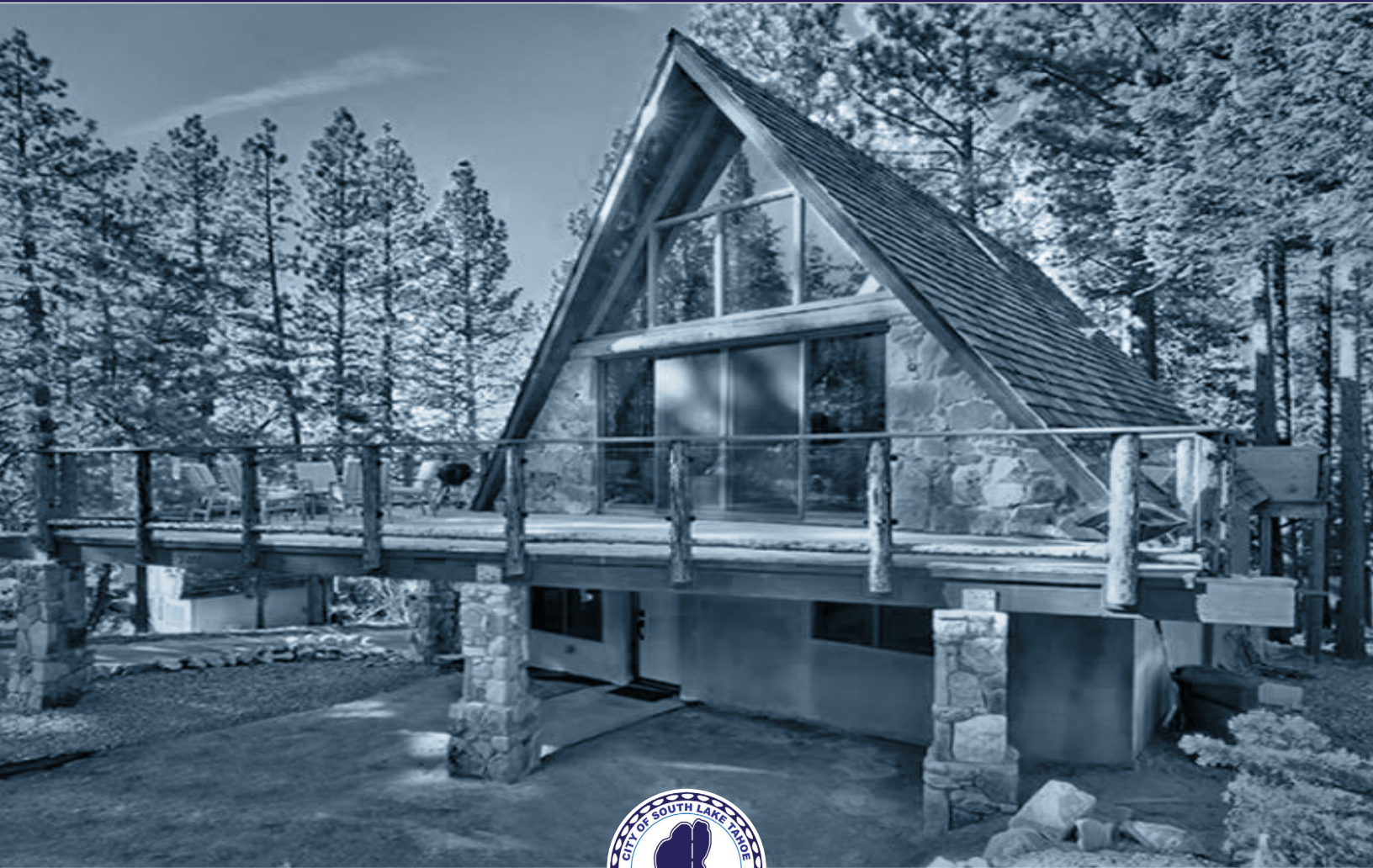


# SOCIOECONOMIC IMPACTS OF VACATION HOME RENTALS IN SOUTH LAKE TAHOE

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Prepared by:

MICHAEL BAKER INTERNATIONAL

2729 Prospect Park Drive, Suite 220  
Rancho Cordova, CA 95670

Phone: (916) 361-8384  
Fax: (916) 361-1574



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## 1. INTRODUCTION

The City of South Lake Tahoe is one of the most visited tourist destinations in the state of California. The pristine natural environment and wide variety of outdoor recreational opportunities, combined with proximity to the casinos and entertainment immediately across the Nevada state line, have made South Lake Tahoe a favorite vacation destination for a wide range of people, from families with children to international tourists. The economy of South Lake Tahoe that has built up around this tourist industry includes traditional sectors, such as hotel and motel accommodations, vacation home rentals (VHRs), restaurants and food services, and recreation and entertainment focused services.

As with many vacation destinations with multifaceted recreation and entertainment options, the city has also become a desirable place to own a vacation or seasonal home, and almost half of its housing stock is owned by people who do not make South Lake Tahoe their full-time residence. The city has long had VHRs as an option for tourist and vacation accommodations. However, in the past, the effort involved in advertising and managing VHRs relegated the VHR market predominantly to management companies that actively managed portfolios and handled the marketing, scheduling, and ongoing operations of these accommodations. The rise of the sharing economy has significantly lowered the barriers to operating VHRs for many vacation and second home owners by providing platforms, such as VRBO.com and Airbnb.com, where property owners can easily and cheaply market, schedule, and manage the financial transactions involved in short-term rental of vacation homes. As a result, the number of VHRs has increased dramatically in the city, and the impacts of this increasing market are still emerging.

The City of South Lake Tahoe has sponsored this study, “Socioeconomic Impacts of Vacation Home Rentals in South Lake Tahoe,” to identify these emerging impacts, particularly impacts that may be directly affecting residents and persons who work in the city. The goal of this study is to examine the wide range of factors that may be influenced by the growth of the sharing economy, and evaluate the socioeconomic impacts of those factors. The City can then use the information gathered to support public policy that will help balance the positive and negative externalities of the rapid growth in the VHR market. This study was completed through a partnership between faculty at California State University, Sacramento, and Michael Baker International.

### 1.1 EXECUTIVE SUMMARY

The City of South Lake Tahoe faces unique challenges in balancing housing needs with economic stability and the desired community character. In addition to the issues facing communities across California regarding rising housing costs and shortages of affordable housing, South Lake Tahoe has a thriving VHR market that provides profitable alternatives to both long-term rentals and vacant second or seasonal homes. To better understand the impacts of this market on the greater housing market, the economy, and the community, this study is separated into five sections. Section 1 is the introduction. Section 2 includes the community outreach and survey results, the community feedback from the public workshops, and an in-depth trends analysis of the different social and economic factors directly and indirectly related to housing and the increase of VHRs in residential neighborhoods. Section 3 is an academic focused literature review of other studies prepared on this and similar topics, and the results of a hedonic regression analysis prepared in cooperation with Robert Wassmer, PhD, who is a professor in the Public Policy Department of California State University, Sacramento. Section 4 is an analysis of different policies that jurisdictions can use to address different issues, and a narrative modeling of how certain policy actions might impact the housing market and tourist economy of South Lake Tahoe and the greater Lake Tahoe Basin. Section 5 includes the conclusions and policy options. The appendix includes the specific information collected from the different community outreach efforts, brief descriptions of other

## 1. INTRODUCTION

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study models that may provide additional insight on the different issues surrounding VHRs, and references. Attached is a policy considerations memo, which provides a regulatory framework model that the City could use to determine how to implement policy changes once the community identifies priorities and sets goals.

The initial community outreach component of this study was well attended and included over 1,600 surveys, four group stakeholder interviews, an open house public meeting, and a live-streamed broadcast public meeting. City staff also scheduled a follow-up public meeting on June 13, 2017, to discuss the findings of this report and the different responses to potential regulations.

The trends analysis section of this effort evaluates a wide range of variables, including changes in the housing market, population, and demographic. It also evaluates several economic indicators such as household incomes and employment sectors, and different components of the tourist accommodation market. The trends analysis concludes with high-level projections of which trends are likely to continue absent regulatory intervention.

The literature review focuses on other peer-reviewed and publicly presented studies that include statistical analysis, and how those studies and their results apply to South Lake Tahoe's situation. The section includes discussion of how different models were used in other studies to identify impacts of short-term rentals or VHRs on per capita spending, economic growth, and home prices. A key finding of the literature review is the appropriateness of using hedonic regression analysis to determine key economic impacts of VHRs on residential housing. The literature review is followed by a hedonic regression analysis completed with data collected from the city, and through real-estate multiple listing services.

The Michael Baker International team sourced the data used in this report from a variety of public and professional resources. City staff provided data about building permits, VHR permit lists, and code enforcement cases, which the team used in this report. Other resources include US Census and American Community Survey (ACS) data, Multiple Listing Service data, and other economic and tourism reports recently completed for both the city and the region. The team elected to use publicly available data whenever possible throughout the preparation of this report for several reasons.

First, much of the City's data was incomplete or inconsistent and required a great deal of processing. This inconsistency is due in large part to the evolving technology around data collection and management. While adopting new technology or programs can improve efficiency and consistency in the long term, it also often disrupts the continuity with prior data collection tools and creates gaps in consistency in the shorter term. The City has been progressive about adopting new technology over the last decade, which provided a wealth of shorter-term data but proved challenging in analyzing data over longer periods of time. The abundance of publicly available data helped supplement the City's data and provide more consistent analysis. Public data is also much easier to reference, and thorough referencing was an important part of the process for the research team.

A second reason for publicly sourcing data whenever possible is the value in preparing a report with verifiable and accessible public sources. Another key goal for the report was to conduct the research and analysis independently from the City to reduce the influence of bias. Public data sources supported that independence and transparency and supplied easily accessible references that any interested parties can verify. Public data also tended to be more consistent and comparable, though often somewhat less detailed. As the research team sourced each piece of data, the team considered the value of independently sourcing the data from public sources versus asking City staff to provide the information as raw data from City databases. The

value of detail was compared to the value in data transparency, and in most circumstances transparency was favored. Most of the data sources are identified in the narrative or in footnotes. The appendix includes a comprehensive list of all the data sources used in this study. The statistical analysis is followed by a regulation modeling section, which outlines different policy options and explores the potential impacts of applying those policies to South Lake Tahoe. There is a brief comparison of different jurisdictional approaches to regulating VHRs, and modeling for four different scenarios. The first scenario includes a null model in which the current ordinance and regulations for the city do not change. The second scenario pertains to significantly increased regulation, and a third to significantly reduced regulation. Finally, there is a scenario that considers alternative options and approaches to regulating VHRs and vacant housing in the city.

The conclusion includes a summary of key findings from this report and a brief discussion of policy considerations. It suggests different policies to address different problems and suggests next steps to help prioritize the community issues that additional or alternative regulation of VHRs could address. Neither City staff nor industry representatives have vetted any of the policy considerations in this report. The research team provided the policy considerations as potential tools to help achieve specific community goals. A key finding from the research and evaluation of the impacts of VHRs in South Lake Tahoe, as well as in other tourist economies, is the need to carefully consider which impacts are community priorities. Community leaders and regulatory agencies can use those priorities to establish a long-term community vision that can be set as a target for progress. The community can then set goals and milestones and carefully select policy options specifically intended to address specific issues toward those goals, while minimizing the negative externalities. Creating a proactive policy and accompanying set of actions based on careful consideration of community priorities and goals can help to both solve existing problems and prevent future issues. The research team hopes that this analysis will be useful for community leaders as they consider the next steps in developing housing policy.

## 1. INTRODUCTION

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## 2. DATA ANALYSIS AND RESULTS

### 2.1 DESCRIPTION OF METHODOLOGY

This socioeconomic analysis of the impact of VHRs on the community and on the quality of life for permanent residents evaluates the available data from multiple angles in an effort to provide a comprehensive understanding of the relationship between the VHR market and the impacts felt in the community. This study approaches the assessment of VHR impacts through three main processes: community and stakeholder data collected through interviews, public meetings, and public surveys; housing market and demographic trend analysis that provides insight into what changes have already happened, and projections on what might be expected to happen; and a statistical regression analysis that evaluates the impacts of VHRs on home prices both in an immediate neighborhood and citywide. The following section explains why these approaches were selected and identifies some of the key challenges and solutions encountered during the study.

#### 2.1.1 Community Surveys, Public Meetings, and Stakeholder Interviews

Community and stakeholder data is critical in clarifying perceptions as well as revealing opportunities for future policy recommendations. Much of what residents actually experience on a day-to-day basis is subjective and integrated into each person's perceptions, which directly influence decision-making and create a fluid evaluation of their quality of life. Understanding the origins and emphasis of certain perceptions can be very useful in forming effective policy that addresses both the underlying issues and the perceived symptoms in a way that most benefits the community.

The community outreach for this study was conducted through multiple venues. Two community surveys were prepared, one designed for residents and one for VHR property owners (both residents and nonresidents), that were intended to identify how people in different neighborhoods and with different priorities experienced VHRs in their communities. These surveys were offered online and were advertised through the City's website, printed flyers, and media promotions, and through a postcard mailing that was sent to a random sample of both residents and nonresident property owners. The link to the residents' survey on the City's website was available to anyone to take, so some respondents were residents of El Dorado County but not of the City of South Lake Tahoe proper.

Three public meetings were held to gather public input in the community outreach process. The first two meetings were held prior to the completion of the draft report, and the third was held to review the preliminary results of the data analysis in the draft report.

Four group stakeholder meetings were held to collect information from specific stakeholder groups and gather insight into how different groups experienced the growth in VHRs in South Lake Tahoe. The information from the surveys, public meetings, and stakeholder meetings was evaluated and summarized for comparison to Section 2.3, Data Trending Results and Analysis (trends analysis).

#### 2.1.2 Housing Market and Demographic Data Trends Analysis and Projections

The second approach to evaluating the impacts of VHRs in the community involved completing a trends analysis of the housing market and demographic data available. The trends analysis helps illustrate a clear understanding of changes that have occurred across the community, and provides correlation with those same changes that may have a cause and effect relationship with the growing numbers of vacation rentals in the city. The trends analysis was also used to prepare

## 2. DATA ANALYSIS AND RESULTS

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projections that use past trends to project future changes. The goal of developing projections is to provide guidance in the development of public policy, as well as a starting point from which the impacts of policy-driven changes can be measured.

The trends analysis included three main topics: demographic and population trends, housing market trends, and economic trends. Demographic data was collected from historic and current US Census collections including the American Community Survey. Housing market data used the above sources and also included information from the City regarding building permits, VHRs in the City's records, and housing sales information collected from the multiple listing services. Economic data was collected from the above sources and included additional data from the California Economic Development Department. A full bibliography of sources is included at the end of the report.

### 2.1.3 Hedonic Regression Modeling and Analysis

Regression analysis is a statistical modeling process that helps estimate the relationships among different variables—how much different variables influence each other, and which variables track together or separately. Regression analysis can measure the strength of a given relationship and assist in eliminating variables that have no statistical relationship or are actually unrelated.

Hedonic regression modeling is frequently used in modeling real estate economics and consumer price index calculations, and is particularly useful in tracking the interaction of nonlinear variables. Hedonic regression can be used to track changes in product quality, such as wear and tear over time, or improvements through reinvestment. Hedonic regression modeling was used in this report to evaluate the impacts of VHRs on home values, both in immediate neighborhoods and citywide.

### 2.1.4 Key Challenges

Several key challenges arose as the team worked through this study. The most significant challenge involved the amount of data available for analysis. While the team made substantial efforts to collect accurate and complete data, several datasets were only available for limited analysis due to inconsistencies or incompleteness. Some data was combined through the collection of multiple datasets and did not include the same variables across the board. Other data had only been collected for a short period of time and lacked sufficient depth to match the length of time included in the study. Still other data had errors or inconsistencies or had been collected sporadically. To the extent possible, data was verified for correctness and completeness; however, none of the data is guaranteed for accuracy, and the study team makes no warranties or guarantees on the validity of the data used in this report. All data sources have been provided.

## 2.2 COMMUNITY SURVEY, COMMUNITY WORKSHOPS, AND STAKEHOLDER INTERVIEW ANALYSIS AND RESULTS

### 2.2.1 Community Survey

#### Overview

In order to receive community input from a wide range of South Lake Tahoe residents and stakeholders, online surveys were offered from November 7, 2016, to February 9, 2017, via SurveyMonkey. The surveys were promoted using the City's website and flyers, and through postcards sent to a random sample of both South Lake Tahoe residents and nonresident property

owners. A comprehensive survey review is included in the appendix of this report. The following section is a discussion of key findings and observations identified in the survey.

### Purpose

The surveys were intended to solicit feedback on the positive and negative impacts that VHRs have on the city, as well as opinions of existing and potential regulatory options. In addition, the survey was intended to provide the following:

- A venue for public comment on the issue of VHRs in South Lake Tahoe
- Insight on public perceptions regarding VHRs that may need to be addressed through public policy
- Opportunities to seek common ground between residents and VHR owners and managers
- An understanding of public perceptions that can be compared to trend/regression statistical analyses to examine where facts and impressions deviate

Feedback and insight gained from the survey will contribute to more informed VHR policies in South Lake Tahoe.

### Structure

In order to receive targeted answers from a range of populations, there was one survey for residents and one survey for property owners. The surveys had the same overall structure and content, with slight variations within several questions; this distinction in questions (and thus analysis of responses) was important because perspectives differed depending on the role respondents have in the industry. For instance, the questions in the resident-oriented survey solicited information about personal impacts on participants' homes and neighborhoods, whereas the property owner survey sought feedback on the owner's business as a vacation rental owner. Both surveys had the same three-part structure: Community Impacts, VHR Regulation, and Demographic Information. The surveys were designed to prevent tampering and provide as many unique responses as possible. In addition, after the survey was closed, surveys that appeared to be exact duplicates were removed.

### Survey Results

During the three months of its availability, the resident survey received 1,316 unduplicated responses and the property owner survey received 344 unduplicated responses. Some questions on the survey were not required to be answered; therefore, the response rates differed by question. Many survey respondents answered all of the Community Impacts questions but declined to comment on regulatory opinions or preferences.

The questions and responses within the first two sections are summarized below. The demographic question (Part 3) results are included in the technical appendix. While responses to the survey were not statistically valid, the survey did generate a statistically significant participation rate.

#### Part 1: Community Impacts

This portion of the survey contained questions about impacts and opinions of VHRs, and was intended to gather information on personal experiences with the VHR industry in South Lake Tahoe.

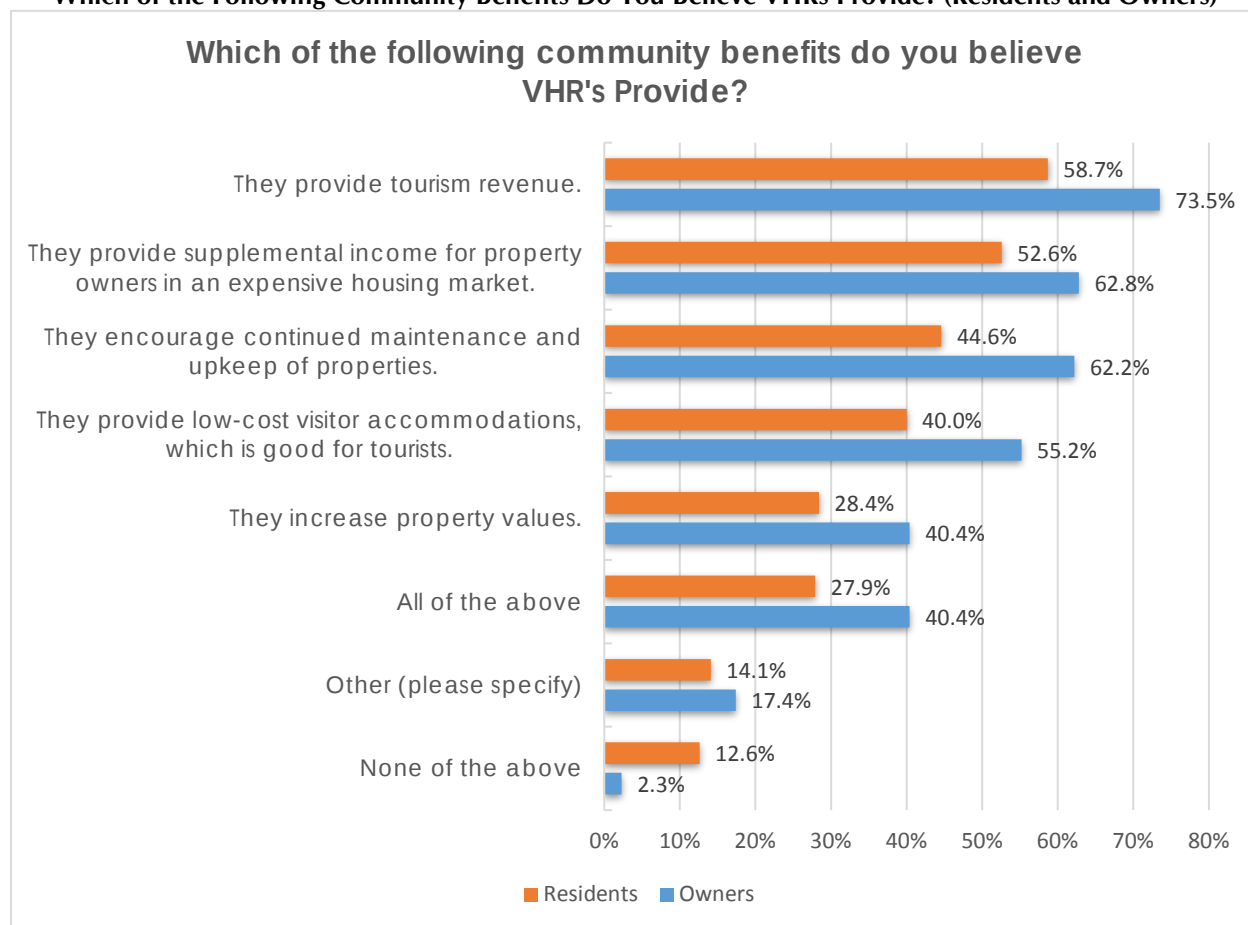
## 2. DATA ANALYSIS AND RESULTS

### QUESTION 1: WHICH OF THE FOLLOWING COMMUNITY BENEFITS DO YOU BELIEVE VHRs PROVIDE? (CHECK ALL THAT APPLY)

This question was the same for both residents and property owners; it listed potential positive impacts and allowed respondents to choose as many options as they felt were applicable. There was also an open-ended “other” option. All respondents answered this question for both the resident and the owner survey. The results are shown in Figures 2.1 and 2.2 below.

While property owners agreed more strongly that VHRs provide benefits overall, the results for property owners and residents were relatively similar.

**Figure 2.1**  
**Which of the Following Community Benefits Do You Believe VHRs Provide? (Residents and Owners)**



#### *Residents*

More than 40 percent of respondents agreed on every individual option, with the exception of “they increase property values,” with which only 28 percent of respondents agreed. The statistical regression analysis in Section 4 confirms that VHRs have an overall negative influence on property values citywide but increase property values for homes in the immediate vicinity of VHR units. The most commonly occurring open-ended comment in the “other” option was that VHRs increase jobs and stimulate the economy in other ways. Many of these comments recommended specific economic impacts, such as transient-occupancy taxes (TOT) or jobs in other sectors (e.g., cleaning, service). Several respondents used this space to comment further on negative impacts

or note that positive impacts do not outweigh negative impacts. The regression analysis supports this observation.

### *Owners*

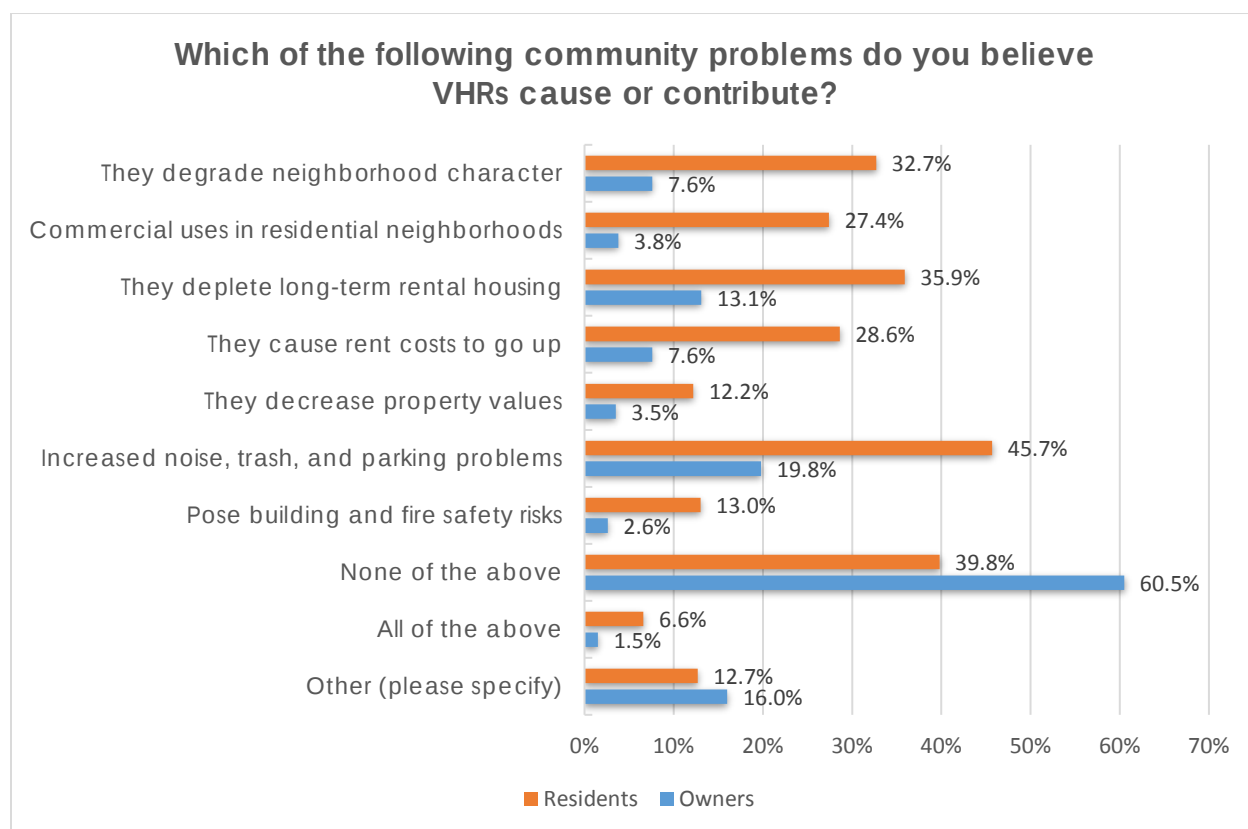
Property owners agreed with positive impacts substantially more than resident respondents. Only 2 percent of property owner respondents felt that none of these impacts applied. Similar to the resident survey, the least popular benefit was “they increase property values.” However, 40 percent of property owners agreed that this is a benefit, compared to 28 percent of residents. This deviation is probably a response to the observation that nonresident property owners are more likely to convert their property to a VHR and experience the localized increase in property values, as identified in the regression analysis. As with the resident survey, the most widely agreed upon benefit was “they provide tourism revenue,” with 74 percent of property owner respondents in agreement. The majority of comments on the “other” option noted that VHRs provide a more desirable, attractive, and affordable accommodation for tourists, especially those traveling with family members. Several “other” responses also noted economic impacts such as providing revenue to the city and jobs to residents.

### **QUESTION 2: WHICH OF THE FOLLOWING COMMUNITY PROBLEMS DO YOU BELIEVE VHRs CAUSE IN THE COMMUNITY? (CHECK ALL THAT APPLY)**

This question was structured the same way as question 1, albeit with a focus on negative impacts. There was also an open-ended “other” option. All respondents answered this question for both the resident and the owner survey. Overall, it appears that respondents agreed more strongly on the positive impacts than the negative impacts.

## 2. DATA ANALYSIS AND RESULTS

**Figure 2.2**  
**Which of the Following Community Problems Do You Believe VHRs Cause or Contribute? (Residents and Owners)**



### *Residents*

The most common response to this question was that VHRs have negative impacts on neighborhoods, such as trash and traffic (46 percent). However, the second most popular response was that none of the impacts were relevant (40 percent). The third most popular response was that VHRs deplete long-term rental housing (36 percent). The most popular comments for “none of the above” response were those noting that problems occur in very specific areas and properties, and that greater enforcement of these “problem properties” is needed. Other comments noted that environmental health, well-being, and neighbor relations are impacted. Many comments reemphasized the impacts listed in the question.

### *Owners*

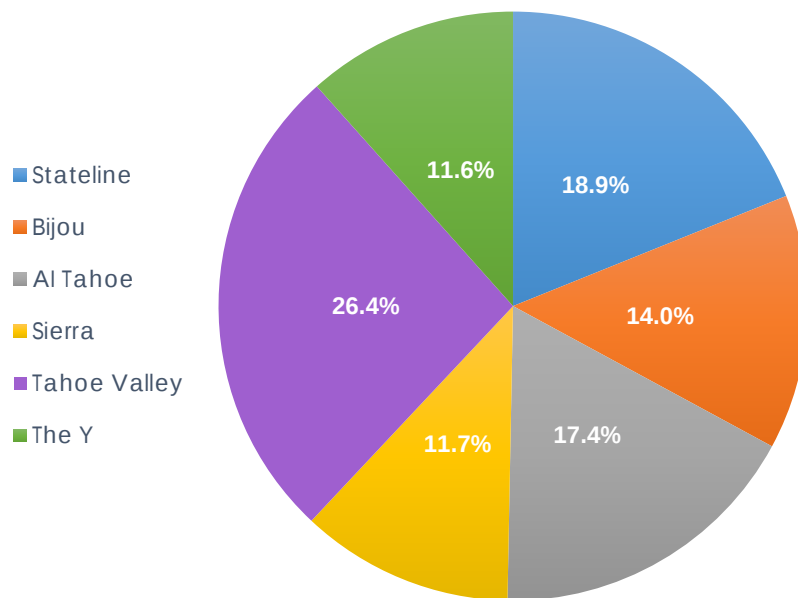
The majority of property owners disagreed with all of the negative impacts (61 percent). However, of those they did agree with, negative impacts on neighborhoods, such as trash and traffic, had the most (29 percent), similar to the residents. Most comments for the “other” option emphasized the belief that VHRs do not cause problems, stating that lack of enforcement or poor management are instead the culprits.

**QUESTION 3: WHAT NEIGHBORHOOD DO YOU LIVE IN? / IN WHAT NEIGHBORHOOD IS YOUR PROPERTY LOCATED?**

This question sought to understand the geographic areas responses were coming from. All respondents answered this question for both the resident and the owner survey. The results are shown in Figures 2.3 and 2.4 below.

