather, it's part of a long-standing history in the U.S. of creating frontiers of empty space for outside wealth. Because current occupation precludes outside occupation, frontiers require a blank space. The defining feature of the 1890 Census, inspiring Frederick Jackson Turner's famous thesis on "The significance of the frontier in American history," was its failure to identify this blank space in the West (Turner, 1893; 1914). But in 1981, nearly a century later, the Intermountain or Interior West was still being described as the "Empty Quarter" (Garreau). It's common to hear characteristics of this perceived emptiness invoked in the West. Arizona is often referred to as "The Wild West," Utah's most-visited national park, Zion, translates to "paradise" or "promised land," and Montana bears the moniker of "the last best place" (Kittredge et al, 1981). Particularly in the West, the frontier has reappeared again and again, with places clinging to this history both as a means of maintaining roots and charting growth.

But if a frontier logic is at work in creating and claiming empty space in the case study cities, this should be especially evident during times of crisis. The steadiness of STRs in these cities since COVID and resulting restrictions took hold provides some evidence of this, but an even better signifier is the purchase of non-primary homes. In the housing boom of the 2000s, it was non-primary homes which were found to be a significant part of the market's rapid growth and price appreciation (García, D., 2019). This helped create a housing "bubble" which then popped and caused the worst financial downturn since The Great Depression.

Another way to look at this is as a "boom" and then "bust," a concept very familiar to the formerly extractive industry-dependent West. While the "New West" is supposed to be far more resilient to this boom-and-bust cycle, its primary means of generating new revenue and meeting price increases within cities has been by growing their populations, particularly by luring higher-income individuals. It is not surprising then that cities increasingly relied upon non-primary home buyers to drive the housing market post-Recession. There is some evidence that Flagstaff did so (Dugas, 2009) as well as evidence of broader trends like second home buyers being decidedly wealthier in the years following the '07-'08 housing crash, with a significant increase in the percent purchasing non-primary homes in the West (National Association of Realtors, 2014).

Clearer evidence has even begun to emerge that non-primary home-buying is surging specifically because of the possibility of STR income (Sisson, 2018; Tostevin and Hyett, 2018). This fits into what one researcher described, with technology further commercializing the vacation rental business and taking it away from being purely referral-based. They cited the work of Ragatz and Gelb (1970) as predicting home-"sharing" would someday prove a huge industry, if not supplanting the hotel industry, because of the sheer number of spare rooms (GEN-Res-7W, 3:45). That was a half-century ago. The use of second homes as STRs could be logically predicted from that point as well.

Despite the evidence that STR income potential is now driving non-primary home sales, there are far more non-primary homes serving as nothing more than secondary spaces for transient residents. This is particularly true in even more tourism-heavy resort towns. A 2017 study commissioned for the town of Vail, Colorado compared the residential occupancy of nine additional ski towns, with staggering results. Despite many claiming a shortage of affordable workforce housing, 8 of the 10 had at least 30% of their total housing units vacant, presumably being used as second homes (Garrison et al, 2017, 9). Breckenridge (CO), Park City (UT), and Vail had the most spaces left vacant, with 71.7%, 71%, and 63.1% respectively.

Ragatz and Gelb (1970) were ahead of their time in predicting the preeminence of home-"sharing" and the role of second homes within this. What would have been more difficult to predict was that this would be permitted, encouraged, and even sometimes funded by varying levels of government, particularly in moments of crisis. With COVID, interviewees in every city claimed home-buying had continued unabated and even increased during the summer. Some officials spoke of a looming "cascading of foreclosures" (FLG-G-Econ-6E), with people out of work unable to make rent or mortgage demands. Meanwhile, many cited what's being called the "Zoom boom" driving non-primary home buyers and remote workers to mountain towns. All spoke anecdotally, saying they would have to wait and see what the data said more officially.

Seven months later, the data backed all of this up. With interest rates hovering near 0%, a report by real estate data analysis firm Redfin showed the sale of non-primary homes to be increasing at twice the rate as primary homes, with an 84% year-on-year increase as of January 2021 (Anderson, 2021). Between November 2019 and November 2020, the median sales price for a single-family home in Gallatin County, home to Bozeman, had risen from $420,000 to $615,000 (Big Sky Country MLS, 2021). To maintain the recommended median price-to-income ratio of 2.6, a household would need to earn around $237,000. With numbers like this, it seems more appropriate to ask when a bust will come rather than if.

Who wins? Who Loses?

Instead of simply deciphering whether events and policies are good or bad, political ecology asks the follow-up question: for whom? This research posits that STRs must be understood as part of a pattern, the latest version of a frontier. At first glance, 18th and 19th century westward movement across the U.S. seems to have little to do with the large swaths of contemporary tourists flocking to western mountain towns, but a closer examination reveals similar winners and losers. As author Naomi Klein put it, "…the reason you build a frontier is always the same: nothing is more profitable" (cited in Cusack, 2011).

Determining the "winners" and "losers" from an influx of university students, tourists, and new residents is not difficult. In an environment in which housing is simply another commodity (Farha, 2017, 3) the "winners" are those who profit from owning property and the "losers" are those who struggle to afford it. "Losers," in other words, are those for whom housing is home, not real estate (Madden and Marcuse, 2016). This is seen in the previous chart, the roughly 25% of each city's homeowners and roughly 55% of each city's renters who must pay inordinate amounts to maintain their footing when housing prices far outpace local wages.

Yet, there is another group beyond the strict binary of those who profit from rising real estate and those who must pay higher sums to maintain residence: those already displaced. These people cannot vote, speak before city council, or sit down for an interview about the difficulties in managing the cost of housing; they do not exist within the bounds of these cities at all (Spivak, 1988). As the literature review showed, people of color—particularly Native and Black People—have historically been most vulnerable to marginalization and displacement. Utilizing Lipsitz's (2011) concept of the white spatial imaginary, this pattern can be seen in the three case study cities.

Bozeman and St. George are 89.6% and 80.5% white alone, non-Latino, respectively. Although Flagstaff's population initially seems more diverse—with 64.5% white alone, non-Latino, 19.3% Latino, and 7.8% Native—this must be understood in a broader context. The overall state of Arizona population is only 54.1% white alone, non-Latino and this number remains the same within Coconino County, of which Flagstaff is part (Census, 2019). Additionally, the city is bordered by the Navajo and Hopi Nations, with the Navajo Nation's 175,000 people representing by far the largest population on Native-held land (Census Map, 2000).

With these demographics, it is perhaps not surprising that race never received a single mention in interviews unless the interviewee posed the question of how race factors into housing. The populations of these cities are so overwhelmingly white that one elected official laughed when a pause preceded the question, an apparent acknowledgement that discussion of race relations was largely a hypothetical exercise, particularly when it came to Bozeman and St. George.

It should be noted that each of the 24 interviewees was white. The vast majority were contacted via email, phone, or referral, without any knowledge of their race or other characteristics beforehand. This could be mere coincidence, but the fact that requests for interviews with elected officials, planners, real estate agents, compliance officials, researchers, and tourism representatives yielded an entirely white group may offer a snapshot of who speaks and who has power within these communities.

As was made clear throughout the literature review, these cities were not always and did not have to become the white enclaves they are today. When asked about the role of race in housing, several interviewees gave quite nuanced responses invoking long-past racist practices of the federal government as well as problems experienced in their own city. In the context of the summer 2020 protests against police violence, several interviewees in Flagstaff said that discrimination against the city's unhomed Native population needed to be a major focus in race relations. But no targeted housing solutions were discussed, a fact which will be returned to in "Solutions and suggestions."

Exclusion of non-white people has been central to each of the five frontiers identified in this research. This has effectively produced what Lipsitz (2011) referred to as "the racialization of space and the spatialization of race." The market-based approach to housing is race-neutral on its surface but ignores the decidedly racialized history which has resulted in a vast racial wealth gap in this country (Aliprantis and Carroll, 2019, 2).

Ignoring this history also ignores how it pervades every aspect of society today. In Flagstaff, the largely Latino population of Arrowhead Mobile Home Park was forced to leave in recent years to make room for future development (Garza, 2018). In Bozeman, the onslaught of evictions resulting from COVID is threatening to displace residents of the only predominantly non-white neighborhood in the city (Milner, 2021). This harkens back to Harold Ickes, head of the 1930s-era Public Works Administration (PWA). His "neighborhood composition rule" favored racially homogenous neighborhoods and served as a blueprint for future housing law (Rothstein, 2018, 65). Now, in part due to policies like these, race and wealth are tightly bound across the entire country. The expensive housing market itself in each of the case study cities is reproducing Ickes' policy on a municipal scale. The operation of STRs in these three cities merely heightens this racial divide by further entrenching a view—and price point—of housing as real estate.

5. Solutions and suggestions

The prevalence of short-term rentals (STRs) in Bozeman, St. George, and Flagstaff is a symptom of a far more massive problem. Officials from each city seem to understand that entire-home STRs can take potential housing off the market and create some price inflation by offering a more profitable option in housing. These effects were consistently identified as negative. But many of the 24 interviewees demurred on the overall impact, particularly those who could do something directly about it. Instead, they said that there were bigger issues from rising land and building costs to university growth to second homeownership to overall growth. Others bemoaned the negatives but also cited the positive that it could allow homeowners to afford the rising costs. Very few articulated the links between these issues and even fewer advocated placing serious restrictions on entire-home STRs or the empty spaces from which they materialize.

Overwhelmingly, those who voiced the most major objections to the impact of STRs and overall housing affordability were non-governmental planners and housing officials. On the surface, this makes sense, as it's far easier to draw attention to an issue that one is not responsible for fixing. It also shows a deference to growth and market forces among many government officials which fails to inspire hope that these problems can be solved.