*Residents*

**Figure 2.3**  
**What Neighborhood Do You Live in? (Residents)**



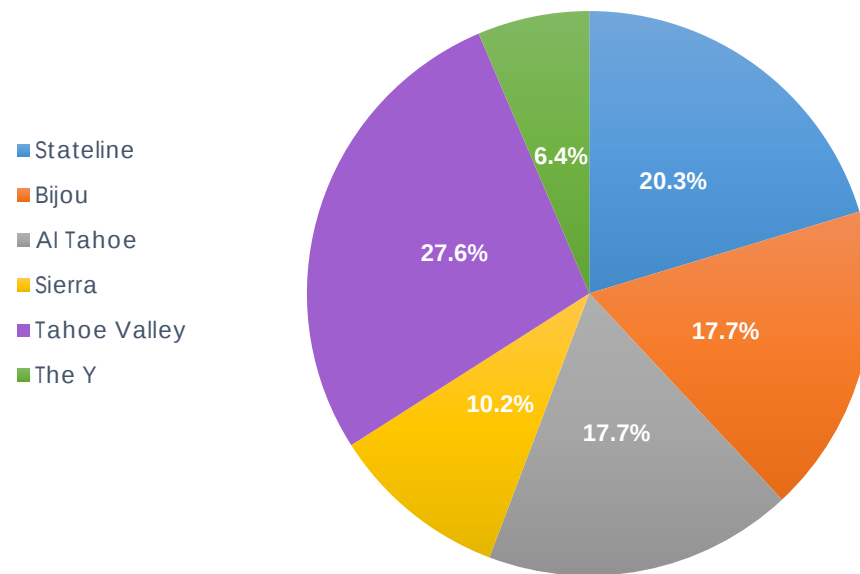
The most commonly represented neighborhoods were Tahoe Valley (26 percent) and Stateline (19 percent), but the remaining responses were fairly evenly split.

## 2. DATA ANALYSIS AND RESULTS

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### Owners

**Figure 2.4**  
**In What Neighborhood Is Your Property Located? (Property Owners)**

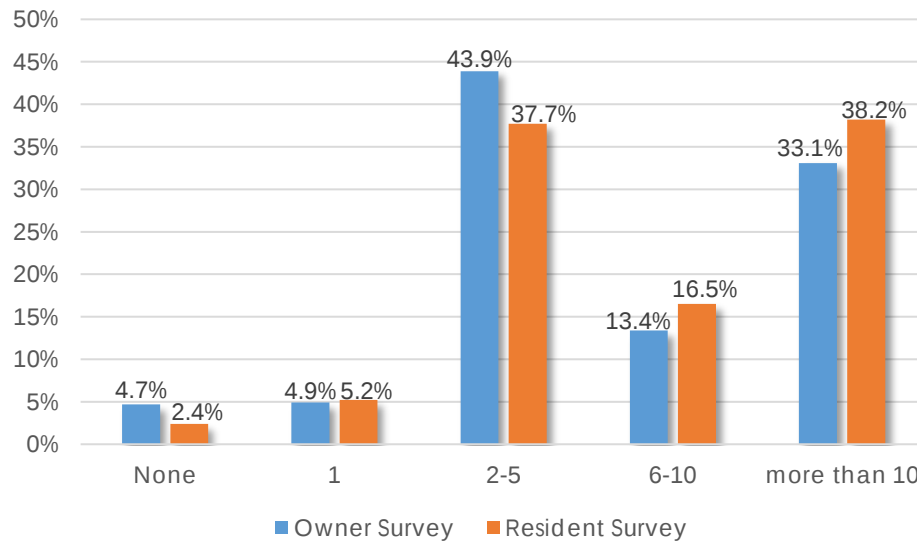


Similar to the residents' survey, the most commonly represented neighborhood was Tahoe Valley (28 percent). The least represented neighborhood was the Y (6 percent). Overall, the differences between represented neighborhoods were more distinct on the property owner survey.

**QUESTION 4: HOW MANY SHORT-TERM RENTALS ARE YOU AWARE OF IN YOUR NEIGHBORHOOD? / HOW MANY SHORT-TERM RENTALS ARE YOU AWARE OF IN THE NEIGHBORHOOD WHERE YOUR PROPERTY IS LOCATED?**

This question was intended to understand perceptions of VHR concentration by neighborhood. All respondents answered this question for both the resident and the owner survey. The vast majority of respondents have at least two VHRs in their neighborhood, indicating that they have firsthand experience with VHRs. Resident and owner surveys had similar results, with many respondents indicating they have multiple VHRs in their neighborhoods. The results are shown in Figure 2.5 below.

**Figure 2.5**  
**How Many Short-Term Rentals Area You Aware of in Your Neighborhood/The Neighborhood Where Your Property Is Located?**



### Residents

The majority of resident responses indicated that more than two VHRs are present in their neighborhoods (93 percent). Approximately 38 percent of these respondents live in neighborhoods with more than 10 VHRs.

### Owners

Responses from property owners were similar to those of residents, with 90 percent of respondents having at least two VHRs in their neighborhoods, and 33 percent having more than 10.

### QUESTION 5: WHAT IS YOUR PRIMARY ISSUE OR CONCERN ABOUT VHRs IN YOUR NEIGHBORHOOD OF SOUTH LAKE TAHOE? / WHAT IS YOUR PRIMARY ISSUE OR CONCERN ABOUT VHRs IN SOUTH LAKE TAHOE?

This question asked respondents to identify their main VHR concern among the following choices:

- Noise
- Unfamiliar people in my neighborhood
- Parking
- Rising rents
- Loss of neighborhood character
- Loss of long-term residents
- Traffic
- Property damage
- Trash
- None. I have no issues or concerns with VHRs.

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They were asked to choose only one. There was also an open-ended “other” option for respondents to offer their own ideas. All respondents answered this question for both the resident and the owner survey.

### *Residents*

There was not significant agreement on VHR concerns in residents’ neighborhoods. The top three responses were “none” (44 percent), noise (12 percent), and “other” (11 percent). The remaining responses had between 1 and 8 percent of votes. While most respondents who answered “other” did not denote any specific concerns, many of those that did wrote “all of the above” or a similar statement. The majority of the remaining comments reemphasized the negative concerns already listed under question 2, or the fact that they do not have any major concerns.

### *Owners*

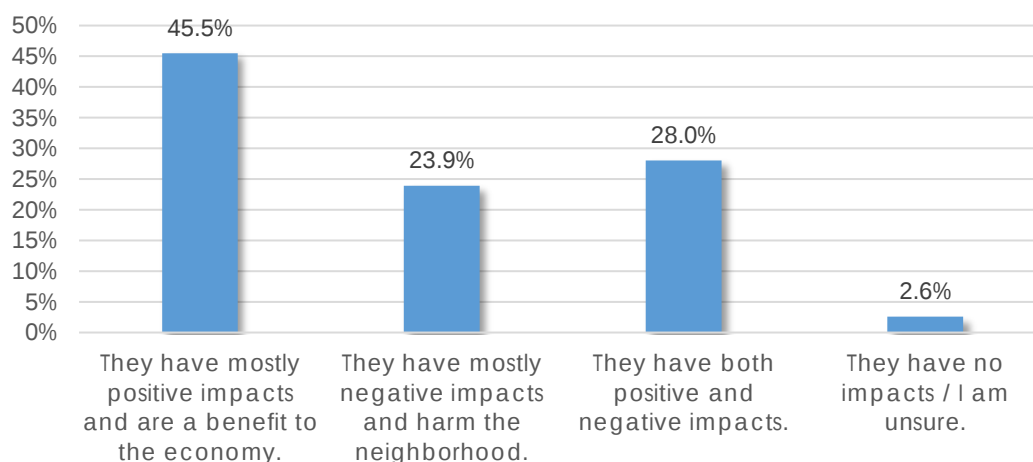
Nonresident property owners had significantly fewer concerns regarding VHRs. Similar to the resident survey, the top three responses were “none” (69 percent), “other” (12 percent), and noise (6 percent). While the top answers were the same for owners and residents, owners had even fewer concerns overall. The most common comments on the “other” option were the negative perceptions of VHRs and poor management and/or enforcement of VHRs.

**QUESTION 6: WHAT IS YOUR OVERALL PERCEPTION OF THE VHRs IN YOUR NEIGHBORHOOD? IF YOU DO NOT HAVE ANY VHRs IN YOUR NEIGHBORHOOD, WHAT IS YOUR IMPRESSION OF THEIR IMPACTS ON THE CITY OF SOUTH LAKE TAHOE? / WHAT IS YOUR OVERALL PERCEPTION OF THE VHRs IN THE NEIGHBORHOOD WHERE YOUR PROPERTY IS LOCATED? IF YOU DO NOT HAVE ANY OPINION OF VHRs IN THE NEIGHBORHOOD, WHAT IS YOUR IMPRESSION OF THEIR IMPACTS ON THE CITY OF SOUTH LAKE TAHOE?**

All respondents answered this question for both the resident and the owner survey. Figures 2.6 and 2.7 below show the results of the survey for this question.

### *Residents*

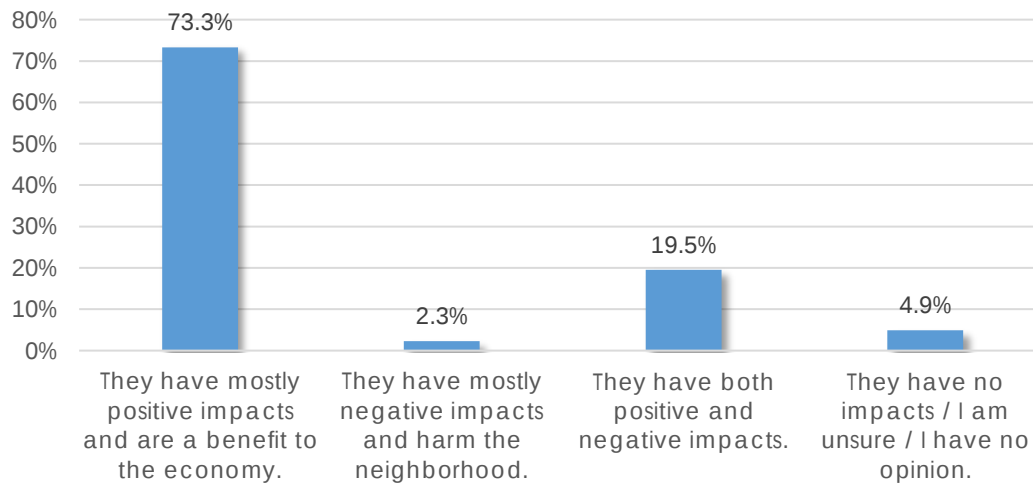
**Figure 2.6**  
**What Is Your Overall Perception of the VHRs in Your Neighborhood?**



More residents felt that VHRs have more positive than negative impacts on the community (46 percent). The second most popular answer, however, was that they have both positive and negative impacts (28 percent).

### Owners

**Figure 2.7**  
**What Is Your Overall Perception of the VHRs in the Neighborhood Where Your Property Is Located?**



A large majority of property owners believed that VHRs have more positive than negative impacts (73 percent). The second most popular response was that they have both positive and negative impacts (20 percent).

### Part 2: VHR Regulation

The second portion of the survey contained questions regarding VHR regulation, in order to gather impressions of the City's existing and potential policies.

#### **QUESTION 7: DO YOU THINK THAT THE CITY SHOULD REGULATE VHRs?**

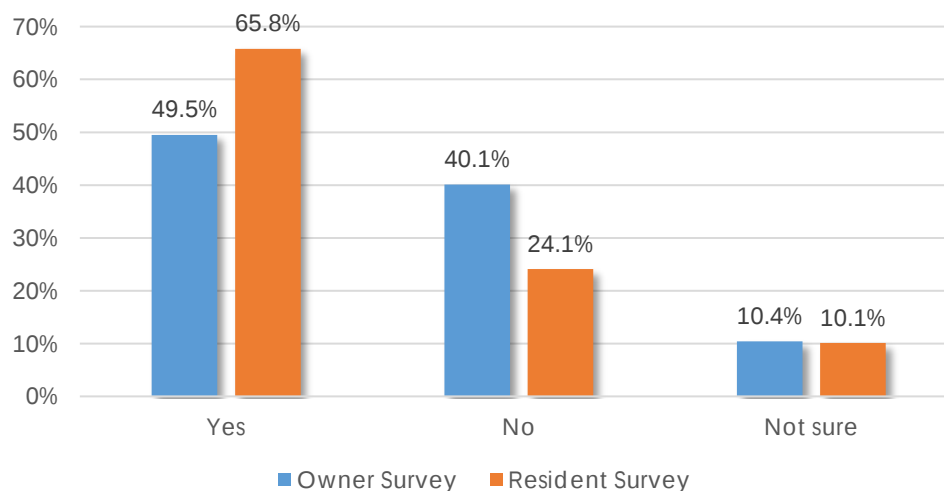
In total, 1,263 residents and 327 owners responded to this question. Overall, residents agreed more strongly with regulation (66 percent) than owners (50 percent). The results are displayed in Figure 2.8 below.

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### *Residents and Owners*

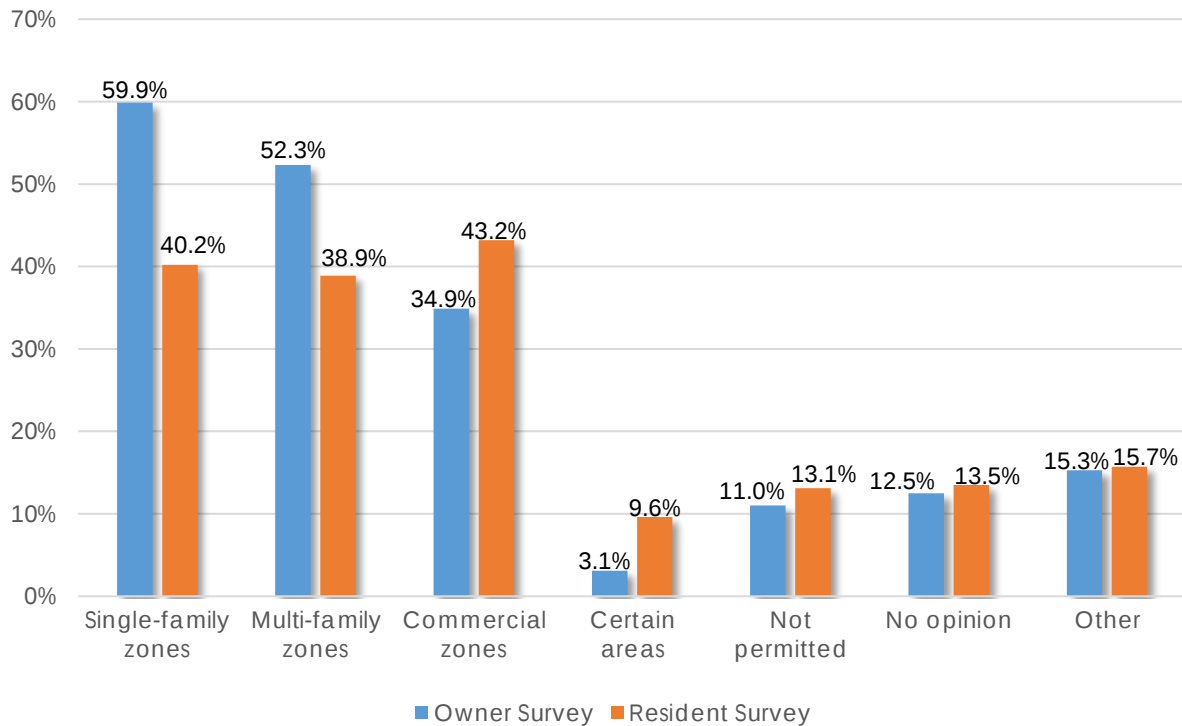
**Figure 2.8**  
**Do You Think the City Should Regulate VHRs?**



### **QUESTION 8: WHERE SHOULD VHRs BE PERMITTED?**

This question asked respondents which zones are most appropriate for VHRs, among a list of choices. They were asked to check all choices that apply. There was also an open-ended “other” option for respondents to offer their own ideas. In total, 1,263 residents and 327 owners responded to this question. Owners are more inclined than residents to allow VHRs in commercial neighborhoods. The results are displayed in Figure 2.9 below.

**Figure 2.9**  
**Where Should VHRs Be Permitted?**



### *Residents*

The most comment response among residents was that VHRs should be permitted in commercial zones (43 percent), which aligns with feedback and concern that VHRs promote incompatible uses. However, single-family zones was the second most popular answer (40 percent). Fewer responses indicated that VHRs should be restricted based on location. Comments on the “other” option for this question varied greatly, but several noted that VHRs should be limited in number (within each location) rather than disallowing them in certain areas.

### *Owners*

Owners were less inclined to limit VHRs by neighborhood. The most popular responses were single-family (60 percent), multi-family (52 percent), and commercial (35 percent). Surprisingly, 11 percent of property owners said they should not be permitted anywhere (36 votes). The most common written comment was that they should be permitted everywhere.

### **QUESTION 9: WHICH OF THE FOLLOWING REQUIREMENTS SHOULD VHRs BE SUBJECT TO?**

This question provided a list of potential regulatory requirements and allowed respondents to check any or all options they felt applied, as well as offer their own ideas in an open-ended “other” answer. The options were as follows:

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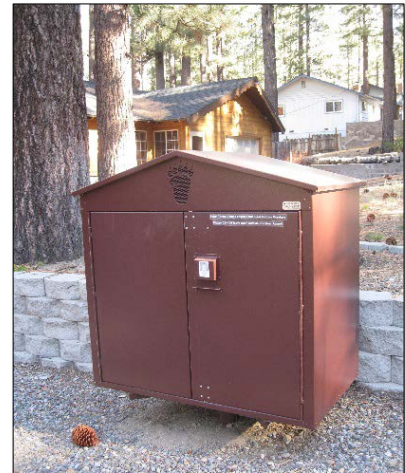
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- Limit each VHR to a maximum number of annual nights
- Require overnight stays to be a minimum number of nights (i.e., VHRs cannot be rented out for fewer than 3 days at a time)
- Require VHR owners to occupy their VHR a certain number of days per year
- Restrict the location and/or density of VHRs (i.e., only in certain zones/neighborhoods, and setting a maximum allotment of VHR permits per area)
- Obtain a business license and pay taxes (similar to hotels)
- Fines for VHR owners who fail to comply with City regulations
- Fines/fees or loss of VHR license for VHR owners with multiple calls for service (police, fire, ambulance)
- Require potential VHR owners to notify neighbors within a certain radius, and attend a public hearing to obtain a license
- Require VHR owners to pay into a neighborhood maintenance/improvement fund (similar to a business improvement district)
- I have no opinion on this issue

In total, 1,263 residents and 327 owners responded to this question.

### *Residents*

The most popular regulatory options were those related to licensing and penalties: fining VHR owners who fail to comply received 63 percent, fines or loss of VHR licenses for multiple calls for service received 57 percent, and the general business license and tax requirements received 52 percent. Among the least popular responses were restricting occupancy or the number of rented nights. The majority of comments for the “other” option were opposed to increased regulation, stating that the City’s existing regulations are sufficient or too much, or that greater enforcement and owner accountability are needed. A small number of comments stated that more regulation or a VHR moratorium is needed. Several respondents specifically stated that all VHRs should be required to have bear boxes for trash cans.



*Bear box for safe trash management*

### *Owners*

The owner survey had the same most popular responses, but with much lower percentages: fining VHR owners who fail to comply received 45 percent, fines or loss of VHR licenses for multiple calls for service received 36 percent, and the general business license and tax requirements received 30 percent. In addition, 30 percent of respondents checked “other,” several of which had additional comments. The majority of these comments stated that additional regulation is not needed, or noted existing regulations. Several of these comments indicated that greater enforcement of existing requirements will solve many problems.

### **QUESTION 10: ARE YOU AWARE OF ANY OTHER CITIES OR COUNTIES THAT REGULATE VHRs?**

This question was intended to find out if respondents have ideas or opinions about regulatory options from other jurisdictions. In total, 1,263 residents and 320 owners answered this question. The responses from residents and owners were similar in that a majority of respondents in both groups were not aware; however, residents were more aware than owners.

#### *Residents*

Forty percent of resident survey respondents said that they are aware of other jurisdictions that regulate VHRs, and 60 percent were not. Those jurisdictions commonly indicated for the “yes” response by residents included San Francisco and Santa Cruz (each mentioned over 60 times), Carmel/Monterey (mentioned over 40 times), and San Diego (mentioned over 20 times). Each of these cities have relatively strict VHR programs, some of which have appeared on the national or local news.

#### *Owners*

Twenty-eight percent of owner survey respondents said that they are aware of other jurisdictions that regulate VHRs, and 72 percent were not. Those jurisdictions commonly indicated for the “yes” response by owners included San Francisco (mentioned over 30 times), Santa Cruz (mentioned over 15 times), and Los Angeles (mentioned 12 times).

### **QUESTION 11: DO YOU HAVE ANY ADDITIONAL QUESTIONS, COMMENTS, OR CONCERNS THAT WERE NOT ADDRESSED IN THIS SURVEY?**

This question aimed to capture any additional feedback that was not received through the survey questions. A total of 504 residents and 320 owners responded to this question. A number of respondents expressed concern that the survey was biased to either side—proponents of VHRs or opponents of VHRs.

#### *Residents*

From the responses to this question, it was clear that a number of respondents were also VHR owners, approximately 23 percent of respondents to the resident survey identified themselves as VHR owners or operators in the resident survey. Furthermore, many of the written comments reemphasized previous question topics and responses from earlier in the survey with greater detail. The most popular themes in comments that were not also addressed in previous questions are summarized below, with the number of comments in parentheses.

- Current or potential regulations are too restrictive (~20)
  - Includes comments about property rights and negatively impacted home values
  - Many respondents self-identified as realtors or VHR owners
- The City needs greater/improved enforcement of existing regulations (~15)
- South Lake Tahoe VHRs have significant bear issues and should have bear boxes for trash and/or other regulations to mitigate these issues (~15)

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### *Owners*

Similar to the resident surveys, many of the written comments reemphasized previous responses. Many of these responses were adamantly opposed to increased regulation. The themes in comments that were not in previous questions/responses were the following:

- Current or potential regulations are too restrictive (~15)
  - Includes comments stating that increased regulation would not allow VHR owners to afford the property, will cause the tourism industry to suffer
  - Also states that the existing regulation needs time to be fully effective
  - Ideas about free market and property rights
- The City needs greater/improved enforcement of existing regulations (~10)
  - Includes statements that action needs to be taken against “problem VHRs” in South Lake Tahoe
- VHRs have significant bear issues and should have bear boxes for trash and/or other regulations to mitigate these issues (~3)

### *Summary of Major Themes*

Overall, the survey elicited a range of opinions on impacts of VHRs and potential regulatory options.

### *Impacts*

Overall, the proportion of respondents that agreed on the positive impacts was larger than the proportion that agreed on the negative impacts for both surveys. Survey respondents agreed that there are positive and negative impacts to VHRs. However, VHR owners had stronger beliefs that positive impacts outweighed the negative impacts. This was true for all questions on VHR impacts.

The most commonly acknowledged issues with VHRs were neighborhood impacts like trash, noise, parking, and overall lack of affordable housing. Furthermore, the perception of the high saturation of VHRs within the neighborhoods of South Lake Tahoe was substantial. The vast majority of both owners and residents noted that their neighborhoods had at least one VHR.

A significant portion of respondents noted that they do not have any primary concerns about VHRs in their neighborhoods: 44 percent of residents and 69 percent of VHR owners noted that they had no major concerns. Furthermore, the overall perception of VHRs is positive or nuanced (both positive and negative). Approximately 74 percent of residents and 93 percent of VHR owners expressed that VHRs either have mostly positive impacts or have both positive and negative impacts.

### *Regulation*

Both VHR owners and residents believe that VHR regulation is needed (66 percent of residents and 50 percent of VHR owners), but VHR owners were less amenable to strict regulatory options. Most respondents agreed with basic regulatory mechanisms like business licenses, TOT remittance, and fining, but were more critical of density or occupancy restrictions.

One commonly expressed sentiment in open-ended responses throughout the survey was that stricter enforcement of existing regulations is needed. A number of comments also indicated that the regulatory requirements should include provisions for protection from damage caused by and to bears, such as bear boxes for trash.

### *Demographics*

Overall, the survey responses from residents were not representative of the greater community with respect to race/ethnicity and income. The majority of respondents to the survey indicated that their roles in the VHR industry are either as concerned citizens impacted by VHRs in their neighborhoods, VHR owners generating extra income, or workers in a VHR-related industry. During the analysis of the survey responses, the research team attempted to refine categories to evaluate responses from specific groups, such as residents that also own VHRs in the city or that have operated VHRs in the past. While the survey did collect that information, the sample sizes were too small to provide useful analysis.

### **2.2.2 Community Workshops**

#### Workshop 1

##### Overview

The first community workshop was held on November 16, 2016, from 6:00 to 8:00 p.m. at the South Lake Tahoe Senior Center. The purpose of this workshop was to introduce the community to the Socioeconomic Impact Study and solicit feedback on the impacts of and potential regulatory options for VHRs in South Lake Tahoe. The meeting was publicized via newspaper, mail, email, and the City website. Feedback obtained during this workshop represents a relatively small sample size and therefore was not representative of the community.



*November 16, 2016, community workshop*

##### Attendance

A total of 86 attendees signed in to the meeting. Since signing in to the meeting was optional due to the open house or drop-in format, it is likely that actual attendance was more than 86.

##### Format

The workshop was in the format of an open house; rather than formal presentations, consultants and City staff were placed at different “stations” where attendees could ask questions and provide input on specific aspects of the study:

- Station 1: What do you think of vacation home rentals in South Lake Tahoe?
  - Posters with lists of potential positive and negative impacts of VHRs for attendees to vote on and write additional comments. Participants could place a sticky dot in the “agree” or “disagree” column for each impact statement.

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- Station 2: What should South Lake Tahoe consider when addressing vacation home rentals?
  - Posters with potential data variables for attendees to provide input on which are most crucial to the study (e.g., TOT data, utility costs). Attendees could vote for “it’s not important” or “it’s important” and write additional comments.
- Station 3: Vacation home rental regulations
  - Posters with information on South Lake Tahoe’s existing VHR program as well as a list of other ways the City can regulate VHRs.

### Summary of Major Themes

#### *Impacts*

According to the results of poster voting and other community feedback at the workshop, it was clear that the positive impacts of VHRs are more widely agreed upon than the negative impacts. For instance, an average of 92 percent of votes agreed with positive impacts on the poster, whereas 50 percent of votes agreed with negative impacts on the poster. Of the negative impacts, the most common concerns were regarding the strain on public services and infrastructure, as well as the loss of affordable housing. Written comments echoed concerns mentioned in the poster voting. There was disagreement on whether negative impacts such as affordable housing can be attributed to VHRs.

Community members agreed that the amount of tax and fee income collected annually, the impact of those revenues on the City’s budget, VHR industry information, including industry trends and internal regulation, and the usage of public services, such as public safety and utilities, are more important in order to understand the issues in South Lake Tahoe.

#### *Regulation*

Feedback on regulatory options was split between those in support of increased regulation and those in support of relaxed regulation. However, the most common suggestion regarding regulation was for increased enforcement of existing regulations. Other popular comments include dedicating TOTs to community-benefiting areas, such as affordable housing or VHR security. There were many concerns over property rights; VHR owners felt that regulations restrict rights to use property however they prefer, and community members felt that VHR activity interferes with the enjoyment of their properties.

### Workshop 2

#### Overview

The second community workshop was held on January 25, 2017, from 6:00 to 8:00 p.m. at the South Lake Tahoe Senior Center. Remote participation via a YouTube live-stream was available for those who do not live in South Lake Tahoe but have a stake in the VHR industry and for anyone else who wanted to participate but was unable to attend in person.

### Attendance

A total of 40 attendees signed in to the meeting. Since signing in to the meeting was optional and not all attendees chose to write their names down, it is likely that actual attendance was greater than 40. Approximately 77 people signed into the remote participation option; however, a smaller number (approximately 30 of these people) participated in the text message voting exercise.

### Format

At this workshop, there was a presentation on the VHR study followed by a voting exercise that allowed audience members, including those participating remotely, to offer input on issues. After the presentation, there was a discussion during which audience members asked questions and provided additional comments.

During the voting exercise, participants were asked the same questions that were asked in the poster voting during workshop 1, with some minor changes that were based on feedback from attendees during or after workshop 1 (e.g., confusing wording). One question was added based on feedback from attendees after workshop 1: "If you did not rent your property as a VHR, would you rent it as a long-term rental, or leave it vacant?" In addition to the voting portion, attendees were able to make comments or ask questions in a YouTube live chat.

### Discussion

At the end of the event after the voting exercise, remote and in-person participants were able to ask questions and provide additional feedback. This part of the conversation did not follow a specific structure, but allowed an outlet for any questions or concerns that were not addressed in the presentation.

### Comments

Comments varied and included those that reemphasized key points from the voting portion of the workshop. Unique comments that were not reflected in the voting results are summarized below with the number of total comments in parentheses to denote when or if similar comments were made multiple times.

- VHRs are vital to the economy (3)
- Existing regulations need to be enforced (2)
- VHR owners cannot afford their units if they use them as long-term rentals / Under their current ownership, VHRs would not be affordable housing if they weren't used as VHRs (2)
- VHRs can accommodate more people than a hotel for a similar or lower price (1)
- VHR renters should be responsible for any problems that occur (1)
- The City should not consider the interests of nonresident VHR owners as much as residents (1)
- Concern over TOT collection for Airbnb room-shares (1)

### Questions

Questions were generally about the VHR study, the existing and historic conditions of South Lake Tahoe, or specific VHR impacts. These questions are summarized below with the number of questions in parentheses in the event that similar questions were asked multiple times.

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- Questions about the VHR analysis
  - How will data be processed?
  - Which variables will be used to evaluate neighborhood character?
  - What is the difference between administrative and public drafts?
  - Does the City have a positive or negative opinion of VHRs?
  - Will tourists be polled to understand how the industry would be altered by changing VHR availability?
- Questions about existing and historic conditions in South Lake Tahoe
  - How much does the VHR industry contribute to the tourist economy / is it critical? (4)
  - What is the evolution of the VHR industry?
  - Has a VHR permit ever been pulled because the violation limit has been exceeded?
- Questions on specific issues
  - How to deal with incompatible uses in residential zones?

### Summary of Major Themes

Overall, there were significant differences in voting results and comments between in-person participants and those who voted via text message or participated via the YouTube stream. Those who participated via text message tended to be more critical of regulation and supportive of recognizing the positive impacts of VHRs. This is likely due to the fact that a greater proportion of those participants were VHR owners. Both groups had similar concerns over the scope of the VHR study and the overall health of the South Lake Tahoe community, though sometimes from different vantage points. For instance, there was disagreement over which types of properties are maintained better. Some participants believed that VHRs are poorly maintained “party houses,” whereas others believed that long-term rentals have worse maintenance issues due to the lack of regulation. However, the key concerns were the same.

### *Impacts*

#### In-Person Participants

In general, the majority of in-person participants agreed that VHRs have positive impacts, including lodging opportunity expansion, economic and job growth, and revenue to the city. However, positive impacts such as the belief that VHRs are well-maintained and that VHRs provide necessary supplemental income to owners were less popular, receiving only 26 percent and 39 percent of votes for “yes,” respectively. In-person participants also agreed more strongly on most of the negative impacts, including strain on public services (60 percent “yes”), inappropriate uses in residential neighborhoods (55 percent “yes”), negative impacts on neighborhood character (67 percent “yes”), and decreasing the supply of affordable housing (68 percent “yes”).

For those property owners who attended the meeting in-person, the majority stated that they would never convert their VHRs to long-term rentals if they were not VHRs; no one cast a vote for “Long-term Rental” for this question. About 27 percent of these responses indicated that they would instead be vacant, and 64 percent indicated “other.” “Other” could be a number of options, including selling the unit or moving back into the unit.