In the decades since political ecology's founding, scholars have continually wondered why the field has failed to move beyond cursory critiques of the status quo (Walker, 2007; Watts, 1990, 128-9). To understand the knowledge gap which this study seeks to address—how the prevalence of STRs in western mountain towns affects housing—it was important to situate it in the larger history of housing and settlement. This helps explain the particular climate in which political decisions on housing have been and continue to be made. But this is not enough. This study has no interest in articulating this problem without offering specific solutions and suggestions on how it can be solved. In addressing the deterioration and unaffordability of working-class housing, what Engels termed “the housing question” nearly 150 years ago (cited in Madden and Marcuse, 2016), the starting point must be, first, a declaration that it is a problem, and, second, a determination that it can be solved. To do so requires sufficient political will and, particularly in places like Flagstaff with strict state restrictions, innovative solutions.

Each city provides hints at potential paths forward. Bozeman, in many ways, has taken the most active role in addressing the impact of STRs. The city sought and received immense public feedback, which led to a nuanced approach allowing for direct enforcement through a registration system as well as the implementation of a software system to monitor STR activity. All of these are important steps which could be emulated in many places struggling to regulate STRs. As one Bozeman elected official said, they “definitely believe in peer learning” and looked to many cities, including Flagstaff, Austin (TX), Bend (OR), Durango (CO), Bellingham (WA), and Champaign (IL), to determine their own policies (BOZ-G-Elec-7S).

One measure Bozeman has undertaken which is similar to St. George is the encouragement of accessory dwelling units (ADUs). This allowed for increased in-fill, what is generally seen as the third option for city growth, in addition to growing up and growing out. Whether this had the intended effect of creating more long-term housing or simply allowed for more STRs, however, is not certain (BOZ-Plan-7R). St. George and several surrounding cities seem to have embraced a fusion of STRs and hotels, with resort areas which cause much less impact on housing. Multiple cities had an approach with similarities to Durango’s, which instituted a quota for the number of entire-home STRs allowed in a particular ratio to housing units.

With enforcement, these are potent options for cities seeking to limit STRs. St. George, however, is akin to Flagstaff in having its enforcement ability severely curtailed as the result of a state law (HB 253, 2017). In this context, multiple officials in the area acknowledged a high rate of illegal listings, emphasizing how difficult it would be to actually enforce (STG-G-Plan-7M). The Arizona state law which prevents Flagstaff from directly regulating STRs is quite restrictive but does have openings. The city has begun using what little leverage it has to incentivize developers and Homeowners' Associations (HOAs) to limit STRs (FLG-G-Elec-6B). In addition, Flagstaff seems to offer the most organized system of rental assistance and downpayment assistance for those looking to buy a home (FLG-Hous-6F).

The last measure worth noting is currently already utilized in Flagstaff and Bozeman: Community Land Trusts (CLTs). Under this model, individuals own homes while the city or a nonprofit owns the land. Particular rules vary, but CLTs are generally restricted to primary homes and individuals must be at or beneath the area median income (AMI). Equity from the house is diminished compared to typical homeownership because initial costs are kept under greater control. CLTs provide both a lower price for those directly living in the place and could create some amount of downward pressure for housing costs more generally.

Collectively, these measures provide the means of addressing STRs' prevalence in some substantial ways. But housing has already become out of reach for many in each of these communities and there does not seem to be an end in sight. Especially in St. George, Flagstaff, and many communities like them, state laws forbid the express regulation of STRs anyway. With this in mind, cities must think more broadly about how they address this issue.

Even for cities like Bozeman which can regulate STRs directly, limiting policy interventions to short-term rentals fails to address the larger issue. What all the commonly cited factors for rising housing costs have in common—from tourists to second homeowners to remote workers to students—is that they make the local housing market a global one. As one St. George elected official said, “One of the things we've tried to do is […] to welcome the world to come here and visit the various state and national parks and monuments and yet still have residential neighborhoods that feel like residential neighborhoods and not like they’re a total tourism neighborhood, if you will” (STG-G-Elec-7N).

Entire-home STRs disrupt this residential neighborhood fabric. Furthermore, they incentivize non-primary homes over primary ones because of the value which can be reaped in simply holding onto a property and offering it to tourists willing to pay more. A non-governmental Bozeman planner said, “There's been a fair bit of speculation that people are going to places like Bozeman and buying a house or condo and [saying], ‘This is my second home, but when I'm not here, you know, I'll do Airbnb [and] the revenue from Airbnb will pay that mortgage. I'll essentially get a free second home. And then with […] that comes the appreciation.’ You know, Bozeman prices are going up 5-10% a year and it's hard to get that returned anywhere” (BOZ-Plan-7U).

The problem in all this is fairly straightforward: entire-home STRs create a frontier, a revolving door for wealth to be accumulated by those who can afford homes—particularly non-primary homes—to begin with. This, in turn, hurts housing affordability by reducing total availability and creating an incentive for homeowners to cater to short-term visitors instead of long-term residents.

The solution, likewise, is also clear, although unpopular with those who most benefit from the current system: close the frontier. The frontier has always operated on two levels. The “opportunity” which Turner (1893) used as synonym for the West could be understood by some as a means of getting rich and by others as a "safety valve." According to economist James M. Buchanan, this "safety valve" served as an exit option when the walls of society seemed to close in and dramatically limited the potential for interpersonal exploitation (cited in Grandin, 2019, Ch. 11). STRs offer an exit option for tourists and second homeowners—a chance for them to "belong anywhere" according to Airbnb—at the direct expense of long-term residents. The only exit option which remains for these long-term residents is to leave town, but where are they to go when housing is on the rise everywhere and cities are in competition for high-income residents and visitors?

Time and again in this research, those interviewed referred to their city's affordable housing issue as a "supply and demand" issue. What most people did not say is that this is partially by design. The only person who touched on this issue was the Flagstaff housing official. They explained:

> "I mean, I think we all agree that we don't want our markets to crash either, right? Like when you're talking about affordable housing, it's crazy, but if we went to a place where housing prices decreased by 25%, that would create a whole different world of hurt problems. So, from […] the real estate perspective, steady and appreciating prices are good. It creates buyers and sellers and stability in the market" (FLG-Hous-6F).

Profits fall when supply is too great or fixed costs are too great (Moore, 2011, 27). In other words, in small cities with a $350,000 median home price, building 100 new homes and pricing them at $200,000 would destroy the exaggerated return on investment enjoyed throughout the entire industry. This gives those with an interest in the status quo little incentive to actually ensure housing is affordable. As long as people keep moving to the city and the incoming residents can afford higher prices, affordable housing will not be a priority.

Fear of the market crashing, a “bust,” is at the heart of this logic. STRs help drive this economic approach by further incentivizing a focus on a house’s exchange value—*what’s this worth on the market?*—instead of the use value—*what purpose does this serve?* With housing viewed as a commodity, return on investment is the only metric that matters. The question is seldom asked why cities should cater to tourists over residents, second-home owners over primary homeowners, tourists with boats, ATVs, and large “toys” over tourists without them, large tourist groups over smaller ones, and a host of other decisions being made without a great deal of consideration. The simple argument made is that the market exists for it. By this, people mean that the profit incentive exists for it. There is, of course, a large market of people looking for affordable housing, but there is inherently less profit to be found in identifying ways to lower prices.

The answer to why homes are sitting empty in these three cities and yet not on the market is that they exist on an entirely different market not tied to the local labor market. The solution is to price them that way. Each case study city already has an example of this right within their own boundaries: in-state and out-of-state tuition at public universities. Out-of-state students pay a premium in tuition, a national practice justified because they have not been paying state and local taxes like in-state students. Why not apply the same logic to STRs and second homes? In additions to the STR policies cited from each city, applying a sizable surcharge to the price of non-primary homes would disincentivize both the building and sale of non-primary homes.

Flagstaff, which just declared a “housing emergency,” can be used to illustrate this example. The city has cited its second-home population as anywhere from 10% - 18% of local housing units (Flagstaff Regional Plan, 2014). Using the low end of this exceedingly wide range, 10% of the 29,713 local housing units (ACS, 2019) translates to approximately 2,971 second homes. If these were to average the median home value of $351,600, then a 10% surcharge could be added to equate to the amount of units which second homes take off the market for potential long-term residents. This would translate to approximately $104 million in revenue for the city. For the sake of comparison, this would cover more than a third of the city's entire 2021 budget of approximately $273 million.

The possibilities for this amount of money being directed toward housing are immense. Flagstaff could add around 1,044 homes to its current stock of 47 Community Land Trusts (FLG-Plan-6C) and remove $100,000 from the price of each property. It could build or simply purchase multiple apartment buildings, making them mixed-income with rent-controlled housing. Properties would be well-maintained and tenants would pay no more than 30% of their monthly income to rent and utilities. These costs would be strictly tied to inflation, limiting the possibility that large increases would price people out. Or perhaps the policy would have the intended effect of making second homes less palatable, thereby eliminating entire-home STR possibilities and adding long-term residential ones instead.

Before being too carried away with this policy, it is necessary to acknowledge that Flagstaff may be restricted in carrying it out. While there is nothing similar known to exist in Montana or Utah, a 2006 Arizona state law known as Proposition 207 allows property owners to sue governments which enact land use laws devaluing their property (Arizona Legislature). This might fall under that purview. An alternative would be to enact a similar law to what is in place in Utah. Currently, Coconino County has one of the lowest annual property tax rates in Arizona, averaging around 0.5% of the home's assessed value despite one official referring to it as the most expensive county in the state (FLG-G-Econ-6E). Similar to home price, there is currently no difference between primary and non-primary rates. By raising this rate to 1.0% of assessed value for non-primary homes, primary homeowners would be able to continue paying half of this assessed rate, 0.5%. This would also be a huge influx of revenue for housing.