Voting results showed that remote participants agreed with positive impacts more than in-person participants. For every question about positive impacts, remote participants voted yes between 9 and 43 percent higher than in-person participants. This is likely due to the fact that most remote participants were VHR owners, and therefore more supportive of VHRs. This trend is also evident in responses to the negative impacts. For every question about negative impacts, remote participants voted no between 14 and 43 percent higher than in-person participants.

Similar to the in-person property owners, the majority of those who participated remotely also stated that they were less likely to convert VHRs to long-term rentals (10 percent). About 53 percent of these responses indicated that they would be vacant, and 25 percent indicated “other.”

### *VHR Study*

Many of the questions and comments provided at the workshop related to the VHR study. Attendees were concerned about data sources and analysis, and were interested in learning general information about the history of VHRs in South Lake Tahoe. When possible, these questions and comments were addressed during the workshop.

### Workshop 3

The third workshop for this study will be held on June 13, 2017. The meeting is scheduled to include a presentation of the key findings to the City Council and the public, followed by an opportunity for questions and answers from the research team.

### **2.2.3 Stakeholder Focus Group Meetings**

Discussions were held in the fall of 2016 with stakeholders representing four different perspectives: VHR owners and operators, lodging operators, the real estate community, and residents. Most of the stakeholders participated in focus group meetings conducted on November 15 and 16 at the South Lake Tahoe Senior Center. The purpose of these conversations was to gain an understanding of diverse community perspectives on VHRs, such as impacts they have on certain sectors of the community, and potential regulatory options. Each group conversation lasted approximately one and one-half hours. Conversations with individual stakeholders lasted between one-half hour and one hour.

### Approach

Each focus group followed a list of questions that were divided into three categories: Impacts, Responsibilities, and Regulation. These questions were used to guide the conversation, rather than set a firm structure. Therefore not all questions were asked and/or answered in every focus group, depending on their relevance and the stakeholders' responses.

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### Discussion Questions

Table 2.1 lists the discussion questions.

**TABLE 2.1**  
**FOCUS GROUP DISCUSSION QUESTIONS**

| Impacts                                                                                                                                                                                                             | Responsibilities                                                                                                                                                                                  | Regulation                                                                                                                   |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------|
| 1. Have you noticed changes in the City since the increase in VHRs?                                                                                                                                                 | 8. What role do you have in the VHR industry (property owner, VHR manager, vacationer, etc.), if any?                                                                                             | 12. What do you understand about the City's current regulations?                                                             |
| 2. From your perspective, what are some of the most positive impacts of VHRs?                                                                                                                                       | 9. If you work in the industry, what are your main responsibilities (property upkeep, complaints to code enforcement, communication with neighbors, etc.)?                                        | 13. What do you think of the City's current approach to regulation?                                                          |
| 3. What do you see as the top 3 opportunities for leveraging the positive impacts (if any)?                                                                                                                         | 10. If you do not work in the industry, what do you do when you observe a VHR-related problem? (call the VHR emergency contact, call Sheriff or Fire Department, report code violations, nothing) | 14. Are you aware of other cities' approaches to VHR regulation?                                                             |
| 4. From your perspective, what are some of the most negative impacts of VHRs? Do you believe there are any particular issues or impacts related to VHRs that the City is not addressing in its current regulations? | 11. What 3 individuals or entities should be most responsible for managing the impacts of VHRs? (rank)                                                                                            | 15. If yes, can you think of any approaches that should be brought to South Lake Tahoe and are feasible in South Lake Tahoe? |
| 5. What do you see as the top 3 priorities for the City in addressing negative impacts (if any)?                                                                                                                    | Examples: City of South Lake Tahoe, VHR companies (Airbnb, VRBO, etc.), VHR property management companies, local businesses, local residents, others                                              | 16. Are there challenges that South Lake Tahoe has that are unique to this community?                                        |
| 6. Do you believe that VHRs impact local and regional businesses? Do VHRs impact your business or professional life?                                                                                                |                                                                                                                                                                                                   | 17. What do you think are some of the main challenges to the regulation and management of VHRs?                              |
| 7. Do you foresee future challenges or needs as the number of VHRs grows in South Lake Tahoe?                                                                                                                       |                                                                                                                                                                                                   | 18. What is your vision for the future of VHRs in South Lake Tahoe?                                                          |

### Attendance

The details of the four stakeholder meetings are summarized in Table 2.2 below.

**TABLE 2.2**  
**STAKEHOLDER MEETING ATTENDANCE**

| Category and Time         | Time                                       | Attendees |
|---------------------------|--------------------------------------------|-----------|
| VHR Owners and Operators* | November 15, 2016<br>1:30–3:00 p.m.        | 13        |
| Lodging Operators**       | November 15, 2016<br>3:30–5:00 p.m.        | 1         |
| Real Estate Community     | November 16, 2016<br>11:00 a.m.–12:30 p.m. | 3         |
| Residents                 | November 16, 2016<br>2:00–3:30 p.m.        | 6         |

*\*Includes employees from cleaning companies that service VHRs in South Lake Tahoe.*

*\*\*Invitations were extended to six of the city's largest traditional lodging operators and industry groups; however, only one attended the stakeholder meeting.*

### Summary of Major Themes

Through meetings with selected stakeholder groups in smaller settings, it was clear that there are differences in perspectives depending on the segment of the community.

VHR owners (Focus Group 1) and lodging operators (Focus Group 2) tended to have similar viewpoints, including that increased enforcement of and attention to certain properties or regions with more problems will solve some of the major problems. Furthermore, both groups noted that there is an important distinction in different types of VHRs that should be noted by the community: professionally managed versus owner-managed VHRs. Both groups also acknowledged the negative and positive impacts, but were less concerned about negative impacts.

Members of the real estate community (Focus Group 3) also recognized positive and negative impacts, but were concerned about regulatory impacts on their industry, due to the fact that many prospective buyers want to use their homes as VHRs and are dissuaded by regulations and fees.

Residents tended to be more concerned about negative impacts of VHRs, and expressed interest in VHR regulations that could be enforced better. Similar to the other focus groups, residents recognized the differences between types of VHRs and noted that these distinct definitions are needed in South Lake Tahoe, especially since it is a vacation community that does receive benefits from tourism.

#### **2.2.4 Other Community Input**

In addition to comments received in the online survey and at outreach events, residents and stakeholders provided additional insight via mail and email. The project team received over 25 emails and/or letters with additional comments, in many cases from interested parties who were unable to attend workshops. This input is categorized and summarized below, with the number of total comments in parentheses in the event that a particular comment was made multiple times by different individuals.

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### *Outreach Methods*

#### Survey

- Survey is biased against the VHR industry (2)
- Wording incorrectly implies that VHRs are “low-cost” or “discount lodging” (1)

#### Workshops

- VHR owners will not be able to participate in night meetings (1)
- Interviewing locals will not capture input of tourists and other people who may be affected by regulations (1)

### *Negative Impacts of VHRs / Concerns about VHRs*

- Neighborhood character is impacted by VHRs (trash, traffic, parking, hot tubs, public services, etc.) (7)
- Large mega-homes interfere with neighborhood character more than small VHRs (5)
- VHRs are commercial uses in residential neighborhoods (3)

### *Positive Impacts of VHRs / in Support of VHRs*

- VHRs provide employment and income that is important for the community (6)
- Long-term renters are not always better than vacationers (3)
- Renting out homes as VHRs provides necessary supplemental income to property owners (3)
- VHR owners should have property rights (3)
- Not all VHRs are poorly maintained “party homes” (2)
- VHRs provide an attractive alternative to hotels (2)
- Renting VHRs shows tourists the benefits of South Lake Tahoe and encourages long-term homeownership (2)
- VHRs have resulted in increased property values (1)
- VHRs with property managers are well-maintained (1)

### *VHR Regulation*

#### Opinions on Existing Regulations

- Existing regulations are vague (1)
- Existing regulations are difficult to implement on all properties (if older property does not have driveway, etc.) (1)

#### Opinions on Future Regulations

- Enforce existing policies (3)
- Enforce maintenance, appearance, and safety regulations across the entire city (in addition to VHRs) (2)

- Provide distinction/different regulations for different types of VHRs (e.g., second home VHRs, investment properties, mega-homes) (2)
- Do not provide VHR permits to properties that were sold recently to prevent investment properties (1)
- Impose building moratorium (1)
- Require VHR owners to have plans for waste collection and bear boxes (1)
- Limit density of VHRs (1)
- Limit VHR rental days per year (1)

### Summary of Major Themes

This additional community input was similar to that received from other outreach events and methods. VHR owners expressed the benefits of VHRs and concern over stringent regulations, and residents expressed concerns about neighborhood character and mega-homes being rented as VHRs in residential neighborhoods.

#### **2.2.5 Outreach Key Findings**

Residents and VHR and nonresident vacation home owners experience the impacts of VHRs in the community very differently.

While both groups agree that the VHR market supports the tourist economy and provides economic benefit to the city, residents have a more negative perception of VHRs due to immediate impacts on the neighborhood, such as improper trash management.

Both groups strongly feel that increased enforcement of existing regulations is needed.

While noise is a key concern for both groups, both VHR and vacation home owners and residents believe VHRs are predominantly a benefit to the community.

Residents perceive that VHRs take housing units out of the stock available for long-term residential occupancy, while vacation home and VHR owners perceive that, for most VHR units, even if the unit was not used as a VHR, it would remain a vacation home and would not be available for long-term residential occupancy anyway.

The most popular regulatory options among both groups involve licensing and penalties for failure to meet City codes and ordinances.

VHRs pose an increased burden on community services, such as police and code enforcement.

VHRs operated by local management companies have fewer negative impacts than VHRs operated by nonresident property owners.

While VHRs provide a significant amount of TOT and have garnered a large market share, it was difficult to engage the traditional hotel and motel operators in the process, suggesting that the traditional accommodation industry is less concerned with impacts of VHRs on the vacation accommodation market.

## 2. DATA ANALYSIS AND RESULTS

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### 2.3 DATA TRENDING RESULTS AND ANALYSIS

Understanding the history and the changes that have happened in South Lake Tahoe over both the short and long term helps provide clarity about how the impacts of VHRs on the community have evolved. The following section includes data trends analysis of three specific topics: changes in demographics of South Lake Tahoe residents; changes in the type and quality of housing stock available in South Lake Tahoe; and changes in the economic environment in South Lake Tahoe, including an evaluation of employment and changes in the tourist economy. This section is followed by future projections based on this past trend analysis.

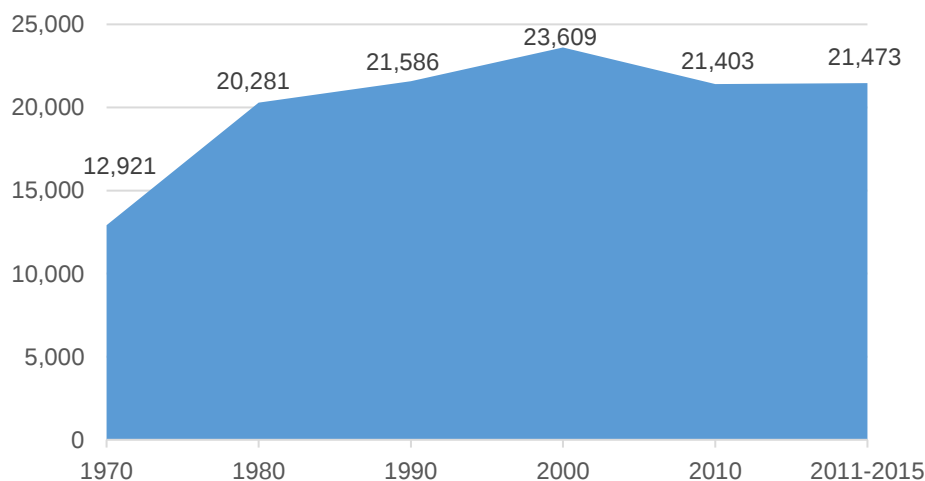
#### 2.3.1 Demographic Trends in South Lake Tahoe

Over the last five decades, the City of South Lake Tahoe has experienced significant demographic changes. Understanding a community's demographics is important because different populations have different needs and priorities. This is particularly true when it comes to core needs and services, such as education, healthcare, and housing. At the same time, community demographics are often changing, as the population ages, families transform, and race and ethnic configurations change. The following figures and discussion explores the changes in race and ethnicity, family size and type, and age in the city over the last five decades.

##### Total Population

Figure 2.10 shows changes in the total population in South Lake Tahoe since 1970.

**Figure 2.10**  
**Total Population Graph**



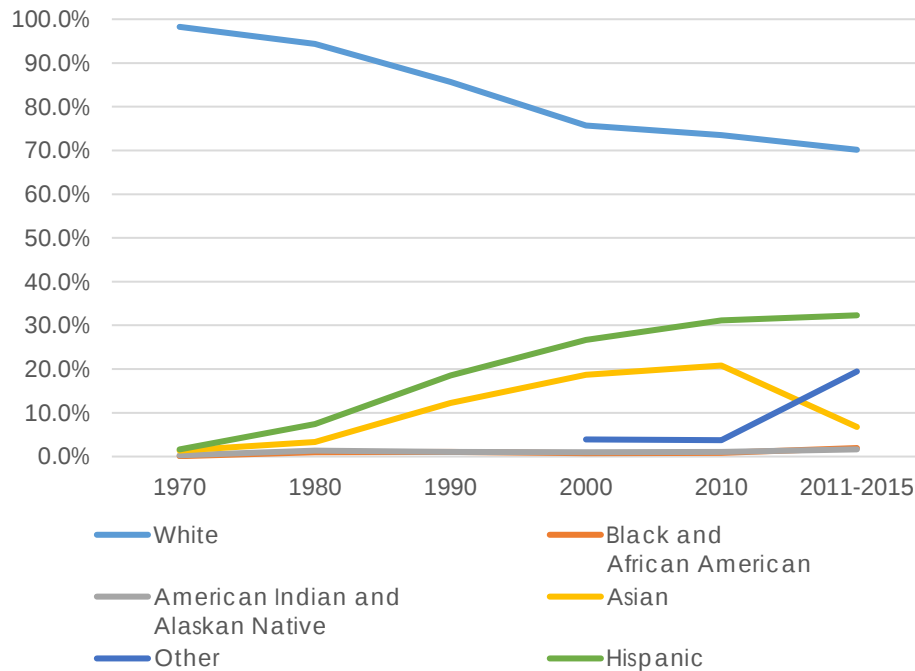
Source: 1970–2010 US Census; 2011–2015 ACS

The population in the city peaked at 23,609 persons in 2000 and decreased 9 percent between 2000 and 2015. The city showed a very slight (0.3 percent) increase in population between 2010 and 2015; however, the overall trend is still a significant decrease in the rate of population growth. The next sections describe these overall changes in more detail.

## Race and Ethnicity

Figure 2.11 shows how race and ethnicity has changed in South Lake Tahoe since 1970.

**Figure 2.11**  
**Race and Ethnicity Graph**



Source: 1970–2010 US Census; 2011–2015 ACS

As Figure 2.11 shows, South Lake Tahoe has changed significantly in terms of race and ethnicity. The most significant increase is in the Hispanic population, which increased from 1.6 percent of the population in 1970 to 32.3 percent in 2015. In the 2000 census, the survey forms began collecting race and ethnicity data in greater detail, which has had some influence on how the different populations compare. The US Census tracks ethnicity separately from race, and the increase in Hispanic persons in the city is not skewed by the changes in the survey forms. Between 2010 and 2015, the white and Asian populations decreased while the other populations increased. This change is due to the increased level of detail collected on the US Census survey forms, which roll up under the US Census “other” category as opposed to Asian. The race and ethnicity changes in the city over the last few decades have aligned more with the state of California as a whole than with El Dorado County, resulting in greater diversity in the city than in the surrounding county. For example, the percentage of the population identifying as white in the city in 2015 is 70.2, compared to 86.7 percent in the county and 65.5 percent in the state. Similarly, the percentage identifying as Hispanic is 32.3 in the city, 12.0 in the county, and 38.4 statewide.

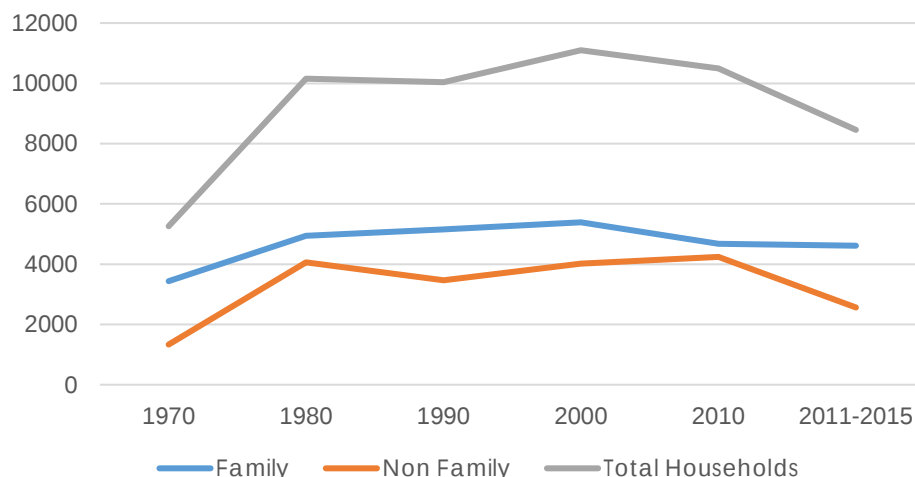
## Household Size and Type

Families and households vary significantly by household composition. The US Census defines a family as two or more related individuals living together. Family households include married couples, single parents with children, and multigenerational households. Non-family households include single-person households and households with unrelated persons living together. Family

## 2. DATA ANALYSIS AND RESULTS

and household data is tabulated slightly differently. Family data only includes households that identify as families with related persons living together. Household data includes both families and non-families. Often family data varies from overall household data, especially in terms of household size and income. Figure 2.12 shows how the total number of family and non-family households in South Lake Tahoe have changed since 1970.

**Figure 2.12**  
**Household Type Graph**



Source: 1970–2010 US Census; 2011–2015 ACS

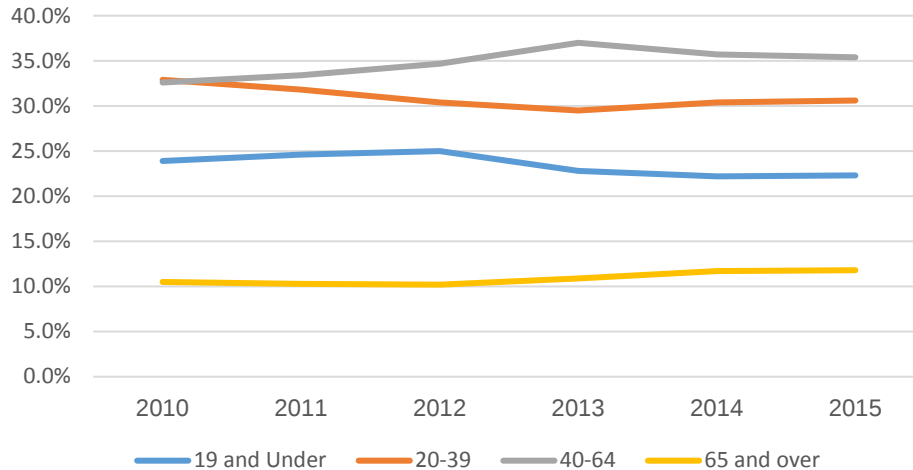
As Figure 2.12 shows, the number of households in South Lake Tahoe increased dramatically between 1970 and 2000, peaking at 11,098 total households. The total number of households decreased somewhat between 2000 and 2010, and decreased sharply from 2010 to 2015. During this period, the total number of family households fluctuated significantly less than the overall population; however, there has been an overall 14.4 percent decrease in the total number of families since the peak of 5,389 in 2000. The decrease in the number of family households is accentuated by the even more dramatic decrease in the number of non-family households, which has dropped 39.6 percent since 2010.

Comparing the total population changes to the changes in the total number of households shows that the two totals do not track very evenly. The decrease in the number of households is far more significant than the population loss. The difference is explained in changes in household and family size. In 2010, the average family size in South Lake Tahoe was 2.99 persons; by 2015 that number had increased 9 percent to 3.26 persons per family. Average household sizes also increased over the same period, from 2.21 persons in owner-occupied housing and 2.45 persons in renter-occupied housing in 2010 to 2.41 persons in owner-occupied housing and 2.57 persons in renter-occupied housing in 2015 (9 percent and 5 percent increases, respectively). While there are fewer households in South Lake Tahoe, the remaining households are larger, with more people sharing housing.

## Population Age

People have very different needs and priorities as they age. Families with children need childcare and have education as a priority concern. As children age, activities for pre-teens and adolescents often become priorities. Households and families both with and without children also need employment, making economic opportunity a frequent household priority for those younger than retirement age. Households entering retirement age are often more concerned with the availability of healthcare and affordable housing, and for many, the ability to age in place becomes a priority. Understanding the age distribution in the population can help jurisdictions balance needs and priorities with available resources. The age distribution in the city remained fairly stable, with a slight shift toward a growing percentage of the population aged 65 and over in the decades prior to 2010. Figure 2.13 shows the age distribution in South Lake Tahoe from 2010 to 2015.

**Figure 2.13**  
**Age Distribution Graph**



Source: 2006–2010 ACS, 2007–2011 ACS, 2008–2012 ACS, 2009–2013 ACS, 2010–2014 ACS, 2011–2015 ACS

To help evaluate changes in population, the population distribution in the City of South Lake Tahoe was divided into four categories: 19 and under includes predominantly school-age children, while 20–39 includes persons who are generally at the stage where they are developing careers and building families. The 40–64 group includes more mature families and households farther along in the employment cycle. The final group is 65 and over to capture persons of retirement age. Between 2010 and 2015, there was a 6.7 percent decrease in persons aged 19 and under, and a 7 percent decrease in persons between 20 and 39, while there was an 8.6 percent increase in persons aged 40 to 64 and a 12.4 percent increase in persons over 65. These changes suggest that the community as a whole is aging. Fewer school-age children and young families indicate a reduced need for public education facilities and services targeting families with children. It also suggests that there are fewer opportunities or more significant challenges for younger families with children in South Lake Tahoe. Conversely, the increase in mature families and persons of retirement age suggests that there are more opportunities or fewer challenges for these groups, who are often either more economically able to continue to live in the city and/or have aged in place.

## 2. DATA ANALYSIS AND RESULTS

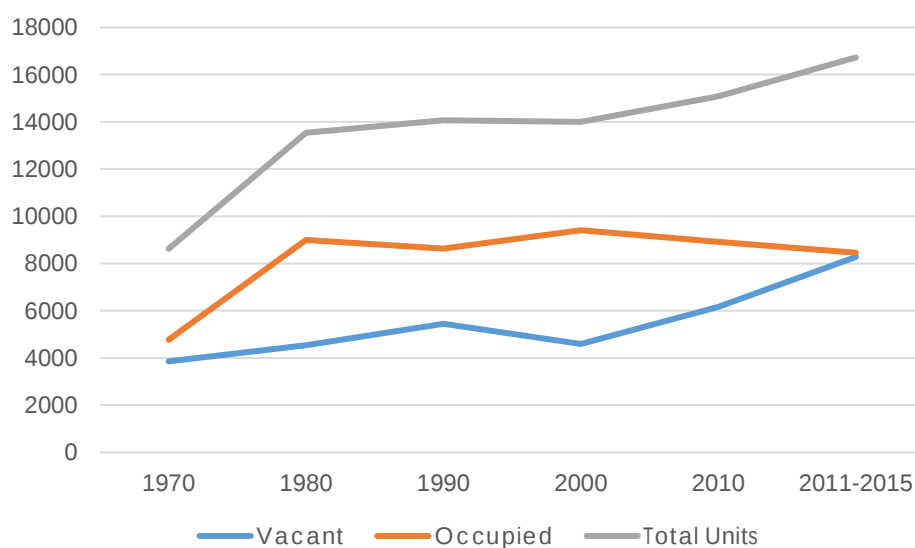
### 2.3.2 Housing Stock in the City of South Lake Tahoe

Housing is a fundamental need that dramatically impacts the quality of life in any given neighborhood. Housing age, condition, affordability, and supply are all critical factors in determining how well the available housing stock meets the needs of the community. The following section evaluates the housing stock in the city to help determine how the VHR market may be impacting housing in South Lake Tahoe. This section will first evaluate the physical housing characteristics, such as supply, age, and condition. Then it provides information about how the available housing interacts with the community needs, such as affordability, crowding, and other housing problems. Finally there is an analysis of the housing market, including housing price, mortgage, and contract rent, and a comparison of VHR and non-VHR homes that have recently been sold.

#### Housing Units

There are a number of factors that impact housing development in the city. In addition to the housing market influences that impact housing development throughout the state, South Lake Tahoe has environmental factors that play a major role in how and when new housing can be built. The Tahoe Regional Planning Agency (TRPA) regulations substantially influence how residential growth occurs in the Lake Tahoe Basin, and new homes must meet environmental standards that are intended to protect the sensitive watershed areas that feed into the lake. In addition to the environmental factors, geographic boundaries limit how many new units can be added in the Lake Tahoe Basin. These restrictions prevent the typical market response to a perceived housing shortage. Developers cannot simply build more units, particularly lower-cost units which are considered to be more affordable and which usually have much narrower profit margins than market-rate units, as easily as in other jurisdictions outside the Tahoe Basin. The result is a fairly static housing supply with little ability to respond to changes in the housing market. The economic analysis section of this report further discusses the role that TRPA and environmental concerns play in the housing market. Figure 2.14 shows the overall change in total housing units in South Lake Tahoe since 1970 compared to the total number of occupied and vacant units.

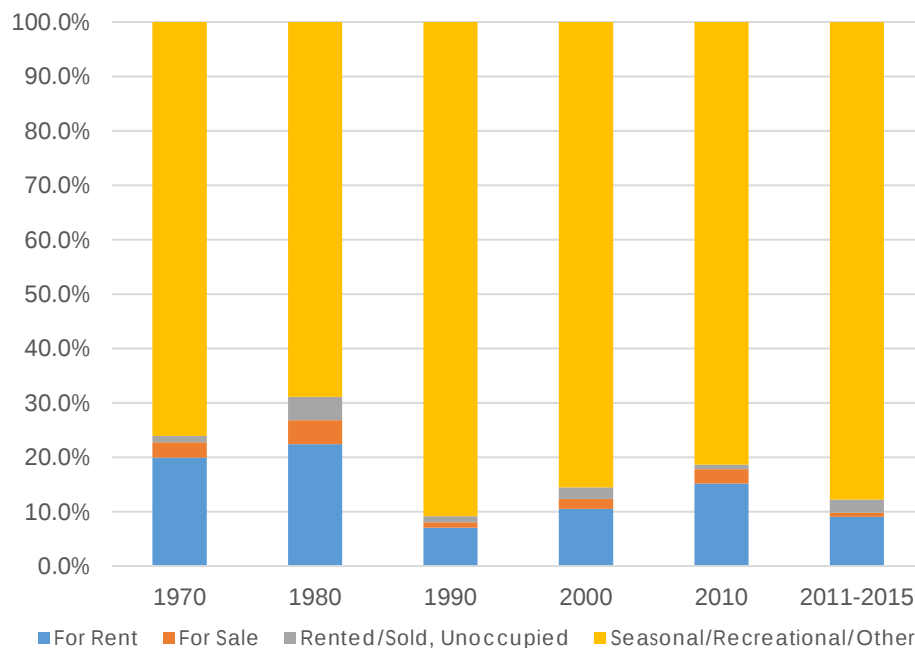
**Figure 2.14**  
**Total Housing Unit Graph**



Source: 1970–2010 US Census; 2011–2015 ACS

Figure 2.14 shows how the mix of vacant and occupied housing units has changed in South Lake Tahoe since 1970. South Lake Tahoe's tourist economy and status as vacation destination has been a significant factor in the vacancy rate of the city's housing stock for many decades. Second homes or vacation homes have been a long-term factor in the city's housing market. VHRs are considered vacant in terms of how the US Census and the American Community Survey track housing occupancy. The number of vacant homes as a percentage of the total housing stock has increased dramatically since 2000 while the number of occupied units has steadily decreased over the same period. Between 2000 and 2015, there was an 80.2 percent increase in total vacant units, with only a 19.5 percent increase in total housing units. At the same time there was a 10.2 percent decrease in occupied units. Not all vacant units are second homes or vacation rentals. Figure 2.15 shows the changes in the composition of vacant units since 1970.

**Figure 2.15**  
**Vacant Unit Distribution Graph**



Source: 1970–2010 US Census, 2011–2015 ACS

Figure 2.15 shows the distribution of vacant units among units available for rent or for sale versus units reserved for seasonal, recreational, or other occupancy. In 2015, only 9.1 percent of the vacant housing stock was available for rent, and 0.8 percent was available for sale. The only comparable point in time is 1990, where 7.1 percent of the vacant housing stock was for rent and 1.0 percent was available for sale. For reference, a comparison of Figure 2.14 (total housing units) with Figure 2.15 (vacant unit distribution) shows that 1990 also marked an increase in the proportion of the housing stock that was vacant, and that the vast majority of those vacant units were being utilized as seasonal or recreational units. The shortage of available-for-rent and for-sale units shows the pressure that the proliferation in vacant units puts on the city's relatively static housing stock.

## 2. DATA ANALYSIS AND RESULTS

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### Vacation Home Rental Units

The increase in vacant units in the city is likely attributed in part to the 53 percent increase in VHR units between 2011 and 2016. Table 2.3 shows the year-over-year change in VHRs in the city.

It is worth noting that the VHR counts only include the units that are in compliance with the City's VHR ordinances and have registered as VHR units for tracking purposes. Units that are unregistered are not calculated. Additionally, there were several duplicates in the year-over-year VHR unit lists, particularly when VHR units had been sold or if the company managing the unit had changed. While all duplicate units were removed during the data processing, the City recognized that there were also units on the lists that at some point had ceased operating as VHRs but were not removed from the lists. It was infeasible to retroactively correct the VHR lists the City had on file, as the only way the VHRs were tracked was through the lists. There was no backup documentation and many units had changed hands multiple times over the years. As a consequence, the City suspects that the total number of units on the list may be marginally inflated each year.

The study team decided to use the lists as is, after clearing the known duplicates, to prevent further inconsistencies in the data where some lists were fully accurate and others were not. Another factor in the decision to use the existing lists is that while the City has been actively working to get all advertised VHRs registered and licensed, there are still unregistered VHRs in operation. Lists that only reflect the registered VHRs likely marginally undercount the total units. The study team suspects that the existing lists probably include between 200 and 300 additional units as VHRs that are no longer operating as VHRs. There is no estimate for how many units may be operating illegally. Illegal units are typically identified via complaint from a neighbor or through identification of a unit through advertising photos. The VHR advertising sites do not include addresses, and cooperation with local governments in enforcing ordinances and regulations is inconsistent from one site to another. This inconsistency complicates efforts to estimate illegal units.