As these are set by the county and locality, state law could have little influence. If again estimating 2,971 second homes being priced at an average of $350,000, this would result in approximately $5.2 million toward city housing initiatives. Every year. This could allow the city to add 104 Community Land Trust properties and cut the initial price by $50,000 each. To make this transition more gradual for non-primary homeowners already present, the property tax rate could be raised 0.1%, or approximately $350, each year until reaching its designated 1.0% of assessed value. It could also fund the city's construction or purchase of small mixed-income, rent-controlled apartment buildings.

When it comes to addressing the racial injustice at the heart of each of the five identified frontiers, this is ironically made more difficult by non-discrimination laws passed which purport to treat everyone equally, regardless of race. To truly target the racial aspect of the "financialization of home" would likely require federal action. Despite this, any city with large non-white populations just beyond their boundaries—like the Native Reservations bordering Flagstaff and St. George—has great power in addressing this. Any person who is at least a second-generation resident of the larger region could be granted first priority and reduced standards of financial eligibility to the aforementioned housing options.

These policies, if enacted and enforced, would immensely improve affordability in any of the three cities. Since Community Land Trusts, with the lack of potential equity, are fundamentally different from homes which appreciate rapidly on these regular markets, it's possible they would not hurt the high return on investment on others. Rent-controlled properties, as used in larger cities throughout the country, could provide the "safety valve" for so many residents who can barely afford rent as it is and might be priced out altogether with a significant increase.

A pattern emerges when talking to city officials on these issues. One of the biggest issues in housing affordability cited in Bozeman was growth in Montana State University enrollment. For St. George, it was land and building costs. For Flagstaff, it was Northern Arizona University growth as well as STRs. In other words, the biggest issues in each city are those where they argue that their hands are tied. It should be noted that Bozeman did indeed put in place far-reaching and public-informed STR regulations, but the city still hosts hundreds of entire-home properties. Bozeman has also frequently been one of the cities specifically cited in the COVID-induced second home boom. Similarly, Flagstaff and St. George are two of many cities which are limited in STR regulation but who simultaneously defer to the market as the determining force in many policies.

This is a trend. Although there are many ways in which each of these cities is restricted from carrying out all desired policies, there are many ways in which they can act but choose not to on the basis of economic incentive. Each of these cities cannot be held in isolation on this and instead must be viewed as places in competition, including with each other. In September of 2020, six months into COVID lockdowns, an AirDNA report cited Flagstaff and nearby Sedona in the top 25 for large markets to own vacation rental property nationwide, with “large markets” defined as having at least one thousand active STR properties. Palm Springs, California—what one St. George official compared the city to within the state of Utah—led the list (DuBois, 2020).

One’s policies touch down in nearby cities, as illustrated by St. George’s formerly restrictive STR policy leading to a STR boon for surrounding towns, but nearby areas boom even without restrictive policies. Ever-aware of economic busts, with formerly thriving nearby towns now reduced to ghost towns, these cities will do everything in their power to grow their economy. In this context, it's not surprising that AirDNA identifies towns near Flagstaff and St. George as some of the best mid-sized markets, or those listing between 100 and 1,000 active STRs, to buy vacation rental property. Forty and seventy miles east of St. George, Springdale and Orderville made the list. Munds Park, just 20 miles south of Flagstaff, made the list as well (DuBois, 2020). These places are all part of a larger story in which cities across the country seek higher-income earners and are more than willing to sacrifice affordability for existing residents in the process.

Several interviewees in Bozeman and St. George mentioned beliefs that STRs were reaching a point in which supply was exceeding demand and it was beginning to be less lucrative. Put in simpler terms, 'The market is fixing it.' But as has been shown repeatedly throughout this research, "the market" does not fix issues like this. The market is designed to accomplish one task and that is to find new frontiers in which to accumulate profit, with the unverified presumption that the most profitable market is one which meets the needs of residents. The "financialization of home" that has been at work in the United States over the last two decades has demonstrated the housing market has largely moved on entirely from the mission of meeting residents' needs.

This story is not new. Government at all levels in the United States has historically denied its ability to prevent settlers deemed desirable from moving in, with this continually focusing along racial lines. It has perpetually maintained this stance, even as it forced Native Peoples from their land (Getches et al, 2017, 3; Stephanson, 1995, 68), prevented Black and Native Peoples from claiming land offered through the Homestead Act (NPS, 2020), prevented all non-white races from accessing the Federal Housing Administration's homeownership subsidies (Rothstein, 2018), spurred massive urban disinvestment in majority non-white areas followed by massive re-investment to bring back more affluent, overwhelmingly white, residents, and propped up the very same companies which had contributed to the largest loss of non-white wealth in history during the Great Recession (Gottesdiener, 2013).

To see this is a pattern requires only a look at what happens when cause and effect are collapsed into a short window of time, as in the case of a crisis. In the wake of the Great Recession of 2007 and 2008, the Department of Housing and Urban Development sold hundreds of thousands of homes to private equity firms (Farha, 2019a, 1-2; 2019b). The UN Special Rapporteur on Adequate Housing at the time, Leilani Farha, stated "the United States of America has disconnected housing from its core social purpose of providing people with a place to live in with security and dignity," the burden of which fell particularly hard on people of color (2019b, 1).

Less than a decade from when most experts cite the economic recovery from the Great Recession, COVID has seen a boom in home sales while millions have been forced from their homes. The federal government initiated these concurrent trends by lowering interest rates to approximately 0% while also providing little assistance to those struggling to make monthly rent and mortgage payments. Furthermore, real estate data analysis firm Redfin showed this has been driven by non-primary home sales (Anderson, 2021).

Airbnb touted a recent report showing that new hosts had collectively earned $1 billion in the year since the first COVID lockdowns were initiated in March of 2020 (cited in Kelleher, 2021). Between trends in non-primary home sales, the current health risks associated with truly sharing space, and consistent data on AirDNA, all evidence points to the new slate of STRs overwhelmingly offering entire-home rentals. In this way, they are likely being used in this crisis to further the "financialization of home."

In 1896, Frederick Jackson Turner said, "This, then, is the real situation: a people composed of heterogenous materials, with diverse and conflicting ideals and social interests, having passed from the task of filling up the vacant spaces of the continent, is now thrown back upon itself, and is seeking an equilibrium." How the country sought equilibrium around this time is instructive for the situation today. Faced with the perception of diminishing empty space, the country began a spate of wars abroad (Grandin, 2018) and initiated the General Allotment Act of 1887 (Getches et al, 2017, 140). These had the combined effect of opening new markets beyond the country's border and dispossessing Native Tribes of nearly 90 million acres, an area approaching the size of California. In other words, faced with the apparent end of the frontier for incoming settlers, the United States created a new one on the lands of existing residents.

This process of producing new frontiers in the pursuit of profit, what Harvey (2001) has referred to as a "spatial fix," has changed forms but continues more than 120 years after Turner talked of "seeking an equilibrium." Until the dawn of the "New West" economy, the "Old West" was one of boom towns and ghost towns. One town's growth and another's demise were dependent on the market value and presence of extractive resources. In the context of the current frontier, STRs are one factor in erasing the distinction between ghost towns and boom towns in the West. Rather, these places are one and the same, producing blank spaces for the entrance of capital next door to long-term residents struggling to afford the rising cost of home.

This study illustrates that STRs turn local markets into global ones, forcing long-term residents to compete for housing with people not constrained to local incomes. It shows that the economic incentives for STRs are strong and have led governments at all levels to forgo their regulatory powers, deferring instead to the market to determine who most deserves housing. Most importantly, this research shows that it doesn't have to be this way. Indeed, the current "financialization of home" has produced heightened uneven developments and arguably made local and global economies even more vulnerable to the boom-and-bust cycle so prevalent in the extractive industries of the West.

This research also provides a path for future research. One theme touched on by multiple interviewees is how tourism is a method for cities to recruit new residents. This was anecdotal but makes sense, particularly with the growing number of remote workers. As has been noted, the "New West" relies on using natural amenities in order to attract people for economic growth rather than relying on jobs to attract people (Travis, 2007, 53). A study examining new residents' past visits to an area, particularly whether staying in STRs showed any marked difference in their likelihood of moving there, would help clarify the strength of the link between tourism and residential growth.

In the sustainable development paradigm, social equity is sometimes considered the "ignored stepchild" and given far less attention than the environment and economic growth (Immergluck and Balan, 2017, 2). This study focused heavily on the importance of social equity. As a result, a critical area which this study scarcely touched on is the environmental impact of STRs and the housing affordability issues in each of these cities. Particularly in the context of climate change and the environmental ethic at the heart of the "New West," this is an area which requires major future study.

As Moore (2011) put it, "If financialization is an ecological project in its own right, the scarcities induced by it (through commodity booms) are neither more nor less directly connected to all of nature than crop failures, species extinctions, and climate shifts" (39). Bozeman, St.

George, and Flagstaff's outward growth and increased dependence on tourism and outside investment raises their environmental impact dramatically (BOZ-Plan-7R). At the same time, these cities have thousands of properties sitting empty for much of the year. This punctures the environmental platforms they put forth in the interest of luring outside money.