**Table 2.3**  
**Year-over-Year VHR Totals**

| Year | Total VHR Units | Percentage Change |
|------|-----------------|-------------------|
| 2011 | 1,213           |                   |
| 2012 | 1,262           | 4.0%              |
| 2013 | 1,455           | 15.3%             |
| 2014 | 1,505           | 3.4%              |
| 2015 | 1,730           | 15.0%             |
| 2016 | 1,861           | 7.6%              |

*Source: City of South Lake Tahoe 2016*

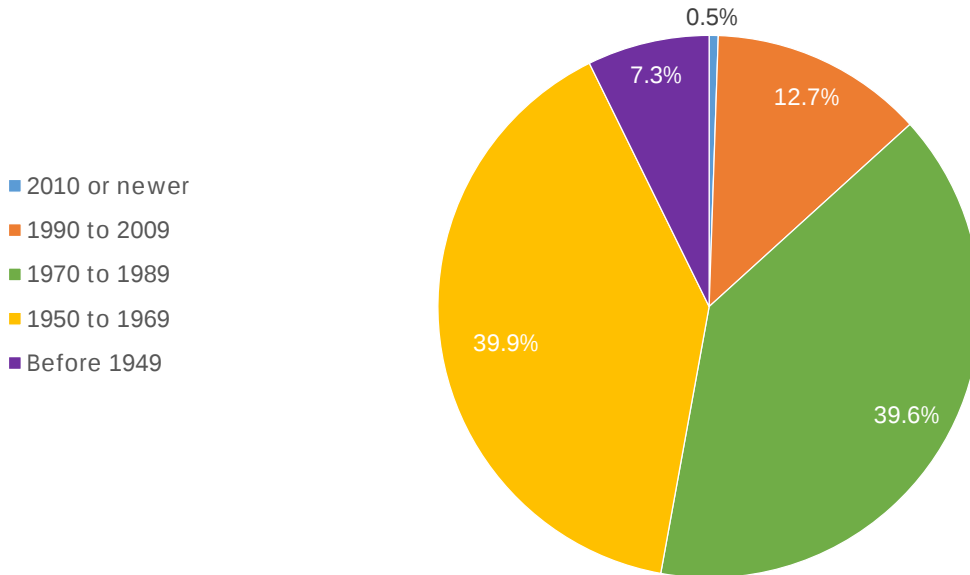
Comparing the above table with the US Census and ACS data suggests that the rate of increase in VHR units, while inconsistent, is still much more rapid than the increase in units added to the housing stock over the same period, and is faster than the increase in overall vacant units in the city for that time frame.

### Housing Age and Condition

Housing age and condition are frequently related factors. As housing ages, the need for maintenance increases, and major systems, such as roofing, electrical, and plumbing, begin to

need replacement. Mature landscaping can also become an issue as trees or bushes encroach into path of travel or begin to crowd structures and utilities. Figure 2.16 shows the general age of the housing stock in South Lake Tahoe.

**Figure 2.16**  
**Housing Age Graph**



Source: 2011–2015 ACS

As Figure 2.16 shows, 86.8 percent of the housing in South Lake Tahoe was built before 1990, and 47.2 percent was built before 1970. Several factors contribute to housing condition beyond the age of the units. The alpine climate in South Lake Tahoe, with freezing winters and warm summers, takes a higher toll on buildings than more moderate climates, and both weatherizing and energy efficiency standards have changed significantly since the 1970s. The older housing stock combined with the high vacancy rate and the varied climate would suggest that there is a significant amount of dilapidated housing, or housing with deferred maintenance. However, a housing condition survey completed in 2002 found that only 11 percent of the housing needed moderate or substantial rehabilitation or demolition (South Lake Tahoe 2014–2022 Housing Element). A review of building permit data provided by the City also suggested significant reinvestment in the housing stock.

Building permit data was analyzed based on the estimated valuation of the work to be completed. About 2,132 permits for alterations or additions to existing housing stock with estimated values of over \$100 were issued between 2001 and 2016. These permits were divided into four groups to help evaluate the estimated impact of maintenance and reinvestment in the existing housing stock. The City issued 815 permits (38.2 percent of the total) with a work valuation of \$9,999 or less, which would be indicative of minor repairs and maintenance; 847 permits (39.7 percent of the total) were issued for work valued between \$10,000 and \$49,999, which suggests more significant maintenance and rehabilitation; 290 permits (13.6 percent of the total) were issued for work valued between \$50,000 and \$99,999, which indicates full rehabilitation and remodeling; and 180 permits (8.4 percent of the total) were issued for work valued at \$100,000 or more, which would represent substantial remodels to rebuilds. In total, approximately \$33,266,000 in estimated work value was permitted between 2001 and 2016. Considering that building permits

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are not required for cosmetic maintenance, such as interior and exterior paint, new interior flooring, cabinetry, and finishes, or most landscape maintenance, the total reinvestment in the existing housing is likely much higher.

### Housing Size

In most housing markets, home size tracks fairly closely with market demands. The square footage of new homes grows and shrinks according to cost, available land, and general buyer preference. The housing market in South Lake Tahoe does not have that sort of flexibility; however, the housing stock has seen some changes over the last several years. Since 2010, there has been some increase in smaller units and decrease in larger units. Table 2.4 shows the change in the number of bedrooms in South Lake Tahoe housing units between 2010 and 2015.

**Table 2.4**  
**Housing Unit Size Comparison**

| Number of Bedrooms      | 2010 Housing Units | 2015 Housing Units | Percentage Change |
|-------------------------|--------------------|--------------------|-------------------|
| Studio/Efficiency Units | 694                | 818                | 17.9%             |
| 1 Bedroom Units         | 2,183              | 2,411              | 10.4%             |
| 2 Bedroom Units         | 5,117              | 5,776              | 12.9%             |
| 3 Bedroom Units         | 5,353              | 5,791              | 8.2%              |
| 4 Bedroom Units         | 1,512              | 1,645              | 8.8%              |
| 5 or More Bedroom Units | 511                | 289                | -43.4%            |
| Total Housing Units     | 15,370             | 16,730             | 8.8%              |

Source: 2006–2010 ACS, 2011–2015 ACS

A major community concern has been the perceived increase in extremely large homes that have recently been built, either as second or recreational homes or to be used as VHRs. The City's VHR permit tracking has identified 34 VHR units at 4,000 square feet or larger. However, according to the ACS, the change in housing size in South Lake Tahoe has reflected a loss of larger units and an increase in smaller units. This change could be the result of several different scenarios. One scenario could be that some larger units have been split into multiple smaller units, which could account for both the decrease in larger units and some of the increase in smaller units. Another scenario could be the conversion of larger units to nonresidential uses.

Table 2.5 shows the average square footage of new units permitted in the city between 2012 and 2016.

**Table 2.5**  
**New Housing Average Square Footage**

| Year            | 2006  | 2007  | 2008  | 2009  | 2010  | 2011  | 2012  | 2013  | 2014  | 2015  | 2016  |
|-----------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Average Sq. Ft. | 3,309 | 2,473 | 2,355 | 2,687 | 1,917 | 2,552 | 3,208 | 2,561 | 2,944 | 2,737 | 3,025 |

Source: City of South Lake Tahoe

New housing units built between 2006 and 2016 typically range between 2,500 and 3,500 square feet, with the exception of 2008 when the average new home was 2,355 square feet, and 2010

when the average was 1,917.<sup>1</sup> During this period, 37 total new homes over 4,000 square feet were permitted. Of those 37 units, 24 permits were issued for units between 4,000 and 4,999 square feet, 10 permits were issued for units between 5,000 and 5,999 square feet, 3 permits were issued for units between 6,000 and 6,999 square feet, and 1 permit was issued for a unit over 9,000 square feet. The average new home size in the building permit data fits with the overall increase in three- and four-bedroom units identified in the ACS data.

### Housing and Residents

Several different factors play roles in how housing impacts communities. The section above discussed the changes in overall housing stock in the city, particularly the changes in the occupied versus vacant housing stock. The following discussion focuses on the interaction between households and the available housing, and reviews changes in housing tenure and housing occupancy characteristics.

### Housing Tenure

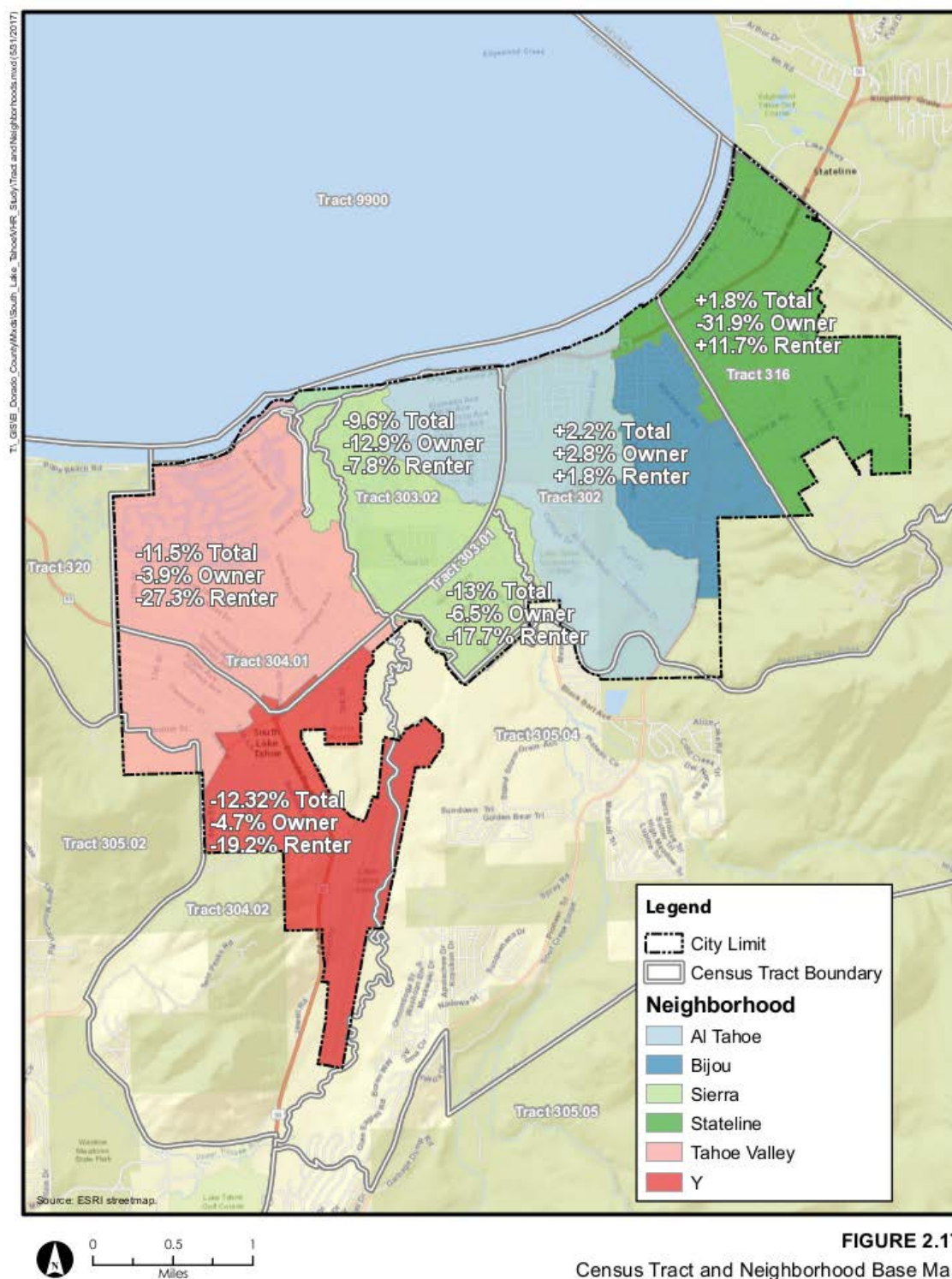
Housing tenure refers to whether households own or rent their home. Different housing markets have very different tenure ratios. Many suburban neighborhoods have high percentages of owner-occupied housing, while lower-income or dense urban neighborhoods often have higher rates of renter occupancy. About 44 percent of housing is owner occupied in the city, while the remaining 56 percent is renter occupied. As mentioned earlier, there has been a shift from occupied units to vacant units in the city. Between 2010 and 2015, about 6.2 percent of the city's occupied housing was converted to vacant. Approximately 5.3 percent of these lost units were rental units and 7.3 percent were owner-occupied units. The conversion of housing units from occupied to vacant has predominantly occurred in the city's single-family units. Figure 2.17 shows the gains and losses in housing stock by tenure in the census tracts across the city.

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<sup>1</sup> 2010 building permit data does not include outlier units in average due to small sample size.

## 2. DATA ANALYSIS AND RESULTS

**Figure 2.17**  
Percentage Change in Housing Units by Tenure by Census Tract



**FIGURE 2.17**  
Census Tract and Neighborhood Base Map

**Michael Baker**  
INTERNATIONAL

Source: 2006–2010 ACS, 2011–2015 ACS

As shown in the figure above, the loss of housing units has not been uniform across the city. Neighborhoods with higher concentrations of residential, particularly single-family residential units, have seen a loss of more units than neighborhoods with more mixed uses. In the map above, Total refers to the percentage change in total housing units, Owner refers to the percentage change in owner-occupied units, and Renter refers to the percentage change in renter-occupied units. The City's ordinances (since 2016) prevent the conversion of multifamily units into VHRs, and the loss of units available for full-time occupancy puts significant pressure on the rental market. The following section provides more detailed information about the challenges facing residents in finding and retaining suitable housing in the city.

### Comprehensive Housing Affordability Strategy (CHAS) Data

The US Department of Housing and Urban Development (HUD), in partnership with the US Census Bureau, uses ACS data to complete in-depth analysis of housing by census tract across the nation and releases annual updates to its Comprehensive Housing Affordability Strategy (CHAS) database. HUD entitlement jurisdictions use CHAS data as part of their comprehensive planning cycles for HUD funding; however, even jurisdictions that do not receive entitlement funds from HUD are included in the CHAS datasets. These datasets include information about housing problems, such as high cost burden and overcrowding, and assess how these problems impact different segments of the population, including minority groups, seniors, and low- and very low-income households. HUD defines four specific housing problems with two tiers of severity. The four housing problems are the unit lacks a complete kitchen; the unit lacks complete indoor plumbing; the unit has more than one person per room (overcrowding); and the housing cost burden is greater than 30 percent of the gross monthly income (cost burden). There are also two categories of severe housing problems: the unit has more than 1.5 persons per room (severe overcrowding); and the housing cost burden is greater than 50 percent of the household's gross monthly income (severe cost burden). Almost all of the housing problems in South Lake Tahoe are related to overcrowding and cost burden. Table 2.6 shows the percentage of owner- and renter-occupied housing that experiences overcrowding and housing cost burdens as defined by HUD.

**Table 2.6**  
**HUD Housing Problems**

| Housing Type    | Overcrowding | Severe Overcrowding | Cost Burden | Severe Cost Burden |
|-----------------|--------------|---------------------|-------------|--------------------|
| Owner Occupied  | 1.5%         | 2.4%                | 21.7%       | 22.4%              |
| Renter Occupied | 2.9%         | 8.6%                | 22.4%       | 21.9%              |
| Total           | 4.4%         | 11%                 | 44.1%       | 44.3%              |

Source: 2009–2013 CHAS data

A significant portion of both the rental- and owner-occupied housing in the city experiences a housing problem; cost burden is the most common, followed by overcrowding. The CHAS data estimated approximately 30 owner-occupied and 45 renter-occupied units with incomplete kitchen or plumbing facilities in the city. The impacts of both the cost burden and the overcrowding issues are further emphasized by the severe housing problem dataset. Approximately 11 percent of the city's housing units have severe overcrowding and about 44.3 percent of households in the city have a severe housing cost burden. The following section evaluates housing costs in the rental market, the owner-occupied market, and the vacation rental market.

## 2. DATA ANALYSIS AND RESULTS

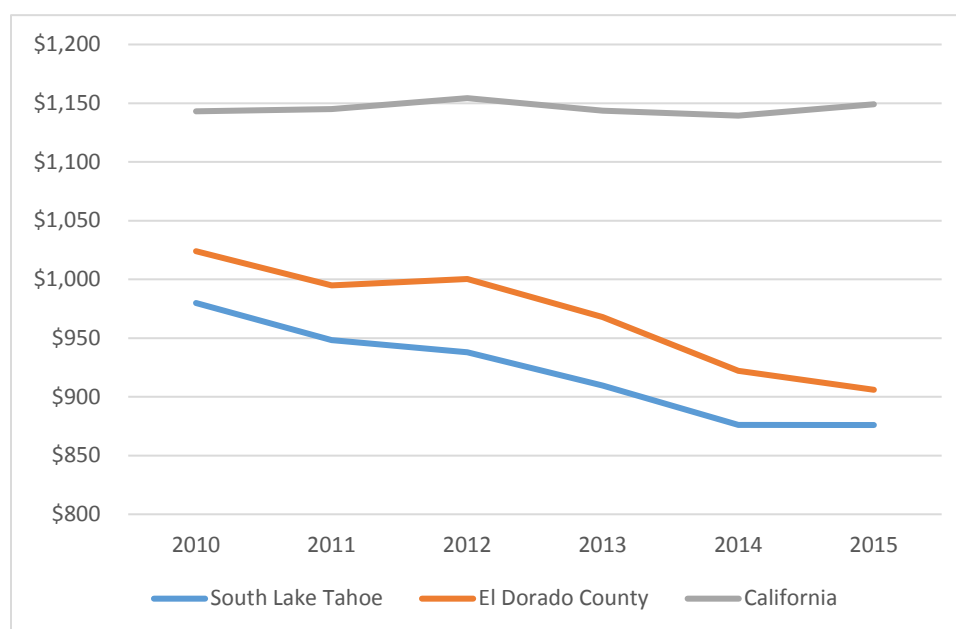
### Housing Market

Different segments of the housing market respond differently to pressure from the supply and demand mismatch. The following sections discuss changes in median contract rents, mortgages, and property sales prices in the city. All prices have been adjusted for inflation to 2015 dollars to improve the comparison of changes in real costs over time. Inflation was measured with the Consumer Price Index (CPI) inflation calculator tool available from the Bureau of Labor Statistics.

### Median Contract Rents

After the collapse of the housing market in 2007 and 2008, rents increased significantly statewide as households lost their homes to foreclosure and were pushed into the rental housing market. The economic recession that followed on the heels of the housing market collapse kept pressure on the rental housing market as household incomes stagnated, unemployment rates jumped, and households struggled with credit damaged by foreclosure or were unable to meet more stringent mortgage lending requirements. While the economy has revived considerably, unemployment is down, and the for-sale housing market is thriving in many parts of the state, the pressure on the rental market continues to support high rental housing costs. Figure 2.18 compares median rents in South Lake Tahoe to rents in El Dorado County and the state of California.

**Figure 2.18**  
**Median Contract Rent Comparison**



Source: 2006–2010 ACS, 2007–2011 ACS, 2008–2012 ACS, 2009–2013 ACS, 2010–2014 ACS, 2011–2015 ACS

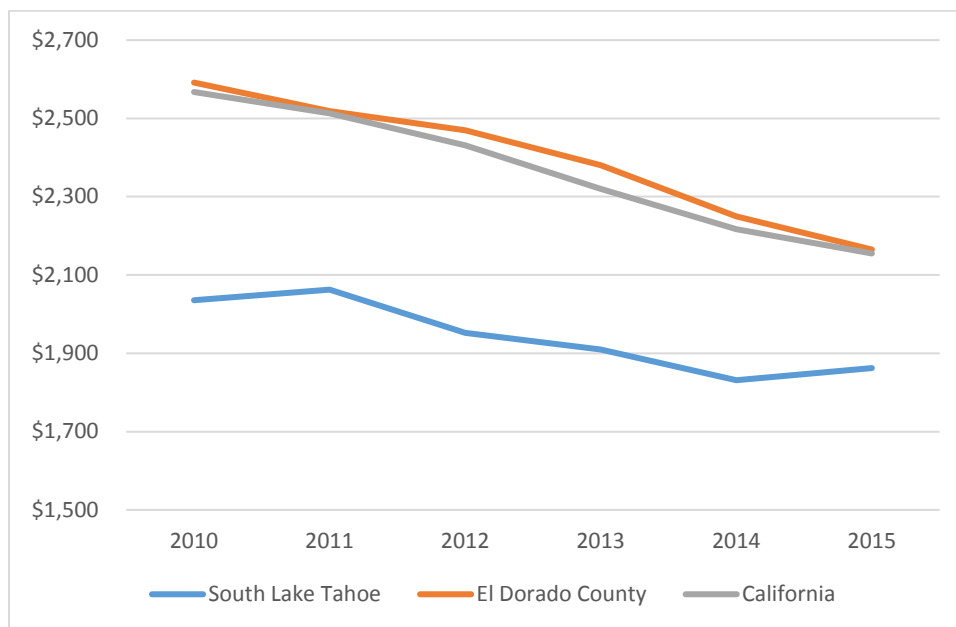
As the above figure shows, median rents in the city track closely with El Dorado County but are lower than both the county and the state medians. While this data would suggest that South Lake Tahoe is more affordable, other factors are at work in this data. During this same period, the city lost about 400 rental units, an 8.2 percent loss of housing stock. The decline in median rents suggests that the bulk of that loss was probably from the higher cost single-family rental stock—units that are more likely to support families with children and that are not restricted from conversion to vacation homes or VHRs. The decline in rents in El Dorado County, on the other

hand, likely reflects the increase in available housing stock built in areas of the county that do not have the same development restrictions as the city. The loss of single-family rental units in the city puts additional pressure on remaining housing stock, as reflected by the fact that median rents in South Lake Tahoe have only declined about \$62 from the 2012 peak of \$938, a 6.6 percent change.

### Median Monthly Housing Costs

Comparing the median monthly housing costs for households with mortgages in South Lake Tahoe with El Dorado County and the state of California shows a different pattern than the median rent data. Figure 2.19 shows how median monthly housing costs compare between 2010 and 2015.

**Figure 2.19**  
**Median Monthly Housing Costs**



Source: 2006–2010 ACS, 2007–2011 ACS, 2008–2012 ACS, 2009–2013 ACS, 2010–2014 ACS, 2011–2015 ACS

Monthly housing costs for households with mortgages decreased in all three geographies measured in the period between 2010 and 2015. The median monthly costs in South Lake Tahoe decreased less than in either El Dorado County or the state, with an 8.5 percent decrease in monthly housing costs. In contrast, in this same time frame, housing costs of owner-occupied housing units with a mortgage decreased 16.5 percent in El Dorado County and 16.1 percent in the state of California. While low interest rates and increased fluidity in the mortgage market has probably helped reduce mortgage costs in both the county and the state, South Lake Tahoe has not seen the same amount of relief in monthly housing costs. This is possibly in part because a greater percentage of South Lake Tahoe households have either a second mortgage, a home equity loan, or both. According to the 2011–2015 ACS, about 26.7 percent of households in the city have either a second mortgage, a home equity loan, or both, as compared to 23 percent for the county and 20.2 percent for the state.

## 2. DATA ANALYSIS AND RESULTS

### Sales Prices

Home sales prices in South Lake Tahoe have significantly different patterns than in other parts of California. While in many jurisdictions single-family homes are either purchased by households intending to occupy the unit or by investors intending to rent the unit, in South Lake Tahoe single-family homes may be purchased for owner occupancy, as second or vacation homes that may be occupied occasionally, or to be operated as a VHR. VHR rentals in the city can be much more profitable than long-term rentals, and the additional profit margin in the VHR market likely discourages investors from providing long-term rentals. The following section evaluates home sales prices and mortgages for the three homebuyer markets in the City of South Lake Tahoe. Table 2.7 shows the median home sales price and the average percentage of down payment for homes in South Lake Tahoe between 2011 and 2015.

**Table 2.7**  
**Median Sales Prices**

| Year | Median Sales Price |                  |                  | Average Percentage of Down Payment |               |            |
|------|--------------------|------------------|------------------|------------------------------------|---------------|------------|
|      | All Units          | Non-VHR Units    | VHR Units        | All Units                          | Non-VHR Units | VHR Units  |
| 2011 | \$240,247          | \$237,044        | <b>\$266,941</b> | 18%                                | 18%           | <b>22%</b> |
| 2012 | \$219,510          | \$213,208        | <b>\$372,327</b> | 16%                                | <b>17%</b>    | 16%        |
| 2013 | \$283,849          | <b>\$288,494</b> | \$247,723        | 15%                                | 14%           | <b>20%</b> |
| 2014 | \$304,884          | \$304,125        | <b>\$308,423</b> | 21%                                | <b>21%</b>    | 18%        |
| 2015 | \$316,879          | \$315,617        | <b>\$318,142</b> | 20%                                | 19%           | <b>24%</b> |

Source: MLS 2017

The above table shows median home prices for homes sold in South Lake Tahoe over the last five years and breaks out the median sales price for homes that are also on the City's VHR lists. In four out of the five years measured, the median sales prices for VHRs exceeded the median sales prices for non-VHRs (highest figures indicated in bold). Housing prices for both VHRs and non-VHRs has increased substantially over the last several years.

The sales data included information about mortgages used to purchase homes. The data was analyzed to determine the median and average amount of the sales price paid as a down payment for the units sold each year. The median percentage of down payment for the homes sold over the review period was 20 percent for both VHRs and non-VHRs across all years. The annual averages had much more variation.

Table 2.7 shows that with the exception of 2012 and 2014, the average percentage of the sales price used for down payment was higher for VHRs than for non-VHR units. It is worth noting that, across the board, down payments were well in excess of the reduced allowances provided by different homebuyer incentive programs. For many lower-income households, the down payment is a major obstacle to purchasing a home, particularly in markets where there are few down payment assistance programs available, or in "seller's markets" where the supply falls short of the demand, and buyers with ready cash have an advantage. Lower down payments contribute to higher monthly mortgage costs, which also poses an obstacle to lower-income households trying to purchase homes in a high-priced housing market. The following section discusses the city's sales data from 2016 in more detail.

### 2016 Sales Data Analysis

The data from 2016 can be analyzed in greater detail than prior years because it includes information about whether or not the property sold was sold to a buyer local to South Lake Tahoe or from out of the area. Unfortunately, the locality of buyers was not available for prior years. In 2016, the median sales price in the MLS data collected was \$355,000, and the average down payment was 20 percent. The median sales price for VHRs purchased by local buyers was \$377,500 with a 20 percent down payment. The median sales price for VHRs purchased by out-of-area buyers (who tend to be more affluent than area residents, as shown in Figure 2.20 below) was \$495,000 with an average 29 percent down payment. The sample size for the VHRs sold in 2016 is fairly small, which means the year-over-year changes can be quite dramatic. About 20.8 percent of the home sales where the buyer was not local were also registered as VHRs with the City, which suggests that the bulk of the non-local buyers had some other purpose for their property, either purchasing it as a new permanent full-time residence, offering it as a long-term rental, or leaving it vacant as a second or seasonal home. However, anecdotally, the 2016 data suggests that out-of-area VHR buyers have both more liquid cash available for down payments and access to more credit, which provides them an advantage in the housing market. It also suggests that VHR buyers, both locally and out of area, have additional purchasing power across the board, and are likely looking for units with the characteristics that will allow them to maximize their income.

### **2.3.3 Economic Condition Analysis**

The following section provides an overview of the city's economic profile, including factors like household income, employment sectors, tax revenues, and the tourist economy. It also includes a review of police and code enforcement data around VHR units, as well as a brief discussion of the role that the TRPA and development commodities play in residential and commercial development in the city.

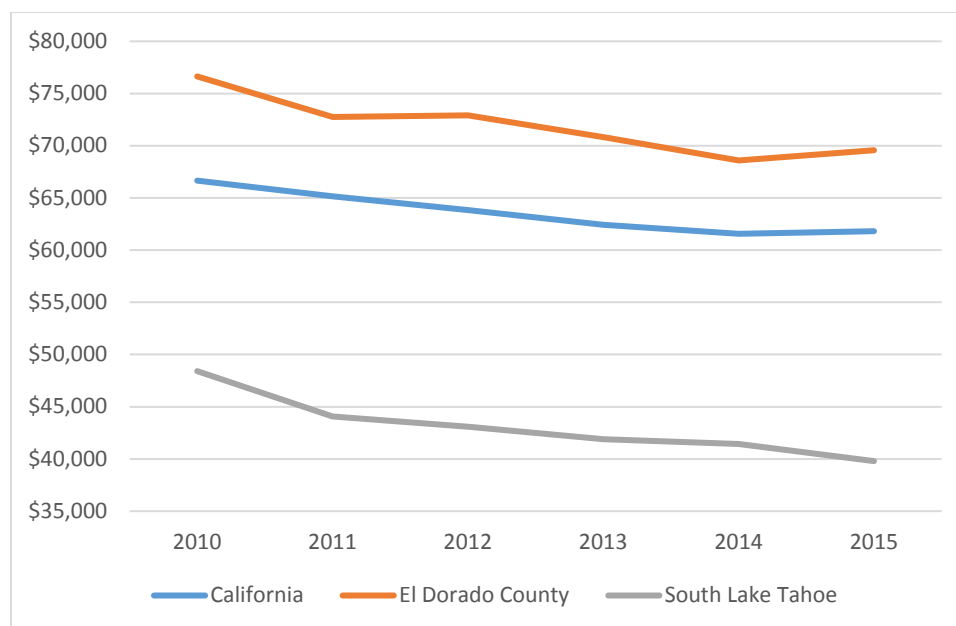
#### Income

Incomes can be measured in different ways, depending on what population sectors are being studied. The most common income measure is the median household income. This measure includes the median income for all households, both family and non-family, and is the most inclusive measurement of income. Median household incomes tend to be somewhat lower than the median family income, which does not include non-family households in the measurement. HUD uses the median family income numbers to establish the income limits used to determine housing affordability in a region. For reference, the 2017 HUD-adjusted median family income for El Dorado County, including South Lake Tahoe, is \$75,200 for a family of four. According to HUD's calculation, a family of four with an income of less than \$59,350 qualifies as low income. HUD's calculation is based on family size, with low-income limits established as below \$41,550 for a one-person household, less than \$47,500 for a two-person household, and less than \$53,450 for a three-person household. HUD uses these low-income measures when evaluating housing cost burden and eligibility for HUD-funded assistance programs, and are more functional as theoretical limits than actual reported income. The HUD median and income limits are available at the county but not the city level.

The more common median household income measure is based on the actual incomes reported in the ACS and is a median of all households, regardless of household size. Figure 2.20 compares the median household income information for the City of South Lake Tahoe with the median household incomes for the state of California and El Dorado County from 2010 through 2015.

## 2. DATA ANALYSIS AND RESULTS

**Figure 2.20**  
**Median Household Income**



Source: 2006–2010 ACS, 2007–2011 ACS, 2008–2012 ACS, 2009–2013 ACS, 2010–2014 ACS, 2011–2015 ACS

As the figure above shows, median household incomes in South Lake Tahoe are significantly below those in both the state and county, which likely reflects the city's service and hospitality focused employment base. Additionally, incomes in the city have declined 21.7 percent, as opposed to a 7.8 percent decrease in the county and a 10.1 percent increase in the state. Incomes in both the county and the state have stabilized or slowly begun to increase, while incomes in the city continue to decline.

### Employment

The city has unemployment rates that track fairly closely with the county, at 5.5 percent and 5.2 percent, respectively. The lower median household income is due to the types of employment available in South Lake Tahoe, as opposed to higher unemployment. Table 2.8 compares the employment distribution across industries in South Lake Tahoe with El Dorado County and the state of California.

**Table 2.8**  
**Employment by Industry Comparison**

| Industry                                                                            | California | El Dorado County | South Lake Tahoe |
|-------------------------------------------------------------------------------------|------------|------------------|------------------|
| Agriculture, forestry, fishing and hunting, and mining                              | 2.40%      | 1.20%            | 1.80%            |
| Construction                                                                        | 6.00%      | 7.40%            | 6.10%            |
| Manufacturing                                                                       | 9.80%      | 7.60%            | 3.80%            |
| Wholesale trade                                                                     | 3.10%      | 1.70%            | 1.20%            |
| Retail trade                                                                        | 11.10%     | 12.40%           | 11.10%           |
| Transportation and warehousing, and utilities                                       | 4.70%      | 4.00%            | 2.90%            |
| Information                                                                         | 2.90%      | 2.10%            | 1.50%            |
| Finance and insurance, and real estate and rental and leasing                       | 6.20%      | 7.60%            | 4.30%            |
| Professional, scientific, management, administrative, and waste management services | 12.90%     | 11.70%           | 5.80%            |
| Educational services, and health care and social assistance                         | 21.00%     | 19.70%           | 13.60%           |
| Arts, entertainment, recreation, accommodation, and food services                   | 10.20%     | 12.60%           | 40.80%           |
| Other services, except public administration                                        | 5.40%      | 4.80%            | 3.20%            |
| Public administration                                                               | 4.50%      | 7.20%            | 3.80%            |

Source: 2011–2015 ACS

While the city tracks closely with the county and state in some sectors, other sectors are dramatically different. The city has much smaller manufacturing, information, and education sectors, among others, but has a very significant arts, entertainment, recreation, and accommodation sector with 40.8 percent of the city's jobs in this industry. The arts and entertainment industry is broken into two main sectors: arts, entertainment, and recreation, which makes up 12.4 percent of the city's employment, and accommodation and food service, which comprises 28.5 percent of the city's employment. The competition for employees in this overall sector is underscored in the wages that those occupations earn in the city. Food preparation and serving as an occupation has a median income of \$16,747, which is 26.4 percent higher in the city than in El Dorado County and 6.1 percent more than the state as a whole. Similarly, personal care and service occupations, which include several occupations in the accommodation industry, have a median income of \$21,571, which is 16.1 percent higher than the county and 30.1 percent higher than the state.

Most other industries in the city do not compare as favorably as the tourist-supported employment sectors. The median wage for sales-related occupations in the city is 26.4 percent and 7.7 percent lower than in the county and state, respectively. Of the 25 occupation categories tracked in the ACS, 18 earn less in the city than in the county and 16 earn less than in the state. This deficit includes occupations such as computer, architecture, and engineering occupations, legal, business, and financial occupations, healthcare technicians (including diagnostics and treating practitioners), firefighters and law enforcement occupations, and construction and manufacturing occupations. The jobs that pay higher in the city than in the county or state include fishing and forestry, healthcare support services, education jobs, and life, physical, and science occupations. However, with the exception of education and healthcare, these occupations make up a small portion of the city's overall employment.

## 2. DATA ANALYSIS AND RESULTS

### City Revenues

In 2015, the Tahoe Prosperity Center partnered with Applied Development Economics on a study titled “Measuring for Prosperity, Community and Economic Indicators for the Lake Tahoe Basin.” The study included economic indicators for both the Lake Tahoe Basin and the independent jurisdictions, including South Lake Tahoe, and measured changes in a number of economic indicators from 2003 to 2014. The overall economy has continued to gradually improve since the report was completed in 2015, and many of the indicators tracked have either stabilized or slightly improved. This improvement is reflected in Table 2.9, which includes select city revenues.

**Table 2.9**  
**City Revenues and Expenses**

| Revenue                    | 2011         | 2012         | 2013         | 2014         | 2015         | 2016         | Average Annual Change |
|----------------------------|--------------|--------------|--------------|--------------|--------------|--------------|-----------------------|
| TOT                        | \$8,670,091  | \$8,824,694  | \$10,297,542 | \$11,034,753 | \$12,708,233 | \$15,686,640 | 13.5%                 |
| Public Safety              | \$555,592    | \$384,590    | \$191,214    | \$1,494,817  | \$1,425,944  | \$1,859,145  | 39.1%                 |
| Licenses<br>Permits & Fees | \$1,253,122  | \$1,408,270  | \$1,637,462  | \$1,688,855  | \$1,854,802  | \$2,218,216  | 12.8%                 |
| <b>Expenses</b>            |              |              |              |              |              |              |                       |
| Public Safety              | \$17,854,458 | \$18,471,859 | \$17,415,969 | \$15,325,025 | \$17,448,023 | \$20,429,955 | 2.4%                  |

*Source: 2016 City of South Lake Tahoe Comprehensive Annual Financial Report. Revenues have not been adjusted for inflation.*

The City of South Lake Tahoe has seen a significant increase in transient occupancy tax (TOT), which is collected from both the traditional accommodation industry and the licensed VHRs in the city. TOT is one of the key revenue sources for the City, and it supports many City services and operations. There are two other revenue sources that are potentially impacted by VHRs in the community: public safety charges for service, and licenses, permits, and fees. The City collects licensing fees for VHRs as part of the registration process. Licenses must be renewed annually, and failure to comply with the City’s VHR ordinance can result in penalty fees. Public safety charges for service include parking revenues from parking violation enforcement, as well as enforcement for other violations, such as code enforcement. Many jurisdictions have also implemented or are considering cost recovery models for public safety that require property owners of problem properties to pay all or a portion of the costs for police and code enforcement response to calls for service, which is then included in their public safety budgets.

The cost of public safety, which also includes police services, as well as the VHR program, has also increased year over year. This increase is likely a response to the improving economy which has led to an increasing flow of tourists as well as the implementation of new enforcement programs.

### Tourist Cost Analysis

The city’s recreation and entertainment industry is fairly diverse. While the ski season is a major draw and the period between January and March is the peak tourist season, the summer months of July through September also see a significant bump in tourism revenues. With access to casinos just over the Nevada border, a range of state parks and campgrounds, and a thriving lakefront, the recreation opportunities in South Lake Tahoe appeal to a wide range of people—from families with children, to singles and couples, to groups celebrating or hosting special events. VHR accommodations offer an array of options for different tourist groups and may be preferable for

some groups, such as families with children and larger groups celebrating events, over traditional hotel and motel accommodations. According to the 2015/2016 Lake Tahoe Visitor's Authority Visitor Profile Study, approximately 19 percent of tourists elect to stay in VHRs when visiting the Lake Tahoe area. By contrast, VHRs in South Lake Tahoe make up about 12.8 percent of the total lodging for the South Shore area, including hotels and motels located in South Lake Tahoe, and the hotels and casinos located immediately across the Nevada border, which underscores that VHRs are becoming the preferred accommodation. Part of that preference is for the amenities available in a private home, such as a full kitchen and living space, but price also plays a role in selecting accommodations when tourists plan their trips.

To help understand the differences in price between the traditional hotel and motel accommodations and VHRs, the study team pulled costs from the VRBO.com and Airbnb.com websites and compared them to hotel and motel prices advertised on Expedia.com. Only VHRs in the City of South Lake Tahoe were evaluated from the VRBO and Airbnb websites, while hotels in South Lake Tahoe and hotel-casinos directly over the state border were included in evaluating traditional accommodations. VRBO provides average nightly costs and maximum occupancy for units, while the hotels and motels assumed an occupancy of two persons, and Airbnb advertises the number of rooms or beds. As hotel prices are dependent on the time of year, three periods were evaluated: room costs for a Thursday through Sunday in April, July, and January. Prices for both the VHRs and the hotels and motels were averaged and costed per person for full occupancy; VHRs were also costed per person for half and quarter occupancy, as the average occupancy for VHRs in South Lake Tahoe as advertised on VRBO is about 10 persons. No taxes or cleaning fees were included in evaluating these costs, as fees can vary depending on the location or the management of the unit. Table 2.10 compares average VHR prices with average hotel costs.

**Table 2.10**  
**Vacation Rental and Hotel/Motel Costs**

| VHRs | Average Cost per Night | Average Persons Max Occupancy | Average Cost per Person at Max Occupancy | Average Persons Half Occupancy | Average Cost per Person at Half Occupancy | Average Persons Quarter Occupancy | Average Cost per Person at Quarter Occupancy |
|------|------------------------|-------------------------------|------------------------------------------|--------------------------------|-------------------------------------------|-----------------------------------|----------------------------------------------|
| VRBO | \$313                  | 9.56                          | \$32                                     | 4.78                           | \$64                                      | 2.39                              | \$128                                        |

Source: VRBO.com

| Hotel/Motel                    | Average April Cost | April per Person Cost | Average July Cost | July per Person Cost | Average January Cost | January per Person Cost | Average per Person Cost |
|--------------------------------|--------------------|-----------------------|-------------------|----------------------|----------------------|-------------------------|-------------------------|
| Hotel/Motel room for 2 persons | \$110              | \$55                  | \$195             | \$98                 | \$197                | \$99                    | \$84                    |

Source: Expedia.com

While VHRs have been a component of the South Lake Tahoe accommodation market for far longer than the internet has been in common use, the improved accessibility of the online VHR marketing tools has definitely increased their popularity. For many tourists, VHRs are a cost-effective alternative to traditional hotel and motel accommodations. As the table above shows, VHRs occupied at full occupancy average \$32 per person, in contrast to the \$84 per person for traditional hotels and motels. Even when VHRs are only at half of their occupancy maximum, they are still more cost effective than traditional hotels. Hotels and motels become competitive with whole-house VHRs when the total occupancy is one or two persons. However, there are other

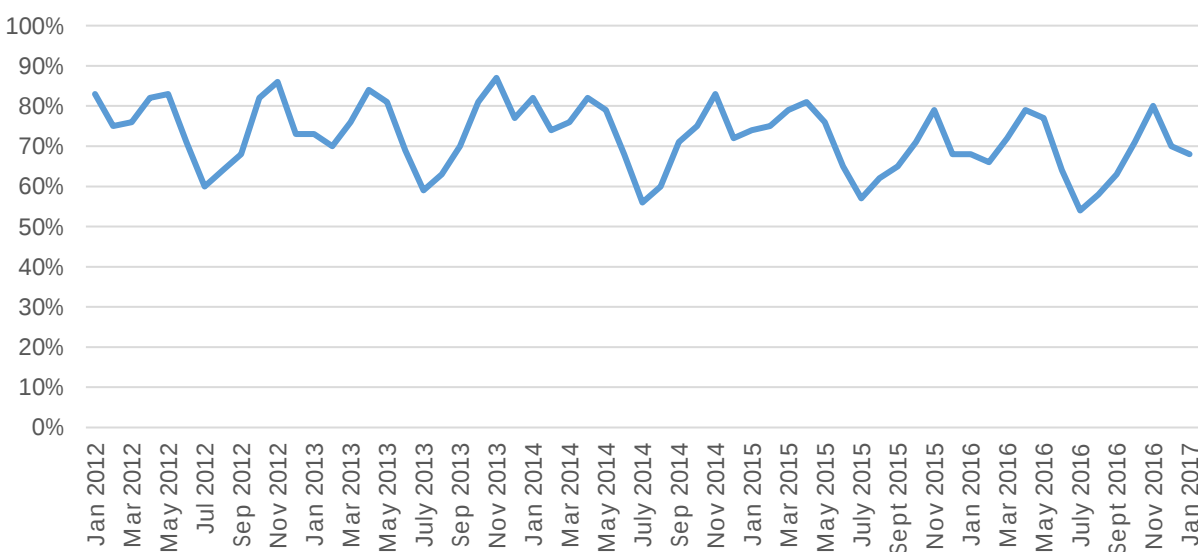
## 2. DATA ANALYSIS AND RESULTS

accommodation options, such as room rentals available through Airbnb and similar sites for single and double occupancy, that again offer lower-cost overnight accommodations than traditional hotels and motels. The average cost for a room in a hosted home through Airbnb is about \$68 per person per night. Directly comparing Airbnb with the per person costs through VRBO and the hotels and motels is difficult because the room listings on Airbnb offered a wide range of options, from single twin or full beds in a shared room to two or three full or queen beds in a single private room or suite. Airbnb counts beds, not occupancy, and rooms are priced per bed established occupancies. Using the same standards as motels and assuming double occupancy, the average cost with Airbnb is \$34, which is comparable with the per person costs for maximum occupancy in a VHR and is significantly less than hotel or motel costs. These lower-cost accommodations allow more people to visit South Lake Tahoe, while contributing to TOT and sales tax revenues.

### Hotels and Motels

The decline of hotels and motels in the city is well documented and was a key incentive for the completion of the 2012 South Shore Vision Plan that identified redevelopment alternatives for the section of Highway 50 that operates as the de facto main street in South Lake Tahoe. The Economic Impact Study prepared by SMG Consulting in 2012 as part of the Vision Plan underscored high vacancy rates, an overall decline in casino earnings, and a reduced demand for rooms in the South Shore area as critical challenges facing the economic vitality of the area and the status of Lake Tahoe as a prime tourist destination. The waning of the casino industry in the South Shore area is directly related to the increase in tribal casinos and other local gambling centers that have expanded over the last couple of decades and which provide local alternatives for gamblers that used to frequent Lake Tahoe's South Shore. The decline of hotels and motels in South Lake Tahoe and neighboring Stateline has been complicated by the aging and deteriorating accommodation stock, much of which is in need of renovation and is an unappealing and expensive option for tourists shopping for accommodations. High vacancy rates compound the problems facing the hotel and motel industry. Figure 2.21 shows the vacancy rate for South Shore hotels between 2012 and January 2017.

**Figure 2.21**  
**Hotel and Motel Vacancy Rates**



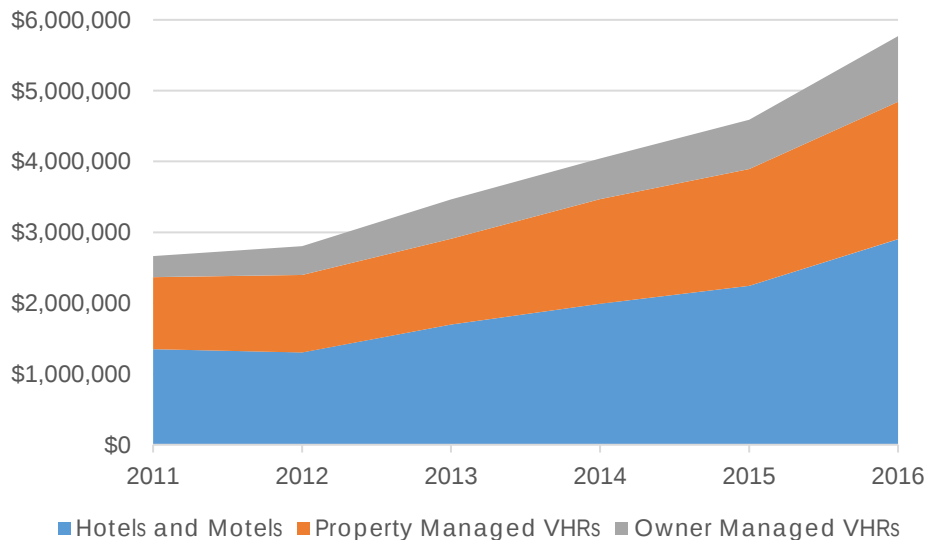
Source: City of South Lake Tahoe Monthly Lodging Report, pulled March 2017

An evaluation of the above figure shows that the hotels and motels in South Lake Tahoe are continuing to operate with very high vacancy rates, even during peak seasons. The average vacancy rate for 2016 was 68.5 percent, compared to 75.3 percent in 2012, which indicates that the vacancy rates have improved slightly over the last five years. However, vacancy rates are still much higher than other tourist-oriented economies, such as Napa and Monterey which had, respectively, 68 percent and 67.4 percent occupancy rates in March 2016, compared to South Lake Tahoe's 28 percent occupancy for the same month. Figure 2.22 compares the TOT from traditional hotels and motels with the VHR market.



*Motels near Stateline*

**Figure 2.22**  
**TOT Comparison**



Source: City of South Lake Tahoe Monthly Transient Occupancy Tax Report, 2011–2016.  
TOT has not been adjusted for inflation.

TOT for all three of the measured accommodation categories increased significantly between 2011 and 2016. TOT for hotels and motels increased 115 percent, from around \$1.3 million in 2011 to about \$2.9 million in 2016. Comparing the TOT increase with the above vacancy rate chart underscores just how much hotel and motel inventory is in the South Lake Tahoe area and that a very marginal improvement in occupancy rates can result in a dramatic change in TOT. Property-managed VHRs saw a 90 percent increase in TOT, from \$1.0 million in 2011 to \$1.9 million in 2016. The most dramatic increase, however, is in owner-managed VHRs, which increased 210 percent over the same time frame, from \$299,146 to \$927,238. While this is half of the TOT brought in by the managed properties, it emphasizes the impact that online VHR management tools, like VRBO.com, have had on the ability of property owners to successfully manage their properties in

## 2. DATA ANALYSIS AND RESULTS

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the VHR marketplace. The TOT in South Lake Tahoe was between 10 percent and 12 percent of the cost per night for properties outside the South Lake Tahoe Tourism Improvement District.

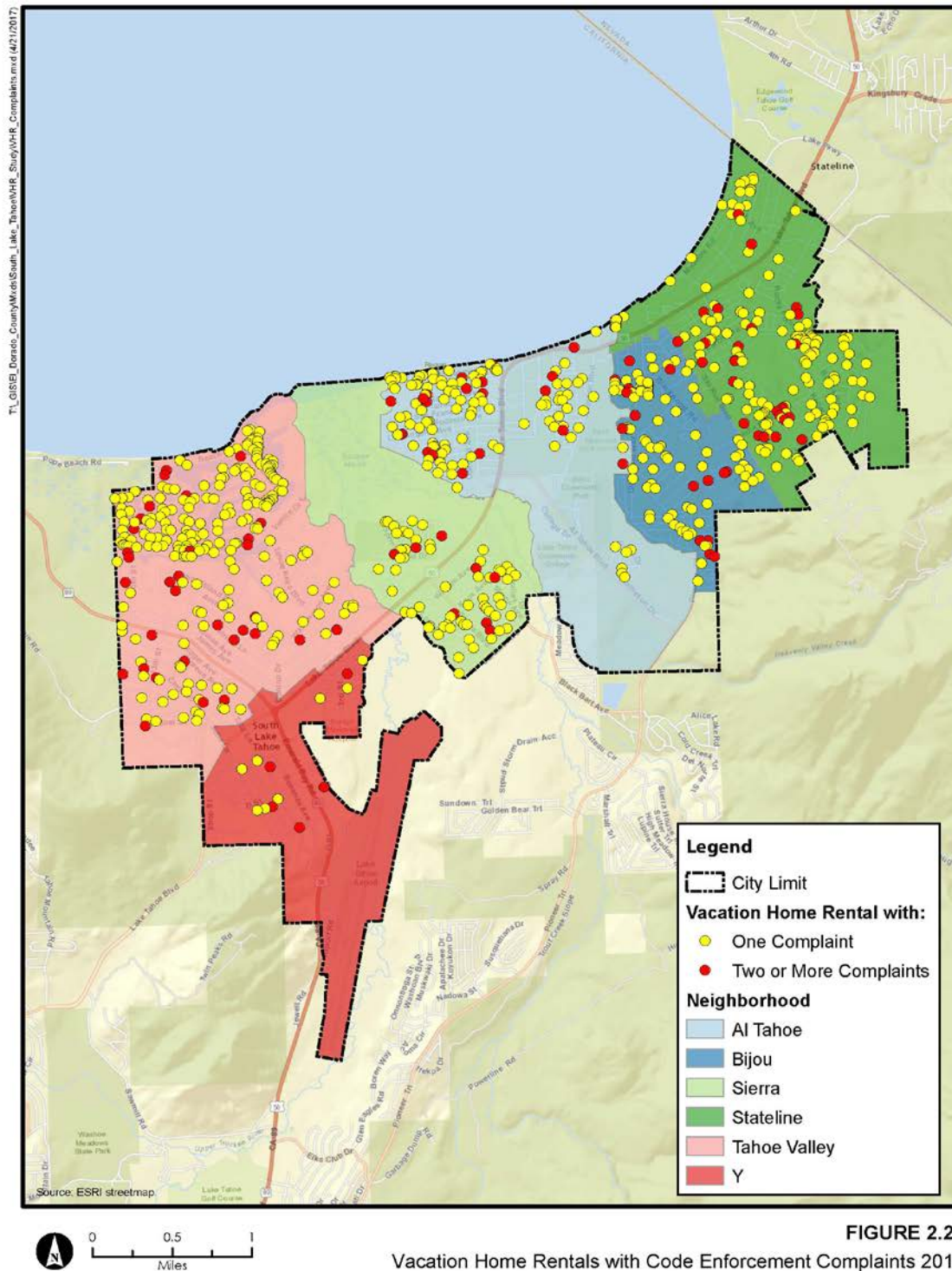
### Code Enforcement and Police

One of the key variables identified in the community outreach for this study was the impacts of VHRs in relation to code enforcement and police services. This was also one of the most difficult datasets to obtain. As the City's programs have evolved and new tracking and enforcement tools have been put in place, the data collected has changed formats, databases, and collection points. In addition, as new data management tools have been added, different users have included different data in the assigned fields. The result is a very inconsistent dataset, with limited opportunity for trends analysis. In order to maintain the integrity of the analysis, the code enforcement and police data analysis was conducted on the most complete and thorough of the data available. Therefore the analysis includes an evaluation of all VHR-related cases and calls recorded during 2016. It also includes a hot-spot map, which identifies neighborhoods with extraordinarily high numbers of calls for service for VHR-related issues.

The code enforcement dataset that included VHR calls for service includes a variety of other call requests, including public nuisance violations, fire and building code violations, abandoned vehicle and building violations, and signage violations. The dataset included the site address of the complaint, the date the complaint was made, and the status of each violation. There were 591 VHR-specific unique case numbers closed in 2016. There were 289 unique 2016 VHR case numbers with a status of open. Of the total open and closed cases, 614 were associated with addresses with only one complaint, 109 addresses had more than one unique open or closed case number associated with them, and 31 addresses had three or more unique case numbers. About 40.5 percent of all VHR units had at least one complaint in 2016.

Not all cases were associated with a specific action, which was one of the complications with the dataset. However, of the actions captured in the dataset, the most common was to send the property owner an owner advisory letter, with 53 percent of actions logged resulting in an owner advisory; 12.6 percent received owner warning letters; 10.7 percent resulted in inspections; 9.6 percent were administrative citations for missing VHR permits; and 2.6 percent were notice of violations. The remainder were administrative actions. In total, about 16.2 percent of the unique cases had an action other than case notes associated with the entry. Figure 2.23 maps all of the recorded cases across the city—yellow markers indicate unique cases and red markers indicate units with multiple case numbers.

**Figure 2.23**  
**Vacation Home Rentals with Code Enforcement Complaints 2016**



**FIGURE 2.23**  
**Vacation Home Rentals with Code Enforcement Complaints 2016**

**Michael Baker**  
 INTERNATIONAL

Source: South Lake Tahoe Code Enforcement complaints provided by the City, 2017

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As visible in the above map, VHR complaints track with the distribution of VHRs in the community (see Figure 3.2 for the distribution of all VHRs in the city in 2016). However, there are a couple of areas where calls are concentrated. Some of these areas are condominium communities, where there are clusters of VHRs. Others, though, reflect some of the problems inherent in operating VHRs nested in traditionally residential neighborhoods. Some hot spots reflect increased neighborhood sensitivity, in which even minor issues warrant a complaint. Others reflect problem properties that may require more aggressive code enforcement or police services. Determining how to spread resources and respond appropriately to both areas of high sensitivity and problem properties requires a nuanced and well-thought-out regulatory plan.

### Tahoe Regional Planning Agency and Development Commodities

TRPA is tasked with protecting the sensitive Lake Tahoe environment and regulating the rate and type of new development in the Lake Tahoe Basin. TRPA limits new development through the use of development commodities, or development rights that regulate the different development types in the area, such as residential development, commercial development, tourist accommodation development, and redevelopment. TRPA development commodities play a vital role in the development of new housing. In 1987, TRPA programmed a timed release of commodities to the various Lake Tahoe Basin to help plan for new development. As new development tracks with the general economy, there have been years when there were few commodities available for new residential development, and years when commodities were not available. Currently, most jurisdictions in the Lake Tahoe Basin have some residential housing commodities available for new development, but the market is very limited.

To understand the role that commodities play in development, it is important to understand how the different commodities are applied. Estimating the actual costs of the different development commodities is difficult because the market is unique to each jurisdiction and is managed by different partners, depending on where the development takes place. The following are estimates based on 2015 information. Residential commodities are available on a per unit basis, and estimates range between \$17,000 and \$35,000 per commodity depending on the timing, location, and other variables involved in new unit development. Each unit counts against the total allocation of residential units for the area. Commercial commodities are estimated to be between \$20 and \$25 per square foot (though they have gone as high as \$40 per square foot in some circumstances), and each square foot counts against the total allocation of commercial floor space for the area. Tourist commodities are estimated to be between \$15,000 and \$25,000 per tourist unit, and count against the total allocation of tourist units for that jurisdiction. Redevelopment commodities are based on conservancy projects and are managed by the different jurisdictions. A complicating factor in the commodities market is that there are both commodities for some development available from the jurisdictions, and a private commodities market where buyers and sellers negotiate the resale of existing development rights. TRPA and the partner jurisdictions all identify the difficulty in managing the development rights process as a major impediment to redevelopment, even in situations where the redevelopment would be a net improvement to environmental quality.

There is some interplay between the different development rights and the VHR industry, which mirrors the challenge inherent in classifying VHRs in terms of commercial, tourist, or residential uses. Most of the city's VHR stock was, at some point, traditional single-family residential units, and clearly fits under the residential commodity and residential use categories. Even when the units were used exclusively as vacation or seasonal homes, the residential definitions still applied. However, when a unit becomes a VHR, with all of the licensing and taxing associated with VHRs, the line between residential and commercial use becomes less clear. Some states are clarifying these definitions through the courts, while others, like California, are leaving regulation of the VHR industry up to the various jurisdictions.

The Lake Tahoe Basin commodities add in the tourist category as a unique development right. While the square footage calculation that applies to traditional commercial development commodities is not applicable for units that could easily revert to purely residential uses, there is some question about the validity of applying residential commodities to what are essentially tourist uses, particularly when new homes are built with the intent to operate as VHRs. VHRs remove residential commodities from the market, even if just temporarily, by removing the unit from the viable long-term occupancy residential housing stock. At the same time, motels with exceptionally high vacancy rates sit on unused or underutilized tourist commodities. One of the key purposes in creating different commodities was to be able to direct impacts away from sensitive environmental areas. However, use of single-family residential units as VHRs muddles the tourist and residential development impacts by allowing higher-impact tourist uses in neighborhoods designed for the lower-impact residential uses.

### 2.3.4 Future Trend Projections Based on Past Trend Analysis

#### Population

The City can expect that, without regulatory intervention and based on a projection of current economic conditions, South Lake Tahoe will likely experience a slow loss of permanent population. Households with young children will be the most directly impacted, while the percentage of the population age 65 and over will continue to increase. The changes in population will continue to impact priority services. Schools will experience a slow shrinking of class sizes and revenues, potentially resulting in the consolidation of school facilities. The need for healthcare and senior assistance programs will continue to increase as a greater portion of the population enters old age.

#### Housing

Housing in the city will continue to increase in cost without regulatory intervention. The rate of conversion from fully occupied to vacant units will continue to outpace the development of new units as the city grows closer to full buildout. Nonresident homebuyers will continue to put pressure on the available for-sale housing stock, as housing costs in South Lake Tahoe are still considered affordable in comparison to the San Francisco and Los Angeles housing markets. The loss of permanently occupied units will put pressure on the existing units and lead to an increase in overcrowding. The rental market will be the most impacted, as the strong demand for housing will result in rising rents and will act as a disincentive for landlords to maintain properties and respond to renter complaints. While the VHR market will likely continue to be a factor in the conversion of units from full-time occupancy to vacant, the impact may be reduced as the City continues to more fully implement existing regulations and ordinances.

#### Economics

The city's economy is impacted by changes in the state and national economy as a whole, which makes economic projections complicated. However, the combination of population, housing, income, and employment trends in the city do provide some foundation for projections. The bulk of the city's economy will continue to be tourist-based, and the majority of employment opportunities will continue to be focused on personal services, accommodations, recreation, and food service. While wages in these jobs will likely increase incrementally in response to the implementation of new labor laws and general inflation, they will continue to be lower-wage jobs and will not increase enough to bridge the affordability gap in the housing market. Service industry employees in these positions will face limited options when looking for housing. Service industry employee households will likely look outside the city for housing, which will increase commutes

## 2. DATA ANALYSIS AND RESULTS

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and contribute to traffic and other adverse impacts on the existing transportation infrastructure. Service industry employees unable to live outside the area may elect to share housing with other households, find alternative shelter like low-rent motels, or be reduced to living in substandard housing.

The mismatch between the cost of housing in the city and incomes earned by service industry workers can put households, particularly minority households, households with children, and other protected classes, at risk of housing discrimination. Protected classes are groups identified by the state and federal governments as populations at increased risk of discrimination. The state and federal lists differ slightly, but include minorities, persons with disabilities, seniors, families with children, and other groups. Violations of fair housing laws are often a result of situations in which landlords and property managers, faced with a strong rental market, may either intentionally or unintentionally discriminate against households when renting units or making decisions about unit maintenance, relocations, and evictions.



*Vacant unit and occupied trailer*

### Key Findings

VHRs have both positive and negative impacts on the community of South Lake Tahoe. Increased TOT, sales tax, permit fees, and public safety charges for service offset the most obvious VHR costs involved in administration and regulation. However, there are many externalities beyond public safety involved in the VHR market and in the increase of vacant housing in general in the city. The mismatch in the city between the cost of housing and the wages earned through the employment market has numerous results that are difficult to price. There are a range of costs that result from a workforce that must commute to jobs in the city from outside the area, including transportation and infrastructure-related costs to the city and lost labor and increased turnover costs for employers. Similarly, there are costs inherent when households become overcrowded or when they experience a housing cost burden. These costs may be lost sales tax revenues, lost education opportunities that might lead to higher-paying employment, and other opportunities that are lost when households have a shortage of excess cash. While the costs of these externalities can potentially be calculated, the relationship between VHRs and vacant housing units and these secondary and tertiary externalities is impossible to determine without far more data than is currently available. The City of South Lake Tahoe does not have the ability to build its way out of the current housing problems, and it must therefore look for other solutions to find a better balance between housing-related activities that generate revenue but also result in widespread negative externalities on the community.

### 3. LITERATURE REVIEW AND REGRESSION ANALYSIS

This study was prepared in partnership with Robert Wassmer, PhD, faculty at the California State University Sacramento (CSUS) Department of Public Policy and Administration. The following Sections 3.1, Literature Review, and 3.2, Regression Analysis, were prepared by Dr. Wassmer, Director of the Master's Program in Urban Land Development at CSUS with support from the Michael Baker International study team. Sections 1, 2, 4, and 5 were prepared by the Michael Baker International team with comments provided by Dr. Wassmer.