These places are on an unsustainable path. This is not to say a housing crash is imminent, although soaring prices make it more likely. It's possible that each will find new visitors and residents, new high-income sources to purchase housing which has, by all measures, become unaffordable to local people. But if that is their primary goal, where will the home builders, the restaurant servers, the teachers, and so many others live? What type of places will they be?

Interviewees across each of these cities cited a housing shortage at the same time that second homes dominate their housing stock, with a sizable percentage of empty homes set aside as STRs. This situation makes it clear that, while more housing may be needed, this alone is not enough to guarantee affordability. Instead, without significant intervention, this new housing will most assuredly serve the needs of those willing to pay more: new, higher-income residents, tourists, and second homeowners. The true issue is that the social and societal values of home have been supplanted by market value. Mirroring the situation across the country, what Bozeman, St. George, and Flagstaff have is not so much a supply issue as it is a priority issue.

Conclusion

Many officials at varying levels of government will dismiss these solutions outright. They realize that they "have an incredibly tasty product" (STG-G-Tour-6J) in the way of outdoor amenities and they do not want to stop offering that product as long as there is a market for it. Many will say that the market will self-correct and will state simply that it has not yet had reason to do so. But expecting the housing market to self-correct its tendency to appeal to those who will spend more without enacting appropriate regulations is antithetical to the profit-oriented design of the market. Kerney, a past NAU Master's candidate, noted this in his 2007 study of workforce housing in the West, with Flagstaff one of his three case study cities. As he put it, "Why the development community would build modestly priced housing for the relatively modest local wage earners when they can build homes that cater to a national audience of homebuyers with almost unlimited earning (and spending) potential is unclear" (119).

History has shown there has consistently been a need for more affordable housing, which "the market" has failed to produce because it is not as profitable. Particularly in the West, STRs conjure up comparisons with the western frontier by offering land and real estate to outsiders able to pay more. The problem with the prevalence of entire-home STRs in Bozeman, St. George, and Flagstaff is that they further incentivize the globalization of the local housing market. Full-time residents, many of whom trace their roots in these areas back generations, cannot compete. This is especially true for low-income and non-white populations. As Harvey (2003) put it, using a phrase oft-attributed to Thomas Jefferson, '"There is […] nothing more unequal than the equal treatment of unequals"' (940).

This research demonstrates that STRs operate as a frontier in Bozeman, St. George, and Flagstaff. Markets and frontiers, however, are sustained on the basis of government's willingness, or unwillingness, to intervene. The affordable housing shortage in each city, what many interviewees referred to as a “crisis” and what Flagstaff formally recognized as an “emergency,” is part of a historic and current pattern in the U.S. If government officials continue to ignore the incentives and regulations that have the potential to create more affordable housing, they would be acting in a long tradition of eschewing these options for the sake of inviting and appeasing higher-income residents. But it should be noted that they are making a choice.

The impact of STRs on housing is part of a larger issue in which housing has been deemed a commodity in the West and across the United States. Full-time residents in each of the case study cities need a way out of this “financialization of home,” a “safety valve” which does not force them to compete on an untenable scale. The massive expansion of Community Land Trusts and mixed-income, rent-controlled housing offer two potential possibilities to reverse the calculus which favors short-term wealth over long-term community stability. No matter what solutions cities propose, the scale of the problem requires creativity, sufficient political will, and a focus on both the immediate and long-term visions for community. It requires cities to act in a way which says to current residents, regardless of class or race, “You belong here.”

Works cited

Aaronson, D., Hartley, D., & Mazumder, B. (2017). *The effects of the 1930s HOLC" redlining" maps* (No. 2017-12). Working Paper. https://www.econstor.eu/bitstream/10419/200568/1/1010730592.pdf

Adams, C. (2018) “Overtourism toolkit.” Published December 4, 2018. Miles Partnership. https://www.milespartnership.com/blog/overtourism-toolkit

Adler, P.A. (2003) The reluctant respondent. *Inside interviewing: new lenses, new concerns.* London: Sage.

AirDNA. (2021). AirDNA, LLC. Accessed frequently with dates and specific city searches cited in-line. Airdna.co

Aliprantis, D., & Carroll, D. R. (2019). “What is behind the persistence of the racial wealth gap?” *Economic Commentary*, (2019-03).

American Community Survey. (2019). “Selected housing characteristics.” Census. https://data.census.gov/cedsci/table?d=ACS 5-Year Estimates Data Profiles&tid=ACSDP5Y2019.DP04

American Housing Survey. (2019). “2019 American Housing Survey data now available.” Published 16 September 2020. https://www.census.gov/newsroom/press-releases/2020/2019-american-housing-survey.html

Anderson, D. (2021). “Demand for vacation homes soared 84% year over year in January, symbolizing uneven financial recovery in the U.S.” Redfin. February 9, 2021. https://www.redfin.com/news/second-home-purchases-increase-january-remote-work/

Arizona Legislature. (2006). “Proposition 207: 1-21-2006; Private Property Rights Protection Act.” January 21, 2006.

https://www.azleg.gov/2006_Ballot_Proposition_Analyses/final%20I-21-2006%20%20Private%20Property%20Rights%20Protection%20Act.pdf

Aydin, R. (2019). "How 3 guys turned renting air mattresses in their apartment into a $31 billion company, Airbnb." *Business Insider*. 20 September 2019. https://www.businessinsider.com/how-airbnb-was-founded-a-visual-history-2016-2

Bach, T. (2019). Is Airbnb ameliorating—or exacerbating—inequality in cities? *U.S. News – The Civic Report*, C12-C15. Retrieved from http://search.ebscohost.com/login.aspx?direct=true&db=a9h&AN=136234894&site=ehost-live&scope=site

Badger, E. (24 August 2017). "How redlining's racist effects lasted for decades." *The New York Times*. https://www.nytimes.com/2017/08/24/upshot/how-redlinings-racist-effects-lasted-for-decades.html

Bassett, T. J. (1988). The political ecology of peasant-herder conflicts in the northern Ivory Coast. *Annals of the association of American geographers*, *78* (3), p453-472.

Big Sky Country MLS (2021). "Annual report for Gallatin County." Current as of January 10, 2021. https://gallatin-public.stats.showingtime.com/docs/ann/x/report?src=map

Bindas, K. J. (2020). *Western mystic: Bob Nolan and his songs*. Western Historical Quarterly. *17*(4), p439–456.

Bivens, J. (2019). "The economic costs and benefits of Airbnb: No reason for local policymakers to let Airbnb bypass tax or regulatory obligations" Report. *Economic Policy Institute*. Published 30 January 2019. https://www.epi.org/files/pdf/157766.pdf

Black, R. (1990). 'Regional political ecology'in theory and practice: A case study from Northern Portugal. *Transactions of the Institute of British Geographers*, p35-47.

Blaikie, P. and Brookfield, H. (1987). *Land degradation and society*. New York: Methuen Publishing.

Braun, V., & Clarke, V. (2012). Thematic analysis. file:///C:/Users/brendan.obrien/AppData/Local/Packages/Microsoft.MicrosoftEdge_8wekyb3d8bbwe/TempState/Downloads/Braun12PsychHandbook%20(1).pdf

Brown-Saracino, J. and Rumpf, C. (2011) "Diverse imageries of gentrification: Evidence from newspaper coverage in seven U.S. cities, 1986– 2006." Journal of Urban Affairs 33: p 289–315.

Bryant, R. L. (1997). Beyond the impasse: the power of political ecology in Third World environmental research. *Area*, *29*(1), 5-19. https://rgs-ibg.onlinelibrary.wiley.com/doi/pdf/10.1111/j.1475-4762.1997.tb00003.x?casa_token=gN2CvtcYYqIAAAAA:a4GklliTDxqtWE6ryrl0XqjaJa9w_RYSeyNgXfOafFGiezYVsLeGETi0h7eh_zMiFrsxYvu5Pur-Paoj

California Newsreel. (2003). "The house we live in." from "Race: The power of an illusion." *PBS*. http://newsreel.org/video/RACE-THE-POWER-OF-AN-ILLUSION

Camp, J. T. (2012). "Blues geographies and the security turn: Interpreting the housing crisis in Los Angeles." *American Quarterly, 64*(3), 653-678. https://bit.ly/3s1eiBQ

Cameron, W. B. (1963). "Knowledge without numbers." *Informal sociology: A casual introduction to sociological thinking*. Random House. 13-30.

Carliner, M.S. (1998). "Development of federal homeownership 'policy.'" Fannie Mae Foundation. *Housing Policy Debate*, yol. 9, issue 2. https://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.501.6539&rep=rep1&type=pdf

Census. (2011). “2010 Center of population.” U.S. Census Bureau. Published 24 March 2011. https://www.census.gov/newsroom/releases/archives/facts_for_features_special_editions/cb11ff10.html

Census. (2018). “Five-year trends available for median household income, poverty rates, and computer and internet use.” U.S. Census Bureau. Released 6 December 2018. https://www.census.gov/newsroom/press-releases/2018/2013-2017-acs-5year.html

Census. (2017). “United States.” U.S. Census Bureau. https://data.census.gov/cedsci/profile?q=United%20States&g=0100000US&table=DP05&tid=ACSDP1Y2018.DP05

Census. (2018). “Quickfacts: Flagstaff city, Arizona.” U.S. Census Bureau. 1 July 2018. https://www.census.gov/quickfacts/flagstaffcityarizona

Census. (2019). “2020 Census residence criteria and residence situations.” U.S. Census Bureau. pp. 1-6. https://www2.census.gov/programs- surveys/decennial/2020/program-management/memo-series/2020-memo-2018_04-appendix.pdf

Census. (1999). Historical census of housing tables ownershirates. https://www.census.gov/hhes/www/housing/census/historic/ownrate.html

Census. (2019). “Quarterly residential vacancies and homeownership, second quarter 2019.” https://www.census.gov/housing/hvs/files/currenthvspress.pdf

Census Map. (2000). “American Indians and Alaska Natives in the United States.” Census 2000. https://media.nationalgeographic.org/assets/photos/678/0c5/6780c5c6-8db6-4d2e-b73b-3b3587958634.jpg

City of Bozeman. (2017). “Short-term rentals.” Implemented December 1, 2017. https://www.bozeman.net/government/planning/short-term-rentals-str

City of Bozeman. (2018). “Accessory dwelling units.” Implemented April 2018. https://www.bozeman.net/Home/ShowDocument?id=8447

Cole, S. (2012). A political ecology of water equity and tourism: A case study from Bali. *Annals of Tourism Research*, *39* (2), p1221-1241.