#### 3.1 LITERATURE REVIEW

The purpose of this literature review is to inform the reader of research already completed on the various impacts of short-term or vacation home rentals (VHRs) on the economics, stability, and character of communities where they are located. As part of the background information for this report, it is desirable for all stakeholders (elected officials, business groups, community groups, citizens, etc.) and analysts involved to understand previous research on this topic. This understanding will help guide the identification of assessment strategies and the data needed to complete them. The studies discussed in this literature review use different terms to refer to short-term rentals (STRs), which may be vacation home rentals or can be other types of residency with similar short-term characteristics. To maintain consistency with the rest of this report, this section will refer to short-term rentals as vacation home rentals (VHRs); however, that does not infer that all short-term rentals are vacation accommodations.

The identification of the studies cited occurred through an intensive search through academic research indexes using the key words (Airbnb, Holiday Rentals, Rental Homes, Seasonal Rental Homes, Sharing Economy, Short-Term Rentals, Transient Vacation Rentals, and Vacation Home Rentals) that capture the type of residential occupancy of interest. Surprisingly, there was not a large amount of previous research on the impacts of these forms of residences. A reference list at the close of this review offers full citations of the works found.

This information is organized into relevant themes that are easily interpreted. The next section describes the academic research that mentions the **Benefits and Costs of VHRs to a Community**. In section two are specific studies attempting to quantify the **Economic Impact of VHRs to a Community**. Section three explicitly examines those studies, trying to tease out the **Effect of VHRs on Neighboring Residential Properties**. Sections one through three conclude with suggestions drawn from the cited literature regarding what variables would need to be collected for this study. Finally, section four offers a brief review of some relevant academic articles discussing issues relating to the **Local Regulation of VHRs**.

#### 3.1.1 Benefits and Costs of VHRs to a Community

The presence of VHRs in a jurisdiction and/or neighborhood is controversial because they offer both benefits and costs to the residents living there. Therefore, it is helpful to start this literature review with a cataloging of what others have determined these potential benefits and costs to be.

An Economic & Planning Systems (2015) report for Sonoma County, California, offers the following as possible benefits of VHRs to a county: (1) increased tourism and the subsequent economic/fiscal benefits it brings, (2) additional income for hosts of VHRs, and (3) an extension of economic benefits of tourism to neighborhoods previously not experiencing it. On the cost side, the report mentions the possibility of: (1) a shift of limited housing away from full-time residents, (2) encouraging long-term tenant evictions if landlords conclude greater profit to be had through

### 3. LITERATURE REVIEW AND REGRESSION ANALYSIS

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VHRs, (3) greater likelihood of the violation of local zoning and other ordinances meant to preserve the character of a neighborhood, (4) increased nuisances to neighbors by visitors not as vested in the neighborhood, and (5) loss of full-time population in neighborhoods, therefore reducing the number of households required for a local elementary school, volunteer fire service, and other community groups.

In examining the “misuse” of VHRs in Berlin’s (Germany) housing market, Schafer and Braun (2016) study the cost that such imposes upon the traditional hotel industry through lost overnight stays and upon permanent residents through a loss in conventional housing and higher rents. The owners of flats (apartments) turning them into permanent VHRs is identified as misuse, as opposed to only offering them occasionally as when the tenant or owner is away. Nonetheless, Schafer and Braun (2016, p. 289) point out that this misuse also generates the benefit of a “new form of urban tourism” at lower prices to tourists for a more “authentic experience of being more embedded in the everyday life of neighborhoods.” Flognfeldt and Tjorve (2013) make similar points regarding the shift from hotels and lodges in Scandinavian mountain resort communities, to what they refer to as “second-home villages,” where VHRs dominate entire neighborhoods. They conclude any attempt to protect the traditional accommodation industry as “misguided”. Instead, resort towns should be nurturing the further development of second-home villages within their boundaries due to the new opportunities they offer.

Using the technical economic term of an “externality,” Kasturi and Loudat (2014) catalogue the benefits and costs of VHRs on a neighborhood or a jurisdiction. A negative (or positive) externality occurs when the parties involved in an economic transaction do not consider some of the costs (or benefits) resulting from the transaction because they fall upon other people or entities not directly involved in the transaction. In their study of the influence of transient vacation rentals in Maui County (Hawaii), they identify the negative externalities of these as: (1) destroying the residential character of neighborhoods, (2) introducing a constant flow of strangers into a neighborhood, (3) reducing the availability of long-term rental housing and raising rents, and (4) infringing upon the property rights of neighbors. Wang et al. (1991) further characterize these negative externalities as arising from a proprietor potentially maintaining their residential VHR at a lower rate of maintenance than a residential owner-occupant, and occupants of the VHR exhibiting a lower commitment to furthering the quality of the neighborhood’s long-term living environment.

In their study, Kasturi and Loudat (2014) further point out that the positive externalities of VHRs to Maui County occur through a promotion of tourism and can include improvement of the county’s quality of life, which happens through induced investments resulting in additional employment and income for permanent residents. Scanlon, Sagor, and Whitehead (2014), in their study of the economic impact of holiday rentals (VHRs) in the United Kingdom, make the critical point that their induced effect on local employment and income should only count the contribution of tourists who would not have come, or would have stayed for a shorter time, without the option to stay in a VHR.

In thinking about the external influences that VHRs contribute to a neighborhood or jurisdiction, it is useful to consider the classification system for “tourism externalities on residents in the literature” that Meleddu (2014) summarizes in the forms listed in Table 3.1 below and used by Brandano (2014, Table 1.1, p. 19). These externalities fall into the categories of “economic,” “environmental,” and “sociocultural.” Such externalities can be either positive or negative. These represent a potential benefit (if positive externality) or potential detriment (if negative externality) of increased VHRs if VHRs encourage a greater amount of tourism in a jurisdiction and/or specific neighborhood. There is some debate with Meleddu’s classifications concerning the placement of increased price of land and housing as an exclusively negative economic externality, and increases in local

revenues as an exclusively positive impact of potential economic externalities generated by VHRs. Increases in the local price of land and housing can hurt long-term residents who do not own their residence, as it drives higher rents. However, this increase also benefits long-term residents who own their residence as they experience an increase in asset value. In addition, it is not definitive that an increase in VHRs that generates an increase in tourism necessarily improves a jurisdiction's local fiscal situation. It depends on whether the increased tax dollars from tourism exceed the increased local government expenditures necessary to accommodate additional tourists.

**Table 3.1**  
**Potential Externalities of VHRs on Residents**

| Externality Types | Positive                                                                                                                                                                                                                                            | Negative                                                                                                                      |
|-------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|
| Economic          | (a) Improved local economy and employment<br>(b) Increased income and standard of living<br>(c) Improved infrastructure and public transit<br>(d) Improved local tax revenues and/or government expenditures<br>(e) Increased shopping alternatives | (f) Increased prices and goods/services shortages<br>(g) Increased price of land and housing                                  |
| Environmental     | (a) Greater preservation of natural environment that draws tourists<br>(b) Improved park/recreation opportunities                                                                                                                                   | (c) Increased air, water, noise, and litter pollution<br>(d) Disruption of natural habitat through building<br>(e) Congestion |
| Sociocultural     | (a) Greater protection of quality of life<br>(b) Greater preservation of identity of resident native population<br>(c) Greater preservation of historical buildings                                                                                 | (d) Increased crime, prostitution, drugs, alcohol and drug abuse                                                              |

A few previous studies examine the influence of VHR activity on a jurisdiction's fiscal situation. Fritz (1982) looks at the influence of vacation home development on the local finances of 240 Vermont towns dominated by winter ski tourism. He specifically tries to understand the effect—holding other explanatory factors constant through regression analysis—of the causal variable of “vacation home percent of town property tax base” on the dependent variable of “rate of total residential property taxes paid per total residential market value.” His finding of a greater number of vacation homes in a town's property tax base driving an increase in rates of effective residential property taxation in smaller towns (less than a thousand population), and having no effect in larger towns (between 1,000 and 38,000 population), is of interest even though vacation homes are not necessarily VHRs.

Hadsell and Colarusso (2009) also examine the influence of the presence of seasonal homes on the local property tax rate in New York State's towns and villages between 1990 and 2000. They use regression analysis to control for other factors that can influence their dependent variable of “total property taxes paid in a jurisdiction divided by the market value of property in a jurisdiction.” Hadsell and Colarusso find that the causal variable of “percentage of homes in jurisdiction that are seasonal” exerts a negative influence on this dependent variable in smaller towns, and positive in villages.<sup>1</sup> They define small towns as having less than 10,000 in population, and small

<sup>1</sup> The following offers a description of what regression analysis is and how it is highly appropriate to ascertain this influence: [https://en.wikipedia.org/wiki/Regression\\_analysis](https://en.wikipedia.org/wiki/Regression_analysis)

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villages with less than a thousand in population. Hadsell and Colarusso speculate the reason for this difference in detected effects by type of community is that in geographically confined villages, vacation homes are more likely to originate through conversion of the existing housing stock. This holds the market value of the village's property base constant, but reduces demand for provision of local government services due to a smaller year-round population, and thus results in lower rate of property taxation.

Finally, Anderson (2006) examines the influence of the causal variable "concentration of vacation homes" in the local tax base of Minnesota communities on the dependent variable of "per-capita local spending." He tests the hypothesis that vacation homes reduce the actual cost of greater public spending in a community because they pay property taxes at the same rate as a non-vacation home, but very likely possess part-time residents who consume fewer local public services. Using a regression analysis that controlled for other factors expected to influence difference in per capita spending across communities, Anderson reports that a 1 percent increase in vacation homes in a local tax base offers the benefit of raising its per capita spending by 1.5 percent. The results of the regression analysis disproved Anderson's hypothesis. The following section identifies the data needed if the city were interested in preparing a similar evaluation of the impact on VHRs on per-capita local spending.

#### 3.1.2 Economic Impact of VHRs to a Community

An economic impact analysis provides a general way to think about the desirability of VHRs to a community. In looking through the previous literature, four studies of this type are relevant to thinking about the influence of VHRs. Two are examples of a more informal approach to doing this, while the other two attempt to attach a specific dollar value to the economic impact of VHRs to the local economy where they operate.

The City of River Falls (2013) Wisconsin offers an informal economic impact analysis of the influence of rental housing (primarily for local college students) in the six different neighborhoods most affected by it. While this is not a one to one comparison with the type of short-term rental typical of VHRs, college student housing does generally have shorter occupancy terms and turn-over more frequently than other longer-term occupancies. The City's analysis does this by comparing data collected from these six neighborhoods to a benchmark neighborhood with a similar vintage and average square footage of homes, but exhibiting less rental housing. In doing so, it reports average assessed value per square foot of houses in the high-rental neighborhoods to be very like the baseline low-rental neighborhood. The average number of police incidents per housing unit in a month is below or close to that of the benchmark neighborhood of 0.59 for all but two of the high-rental neighborhoods (0.85 and 1.59). In addition, all but one high rental neighborhood had acceptable housing densities within their residential zoning classification. The city concludes that the negative economic impact of short-term housing rentals in the city is minimal.

Economic & Planning Systems, Inc. (2015) conducts a more detailed example of informally measuring the economic impact of vacation rentals on affordable housing for Sonoma County, California. Its analysis quantifies and maps the shift to these forms of VHRs and demonstrates that the subsequent reduction in long-term housing supply has placed upward pressure on long-term residential rents and home prices. Using data collected from Airbnb (the largest vacation rental source in the county), it documents the rise in VHRs from 50,000 in 2011 to 975,000 in 2014, the increasing use of VHRs in previously non-tourist neighborhoods, and the loss of affordable long-term housing units for rent or sale.

Kasturi and Loudat (2014) offer a more formal economic impact analysis of the effect of VHRs on the jurisdiction of Maui County, Hawaii. They collect the data necessary to utilize input-output

tables to make a specific estimate of the influence of the presence of VHRs to the county's income and employment. Input-output tables, calculated by private sources, measure the contribution of an input from one sector of a local economy to all the other sectors present in the local economy.<sup>2</sup> To do this analysis, the researchers had to know that 1,095 VHRs existed in Maui County in 2006, and that they generated about \$116 million in direct total expenditures, based upon a 6.85-day average length of stay determined through existing surveys of visitors. An important element to consider in this study is the implicit assumption that if these VHRs did not exist, visitors staying in them would not have come to Maui County and that \$116 million in tourist revenue would not have been gained. This assumption suggests that tourists who use VHRs would not consider other accommodations and would not visit Maui at all. This assumption is suspect, based on the range of accommodations available on Maui, and the popularity of the Island as a destination, and the economic impacts calculated from running this added tourist revenue through an input-output table for the economy is a high-end approximation. Nevertheless, Kasturi and Loudat report a total output influence to Hawaii from the presence of VHRs of about \$230 million (\$150 million of this occurring in Maui County), with about 2,700 new Hawaii jobs generated, and about \$14 million in additional Hawaii state taxes collected.

Scanlon, Sagor, and Whitehead (2014) attempt a similar economic impact analysis of "holiday rentals" (VHRs) for the entire United Kingdom that resulted in what they termed a "gross economic impact" of about 4.5 billion euros from the income earned by holiday rental owners and spent by holiday rental clients. This also resulted in a gross increase of about 100,000 new jobs. However, they go further than the economic impact study for Maui, and rely upon surveys that asked holiday rental occupants if they would have traveled if VHRs did not exist (and they would have had to stay in a traditional hotel), or if they would have cut their stay shorter. This resulted in "net economic impact" calculations, which attempted to account for travel activity induced only by the presence of VHRs, of about 2.3 billion euros and 30,000 to 50,000 new jobs. These net economic impacts are about half that of the gross economic impacts calculated. The following section identifies the data needs if the city were to prepare an economic impact study that specifically captured the impact of VHRs on the tourist economy.

#### 3.1.3 Effect of VHRs on Neighboring Residential Properties

Hedonic regression analysis provides the most efficient way to assess the quantitative effect of the presence of VHRs to neighboring residential properties (or the presence of VHRs in a jurisdiction to the entire jurisdiction).<sup>3</sup> This statistical technique relies on gathering price (market sales value or market rental rate) data on parcels of property, and the characteristics of these parcels that cause differences in the price that consumers are willing to pay for them. For example, consider a sample of recent sales prices of homes in a specific city. Of course, one home will have sold for more or less than another due to the characteristics of the home itself (square footage, number of bedrooms, number of bathrooms, garage present, roof type, etc.) and the size of the plot of land it sits on. But the location of the home also plays a vital role. In positive terms, location attributes could be proximity to high socioeconomic neighbors, parks/recreation, a "good" elementary school, shopping, restaurants, mass transit, etc. Negative location attributes could be proximity to road noise/traffic, foul smells, vacant homes, non-maintained homes, etc.

Other characteristics of a home's neighborhood, such as the proximity of VHRs, exert less certain positive or negative influences on its value. Hedonic regression analysis allows one to analyze a

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<sup>2</sup> See [https://en.wikipedia.org/wiki/Input%E2%80%93output\\_model](https://en.wikipedia.org/wiki/Input%E2%80%93output_model) for a summary of input-output models and the tables it relies on.

<sup>3</sup> For a further explanation of the statistical technique of hedonic regression, see [https://en.wikipedia.org/wiki/Hedonic\\_regression](https://en.wikipedia.org/wiki/Hedonic_regression).

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sample of data based on recent home sales as the unit of analysis, and calculate the independent contribution that each characteristic making up the home offers to its value. This provides an objective answer to whether the proximity of VHRs raises or reduces the market value of a home, and by how much—thus offering an answer to whether the long-term homeowner should welcome or regret the entry of VHRs into their neighborhood based upon the expected effect to their home's property value. If the possible negative externalities of VHRs (exhibiting greater noise, greater traffic, and less upkeep) dominate, then their detected effect in a hedonic regression of home values is negative.

Lafferty and Frech (1978) present an early example of hedonic regression analysis that looks to tease out the influence of different local land uses on the median value of homes in 40 different Boston area communities. They attempt to discern the externalities of surrounding land use at the citywide and neighborhood levels by including in their hedonic regression analysis both the proportions of city land devoted to different forms of land use (multi-family, commercial, industrial, institutional, and vacant/agricultural) and the dispersions of these land uses across the entire city. After controlling for other characteristics expected to influence median home value, they find the greater the fraction of city land devoted to multi-family apartments (or the closest approximation to VHR) use, the higher the median home value in city. The dispersion of land devoted to multi-family use across a city's neighborhood exerted no discernable influence on the city's median home value. They believe that the greater presence of multiple-family land uses in a city offers citywide positive fiscal externalities that overcome any negative externalities, while the degree of the concentration of apartments in a city's neighborhoods offer no impacts because such concentration offers both positive and negative effects to the median home value observed in the city.

Wang et al. (1991) provides another relevant example of using hedonic regression analysis to test the claim that the presence of rental properties in a neighborhood exerts a negative influence on the value of single-family, owner-occupied residences. Using 1984 to 1986 data from over a thousand home sales in the City of San Antonio, Texas, and controlling for other relevant factors, they find that the addition of another rental property within the immediate eight houses that surround a property on average reduces the selling price of the home by approximately 4 percent.

More recently, Usrey (2012) completed a hedonic regression analysis of 2,766 homes that sold in 2011 and 2012 in Fort Collins, Colorado. Using geographic information system (GIS) techniques, she is able to identify the number of single-family homes within a radial band of a quarter mile of a home that sold, and within a second radial band of a quarter to half mile. After controlling for other relevant characteristics of the homes that sold, she finds that the addition of a single-family rental home within the nearer band reduced the home's sales price, while one in the farther band increased it. Specifically, if a home had 100 rental properties within a quarter mile, and this rose 10 percent to 110, Usrey's regression analysis shows that the price of the home would have fallen by 5.3 percent. However, if a home had 100 rental properties between a quarter mile and half mile away, and this rose 10 percent to 110, the price of the home would have risen by about 5.6 percent. Usrey believes the negative effect of close proximity to a rental is picking up the dominant negative externality effect, while the positive effect of moderate distances from a rental mitigates the negative externality-effect of the likely alternative of a vacant foreclosure, and allows the positive externality of an occupied rental.

Kim, Leung, and Wagman (2016) offer the first hedonic regression analysis to specifically capture the influence of VHRs on residential property values, using both sales prices and property tax appraisals as dependent variables. They did this by using both a property's proximity to VHRs as the causal variable of interest, and the causal effect on property values of adopting a city

ordinance that restricts the future presence of VHRs. The focus of their analysis was Anna Maria Island, Florida, in 2007, where only one of the three cities on the island had adopted a VHR ordinance. The ordinance includes minimum stay requirements and requires a 30 and 7 consecutive day stay for residential rentals in low- and high-density residential areas, respectively.

Kim, Leung, and Wagman (2016) use hedonic regression data from nearly 3,000 arm's length home sales (transactions between unrelated parties) that occurred in all three cities on the island. Their data cover a period that spanned the adoption of the VHR restriction by one city. The hedonic regression analysis relies on the sales price of a home as the dependent variable. They detect the separate influence of the surrounding density of VHRs, the adoption of the restrictive ordinance, and how the two work together to exert an even stronger influence. Specifically, a 10 percent increase in the ratio of "surrounding VHRs within a tenth of a mile of property to total homes" raises the property's value by 11.7 percent. The ordinance restricting the short-term length of residential rentals lowers a property's value by 20.4 percent if the property is subject to it and there are no VHRs within a tenth of a mile of this property. However, density of surrounding VHRs to total residential units within a tenth of a mile reduces this negative influence. Mitigation occurs gradually with distance, but when the ratio of VHR homes to all homes within a tenth of a mile of a home reaches about two-thirds and higher, the effect of the ordinance on sales price changes from negative to positive. Consequently, they have detected a tipping point at which the sales price of homes in an area with a very high density of VHRs would benefit from restricting the turnover of renters in those VHRs.

The previous studies on the likely influence of proximity to VHRs on a property's market value is clearly mixed. Lafferty and Frech (1978) find that the greater presence of apartment rentals throughout a city raises the market value of the median value home. Alternatively, Wang et al. (1991) report that a one unit increase in the number of rentals within the nearest eight homes lowers the sales price of the home affected by it. Usrey (2012) finds that the varied influences of a 10 percent increase in rental properties within a quarter mile of a home lowers its sales price, while the same increase in rental activity within a quarter to half mile band raises its sales price. Kim, Leung, and Wagman (2016) also detect multiple influences of VHRs specifically on the sales price of neighboring homes, i.e., a 10 percent increase in the density of VHRs (VHRs / Total Residential Units) within a tenth of a mile raising a home's sales price and the expected concurrent finding of restricting the number of VHRs in the community that the home sells in of reducing its sales price. Kim, Leung, and Wagman also find, however, a decrease of the second ordinance-based price reduction effect as the density of VHRs in the community increases.

Furthermore, it is worth calling out the finding reported by Stulber (2016) that describes the hedonic-regression-based research effort by FiveThirtyEight (headed by Nate Silver) to detect if the presence of Airbnb rentals in the United States' largest 25 housing markets drove up the rent charged for more long-term residential housing rentals between June 2015 and July 2016. Though details are not reported, the general conclusion is that the impact is likely positive but quite small, but could rise if more of Airbnb's rentals become the type that rent out for a substantial portion of the year. The following section offers a similar hedonic regression study to determine the impact of VHRs on home prices in the City of South Lake Tahoe. The technical appendix includes alternative regression analysis models that could be used to further assess the costs and benefits of VHRs in the city.

### 3. LITERATURE REVIEW AND REGRESSION ANALYSIS

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#### 3.1.4 Local Regulation of VHRs

The search through the previous literature on the influence of VHRs uncovered a few articles that offer interesting reading about community regulations that attempt to curtail the use of VHRs due to residential complaints of increased traffic, noise, and lack of upkeep. For instance, Pindell and Boyd (2010, pp. 54-56) describe how VHR limits already exist in United States communities through private covenants and municipal-wide actions. Municipalities have found trouble in some courts when justifying these ordinances as a form of zoning intended to control types of property use in specific zones, rather than the length of occupancy. Instead, courts have suggested restrictions based upon violation of “family” definitions, enforcement of nuisance codes, or not engaging in “community-strengthening activities.”<sup>4</sup>

Gottlieb (2013) offers a commentary on the reasons for the observed growth in VHRs (vacationer’s interest in a “different” and affordable lodging experience and homeowners’ desire for a supplemental income) and the conflicts created with residents in traditional neighborhoods. He describes the actions taken by some communities that attempt to quell such conflicts, including: (1) Palm Springs’ (California) Vacation Home Rental Ordinance that includes a hotline for neighbor’s complaints and restrictions on length of stay and number of occupants, (2) St. Helena’s (California) use of only 25 VHR permits that can be in use at the same time in the city, and (3) Maui County’s (Hawaii) restriction of VHRs to only certain business/resort districts. Gottlieb concludes that communities should instead consider controlling VHRs through the enforcement of existing noise limits, property care standards, public gathering restrictions, curfews, and parking codes. Lines (2015), after examining the approaches to Airbnb regulations in two Arizona jurisdictions, alternatively determines that the Pima County approach of creating a new regulatory system is superior to Phoenix’s reliance on existing ordinances.

Jefferson-Jones (2015) urges that VHRs allow homeowners to shift and share the burden of homeownership by helping to defray mortgage and tax costs. Such action, Jefferson-Jones contends, will help reduce disrepair, distressed sales, and foreclosure. She questions whether imposing restraints on VHR use furthers the stated goals of such to preserve property values and neighborhood integrity. Similarly, after extensive review of the policy implications of VHRs to local governments, Mehmed (2016) concludes that cities must take care to proceed deliberately into the adoption of regulations, ordinances, and permitting restrictions that constrain the existence and operation of VHRs within their borders.

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<sup>4</sup> The State of California has a very inclusive definition of “family,” which would likely preclude this term as a means to restrict occupancy.

### 3.2 REGRESSION MODEL ANALYSIS AND RESULTS

The purpose of the quantitative investigation described next, in the form of a multiple regression analysis, is to measure the dollar impacts of the presence of VHRs on the selling price of single-family homes in the City between 2011 and 2016. Background information on what regression analysis is, the use of this statistical method to study this topic elsewhere, and the findings from these earlier studies are part of a literature review on the economic impact of VHRs contained in Section 3.1, Literature Review. The remainder of this section describes the: (1) appropriateness of regression analysis for the issue under consideration, (2) data needed for the regression analysis, (3) regression findings, and (4) overall assessment of VHRs on the value of residential home sales.

#### 3.2.1 Appropriateness of Regression Analysis

Policy-makers and citizens of South Lake Tahoe desire to better understand the impact that the presence of VHRs has had on residents and businesses within the city's boundaries. As detailed in Section 2, there are multiple ways to accomplish this, including: (1) a benefit/cost comparison of the dollar value of all benefits that VHRs bring to South Lake Tahoe in comparison to the dollar value of all costs; (2) an economic impact analysis of the effect of VHRs on South Lake Tahoe's economic activity (income and employment); and (3) a hedonic regression analysis of the impact of a house being a VHR and the proximity of VHRs, to the selling price of homes in the city. This section offers a description of the last method.

Hedonic regression analysis offers a direct measure of the net benefits of VHRs through a statistical-based calculation that relies upon the market-based choices of both sellers and buyers in the city's residential (single-family) real estate market. The results of this calculation show whether residents (homeowners) who sold their homes received a higher or lower price based upon the home itself being a VHR, and/or the home's proximity to VHRs. If residential property owners value the use of South Lake Tahoe homes more as short-term VHRs than as long-term residences, they are willing to pay more for them. Furthermore, if the presence of VHRs are overall attractive or unattractive to potential buyers of South Lake Tahoe single-family real estate, the buyers will be willing to pay more or less for a home, depending on its proximity to VHRs in the neighborhood. As noted in the literature review, this is not to imply that the proximity of VHRs to a home is exclusively a perceived benefit, or a perceived cost, to a homebuyer; VHRs clearly offer both. But what this hedonic regression analysis does show is whether VHR proximity is on net an overall benefit to a homebuyer, or is on net an overall cost.

As discussed in the literature review, a hedonic regression analysis uses statistics to decompose the total price paid for a product based upon a determination on whether a specific characteristic adds or subtracts value to what a typical buyer is willing to pay for this product. Policy analysts have found it informative to apply this technique to the determination of the price paid for a home. The simple theory being that:

- (1) Selling Price of Home<sub>i</sub> = f (Structural Characteristics<sub>i</sub>, Age<sub>i</sub>, Lot Characteristics<sub>i</sub>, Period Sold in<sub>i</sub>, Neighborhood Location<sub>i</sub>, VHR<sub>i</sub>, Proximity to Other VHRs<sub>i</sub>)

Equation (1) is a functional (f) representation that the attributes of home (i), known to be of value to buyers of the home, determine its selling price. In general terms, these attributes usually include structural characteristics, the age of the home, the size of the lot it sits on, when sold, and its location. For this analysis, which seeks to identify the independent effects of VHRs on the selling price of a home, relevant attributes also include whether the home itself is a VHR, and the number of VHRs located within four radial and non-overlapping mileage bands from the home. Hedonic

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regression analysis can thus identify the contribution of whether a home is operating as a VHR, and its proximity to other VHRs, to the selling price of a home.

Figure 3.1 (year 2011) and Figure 3.2 (year 2016) offer a visual understanding of the hedonic regression method used. The dashed lines in these figures represent the city boundaries. The double-drawn lines represent the boundaries of the eight census tracts assigned to the city. The US Census designates these tracts in part to account for the city's different neighborhoods.<sup>1</sup> A dot in these figures represents the location of a licensed VHR. A comparison of the number of dots (1,213) in 2011 to the number of dots (1,861) in 2016 illustrates the overall growth of VHRs in this six-year period, and the greater concentration of this growth in some census tracts over others. In 2011, 433 single-family home sales occurred in the city and 18 (about 4 percent) of these were homes with a VHR license. In comparison, in 2016, 547 single-family home sales occurred and 42 (nearly 8 percent) of these were registered as VHRs. Each of these 980 home sales, and the nearly 2,000 others that occurred in 2012 through 2015, represent a data point in this analysis.

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<sup>1</sup> For more information about census tracts, see [https://www.census.gov/geo/reference/gtc/gtc\\_ct.html](https://www.census.gov/geo/reference/gtc/gtc_ct.html).

Figure 3.1  
2011 City of South Lake Tahoe Vacation Home Rentals within City Boundaries and Census Tracts

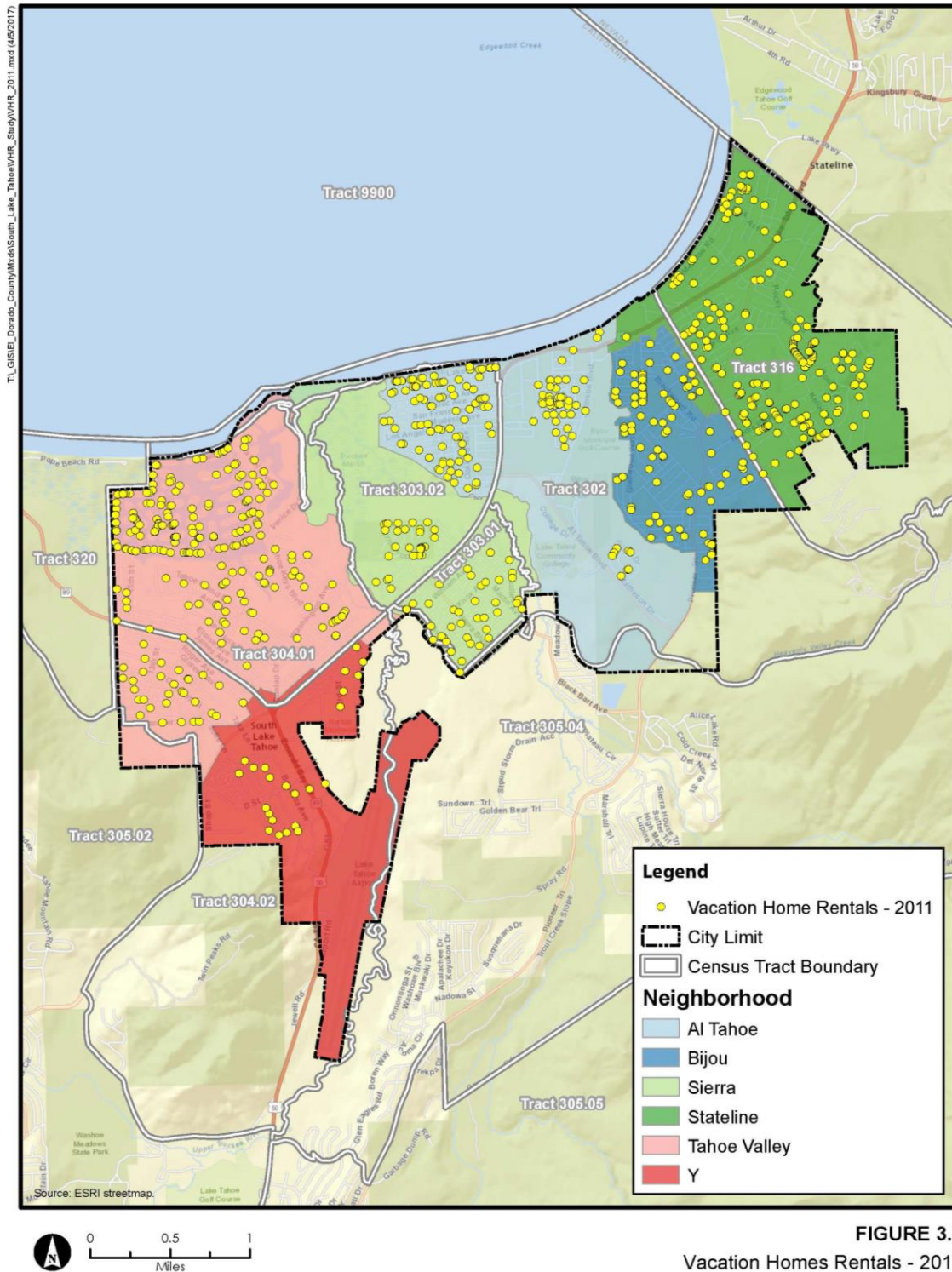


FIGURE 3.1  
Vacation Homes Rentals - 2011

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Figure 3.2  
2016 City of South Lake Tahoe Vacation Home Rentals within City Boundaries and Census Tracts

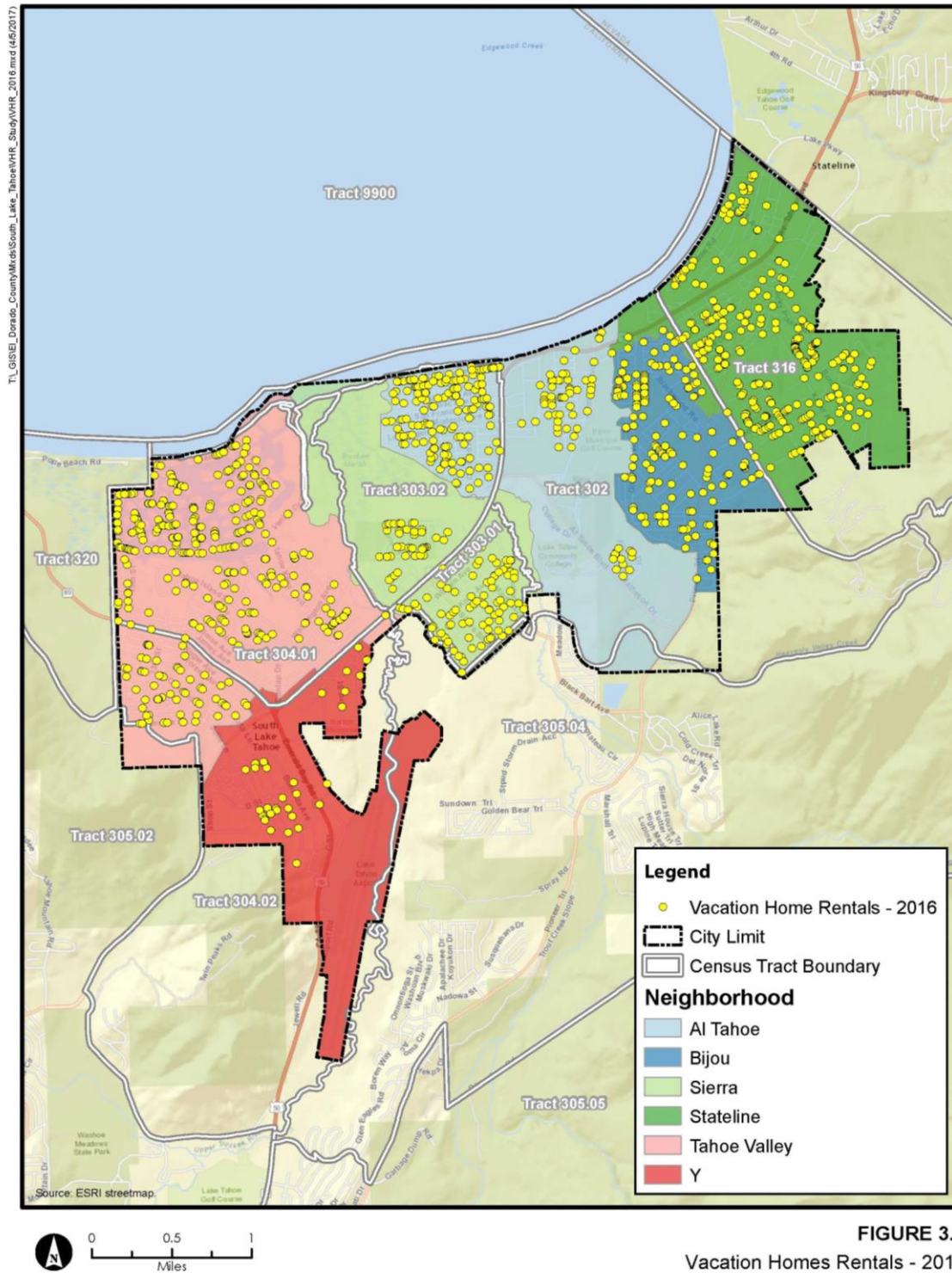


FIGURE 3.2  
Vacation Homes Rentals - 2016

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INTERNATIONAL

### 3.2.2 Data Needed for Regression Analysis

The hedonic regression estimation equation requires the collection of data that accounts for the categories included there. The specific data used to represent these categories include:

- (1) Structural Characteristics<sub>i</sub> = f (Bathrooms<sub>i</sub>, Bedrooms<sub>i</sub>, House\_Square\_Feet\_Hundred<sub>i</sub>, Minimum\_Remodel\_Dummy<sub>i</sub>, Major\_Remodel\_Dummy<sub>i</sub>)
- (2) Age<sub>i</sub> = f (Years\_Old<sub>i</sub>)
- (3) Lot Characteristics<sub>i</sub> = f (Condominium\_Dummy<sub>i</sub>, Lot\_Square\_Feet\_Thousand<sub>i</sub>, Multiple\_Properties\_Dummy<sub>i</sub>)
- (4) Period Sold in<sub>i</sub> = f (Year\_2012\_Dummy<sub>i</sub>, Year\_2013\_Dummy<sub>i</sub>, Year\_2014\_Dummy<sub>i</sub>, Year\_2015\_Dummy<sub>i</sub>, Year\_2016\_Dummy<sub>i</sub>, April\_May\_June\_Sold\_Dummy<sub>i</sub>, July\_Aug\_Sept\_Sold\_Dummy<sub>i</sub>, Oct\_Nov\_Dec\_Sold\_Dummy<sub>i</sub>)
- (5) Neighborhood Location<sub>i</sub> = f (Tract\_30200<sub>i</sub>, Tract\_30301<sub>i</sub>, Tract\_30302<sub>i</sub>, Tract\_30401<sub>i</sub>, Tract\_30402<sub>i</sub>, Tract\_30502<sub>i</sub>, Tract\_30504<sub>i</sub>)
- (6) VHR<sub>i</sub> = f (VHR\_Occupancy\_Number<sub>i</sub>)
- (7) Proximity to Other VHRs<sub>i</sub> = f (VHRs\_Tenth\_Mile\_Band<sub>i</sub>, VHRs\_Quarter\_Mile\_Band<sub>i</sub>, VHRs\_Half\_Mile\_Band<sub>i</sub>, VHRs\_One\_Mile\_Band<sub>i</sub>)

The data used in this analysis contains 2,956 observations on single-family home sales that occurred in SLT between 2011 and 2016. Much of the data comes from realtor-generated MLS data recorded for each of these home sales. An exception for this was whether the home sold was currently operating as a VHR, and if so, the maximum occupancy on record with the City; this data came from a search of City records of required licenses granted in SLT to operate a VHR. This full set of VHR license data for the six years under consideration as well as the use of ArcGIS was necessary to determine the number of VHRs within the chosen four radial bands from a home of: (1) zero to a tenth mile, (2) tenth to a quarter mile, (3) quarter to a half mile, and (3) half to one mile.<sup>2</sup> In addition, a search of City building permit records revealed whether a home had undergone a moderate (between \$20,000 and \$50,000) renovation, or a major renovation (greater than \$50,000) since 2001. Finally, the Census Geocoder revealed the location of a home within one of the eight possible tracts in SLT.<sup>3</sup>

Table 3.2 contains complete definitions for each variable used in this regression analysis. Table 3.3 contains the descriptive statistics for each variable. Note that when using multiple dummy variables to account for distinct categories that a broad category can take on, it is necessary to exclude the variables selected to act as a base of comparison. Thus, the base, or excluded variable, of how neighborhoods and location affect the selling price of a home is the relationship between the home and the city's far eastern Census Tract 31600, which contains the commercial area nearest the Nevada casinos. The base of comparison for how the quarter of the year in which a home sold influenced its price is the first three months of the year, while the base of comparison for how the year in which a home was sold affected its selling price is the first year observed, 2011. Note that there is no adjustment of the home's selling price for differences in the Consumer Price

<sup>2</sup>Radial bands beyond one mile were also tried, but ArcGIS was unable to calculate due to hitting the city boundaries in too many cases.

<sup>3</sup>Available at <https://geocoding.geo.census.gov/geocoder>.

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Index that occurred between 2011 and 2016, and thus the effects for each calculated year account for that, as well as for the differences in housing price and inflation/deflation unique to the South Lake Tahoe housing market. The following tables detail the variables used in this portion of the analysis.

The validity of a regression analysis relies on having data that is complete and consistent. The more variables included, the more precise the analysis. Many other variables might have potentially increased the precision of this analysis, such as additional structural details, call for service records, and neighborhood information. While some of this information was available for some of the years evaluated, it was not consistent and complete, and could not be added in a reliable way.

**Table 3.2**  
**Variable Descriptions**

| Variable Name             | Description                                            |
|---------------------------|--------------------------------------------------------|
| Home Price                | Nominal (no accounting for inflation) Price of Home    |
| VHR Occupancy Number      | Number of Occupants that VHR License Allows            |
| VHRs Tenth Mile Band      | Number of Licensed VHRs in 0 to Tenth Mile Radius      |
| VHRs Quarter Mile Band    | Number of Licensed VHRs in Tenth to 1/4 Mile Radius    |
| VHRs Half Mile Band       | Number of Licensed VHRs in 1/4 to 1/2 Mile Radius      |
| VHRs One Mile Band        | Number of Licensed VHRs in 1/2 to 1 Mile Radius        |
| Condominium Dummy         | Dummy Equals One if Condominium                        |
| Bathrooms                 | Number of Bathrooms                                    |
| Bedrooms                  | Number of Bedrooms                                     |
| House Square Feet Hundred | Square Foot of House in Hundreds                       |
| Lot Square Feet Thousand  | Square Foot of Lot in Thousands                        |
| Years Old                 | Number of Years Old When Sold                          |
| Minimum Remodel Dummy     | Dummy Equals One if Between \$20–\$50K Reno Since 2001 |
| Major Remodel Dummy       | Dummy Equals One if Greater than \$50K Reno Since 2001 |
| Multiple Properties Dummy | Dummy Equals One if more than One Home in Sale         |
| Tract 31600 Dummy         | Excluded Base Census Tract Nearest Nevada Casinos      |
| Tract 30200 Dummy         | Dummy Equals One if Tract 30200 (see Figure 3.1)       |
| Tract 30301 Dummy         | Dummy Equals One if Tract 30301 (see Figure 3.1)       |
| Tract 30302 Dummy         | Dummy Equals One if Tract 30302 (see Figure 3.1)       |
| Tract 30401 Dummy         | Dummy Equals One if Tract 30401 (see Figure 3.1)       |
| Tract 30402 Dummy         | Dummy Equals One if Tract 30402 (see Figure 3.1)       |
| Tract 30502 Dummy         | Dummy Equals One if Tract 30502 (see Figure 3.1)       |
| Tract 30504 Dummy         | Dummy Equals One if Tract 30504 (see Figure 3.1)       |
| Year 2011 Dummy           | Excluded Base Year of 2011                             |
| Year 2012 Dummy           | Dummy Equals One if Sale Occurred in 2012              |
| Year 2013 Dummy           | Dummy Equals One if Sale Occurred in 2013              |
| Year 2014 Dummy           | Dummy Equals One if Sale Occurred in 2014              |
| Year 2015 Dummy           | Dummy Equals One if Sale Occurred in 2015              |
| Year 2016 Dummy           | Dummy Equals One if Sale Occurred in 2016              |
| Jan Feb March Sold Dummy  | Excluded Base First Quarter of Year Sale               |
| April May June Sold Dummy | Dummy Equals One if Sale in Second Quarter             |
| July Aug Sept Sold Dummy  | Dummy Equals One if Sale in Third Quarter              |
| Oct Nov Dec Sold Dummy    | Dummy Equals One if Sale in Fourth Quarter             |

**Table 3.3**  
**Descriptive Statistics - 2,956 Observations from Years 2011 to 2016**

| Variable                  | Mean      | Standard Deviation | Minimum  | Maximum     |
|---------------------------|-----------|--------------------|----------|-------------|
| Home Price                | \$361,974 | \$341,056          | \$25,000 | \$5,750,000 |
| VHR Occupancy Number      | 1.03      | 3.08               | 0        | 26          |
| VHRs Tenth Mile Band      | 17.22     | 35.07              | 0        | 267         |
| VHRs Quarter Mile Band    | 37.49     | 41.09              | 0        | 337         |
| VHRs Half Mile Band       | 98.15     | 89.20              | 3        | 538         |
| VHRs One Mile Band        | 175.41    | 133.01             | 0        | 617         |
| Condominium Dummy         | 0.07      | 0.13               | 0        | 1           |
| Bathrooms                 | 2.00      | 0.86               | 1        | 9           |
| Bedrooms                  | 2.85      | 0.89               | 1        | 8           |
| House Square Feet Hundred | 15.09     | 7.22               | 3.03     | 73.39       |
| Lot Square Feet Thousand  | 7.03      | 81.19              | 3.94     | 2,224.49    |
| Years Old                 | 45.43     | 15.90              | 1        | 105         |
| Minimum Remodel Dummy     | 0.067     | 0.250              | 0        | 1           |
| Major Remodel Dummy       | 0.039     | 0.194              | 0        | 1           |
| Multiple Properties Dummy | 0.012     | 0.107              | 0        | 1           |
| Tract 30200 Dummy         | 0.216     | 0.412              | 0        | 1           |
| Tract 30301 Dummy         | 0.116     | 0.320              | 0        | 1           |
| Tract 30302 Dummy         | 0.117     | 0.321              | 0        | 1           |
| Tract 30401 Dummy         | 0.303     | 0.460              | 0        | 1           |
| Tract 30402 Dummy         | 0.128     | 0.334              | 0        | 1           |
| Tract 30502 Dummy         | 0.00068   | 0.026              | 0        | 1           |
| Tract 30504 Dummy         | 0.0047    | 0.069              | 0        | 1           |
| Year 2012 Dummy           | 0.182     | 0.386              | 0        | 1           |
| Year 2013 Dummy           | 0.177     | 0.382              | 0        | 1           |
| Year 2014 Dummy           | 0.158     | 0.364              | 0        | 1           |
| Year 2015 Dummy           | 0.161     | 0.367              | 0        | 1           |
| Year 2016 Dummy           | 0.177     | 0.382              | 0        | 1           |
| April May June Sold Dummy | 0.245     | 0.430              | 0        | 1           |
| July Aug Sept Sold Dummy  | 0.312     | 0.463              | 0        | 1           |
| Oct Nov Dec Sold Dummy    | 0.255     | 0.436              | 0        | 1           |

### 3.2.3 Regression Method and Findings

To appropriately conduct a hedonic regression analysis of the type desired here, which policy-makers can reliably use to make an overall assessment of how VHRs have affected home prices in the city, there are first a few essential issues to consider. These include: (1) the functional form to use (linear or nonlinear); (2) whether the included explanatory variables move so closely together (i.e., "multicollinearity") that the effect of these variables are undetectable; and (3) whether the standard errors of the calculated regression coefficients exhibit the concern of

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“heteroscedasticity.” These are all rather technical issues, only covered briefly here, to assure the informed reader of their examination.

First, as noted in the literature review summary of previous hedonic regressions involving home prices, researchers often translate the dependent variable of home price into its natural log form before running the regression. This transformation accounts for the likelihood of explanatory variables exhibiting a “nonlinear” influence on home price. Nonlinear influence means that every one-unit change in an explanatory variable does not result in the same dollar change in home price. The study team calculated regression results that used the natural log translation of home price and also did nothing to the price of homes, and found the explanatory power of the analysis much improved after the log transformation of home price. The natural log of home price is thus the dependent variable in all regressions. The interpretation of a regression coefficient in such a regression is the expected decimal percentage change in home price, from a one-unit change in a respective explanatory variable. The only modification to this interpretation is that the explanatory measure of number of bedrooms is also in natural log form, because doing so accounted for the better fit of how a percentage change in bedrooms affects home price in percentage terms.<sup>4</sup>

Second, this research originally explored the possibility of trying to calculate the separate effects on a home's selling price of: (1) being or not being a VHR, (2) the number of occupants allowed if a VHR, and (3) the number of parking spaces allowed if a VHR. However, when including all three of these explanatory variables in the regression analysis, none of them showed any statistically significant influence on home price. This is a clear symptom of multicollinearity.<sup>5</sup> The necessary solution, since these three measures move so closely together—the partial correlation coefficients run between 0.91 and 0.94—is to only include number of occupants allowed if a VHR in the regression. If a sold property is not a VHR, this variable takes on value of zero. By allowing this measure of VHR use to vary by number of occupants allowed, it also accounts for the greater revenue stream likely to the owner if it can legally house more occupants as a rental property.

The appropriate use of ordinary least squares to determine the statistically significant influence of explanatory variables on a dependent variable requires that the researcher investigate whether the “standard errors” calculated from the regression are heteroscedastic, or reflect variable irregularities that compromise the analysis.<sup>6</sup> If they are, as is often the case for hedonic housing price regression analysis, then the study team used widely accepted corrections to yield unbiased regression findings. An initial regression analysis indicated heteroskedasticity, and three possible corrections used to deal with it. The first was the STATA calculation of “clustered robust standard errors” using ordinary least squares (OLS) regression analysis and clusters based upon the eight census tracts in the city.<sup>7</sup> The second and third corrections were the GEODA<sup>8</sup> use of maximum likelihood estimation (MLE) with either a spatial error or spatial lag model that respectively

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<sup>4</sup> A simple explanation of the choice of functional form is at <http://www.dummies.com/education/economics/econometrics/econometrics-choosing-the-functional-form-of-your-regression-model>.

<sup>5</sup>For more information, see <https://en.wikipedia.org/wiki/Multicollinearity>.

<sup>6</sup>For more information, see <https://en.wikipedia.org/wiki/Heteroscedasticity>.

<sup>7</sup>For more information, see [http://cameron.econ.ucdavis.edu/research/Cameron\\_Miller\\_JHR\\_2015\\_February.pdf](http://cameron.econ.ucdavis.edu/research/Cameron_Miller_JHR_2015_February.pdf).

<sup>8</sup> GEODA is software that conducts [spatial data analysis](#), [geovisualization](#), spatial autocorrelation and spatial modeling, see <https://en.wikipedia.org/wiki/GeoDa>.

accounted for the possibility that the error terms across spatial units within a certain proximity are correlated, or that the home price is not only affected by its own explanatory variables, but also the explanatory variable values of homes within a certain proximity.<sup>9</sup> Table 3.4 displays the regression results from the three different models, OLS, MLE spatial error model, and MLE spatial lag model, which is the model that best fit the variables evaluated.

**Table 3.4:**  
**Regression Results -**  
**Dependent Variable: LN\_Home\_Price, 2,956 observations from Years 2011 through 2016**

| Explanatory Variable      | OLS<br>(Clustered Robust<br>Standard Errors) | MLE<br>(Spatial Error<br>Model~) | MLE<br>(Spatial Lag<br>Model~) |
|---------------------------|----------------------------------------------|----------------------------------|--------------------------------|
| VHR Occupancy Number      | 0.0092***<br>(0.0020)                        | 0.0095***<br>(0.0026)            | 0.0094***<br>(0.0026)          |
| VHRs Tenth Mile Band      | 0.0017***<br>(0.00046)                       | 0.0017***<br>(0.00026)           | 0.0017***<br>(0.00025)         |
| VHRs Quarter Mile Band    | 0.00096<br>(0.00089)                         | 0.00098***<br>(0.00022)          | 0.00097***<br>(0.00022)        |
| VHRs Half Mile Band       | -0.00054*<br>(0.00028)                       | -0.00053***<br>(0.00012)         | -0.00054***<br>(0.00012)       |
| VHRs One Mile Band        | -0.00053<br>(0.00031)                        | -0.00051***<br>(0.000092)        | -0.00052***<br>(0.000091)      |
| Condominium Dummy         | -0.145***<br>(0.021)                         | -0.145**<br>(0.061)              | -0.144**<br>(0.061)            |
| Bathrooms                 | 0.068**<br>(0.029)                           | 0.070***<br>(0.016)              | 0.069***<br>(0.016)            |
| LN Bedrooms               | 0.053<br>(0.050)                             | 0.051*<br>(0.031)                | 0.051*<br>(0.031)              |
| House Square Feet Hundred | 0.042***<br>(0.0033)                         | 0.042***<br>(0.00021)            | 0.042***<br>(0.00021)          |
| Lot Square Feet Thousand  | 0.0052**<br>(0.0016)                         | 0.0052***<br>(0.0010)            | 0.0052***<br>(0.0010)          |
| Years Old                 | -0.0027**<br>(0.00090)                       | -0.0027***<br>(0.00061)          | -0.0027***<br>(0.00061)        |
| Minimum Remodel Dummy     | 0.034<br>(0.035)                             | 0.034<br>(0.030)                 | 0.033<br>(0.030)               |
| Major Remodel Dummy       | 0.048<br>(0.031)                             | 0.048<br>(0.040)                 | 0.047<br>(0.040)               |
| Multiple Properties Dummy | 0.121<br>(0.067)                             | 0.121*<br>(0.071)                | 0.119*<br>(0.071)              |
| Tract 30200 Dummy         | -0.059**<br>(0.021)                          | -0.059**<br>(0.028)              | -0.059**<br>(0.028)            |

<sup>9</sup>An easy-to-follow summary of these models is at <https://s4.ad.brown.edu/Resources/Tutorial/Modul2/GeoDa3FINAL.pdf>.

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| Explanatory Variable          | OLS<br>(Clustered Robust<br>Standard Errors) | MLE<br>(Spatial Error<br>Model~) | MLE<br>(Spatial Lag<br>Model~) |
|-------------------------------|----------------------------------------------|----------------------------------|--------------------------------|
| Tract 30301 Dummy             | -0.189**<br>(0.079)                          | -0.183***<br>(0.039)             | -0.189***<br>(0.039)           |
| Tract 30302 Dummy             | 0.014<br>(0.043)                             | 0.021<br>(0.034)                 | 0.014<br>(0.035)               |
| Tract 30401 Dummy             | 0.212**<br>(0.030)                           | 0.216***<br>(0.028)              | 0.211***<br>(0.028)            |
| Tract 30402 Dummy             | -0.195<br>(0.076)                            | -0.190***<br>(0.038)             | -0.197***<br>(0.038)           |
| Tract 30502 Dummy             | 0.078<br>(0.097)                             | 0.059<br>(0.291)                 | 0.065<br>(0.291)               |
| Tract 30504 Dummy             | 0.066<br>(0.082)                             | 0.067<br>(0.114)                 | 0.070<br>(0.114)               |
| Year 2012 Dummy               | -0.040<br>(0.028)                            | -0.041<br>(0.027)                | -0.041<br>(0.027)              |
| Year 2013 Dummy               | 0.105<br>(0.121)                             | 0.105***<br>(0.034)              | 0.107***<br>(0.035)            |
| Year 2014 Dummy               | 0.345***<br>(0.036)                          | 0.344***<br>(0.028)              | 0.346***<br>(0.028)            |
| Year 2015 Dummy               | 0.399***<br>(0.048)                          | 0.396***<br>(0.028)              | 0.399***<br>(0.028)            |
| Year 2016 Dummy               | 0.511**<br>(0.061)                           | 0.508***<br>(0.028)              | 0.510***<br>(0.028)            |
| April May June Sold Dummy     | 0.056***<br>(0.015)                          | 0.056**<br>(0.023)               | 0.056**<br>(0.023)             |
| July Aug Sept Sold Dummy      | 0.095***<br>(0.015)                          | 0.096***<br>(0.022)              | 0.094***<br>(0.022)            |
| Oct Nov Dec Sold Dummy        | 0.082***<br>(0.012)                          | 0.081***<br>(0.023)              | 0.081***<br>(0.023)            |
| Constant                      | 11.606***<br>(0.108)                         | 11.601***<br>(0.065)             | 9.539***<br>(0.824)            |
| R-Squared                     | 0.6162                                       | 0.6173                           | 0.6171                         |
| Log Likelihood                | -                                            | -1,545.57                        | -1,545.84                      |
| Akaike Info Criterion         | -                                            | 3,151.15                         | 3,153.68                       |
| Lamda (Spatial Error)         | -                                            | 0.244***<br>(0.091)              | -                              |
| W LN Home Price (Spatial Lag) | -                                            | -                                | 0.165**<br>(0.065)             |

Note: Statistical significance in two-tailed test indicated by: \*\*\* 99% or greater, \*\* 95 to 98.9%, and \* 91 to 94.9%.

The MLE regressions for both the spatial error and spatial lag models used a distance spatial metric based upon an arc distance of a quarter mile. An arc distance of 0.192 miles was the minimum determined by GEODA such that each property has at least one comparable property.

Table 3.4 contains the regression results derived from the use of all three possible corrections for heteroskedasticity. It is reassuring to note that the regression findings among all three are nearly identical. I have chosen to focus on the results of the MLE spatial lag model because Akaike info criterion values are slightly higher (indicating a minor preference for its use). But note that the use of any of the three specific findings yield essentially the same conclusions that follow.

First, recall that a regression coefficient (recorded as the top entry in a cell in Table 3.4), derived through a regression analysis with a logged dependent variable of home price, indicates the expected percentage change in home price from a one-unit change in a respective explanatory variable, holding other explanatory variables in the regression constant. Also, regression coefficients only indicate a non-zero influence, under the standards of statistical analysis, if statistically significant from zero with at least a 90 percent level of confidence.<sup>10</sup> The statistical significance is determined by the ratio of the regression coefficient to its standards error reported directly below it in a cell in Table 3.4.

Understanding the above, the results of the spatial lag model indicate that a one-unit increase in the number of occupants for a VHR-licensed home raises its value by 0.94 percent. Thus, for the mean number of nine occupants licensed to a VHR in this dataset, it sells for about 8.5 (9 x 0.94) percent more than a similar house with no VHR license (zero occupants allowed). Reading down the same column in Table 3.4, relative to a home with similar characteristics:

- a condominium sold for 14.4 percent less
- every bathroom adds 6.9 percent more value
- every 10 percent increase in bedrooms adds 5.1 percent in value
- every 100 square feet in structure adds 4.2 percent in value
- every 1,000 square feet in lot size adds .52 percent in value
- every 10-year increase in years old subtracts 2.7 in value
- single family properties with multiple units (such as accessory dwelling units) sold for 11.9 percent more
- relative to Tract 31600 (containing the Stateline), homes respectively sold for percentages differences across the city

|                                   |       |        |       |        |
|-----------------------------------|-------|--------|-------|--------|
| home located in census tract      | 30200 | 30301  | 30401 | 30402  |
| percent difference in sales price | -5.9% | -18.9% | 21.1% | -19.7% |

- relative to year 2011, the years different homes sold also respectively had percentage differences in sales price

|                                   |       |       |       |       |
|-----------------------------------|-------|-------|-------|-------|
| year home sold                    | 2013  | 2014  | 2015  | 2016  |
| percent difference in sales price | 10.7% | 34.6% | 39.9% | 51.0% |

- relative to the first quarter of the year, homes that sold in the second, third, or fourth quarters respectively sold for percentage differences of 5.6, 9.4, or 8.1

<sup>10</sup> For more information on the concept of statistical significance, see [https://en.wikipedia.org/wiki/Statistical\\_significance](https://en.wikipedia.org/wiki/Statistical_significance).

### 3. LITERATURE REVIEW AND REGRESSION ANALYSIS

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Of great interest to the primary issue of this analysis are the hedonic regression results recorded for the influence of an additional VHR within the four, non-overlapping, radial bands recorded in Table 3.4. Interestingly, a VHR within a tenth of a mile of a purchased home added a 0.17 percent increase to its value. For the mean value of about 17 VHRs observed within a tenth of a mile of a sold home in this dataset (see Table 3.3), this indicates about a 2.9 ( $17 \times 0.17$ ) percent increase in value.<sup>11</sup> An additional VHR, between a tenth and quarter mile of a purchased home, also adds to its value in the form of 0.097 percent. For the mean of about 37 VHRs within this band, this translates into about a 3.6 ( $37 \times 0.097$ ) percent increase in sales price.

Beyond the quarter-mile boundary, the influence of the VHRs changes. Adding a VHR beyond a quarter mile reduces the sales price of a home. For the two measured bands of a quarter to half mile and half mile to one mile, the appropriate regression coefficients in Table 3.4 indicate a similar respective -0.054 and -0.052 percent decreases in price for each additional VHR. At the respective means of about 98 and 175 VHRs for these two most distant bands, these yield calculated decreases in sales price of about -5.3 ( $98 \times -0.054$ ) and -9.1 ( $175 \times -0.052$ ) percent.

Summarizing the calculated effects of VHRs on City home values:

- A VHR with an average allowed maximum occupancy of nine sells for about 8.5 percent more than a similar house not licensed to be a vacation home rental.
- The presence of the average number of VHRs within a zero to a tenth mile of a home, and a tenth to quarter mile of a home, respectively raise the home's selling price by 2.9 and 3.6 percent.
- The presence of the average number of VHRs with a quarter to half mile of a home, and a half to one mile of a home, respectively lower the home's selling price by -5.3 and -9.1 percent.

A comparison of these findings to the only earlier example of hedonic regression analysis by Kim, Leung, and Wagman (2016), which measured the influence of the density of short-term rentals within a tenth of a mile on a home's price, also detected a positive influence of converting from no short-term rentals within a tenth of a mile from a home, to only short-term rentals within that tenth of a mile, yielding about a 12 percent increase in home value.

#### 3.2.4 Overall Assessment of Vacation Home Rentals on Property Value

This hedonic regression analysis has clearly detected both positive and negative influences of vacation home rentals on the sales price of homes in the City between 2011 and 2016. During this period, the number of VHRs in the city's boundaries steadily increased by 53 percent, from 1,213 to 1,861. An overall assessment of the impact of VHRs on home sales in the city would include simulating for all home sales the price increase or decrease that occurred because the home could have been a VHR (and thus sold for more); could have been located within a half mile of a VHR (and thus sold for more); or could have been between a half mile and one mile of a VHR (and thus sold for less). The results of these calculations are in Table 3.5.

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<sup>11</sup> The regression coefficient of 0.0017 is the decimal percentage change in home price for the addition of another VHR within a tenth of a mile. The standard percentage change is thus 0.17, which is used in the calculation here.