Collins, T. W. (2008). The political ecology of hazard vulnerability: marginalization, facilitation and the production of differential risk to urban wildfires in Arizona’s White Mountains. *Journal of Political Ecology, 15* (1), p21-43. https://doi.org/10.2458/v15i1.21686

Cox, K.R. (2014). *Making human geography.* Guilford Press: New York.

Coulthard, G. S. (2014). *Red skin, white masks: Rejecting the colonial politics of recognition*. U of Minnesota Press. https://www.sss.ias.edu/sites/sss.ias.edu/files/pdfs/Crisis-and-Critique-2018-19/coulthard_recognition_intro_ch1.pdf

Cusack, J. (2011). “The real Blackwater scandal: Build a frontier, you get cowboys.” *The Huffington Post*. Updated 25 May 2011. https://www.huffpost.com/entry/the-real-blackwater-scand_b_67741

de Kock, L. (1992) “Interview with Gayatri Chakravorty Spivak: New nation writers conference in South Africa.” *ARIEL: A Review of International English Literature Archived 2011 07-06 at the Wayback Machine.* 23 (3) p29-47

Denevan WM. (1992). “The pristine myth: The landscape of the Americas in 1492.” Annals of the Association of American Geographers 82: p369-385. file:///C:/Users/brendan.obrien/Documents/pristine%20myth_Denevan.pdf

Deterding, N. M., & Waters, M. C. (2018). Flexible coding of in-depth interviews: A twenty-first-century approach. *Sociological methods & research*, 0049124118799377.

Ducey, D. (2016). “Executive Order 2016-01: The Governor’s Council on the Sharing Economy.” https://bc.azgovernor.gov/home

Dugas, C. (2009). “Flagstaff looks to second-home buyers, tourists for recovery.” *USA Today*. February 16, 2009. https://abcnews.go.com/Business/story?id=6892885&page=1

Dunbar-Ortiz, R. (2015). *An indigenous peoples’ history of the United States*. Boston: Beacon Press.

Dunn, K. (2000). “Interviewing.” *Qualitative research methods in human geography*. Edited by Iain Hay. Oxford University Press: South Melbourne, Victoria, Australia. 50-80.

Dunphy, P. (2019). “The state of Native American voting rights.” The Brennan Center for Justice. 13 March 2019. https://www.brennancenter.org/our-work/analysis-opinion/state-native-american-voting-rights

ECONA. (2017). “Housing attainability for the Flagstaff workforce.” Economic Collaborative of Northern Arizona. November 20, 2017. https://www.flagstaff.az.gov/DocumentCenter/View/64819/ECoNA-Flagstaff-Workforce-Housing-Attainability-Report

Fabo, B., Hudáčková , S., Nogacz, A. (2017). “Can Airbnb provide livable incomes to property owners? An analysis on national, regional and city district level.” Universiteit van Amsterdam, AIAS Working Paper 168. https://www.researchgate.net/profile/Brian_Fabo/publication/314949640_Can_Airbnb_Provide_Livable_Incomes_to_Property_Owners_An_Analysis_on_National_Regional_and_City_District_Level/links/5bbf2b7ca6fdccf29792b4f9/Can-Airbnb-Provide-Livable-Incomes-to-Property-Owners-An-Analysis-on-National-Regional-and-City-District-Level.pdf

Farha, L. (2017). Special Rapporteur, United Nations. "Report of the Special Rapporteur on adequate housing as a component of the right to an adequate standard of living, and on the right to non-discrimination in this context." *A/HRC/34/51*. http://unhousingrapp.org/user/pages/04.resources/Thematic-Report-3-The-Financialization-of-Housing.pdf

Farha, L. (2019a). Letter from UN Special Rapporteur on Adequate Housing to Blackstone Group. March 22, 2019. https://www.ohchr.org/Documents/Issues/Housing/Financialization/OL_OTH_17_2019.pdf

Farha, L. (2019b). Letter from UN Special Rapporteur on Adequate Housing to U.S. Government. March 22, 2019. http://wiki.pghrights.mayfirst.org/images/6/65/March_2019_Housing_UN_Rapp_USLetter_Financialization.pdf

Freund, D.M.P. (2007). *Colored property: State policy and white racial politics in suburban America*. University of Chicago Press: Chicago. pp. 1-44.

Frey, W.H. (2018). "U.S. white population declines and Generation 'Z-Plus' is minority white, census shows." *Brookings Institute*. 22 June 2018. https://www.brookings.edu/blog/the-avenue/2018/06/21/us-white-population-declines-and-generation-z-plus-is-minority-white-census-shows/

Federal Reserve Board. (2017). "Federal Reserve Board issues report on the economic well-being of U.S. households." 19 May 2017. https://www.federalreserve.gov/newsevents/pressreleases/other20170519a.htm

Flagstaff Regional Plan. (2014). “Flagstaff regional plan 2030: Place matters.” Adopted by City Council Jan. 14, 2014. https://www.flagstaff.az.gov/DocumentCenter/View/49295/0-FullPlan_webreduced?bidId=

Fortmann, L. (1995). The long journey home: domestic land tenure through international lenses. *Who Owns America? Land and Resource Tenure Issues in a Changing Environment (1995: Madison, Wis.)*.

Galletta, A. (2013). *Mastering the semi-structured interview and beyond: From research design to analysis and publication* (Vol. 18). NYU press.

García, Daniel (2019). “Second-Home Buying and the Housing Boom and Bust,” Finance and Economics Discussion Series 2019-029. Washington: Board of Governors of the Federal Reserve System, https://doi.org/10.17016/FEDS.2019.029r1

Garcia-López, M. À., Jofre-Monseny, J., Martínez Mazza, R., & Segú, M. (2019). Do short-term rental platforms affect housing markets? Evidence from Airbnb in Barcelona. https://mpra.ub.uni-muenchen.de/96131/1/MPRA_paper_96131.pdf

Garreau, J. (1981). “The empty quarter.” *The nine nations of North America*. Boston: Houghton.

Garza, J. (2018). “Gentrification, neoliberalism and place: Displacement and resistance in Flagstaff.” Thesis submitted for M.A. in Sustainable Communities. Northern Arizona University.

Gilmore, R. W. (2009). Race, prisons and war: scenes from the Gilmore history of US violence. *Socialist Register*, *45*(45). file:///C:/Users/brendan.obrien/AppData/Local/Packages/Microsoft.MicrosoftEdge_8wekyb3d8bbwe/TempState/Downloads/5897-Article%20Text-7824-1-10-20090319%20(1).pdf

Glesne, C. & Peshkin, A. (1992). *Becoming qualitative researchers: An introduction*. Longman: White Plains, NY. 93-107

Goldwater Institute. (2021). “About the Goldwater Institute.” https://goldwaterinstitute.org/about/

Gottesdiener, L. (2013). *A dream foreclosed: Black America and the fight for a place to call home*. Zuccotti Park Press: New York.

Greenberg, Z. (2018). “New York challenges Airbnb, aiming at landlords who rent to tourists.” *The New York Times*. Retrieved from http://eds.a.ebscohost.com/ehost/detail/detail?vid=0&sid=823c23c0-648e-4d12-850b-888c776afcb3%40sdc-vsessmgr01&bdata=JnNpdGU9ZWhvc3QtbGl2ZSZzY29wZT1zaXRl#AN=130787126&db=a9h

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. https://doi.org/10.1080/01944363.2016.1249011

Guttentag, D. (2015). Airbnb: Disruptive innovation and the rise of an informal tourism accommodation sector. *Current issues in tourism*, *18*(12).

Hamnett, C. (1991). The blind men and the elephant: The Explanation of gentrification. *Royal Geographical Society*, *16*(2), 173–189. https://doi.org/10.2307/2786835

Harvey, D. (2001). *Spaces of capital: Towards a critical geography*. Edinburgh University Press: Edinburgh, Scotland. https://perpus.wildanfauzy.com/Critical%20Theory/David%20Harvey-

Spaces%20of%20capital%20_%20towards%20a%20critical%20geography-Routledge%20%20(2001).pdf

Harvey, D. (2003). “Debates and developments: The right to the city.” *International Journal of Urban and Regional Research*. Blackwell Publishing. Vol. 27.4. December 2003. abahlali.org/files/Harvey_right_to_the_city_0.pdf

Harvey, D. (2004). *The 'new' imperialism: Accumulation by dispossession*. Excerpt in *Socialist Register, 40*. 63-87

H.B. 253. (2017). “H.B. 253: Short-term rental agreements.” Effective May 9, 2017. https://le.utah.gov/~2017/bills/static/HB0253.html

Heidkamp, C. P., & Lucas, S. (2006). Finding the gentrification frontier using census data: The case of Portland, Maine. *Urban Geography*, *27*(2), 101-125.

Hernandez, J. (2009). Redlining revisited: mortgage lending patterns in Sacramento 1930–2004. *International Journal of Urban and Regional Research*, *33*(2), 291-313. file:///C:/Users/brendan.obrien/Documents/redlining%20sacramento_hernandez.pdf

Hill, S. (2015). The unsavory side of Airbnb. *The New Prospect*, *15*. https://www.cityofberkeley.info/uploadedFiles/Rent_Stabilization_Board/Level_3_-_General/INFO_The%20Dark%20Side%20of%20Airbnb%20article_Harr(1).pdf

Hillier, A. E. (2003). Redlining and the home owners' loan corporation. *Journal of Urban History*, *29*(4), 394-420. https://journals.sagepub.com/doi/pdf/10.1177/0096144203029004002?casa_token=sD1YlSLF6kMAAAAA:05eMEXIg7t_9XXymneMbLt31r1gxU_P5pfl-QzLeB03FSoyK8sBZh2kkmi9S7mTv42-6nJ9ZBoXlJg

Hines, J. D. (2010a). “In pursuit of experience: The postindustrial gentrification of the rural American west.” *Ethnography*, *11* (2), 285–308. https://doi.org/10.1177/1466138110361846

Hines, J. D. (2010b). Rural gentrification as permanent tourism: the creation of the ‘New’ West Archipelago as postindustrial cultural space. *Environment and Planning D: Society and Space*, *28*(3), 509-525. https://journals.sagepub.com/doi/pdf/10.1068/d3309?casa_token=YPt0Kx0aWi8AAAAA:IAcosyxQdzl3NI6u0rhXsp71ANfyegTUmVjFbOFfiJ_qoZeKWsed8T_KCehE_fZOPZ5yh6k6NE8

Hobson, K., & Lynch, N. (2016). “Diversifying and de-growing the circular economy: Radical social transformation in a resource-scarce world.” *Futures*, *82*, 15–25. https://doi.org/10.1016/j.futures.2016.05.012

Housing Solutions of Northern Arizona. (2019). “Rental attainability report.” HSNAZ. https://348964ae-c6ce-4b73-8611-92a42225dc20.filesusr.com/ugd/cf6dc3_f65e9eee1d24472d8a92464288d6b8a7.pdf

HR 1424. (2008). “Emergency economic stabilization act of 2008.” House of Representatives. 3 October 2008. https://www.congress.gov/bill/110th-congress/house-bill/1424/text

Hubbard, P. (2016). “Hipsters on our high streets: Consuming the gentrification frontier.” *Sociological Research Online*, *21*(3), 106-111. https://doi.org/10.5153/sro.3962

HUD. (2020). “Glossary of terms to affordable housing.” Department of Housing and Urban Development. https://archives.hud.gov/local/nv/goodstories/2006-04-06glos.cfm#:~:text=Affordable%20Housing%3A%20Affordable%20housing%20is,Reference%3A%20www.hud.gov

Immergluck, D. (1999). *Unfinished business: Increases in African-American home buying and continuing residential segregation in the Chicago region*. Woodstock Institute. file:///C:/Users/brendan.obrien/Documents/subprime%20industry%20and%20race_Immergluck.pdf

Immergluck, D. & Balan, T. (2018). Sustainable for whom? Green urban development, environmental gentrification, and the Atlanta Beltline. *Urban Geography*, *39*(4), 546-562. https://scholarworks.gsu.edu/cgi/viewcontent.cgi?article=1013&context=urban_studies_institute

Jung, J., Yoon, S., Kim, S., Park, S., Lee, K. P., & Lee, U. (2016). Social or financial goals? Comparative analysis of user behaviors in Couchsurfing and Airbnb. *Conference on Human Factors in Computing Systems - Proceedings, 07-12-May-2016*, 2857–2863. https://doi.org/10.1145/2851581.2892328

Kapoor, I. (2002) Capitalism, culture, agency: Dependency versus postcolonial theory, Third World Quarterly, 23:4, 647-664, DOI: 10.1080/0143659022000005319 https://doi.org/10.1080/0143659022000005319

Kerney, O.M. (2007). “Workforce housing programs and policies in three Western United States amenity communities.” Department of Sustainability Studies. Northern Arizona University. Thesis.

Kerr, D. (2017). “Airbnb gets free rein in Arizona thanks to new law.” CNET. Updated 4 January 2017. https://www.cnet.com/news/airbnb-gets-free-rein-in-arizona-says-new-law/

Kittredge, W. & Smith, A. (Eds.). (1988). *The last best place: A Montana anthology*. Montana Historical Society Press.

Klein, M., Zhao, J., Ni, J., Johnson, I., Hill, B. M., & Zhu, H. (2017). "Quality standards, service orientation, and power in Airbnb and Couchsurfing." *Proceedings of the ACM on Human-Computer Interaction*, *1*(CSCW). https://doi.org/10.1145/3134693

Klein, N. (2013). Dancing the world into being: A conversation with Idle No More's Leanne Simpson. *Yes! Magazine*, *5*.

Klein, N. (2007). *The shock doctrine: The rise of disaster capitalism*. New York: Allen Lane.

Kondo, M. C., Rivera, R., & Rullman Jr, S. (2012). "Protecting the idyll but not the environment: Second homes, amenity migration and rural exclusion in Washington State." *Landscape and urban planning*, *106* (2), p174-182

Kostakis, V. (2018). In defense of digital commoning. *Organization*, *25*(6), 812–818. https://doi.org/10.1177/1350508417749887

Lane, J. (2021). "AirDNA market review: U.S., January 2021." AirDNA, LLC. February 10, 2021. https://www.airdna.co/blog/airdna-market-review-us-january-2021?utm_source=drip&utm_medium=email&utm_campaign=February+Newsletter+-+US&utm_content=0

Leaver, J. (2020). "The state of Utah's travel and tourism industry 2019." Kem C. Gardner Policy Institute, University of Utah. September 2020. https://gardner.utah.edu/wp-content/uploads/TravTourReport-Sep2020.pdf

Lee, D. (2016). "How Airbnb short-term rentals exacerbate Los Angeles's affordable housing crisis: Analysis and policy recommendations." *Harvard Law & Policy Review*, *10*, 229.

Lee, E. (2006). “A nation of immigrants and a gatekeeping nation: American immigration law and policy.” Excerpt from *A companion to American immigration, 5-35*.

Levine, D. (2016). “Airbnb just suffered a major loss in New York.” *The Huffington Post*. Published October 21, 2016. Retrieved February 21, 2017. https://bit.ly/36Ohmcj

Leviticus. (n.d.). *King James Bible Online*. Retrieved 2020. https://www.kingjamesbibleonline.org/ (Original work published 1769). 19:34.

Ley, D. (1980). *Liberal ideology and the postindustrial City*. *Annals of the Association of American Geographers, Vol. 70, No. 2 (Jun . 1980)*. pp. 238–258.

Lipsitz, G. (2011). *How racism takes place*. Temple University: Philadelphia. pp. 25 – 70.

Longhi, L. and Randazzo, R. (2019). “Arizona governor signs law regulating short-term rental ‘party houses’—but does it do enough?” *The Arizona Republic*. May 21, 2019. https://www.azcentral.com/story/news/politics/legislature/2019/05/21/arizona-law-crack-down-short-term-rental-party-houses-airbnb-vrbo/3761624002/

Lopez, I.H. (2006). “Ozawa and Thind” in *White by law*. NYU Press. pp. 56-77.

Louis, D. (2019). “City of St. George making new plans to bring attainable housing to the area.” *St. George News*. https://www.stgeorgeutah.com/news/archive/2019/11/23/dld-city-of-st-george-making-new-plans-to-bring-attainable-housing-to-the-area/#.YBsy3JeSm00

Lye, Colleen. (2009).“A Genealogy of the Yellow Peril,” in *America’s Asia: Racial form and American literature*, *1893-1945*. Princeton University Press.

Maney, G. M., & Abraham, M. (2008). Whose backyard? Boundary making in NIMBY opposition to immigrant services. *Social Justice, 35* (4 (114), p66-82. https://www.jstor.org/stable/pdf/29768515.pdf?casa_token=Nx1a6xHHyQQAAAAA:sJnOjGXhRgv2vgACZKPBh9_ICR9q4rjeY7AZifAL3r-yv3rbyjoAui3jy7U_8JJFW2UKoABlan8DCsy24ON5YcsUCdGuZmQT9n8xsQXQU7fRey5L7k9

Marx, K. (1867). *Capital: A Critique of Political Economy*. Vol. 1. Translated by Ben Fowkes. New York: Penguin, 1990

McCarthy, J. (2002). "First World political ecology: Lessons from the Wise Use movement." Environment and Planning A, Vol. 34. pp. 1281-1302

Meyer, S.G. (2000). *As long as they don't move next door: Segregation and racial conflict in American neighborhoods*. Lanham, Maryland: Rowman and Littlefield.

Miller, D. (2018). "The hottest secondary home markets in the U.S." SmartAsset. 21 March 2018. https://smartasset.com/mortgage/hottest-secondary-home-markets-us

Milner, S. (2021). "Bozeman's sole multicultural enclave faces evictions amid a housing crisis." *High Country News*. February, 11, 2021. https://www.hcn.org/articles/north-economy-bozemans-sole-multicultural-enclave-faces-evictions-amid-a-housing-crisis

Mitchell, M. et al. (2019). State higher education funding cuts have pushed costs to students, worsened inequality. Center on Budget and Policy Priorities. Published 24 October 2019. https://www.cbpp.org/sites/default/files/atoms/files/10-24-19sfp.pdf

Molotch, H. (1976). "The city as a growth machine: Toward a political economy of place." *American Journal of Sociology*. 82: 309-32.

Montana State University. (2021). "Fall headcount enrollment history." https://www.montana.edu/opa/students/enrollment/headhist.html

Moody's Analytics. (2018). U.S. News and World Report. "Affordability rankings: determining the most affordable states." Accessed 24 October 2019. https://www.usnews.com/news/best-states/rankings/opportunity/affordability

Moskowitz, P. (2018). *How to kill a city: gentrification, inequality, and the fight for the neighborhood*. New York, NY: Nation Books.

Muro, M. et al (2020). "The places a COVID-19 will likely hit hardest." *The Brookings Institute*. March 17, 2020. https://www.brookings.edu/blog/the-avenue/2020/03/17/the-places-a-covid-19-recession-will-likely-hit-hardest/

Murray, C., & Slee, T. (2016). 'How Airbnb's data hid the facts in New York City." Published February 10, 2016. Inside Airbnb. http://insideairbnb.com/reports/how-airbnbs-data-hid-the-facts-in-new-york-city.pdf

Nader, L. (1972). Up the anthropologist: Perspectives gained from studying up. https://files.eric.ed.gov/fulltext/ED065375.pdf

National Association of Realtors. (2014). "Second homes: Recovery post financial crisis." FannieMae. April 7, 2014. https://www.fanniemae.com/media/18811/display

NAU College of Business. (2018). "2017-2018 Flagstaff visitor study." AZ Office of Tourism and W.A. Franke College of Business, NAU. https://tourism.az.gov/wp-content/uploads/2019/05/Flagstaff-Tourism-Study-2017-2018.pdf

NLIHC. (2018). "Housing is built with ballots: Key 2018 ballot measures across the country." National Low-Income Housing Coalition. Updated 7 November 2018. https://nlihc.org/sites/default/files/Housing-Ballots_Initiatives.pdf

Novak, M. (2015). "Oregon was founded as a racist utopia." *Gizmodo*. January 21, 2015. https://gizmodo.com/oregon-was-founded-as-a-racist-utopia-1539567040

Office of Institutional Research and Analysis. (2019). "Fact book 2018-2019." Northern Arizona University. https://in.nau.edu/wp-content/uploads/sites/129/2019/11/2018_2019FactBook.pdf

Office of Planning and Analysis. (2018). “Registrar’s enrollment reports.” Montana State University. https://www.montana.edu/opa/enrollment/previousyears.html

Office of Policy Development and Research. (2018). “St. George, Utah: Comprehensive housing market analysis.” Department of Housing and Urban Development (HUD). https://www.huduser.gov/portal/publications/pdf/StGeorgeUT-CHMA-18.pdf

Pansera, M., Ehlers, M. H., & Kerschner, C. (2019). Unlocking wise digital techno-futures: Contributions from the Degrowth community. *Futures, 114*. https://doi.org/10.1016/j.futures.2019.102474

Paris, C. (2009). Re-positioning second homes within housing studies: Household investment, gentrification, multiple residence, mobility and hyper-consumption. *Housing, Theory & Society*, 26 (4), 292-310. https://doi.org/10.1080/14036090802300392

Park, L. and D. Pellow. (2013). *The slums of Aspen: immigrants vs. the environment in America’s Eden*. New York University Press.

Peck, J.M. (1837). *New guide for emigrants to the West*. Boston: Gould, Kendall, and Lincoln. Digitized 2007. https://archive.org/details/newguideforemigr00peck

Perreault, T., Bridge, G., & McCarthy, J. (Eds.). (2015). *The Routledge handbook of political ecology*. Routledge.

Pew. (2019). “Mobile fact sheet.” Pew Research Center. Accessed 12 February 2020. https://www.pewresearch.org/internet/fact-sheet/mobile/

Ragatz, R. L., & Gelb, G. M. (1970). The quiet boom in the vacation home market. *California Management Review*, *12*(3), 57-64.

Rau, A.B. (2016). “Arizona forces cities to allow Airbnb-type rentals.” *The Arizona Republic*. May 12, 2016.

https://www.azcentral.com/story/news/politics/arizona/2016/05/12/arizona-forces-cities-allow-airbnb-type-rentals/84299858/

Robbins, P. (2011). *Political ecology: A critical introduction* (Vol. 2). John Wiley & Sons.

Robbins, P. (2002). Obstacles to a First World political ecology? Looking near without looking up. *Environment and planning A*, *34*(8), 1509-1513. https://journals.sagepub.com/doi/abs/10.1068/a34217

Rolnik, R. (2010). "Report of the Special Rapporteur on Adequate Housing as a Component of the Right to an Adequate Standard of Living, and on the Right to Non-discrimination in This Context (Geneva: Human Rights Council, February 12, 2010), 8. https://drpop.org/wp-content/uploads/2010/04/UN-Rapporteur-report-Rolnik.pdf

Rosenblatt, P. C. (2002). Interviewing at the border of fact and fiction. *Handbook of interview research: Context and method*, 893-909

Rothstein, R. (2018). *The color of law: A forgotten history of how our government segregated America*. New York: Liveright.

Runte, A. (2010). *National parks, American experience*. 4th ed. Lanham, MD: Taylor Trade.

Sadowski, J. (2020). The internet of landlords: Digital platforms and new mechanisms of rentier capitalism. *Antipode*, *52*(2), 562–580. https://doi.org/10.1111/anti.12595

Schaffer, R., & Smith, N. (1986). *The Gentrification of Harlem. 76*(3), 347–365. *http://www.jstor.org/stable/2562585*

Schroeder, R. A., Martin, K. S., & Albert, K. E. (2006). Political ecology in North America: Discovering the Third World within? *Geoforum*, *37*(2), 163-168. file:///C:/Users/brendan.obrien/Documents/Third%20World%20in%20N.%20Am._Schroeder%20et%20al.pdf

Sheridan, T. E. (2001). Cows, condos, and the contested commons: The political ecology of ranching on the Arizona-Sonora borderlands. *Human Organization*, 141-152. http://www.eebweb.arizona.edu/Courses/Ecol406R_506R/Sheridan_ranching_2001.pdf

Siciliano, G., Urban, F., Tan-Mullins, M., Pichdara, L., & Kim, S. (2016). The political ecology of Chinese large dams in Cambodia: Implications, challenges and lessons learnt from the Kamchay Dam. *Water (Switzerland)*, *8* (9), p1–18. https://doi.org/10.3390/w8090405

SignalsAZ Staff. (2020). "City of Flagstaff declares a housing emergency." SignalsAZ. December 12, 2020. https://www.signalsaz.com/articles/city-of-flagstaff-declares-a-housing-emergency/

Sisson, P. (2018). "How vacation homes went from private escape to investment opportunities." *Curbed*. October 2, 2018. https://archive.curbed.com/2018/10/2/17925738/property-airbnb-vacation-home-short-term-rental

Smith, N. (1996). *The new urban frontier: Gentrification and the revanchist city*. Psychology press. file:///C:/Users/brendan.obrien/AppData/Local/Packages/Microsoft.MicrosoftEdge_8wekyb3d8bbwe/TempState/Downloads/the-new-urban-frontier-neil-smith%20(1).pdf

Solop, F. I., Hagen, K., & Ostergren, D. (2003). Ethnic and racial diversity of national park system visitors and non-visitors. *NPS Social Science Program, Comprehensive Survey of the American Public, Diversity Report*, 1-13. http://npshistory.com/publications/social-science/comprehensive-survey/ethnic-racial-diversity.pdf

Sommeiller, E. and Price, M. (2018). "The new gilded age: Income inequality in the U.S. by state, metropolitan area, and county." *Economic Policy Institute*. July 19, 2018.

https://www.epi.org/publication/the-new-gilded-age-income-inequality-in-the-u-s-by-state-metropolitan-area-and-county/

Spivak, G. C. (1988). "Can the subaltern speak?" in *Can the subaltern speak? Reflections on the history of an idea*. 66-111. https://tinyurl.com/vvqm8rd

St. George City Code. (2019, section update). "Article D. Resort overlay zone." https://stgeorge.municipal.codes/Code/10-13D

Strauss, A., & Corbin, J. (1994). "Grounded theory methodology." *Handbook of qualitative research*, *17*, 273-85. http://www.depts.ttu.edu/education/our-people/Faculty/additional_pages/duemer/epsy_5382_class_materials/Grounded-theory-methodology.pdf

Stuart, F. (2011). "Race, space, and the regulation of surplus labor: Policing African-Americans in Los Angeles' Skid Row." *Souls: A critical journal of Black politics, culture, and society*. Vol. 13, issue 2. pp. 197-212.

Stynes, D.J. (2005). "Economic significance of recreational uses of national parks and other public lands." National Park Service, *Social Science Research Review*, 5 (1), p1-36

Stynes, D. J. & Sun, Y. Y. (2005). "Economic impacts of Grand Canyon National Park visitor spending on the local economy, 2003." Michigan State University. http://npshistory.com/publications/social-science/mgm2/parks/grca.pdf

Stulberg, A. (2016). "Airbnb probably isn't driving rents up much, at least not yet." FiveThirtyEight. August 24, 2016. https://fivethirtyeight.com/features/airbnb-probably-isnt-driving-rents-up-much-at-least-not-yet/

Sullivan, W. and Walker, C. (2019). “Bozeman, Montana community housing needs assessment.” Report produced by WSW Consulting and Navigate, LLC. February 2019. https://www.bozeman.net/home/showdocument?id=8773

Thomas, D. R. (2006). “A general inductive approach for analyzing qualitative evaluation data.” American Journal of Evaluation. https://doi.org/10.1177/1098214005283748

Tolfo, P. (2019). *Go on play with the words, the effect is the same: How gentrification and liveability feature in public discourses of neighbourhood change*. Master's thesis, University of Waterloo).

Tostevin, P. and Hyett, S. (2018). “Spotlight: Second homes—global trends in ownership and renting.” Savills. September 17, 2018. https://www.savills.co.uk/research_articles/229130/264370-0

Turner, F. J. (1893). “The significance of the frontier in American history.” Excerpts republished in *Rereading Frederick Jackson Turner*, (1994). p31–60. http://www.jstor.org/stable/j.ctt32bv5g.5

UN WCED. (1987). Report of the World Commission on Environment and Development: Our common future. United Nations. http://www.un-documents.net/our-common-future.pdf

U.S. News and World Report. (2021). “Gardiner High School.” Accessed Jan. 13, 2021. https://www.usnews.com/education/best-high-schools/montana/districts/gardiner-school-district/gardiner-high-school-12074

Vanderbilt, Tom. (2017). "Did Airbnb kill the mountain town?" *Outside*. Retrieved from https://www.outsideonline.com/2198726/did-airbnb-kill-mountain-town

Veal, S. and Spader, J. (2018). “Nearly a third of American households were cost-burdened last year.” Joint Center for Housing Studies of Harvard University. Published 7 December 2018.

https://www.jchs.harvard.edu/blog/more-than-a-third-of-american-households-were-cost-burdened-last-year/

Verhage, J. (2016). "Goldman Sachs: More and more people who use Airbnb don't want to go back to hotels." Bloomberg. Published 16 February 2016. Retrieved from https://www.bloomberg.com/news/articles/2016-02-16/goldman-sachs-more-and-more-people-who-use-airbnb-don-t-want-to-go-back-to-hotels

Wachsmuth, D., et. al. (2018). "The high cost of short-term rentals in New York City." McGill University. https://mcgill.ca/newsroom/files/newsroom/channels/attach/airbnb-report.pdf

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. https://journals.sagepub.com/doi/pdf/10.1177/0308518X18778038?casa_token=bAWlFZayIhYAAAAA:HP5okr3KYHV1HrEULZYHNFH7_gsFKjwhsOVloJ_oLRQ0xI2F6j70GINkxMtTJ3L1YNxQHOE_lHt5YQ

Wainwright, J. (2005). "The geographies of political ecology: After Edward Said." *Environment and planning A*, *37* (6), 1033-1043

Walker, P. A. (2003). Reconsidering 'regional' political ecologies: Toward a political ecology of the rural American West. *Progress in Human Geography*, *27*(1), 7-24.

Walker, P. & Fortmann, L. (2003). "Whose landscape? A political ecology of the 'exurban' Sierra." *Cultural Geographies*. Vol. 10. p469–491. https://nature.berkeley.edu/fortmann/WhoseLandscape.pdf

Winkler, R., Field, D. R., Luloff, A. E., Krannich, R. S., & Williams, T. (2007). "Social landscapes of the Inter-mountain West: A comparison of 'Old West' and 'New West'

communities." *Rural Sociology*, *72*(3), 478-501.
http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.483.3730&rep=rep1&type=pdf

Wolfe, P. (2006). Settler colonialism and the elimination of the native." *Journal of Genocide Research*, 8:4, 387-409, DOI: 10.1080/14623520601056240

Wolfe, P. (1997). *History and imperialism: A century of theory, from Marx to postcolonialism*. *The American Historical Review*, *102*(2), 388-420. https://tinyurl.com/wjm29se

Woods, L. L. (2012). The Federal Home Loan Bank Board, redlining, and the national proliferation of racial lending discrimination, 1921–1950. *Journal of Urban History*, *38*(6), 1036-1059.
https://journals.sagepub.com/doi/pdf/10.1177/0096144211435126?casa_token=W8itJWrokUAAAAA:WgFWSg4wUewe4W6XeldHvzqmqQlxZUfze-K16NAshqpj_RO5np__ZkULmmJgtBNsM_7rHNMo0DpUrQ

Workforce housing. (2019). "Short-term rental policy and best practices: An introduction for local leaders." Housing and Community Development, Community Development Office. October 29, 2019. https://cdotoolbox.files.wordpress.com/2019/11/short-term-rentals-guide-final-10.29.2019.pdf

Worster, D. (1987). "New West, true West: Interpreting the region's history." *The Western Historical Quarterly*, *18*(2), 141-156. https://www.jstor.org/stable/pdf/969580.pdf

Wrobel, D. M. (2009). Global west, American frontier. *Pacific Historical Review*, *78* (1), 1–26. https://doi.org/10.1525/phr.2009.78.1.1

Wyly, E. (2015). Gentrification on the planetary urban frontier: The evolution of Turner's noösphere. *Urban Studies*, *52*(14), 2515-2550.
https://journals.sagepub.com/doi/pdf/10.1177/0042098015601362?casa_token=vJpvZJPk-

gkAAAAA%3ActE1654N5F4If-VDT-o0bc5Crm6z1hqLKB6Jby2pjhPUviKvuRJCO51BmN8vBaaB2sB7htsXhNE&

Wyman, D., Mothorpe, C., and McLeod, B. (2020). "Airbnb and VRBO: The impact of short-term tourist rentals on residential property pricing." *Current Issues in Tourism*. https://doi.org/10.1080/13683500.2019.1711027

Zillow. (2019). "Price-to-income ratio for March 2019." As analyzed by Clever Real Estate. https://www.housingwire.com/articles/49637-wages-arent-keeping-pace-with-home-price-growth-and-its-putting-a-dent-in-the-housing-market/

Appendices

A. Interview guides

Government officials (4-6 per city)

1. What do you see as the biggest problem facing your city?
2. What do you see as possible solutions?

   Then will focus on housing if not brought up:
3. Do you see housing as a major issue in your city?
4. What's your view of short-term rentals?
5. On a scale of 1 to 10 (1 being not at all, 10 being an extreme amount), how much would you say short-term rentals have affected housing? Why did you give that number?
6. Next, I want to get your opinion on the prevalence of short-term rentals in your city. To do this, I want you to imagine a residential street a mile from downtown. Of 20 homes, how many would you say operate as short-term rentals?
7. And let's say this is your street. How many of these 20 homes would you be comfortable with being short-term rentals?
8. Now, short-term rentals are primarily used by outside visitors. Do you have a sense of why visitors come to your city?
9. What do you hear from members of the community when it comes to STRs?
10. Do you see a need/potential for regulation?
11. What type of pushback do you get on this? From who?

Housing advocacy organizations (1-2 per city)

1. What is your role and your organization's role in the city?

2. How do you view housing?
3. What do you see as possible solutions?
4. What do you hear from people you work with on housing? Why do they come to you in the first place?
5. What's your view of short-term rentals?
6. On a scale of 1 to 10 (1 being not at all, 10 being an extreme amount), how much would you say short-term rentals have affected housing? Why did you give that number?
7. Next, I want to get your opinion on the prevalence of short-term rentals in your city. To do this, I want you to imagine a residential street a mile from downtown. Of 20 homes, how many would you say operate as short-term rentals?
8. And let's say this is your street. How many of these 20 homes would you be comfortable with being short-term rentals?
9. Now, short-term rentals are primarily used by outside visitors. Do you see any sort of tension between short-term visitors and long-term residents?
10. Do you see a need/potential for regulation?

______*Other housing and lodging industries (real estate, hotels, etc. 1-2 per city)*

1. What is your role and your company's goal?
2. What's your view of short-term rentals?
3. On a scale of 1 to 10 (1 being not at all, 10 being an extreme amount), how much would you say short-term rentals have affected your company and industry? Why did you give that number?
4. Has your company made any changes to address the impact of short-term rentals?

5. Next, I want to get your opinion on the prevalence of short-term rentals in your city. To do this, I want you to imagine a residential street a mile from downtown. Of 20 homes, how many would you say operate as short-term rentals?
6. And let's say this is your street. How many of these 20 homes would you be comfortable with being short-term rentals?
7. Do you see a need/potential for regulation?

B. Interviewee codes

Research into Bozeman involved six interviews consisting of three government and three non-government officials. There were three planners, one elected official, a compliance official, and one real estate agent, which can be understood in these codes:

BOZ-G-Plan-6Q

BOZ-Plan-7R

BOZ-G-Elec-7S

BOZ-G-Comp-7T

BOZ-Plan-7U

BOZ-Real-8V

Research into the impact of STRs on housing in St. George involved seven interviews consisting entirely of government officials but with three operating in St. George, one in a nearby community, and three for the county or state. There were three planners, two elected officials, one housing official, and one tourism official, which can be understood in the following codes:

STG-G-Tour-6J

STG-G-Hous-7K

STG-G-Elec-7L

STG-G-Plan-7M

STG-G-Elec-7N

STG-G-Plan-9O

STG-G-Plan-9P

The nine interviews conducted as part of the research into Flagstaff involved seven officials at varying levels of government: three elected officials, three planners, and one economic development official. This was rounded out by two non-government officials—one in housing and one in tourism—who could speak to General trends in the city and surrounding area. Some details surrounding specific departments of those interviewed are obscured to protect individual privacy, but they are cited under the following codes:

FLG-Tour-6A

FLG-G-Elec-6B

FLG -G-Plan-6C

FLG-G-Plan-6D

FLG-G-Econ-6E

FLG-Hous-6F

FLG-G-Plan-6G

FLG-G-Elec-6H

FLG-G-Elec-