**Table 3.5**  
**Summary of Overall Effects of VHRs on Value of Home Sales in South Lake Tahoe between 2011 and 2016**

| Influence                                                                  | Total Dollar Value of Influence | Total Dollar Value of Influence as a Percentage of Total Dollar Value of Homes Sold | Total Dollar Value of Influence as a Percentage of Number Homes (VHRs) Sold |
|----------------------------------------------------------------------------|---------------------------------|-------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| Increased Value in Homes Sold Due to Operating as a VHR                    | \$15,954,526                    | 1.45%                                                                               | \$46,925 per VHR                                                            |
| Increased Value in Homes Sold Due to Proximity of VHRs within Tenth Mile   | \$35,902,430                    | 3.26%                                                                               | \$11,888 per home                                                           |
| Increased Value in Homes Sold Due to Proximity of VHRs within Quarter Mile | \$45,066,458                    | 4.10%                                                                               | \$14,923 per home                                                           |
| Decreased Value in Homes Sold Due to Proximity of VHRs within Half Mile    | -\$60,541,625                   | -5.51%                                                                              | -\$20,046 per home                                                          |
| Decreased Value in Homes Sold Due to Proximity of VHRs within One Mile     | -\$101,081,858                  | -9.20%                                                                              | -\$33,470 per home                                                          |
| Sum of Column                                                              | -\$64,700,070                   | -5.89%                                                                              | \$20,218 per VHR<br>-\$26,707 per non-VHR                                   |

*Note: Total nominal value of all 3,020 home sales = \$1,098,603,250; of which 340 were VHR home sales*

The City policy-maker or citizen, desiring an overall assessment of the presence of VHRs on the dollar value of home sales in their city between 2011 and 2016, should look at the values recorded in the last rows of Table 3.5. The calculated aggregate loss of about -\$65 million is about 6 percent of the slightly over one billion dollars in home sales that occurred over the six-year period under consideration. However, if broken down by typical VHR and non-VHR home, the final entries in Table 3.5 reveal a typical net gain in the aggregate value of VHR home sales, and a typical net loss in non-VHR home sales. This is due to the positive increase in an existing VHR that occurs because of the allowance to operate as such. This raises the total value of all VHRs' selling prices, more than the net-negative effects of proximity to VHRs. **So, owners of a VHR benefit from the allowance of VHRs in SLT, while non-VHR homeowners do not.**

All non-VHR homeowners who sold their SLT home between 2011 and 2016 experienced an aggregate increase in the selling price of their homes if the number of VHRs within a half mile increased, because even though the influence of VHRs between the quarter- and half-mile radius had a negative influence on sales prices, the net impact was still positive. However, the elimination of this aggregate increase occurred because of the detected total negative influence of VHRs within one half to one mile of a home. As discussed in the literature review, the effect of a VHR on home value could theoretically differ by distance because the positive externalities on home price of having VHRs nearby are greater in the proximity of less than a quarter mile. The positive externalities of the close proximity of VHRs on sales prices could be the result of several different factors. Since VHR marketing often includes photos intended to showcase the unit, properties tend to be well-maintained, which improves curb appeal and increases property values in a neighborhood. The presence of other nearby VHRs is also a factor by indicating the greater likelihood that a property itself has a higher potential to convert to a profitable VHR. Alternatively, when the number of VHRs located between a quarter to one mile of a home increase, these positive externalities are less likely to occur. Instead, the possible negative externalities dominate: greater congestion, pollution, disruption of natural habitat, greater crime, greater local service demands without compensating tax revenue, etc. One policy prescription from such a finding is

### 3. LITERATURE REVIEW AND REGRESSION ANALYSIS

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the levy of an additional tax on the rental income earned by the owner of a VHR. The revenue could be used to mitigate these overall negative externalities on non-VHR homeowners.

In conclusion, this analysis of the influence of the presence of VHRs in the City shows a net negative effect on the aggregate value of home sales over 2011–2016. In other words, if VHRs did not exist, the aggregate value of all single-family residential sales would have been slightly (about 6 percent) higher. This does not mean with certainty that South Lake Tahoe would be better off if it banned the use of VHRs within its city limits, because, as noted in the literature review and other sections of this report, there are benefits of VHRs that not necessarily captured in this hedonic regression analysis. The additional benefits come in the form of TOT revenues and greater economic activity (including more employment opportunities and income for locals) occurring in the City through the presence of visitors who may have not been there if the option of staying in a VHR was eliminated. A description of other methods that could be used to specifically capture these economic impacts, and the data needed to implement them, are in the literature review.

## 4. REGULATION MODELING

### 4.1 INTRODUCTION

Response to the growing VHR market varies according to jurisdictional preferences. The state of California has not elected to make regulations statewide and has instead left regulation to local jurisdictions. Cities and counties across the state are struggling with housing problems and many jurisdictions identify rising housing costs and the shortage of affordable units as high priority issues. The affordable housing shortage is a large and complicated problem with a wide variety of contributing factors. Jurisdictions with strong tourist economies or large numbers of vacation homes, and already struggling with a lack of affordable housing, often see VHRs as yet another market factor putting even more pressure on the housing stock. The response is to develop policies and ordinances to moderate the impacts from VHRs on the community. Yet, for many cities, VHRs are also vital components of the tourist accommodation market, and regulation can either support that market or depress it. Table 4.1 includes select tourist areas, both in California and out of state, and a brief description of their policy responses to VHRs.

**Table 4.1**  
**Policy Responses to VHRs**

| Tourist Market          | Policy Response                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|-------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| City of San Francisco   | Regulation: registration with application fee, business registration, proof of liability insurance, must pay TOT, limits on the number of nights available for VHR, limited to one unit per owner, maximum occupancy restrictions, penalties for noncompliance.<br><a href="http://sf-planning.org/Office-short-term-rental-registry-faqs">http://sf-planning.org/Office-short-term-rental-registry-faqs</a>                                                                 |
| City of Napa            | Regulation: permits with fee, annual renewal, limited number of permits issued each year, limited application period, annual fire and safety inspections, requires business license, must pay TOT, obligatory house rules, penalties for noncompliance.<br><a href="http://www.cityofnapa.org/index.php?option=com_content&amp;view=article&amp;id=967&amp;Itemid=753">http://www.cityofnapa.org/index.php?option=com_content&amp;view=article&amp;id=967&amp;Itemid=753</a> |
| Sonoma County           | Regulation: permits with fee, restricted to specific zones, certified property manager, maximum occupancy limits, must pay TOT, parking requirements, nuisance restrictions, penalties for noncompliance.<br><a href="http://sonomacounty.ca.gov/PRMD/Planning/Vacation-Rentals/">http://sonomacounty.ca.gov/PRMD/Planning/Vacation-Rentals/</a>                                                                                                                             |
| City of Monterey        | Prohibited.<br><a href="http://isearchmonterey.org/cache/2/jmtxvmqsw13mfj4yh31gjml/37373004202017055140241.PDF">http://isearchmonterey.org/cache/2/jmtxvmqsw13mfj4yh31gjml/37373004202017055140241.PDF</a>                                                                                                                                                                                                                                                                   |
| City of Big Bear Lake   | Regulation: registration with fee, business licensing, annual unit inspections, must pay TOT, exterior signage identifying VHRs with notification information, maximum occupancy limits, penalties for noncompliance.<br><a href="https://www.citybigbearlake.com/index.php/city-departments/code-compliance">https://www.citybigbearlake.com/index.php/city-departments/code-compliance</a>                                                                                 |
| City of Santa Barbara   | Prohibited.<br><a href="http://www.santabarbaraca.gov/services/planning/mpe/stvr/default.asp">http://www.santabarbaraca.gov/services/planning/mpe/stvr/default.asp</a>                                                                                                                                                                                                                                                                                                       |
| City of San Luis Obispo | VHRs prohibited, short-term room rentals allowed with permit, business license, fee.<br><a href="http://www.slocity.org/home/showdocument?id=6399">http://www.slocity.org/home/showdocument?id=6399</a>                                                                                                                                                                                                                                                                      |

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| Tourist Market    | Policy Response                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|-------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Mendocino County  | Regulated: minor use permit with fee, limited permits available (nexus with increase of new residential dwelling units), must pay TOT.<br><a href="http://www.co.mendocino.ca.us/planning/pdf/CHAPTER_20.748.pdf">http://www.co.mendocino.ca.us/planning/pdf/CHAPTER_20.748.pdf</a>                                                                                                                                                                                                                                                                                                     |
| City of San Diego | Prohibited with pending ordinance.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Maui, Hawaii      | Regulated: permit with fee, must pay TOT and excise tax, must be legal property owner, mandatory notification of neighbors, no absentee management, maximum occupancy limits, exterior VHR signage with notification information, house policies must be displayed, limited number of permits available, advertising requirements, parking requirements, restrictions on how close VHRs can be in proximity to each other.<br><a href="http://www.co.maui.hi.us/1874/Short-Term-Rental-Home-STRH-Application">http://www.co.maui.hi.us/1874/Short-Term-Rental-Home-STRH-Application</a> |
| Aspen, Colorado   | Regulated: permit with fee, annual renewals, business license, must pay TOT, must notify applicable homeowners associations, on-call manager required, penalty for noncompliance.<br><a href="http://www.aspenpitkin.com/Portals/0/docs/City/Comdev/Recent%20Code%20Amendments/cc.ord.034-11_short%20term%20rentals.pdf">http://www.aspenpitkin.com/Portals/0/docs/City/Comdev/Recent%20Code%20Amendments/cc.ord.034-11_short%20term%20rentals.pdf</a>                                                                                                                                  |
| Park City, Utah   | Regulated: nightly rental license with fee, business license, state sales tax number, allowed only in certain zones.<br><a href="http://www.parkcity.org/how-do-i/business-licenses/nightly-rental-license">http://www.parkcity.org/how-do-i/business-licenses/nightly-rental-license</a>                                                                                                                                                                                                                                                                                               |
| New York City     | Prohibited in all multiple dwelling structures (apartments). Short-term room rentals may be allowed provided hosts are present; single-family homes must comply with zoning and rent control regulations; high penalties for illegal VHRs.<br><a href="http://www.nolo.com/legal-encyclopedia/overview-airbnb-law-new-york-city.html">http://www.nolo.com/legal-encyclopedia/overview-airbnb-law-new-york-city.html</a>                                                                                                                                                                 |
| Miami, Florida    | Prohibited: potentially pending ordinance or options for enforcement.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |

The following section proposes regulation models that South Lake Tahoe may consider in addressing the externalities that are a result of the growing VHR market. All of these models are hypothetical. The first model assumes that the City will make no significant changes to the existing ordinance, but will increase enforcement. The second model assumes a range of reduced restrictions on VHRs, and assesses how those may impact the community and the economy. The third model assumes a range of increased restrictions on VHRs, including what might happen if VHRs were to be phased out as a permitted use in the city, and evaluates what impacts may result. The fourth model assumes an alternative range of policy options, including options that do not specifically target VHRs, but which might help address VHR-related concerns.

### 4.2 NULL MODEL (MAKE NO CHANGES TO EXISTING POLICIES)

The City currently has a VHR program, and has been actively attempting to address the community challenges posed by VHRs in residential neighborhoods. The current program includes:

- Required annual permit with a permit fee (in lieu of business license). Maximum occupancy determines the cost of the fee. There is a fine of \$1,000 for VHRs operating without a permit.
- Notification of all property owners within 300 feet of proposed VHR when a VHR application is received.
- Compliance with parking standards. Police and code enforcement manage parking enforcement.
- Preservation of residential neighborhood character.

- Public hearing if written opposition to the application is received after the public notice has been issued.
- Compliance with the California Building Code, and application preapproval and annual renewal site inspections by building inspector.
- Must meet health and safety code regarding egress, smoke and carbon monoxide detectors, emergency lighting, and posting an emergency evacuation map.
- Must pay TOT.
- Clear exterior signage identifying the unit as a VHR, including notification information.
- Penalties for noncompliance.
- VHRs managed by nonresident owners are required to have a local contact.

The City also promotes the Leave No Impact Program, which includes VHR guest best practices. This program is primarily enforced through the complaint process and includes:

- Noise restrictions.
- Trash management and bear damage prevention.
- Maximum occupancy limits.
- Nighttime pool/spa/hot tub noise prohibition.
- Designated parking restrictions.

Additionally, the City offers support and enforcement for residents that may be impacted by noncompliant VHRs, including:

- Dedicated vacation home rental phone line for nonemergency complaints.
- Notification for any new VHR within 300 feet of the resident address.
- Appeal process for new VHR applications.
- Code enforcement with penalties for ordinance violations.

During the public outreach phase of this study, the City initiated a mobile VHR enforcement program intended to increase enforcement visibility and reduce the response time to VHR complaints.

Comments at the public outreach sessions also strongly recommended the addition of a requirement that VHRs in neighborhoods that frequently experience issues with bears have bear boxes for the trash that guests leave behind after their stay.

#### **4.1.1 Current Impacts**

One of the most common comments received during the community outreach phase of this study was the need for increased enforcement of the City's existing ordinance. A comparison of the City's ordinance with ordinances in other areas with significant tourist economies suggests that the City's ordinance is neither exceptionally restrictive nor lenient, though it is more aligned with addressing immediate neighborhood impacts than with addressing community-wide impacts. Review of the City's code enforcement data as well as interviews with public safety staff suggest that there is a delicate balance involved in enforcing the City's code.

## 4. REGULATION MODELING

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### Security

The current ordinance to regulate VHRs in South Lake Tahoe is primarily concerned with preserving the quality of life for residents. A sense of personal safety and security is fundamental to the measure of quality of life. While the existing ordinance is not the most restrictive in terms of requiring local management and 24-hour contact information, the data analysis did not indicate that the city is experiencing increased crime or other concerns that would threaten the community's sense of security. Crime data available at <http://www.city-data.com/crime/crime-South-Lake-Tahoe-California.html> actually suggests that, as a whole, the crime rate in the city has decreased over the last several years. Throughout the evaluation of the data, there was no indication that VHRs pose a significant security risk to neighborhoods. Instead, the primary problems in the specific neighborhoods tend to be nuisance based.

### Response to Complaints

The VHR professional management community is active and engaged with the local government, and generally desires an opportunity to respond and rectify problems before they are cited or penalized. The residents are encouraged to report any and all violations, and are often on-site when police or code enforcement arrive to find out what action will be taken to address their complaint. Tourists are by definition temporary residents, and have little or no familiarity with the nuances of the VHR regulations, and many violations are likely the result of ignorance or an attitude that the temporary nature of their stay means that they do not need to foster goodwill with the neighbors. Notes in the VHR code enforcement complaint data suggest that the majority of tourists are responsive to requests to comply with the ordinance, particularly concerning sound and parking complaints, which are the most common issues that arise while the tourist is occupying the VHR.

Many residents feel that the City's current VHR ordinance is underenforced while VHR operators feel that either there is an appropriate level of enforcement or that their properties are not the problems, and that the enforcement should target specific VHR operators, such as absentee owner/managers. A few specific residents with objections against specific VHRs or VHR property owners in their neighborhoods appear to use the ordinance and the City's efforts to respond to all complaints as a means to harass the VHR operators, likely with the goal of removing the property from VHR use.



*VHR signage outside unit*

### Administrative Approvals, Public Noticing, and Appeals

The current regulations are intended to address key community issues and give residents a voice in how new VHR applications are addressed. New applications can be administratively approved if they meet all of the requirements in the City's ordinance. That includes providing public notice to all property owners within 300 feet of the proposed VHR. Tenure in the city is about 55.9 percent renters to 44.1 percent owner occupied. Many owners and renters use post office boxes to access mail, which means that some renters may not be receiving notification of new VHR applications. It can be argued that renters are less vested in the community than property owners, however a key factor in choosing where to rent is neighborhood stability, which the addition of VHRs can

directly impact. One additional step in the noticing process might be to include notification to all residents in the 300-foot radius, both renters and property owners.

The current process allows for any concerned resident to request a hearing on the proposed VHR. This process has brought several potential VHRs into the public discussion, and has attempted to elevate the discussion from the specific impacts of a single new VHR on a specific neighborhood to the impacts of VHRs on the city as a whole. The public noticing, public hearing, and appeal processes are critical to maintaining transparency in the VHR approval process and in identifying potential negative impacts. However, this process can be costly, involving many hours of staff time beyond the processing of the original application. Denials resulting from public protest, as opposed to noncompliance with city ordinances, can also result in an appeal, and leaves the city potentially vulnerable to legal response.

#### **4.1.2 Projected Impacts**

Increased enforcement of the City's existing ordinance, or a zero-tolerance approach, is likely to have the greatest impact on VHR owners who manage their property remotely, though all VHR operators will be impacted, along with some of the City's public safety staff. The following projected impacts are estimates based on evaluation of the data, and are intended to provide insight into how the different factors surrounding the VHR issues may evolve under the assumption that the City will continue to enforce, or increase enforcement of, the existing VHR ordinances and policies.

##### Social/Community Impacts

Residents may feel more empowered and make greater use of the hotline and other reporting mechanisms to report violations of the ordinance. Some problem properties may be restricted from continuing to operate as VHRs. However, the profitability of VHRs will still outweigh the potential increase in costs that result from increased enforcement. The VHR stock in the city will continue to increase. The demographic and housing trends observed in the trends analysis section of this report will continue to progress, with growing housing shortages and continued mismatch between available employment and the cost of housing.

This scenario continues to focus on the nuisance concerns around VHRs, and does not address the other externalities involved. It also does not respond to the potential challenges in the administrative approval, public noticing, and appeals process. Residents can continue to use that portion of the ordinance to protest allowing new VHRs into the community. The cost of the public process will continue to increase, both on the part of City staff, and on the part of the public, who must complete the process to request a public hearing. As the existing ordinance does not address the deeper socioeconomic issues in which VHRs are both a symptom and contributing factor, resident protest to new VHRs is unlikely to decrease, and general dissatisfaction with the distribution and increase of VHRs in the community will likely continue to be a concern.

Under this scenario, the relationship between VHR owners and operators and residents in the community is likely to remain a stalemate. Residents with nuisance concerns may be somewhat appeased, but the residents concerned with the larger socioeconomic challenges will continue to have frustration with the VHR market and with the owners and operators of that market.

##### Economic Impacts

Increased enforcement of the existing ordinances will incur a marginal additional cost to various players in the VHR market. The City will see increased cost from public safety, code enforcement,

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and administrative staff time involved in responding to nuisance calls and the efforts required to bring illegal units into compliance. This scenario will also continue to require increased effort from and costs associated with staff responsible for managing the VHR approval process.

Increased enforcement of the current ordinance will incur only marginal costs for existing VHR owners and operators, mostly resulting from the management costs of responding to nuisance complaints, and the costs of additional citations. The high profitability of the VHR market will continue to encourage the conversion of housing stock to VHRs. New VHR applicants may see increased costs resulting from the public noticing and public hearing process, and may experience some difficulty in entering the market. The costs of the public process are unlikely to be spread evenly—as the process is initiated by the public and requires a lot of public effort—and will not effectively act as a brake on all new VHR applications. Increased VHRs will result in VHRs continuing to gain market share from traditional hotels and motels. TOT will continue to increase; however, motel operators will be more vulnerable to shifts in the tourist economy, such as weather irregularities and regional or national economic downturns or stalls. Underutilized motels may resort to weekly or monthly rentals, and backfill some of the shortage of affordable housing with motel units. VHR units will continue to be added to the South Lake Tahoe marketplace until they reach market saturation and self-stabilize.

Increased enforcement of the existing ordinance is unlikely to have any measurable impact on the tourist economy that supports the bulk of the city's employed residents. Even if VHR operators marginally increase prices to recoup any increases in management costs, the cost per person difference between VHRs and other accommodations is still too large to result in a market shift.

Increased enforcement of the current ordinance is very unlikely to add to the housing stock available for long-term occupancy, and will not address the housing affordability issues that the city is currently facing.

Finding all of the applicable information about VHR permitting, regulation, and process in the city required a fair amount of digging through the City's website through narrative and text links and nested menus, indicating that comprehensive information about the City's program was not consolidated or easily accessible. Not only do nested links in text or menus make navigation cumbersome and specific information difficult to find, it increases the burden involved in consistently updating information as updates need to be made in several places. The web-design approach applied to most government websites tries to limit page size to what fits on a screen without scrolling. However, that limitation requires information to be linked and nested within menus. When regulations or requirements are nested, or are truncated or incompletely summarized to fit in limited screen space, it creates a liability. People fully intent on following regulations may not find the applicable rules if they are two or three links into the website, or if they are split into multiple places on the website. The research team found skipping links and nested menus substantially increased the risk that we would miss critical information as we prepared this report, indicating that important information about the City's VHR program was not always consistent or consolidated. We strongly recommend working with information design professionals to create consolidated and comprehensive online resources that reduce the risk of missing critical information about regulations and processes.

Another observation about the City's current program is that while the ordinance includes options for new VHR permits that can be approved administratively, due to the sensitivity around the topic all new VHR permits have been subject to a public hearing. While this option allows for public input on all new VHR permits, it slows the approval process, significantly increases administrative cost and burden, and puts the city at risk of claims of unequal treatment by applicants. While the city's commitment to the public process is commendable, one purpose of an ordinance with

established administrative approval criteria is to reduce administrative cost and burden associated with full public review. If the public review process is being invoked on every application, the administrative approval option has essentially been eliminated, indicating that the ordinance does not sufficiently align with community priorities to be allowed to work as written. Increased enforcement of the existing ordinance is unlikely to resolve that misalignment, and will continue to incur increased administrative costs due to the use of the public process for every application.

## **4.2 REDUCE RESTRICTIONS ON VACATION HOME RENTAL PERMITS**

Just as there are jurisdictions with strict prohibitions and restrictions on VHRs, there are also jurisdictions with very relaxed or absent regulations. Jurisdictions with reduced or absent regulations typically have very different housing and employment profiles from South Lake Tahoe. They have more diversified economies, rely less on TOT and tourist economy revenues, and have more options to respond to housing shortages, including the option to build a substantial number of additional units. The below model evaluates a hypothetical scenario in which the City's current ordinance is pared down and the restrictions on VHRs are substantially reduced.

### **4.2.1 Projected Impacts**

While the City's current ordinance is primarily focused on addressing VHR nuisance issues, it also includes two financial components. First, each VHR registration and renewal includes a fee, intended to recover the costs of administering that renewal. Second, VHRs are required to pay TOT to the City. In evaluating this scenario, the study team opted to identify a range of nuisance-based restrictions to reduce, but kept the registration fee and the TOT requirements in place. Eliminating the fee and TOT collection would essentially eliminate the most significant and direct benefit derived from VHRs operating in the community, and could be distilled into a succinct evaluation: It would be very bad for everyone in the city who relies on public infrastructure, facilities, and services, including public safety. The loss of almost half of the city's annual TOT would adversely impact every sector of the community, including businesses, VHR owners and operators, all other property owners, residents, and employees. A good comparison to the impacts would be the depths of the post-housing bubble recession, an event recent enough to still be felt by many sectors of the community. The remainder of this evaluation assumes that the reduced restrictions will be mostly those related to nuisance prevention.

Reducing the nuisance restrictions on VHRs in the city would also have significant social and economic impacts on the current residents and housing stock. Many of both the positive and negative current impacts facing the city would be exacerbated by reducing restrictions. However, the cost of the negative impacts is likely to increase exponentially, as the negative impacts are multi-faceted, whereas the positive impacts will have a more linear increase, as there are fewer factors involved. Table 4.2 evaluates the existing restrictions and projects what could happen if they were removed or reduced.

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**Table 4.2**  
**Removed or Reduced Restrictions**

| Restriction                                                                      | Remove or Reduce Impacts: Positive, Negative, Neutral                                                                                                                                                                                                                                                                                                                                                                                                                        |
|----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Required Annual Permit                                                           | <b>Negative:</b> Doing away with the required annual permit will remove the City's ability to track changes in VHR stock; administrative costs will not be recovered; more units will operate illegally.                                                                                                                                                                                                                                                                     |
| Public notification of new VHR permit sent to property owners in 300-foot radius | <b>Negative:</b> Reduced to one public notice in the newspaper will mean that residents will have less opportunity to appeal new VHR permits, and already impacted neighborhoods will have less of a voice. If the public noticing is removed, residents will have no voice in the process, and will likely look for ways to voice concerns outside the process.                                                                                                             |
| Parking standard requirements                                                    | <b>Negative:</b> Removing this restriction will impact neighborhoods differently. Neighborhoods already experiencing parking shortages will see the problem increase, particularly during snow removal season. Residents could find it difficult or impossible to park close to their property; people will resort to parking wherever space is available, which could have adverse impacts on environmentally sensitive areas. Residents will protest.                      |
| Preservation of residential character                                            | <b>Neutral:</b> A key selling point for most VHRs is their "home away from home" appeal, with residential character being advertised prominently. Most VHR owners and operators have an interest in preserving the residential character of their neighborhoods, including the public health, safety, and security of the residents, which, at least temporarily, include their tenants.                                                                                     |
| Public hearing in response to written objection to new VHR permit                | <b>Negative:</b> Doing away with the option for a public hearing would deprive residents of their primary avenue for objecting to new VHRs that could adversely impact their neighborhoods. Result would be increased resident dissatisfaction and disenfranchisement.                                                                                                                                                                                                       |
| Compliance with Building Code and Health and Safety Code                         | <b>Negative:</b> While removing these requirements from the City's ordinance does not mean that VHRs are no longer required to comply, it does reduce the City's ability to monitor compliance through inspection and can result in deferred maintenance, unsafe structures, and increased risk to the safety of the tourists staying in uninspected VHR units. Inspections would only occur as part of a code enforcement complaint rather than as part of the VHR program. |
| Clear exterior signage identifying VHR with notification info                    | <b>Negative:</b> VHRs in the community become more difficult to identify, both for residents and for tourists looking for their accommodation, and a lack of notification information can result in unreported damage, crime, nuisances, and other conditions that can risk public safety, security, and health.                                                                                                                                                             |
| Absentee VHR owners and operators must have local contact                        | <b>Negative:</b> Absentee owners and operators are less able to respond to emergencies and other critical time-sensitive issues. VHR occupants could potentially be at risk due to unforeseen changes in weather, problems with the home, and other issues that can require on-site attention.                                                                                                                                                                               |
| Noise, trash, maximum occupancy, and other nuisance restrictions                 | <b>Negative:</b> Removing or reducing these restrictions negatively impacts the neighborhoods. Removing noise restrictions will result in more late-night noise complaints; removing trash restrictions will result in more problems with wildlife, such as bears; and removing maximum occupancy restrictions would likely result in more large gatherings, loud parties, and overcrowded units, posing numerous safety risks.                                              |

### Social/Community Impacts

Reducing the regulations on VHRs in the city will have the most significant impacts on the community, and most of these impacts are negative in terms of fostering a stable community. Reduced regulations allow for increased profit margins in operating VHRs and would encourage more property owners to convert their units to VHRs, including units that are currently used for long-term occupancy. The increased conversions would further reduce the housing stock available for local residents, and substantially increase housing prices. The additional loss of units in the single-family market will add pressure to the multi-family market, which is currently protected from VHR conversion. The added pressure will drive up rents, even in marginal multi-family units, and will push more households employed in the city's tourist industry to less expensive housing outside the area. Households unable to commute will double and triple up in the remaining housing units, leading to an increase of overcrowding and substandard living conditions. More households will turn to the underutilized motel stock as an alternative to standard housing, and more motels will convert to de facto long-term rentals.

The city will also likely experience a loss of permanent population as workers are priced out of the residential housing market. Households dependent on employment for income will be most affected, and the city would see a reduction of families with children. The dispersal of families will reduce the need for school and education facilities in the city and increase and move it to other areas in the region where housing costs are less. The population will age as retirees and households that own their housing and are less vulnerable to changes in the employment market will be less impacted and less likely to leave the area. The shifting age demographic will result in reprioritizing community assets and services toward an aging population. It is also likely that this scenario would change the racial and ethnic distribution of the city, as the older population in the city is a higher percentage of white than the younger households and families with children.

Employees of the city's tourist economy who are pushed out of the housing market and forced to live elsewhere in the region and commute to work will contribute to an increase of the impacts resulting from additional vehicle miles traveled, including both the environmental and economic impacts associated with increased commutes.

### Economic Impacts

The economic impacts of reducing restrictions on VHRs will be significant for both the City and the VHR owners and operators, as well as the hotel and motel industry and the general tourist economy. Reduced regulations will lead to an increase of VHRs in the city which will increase TOT revenues received from VHRs. More VHRs on the market will increase the competition between VHR operators and drive down the cost of VHRs, which will encourage more tourists to choose VHRs as their preferred accommodation. Reduced cost per night for VHRs will make staying in a VHR more appealing for a wider market segment as the gap narrows between the cost of a two-person occupancy in a hotel/motel and two-person occupancy in a VHR, with more tourists selecting VHRs over the dilapidated motel stock. Hotels and motels will see a stagnation or even a decrease in revenues, which will reduce their share of TOT paid to the City.

The tourist industry employment market will likely remain strong, with competitive wages. However, the industry will still be service-based, and even if incomes increase, the increase will unlikely be enough to compensate for increased housing costs. The increased costs of housing and the added costs of commuting will erode the income increases, resulting in little if any net gain for employees.

## 4. REGULATION MODELING

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Complaints against VHRs will increase as neighborhood saturation increases, and also because more competition and cheaper VHR costs to tourists means more people, and higher concentrations of tourists in the residential neighborhoods. Police and code enforcement costs will likely increase, as will the public safety support staff costs as the management of VHR impacts will require more resources. Reduced regulations may also reduce the options available to public safety staff to address problems, which could lead to concentrations of problem VHRs, with community impacts not unlike those experienced in very low-income neighborhoods, such as increased crime, vandalism, property damage, and other public nuisances.

Reducing regulations raises the VHR market saturation point by reducing risks and costs of operating VHRs in the city and may encourage less sophisticated or less engaged property owners to enter the VHR market, resulting in more poorly managed VHRs and more VHR problems.

### Restriction Analysis

As detailed in the above discussion and the restriction and impacts matrix (Table 4.2), very few restrictions could be removed without having either a direct or potential negative impact on the community, city operations, or the tourists who use VHRs as accommodations. Of the restrictions in the City's ordinance, only the preservation of residential character finding, if removed, is perceived to have a neutral impact on both the economic and social sectors of the city. Removing or reducing the nuisance-oriented restrictions will result in increased nuisance complaints from residents. Removing the public notification restrictions will result in disenfranchisement by the public and increased public anger with the lack of transparency in processing VHR applications.

For VHR owners, operators, and potential applicants, removing the nuisance restrictions is likely to have little positive impact on the profitability of the VHR. Nor is it likely to dramatically increase tourist interest in South Lake Tahoe as a destination, with the one exception of maximum occupancies. Maximum occupancy restrictions are intended to prevent health and safety risks, so that all persons are able to evacuate in the instance of an emergency, for example. They also prevent large parties or gatherings that can become boisterous and disruptive to the neighborhood and create traffic problems. Eliminating or reducing the restrictions around maximum occupancies could increase tourist attraction by allowing for more parties or exceptionally large gatherings in averaged sized units. Even so, the proportion of the tourist population looking for venues specifically to host large boisterous gatherings is likely fairly small, and the overall tourist economy impact is likely negligible.

Removing the public noticing requirements would likely have more impact on VHR owners, operators, and potential applicants. Without the public noticing, there would be few, if any, objections and/or public hearings. This would eliminate uncertainty in the process, and VHR applicants who meet the minimum application requirements could be assured of receiving a permit. This results in increased VHR profitability and increase in new VHRs as discussed earlier. It is inadvisable to remove this restriction at this time as it currently plays a key role in the public participation process.

### 4.3 INCREASE RESTRICTIONS ON VACATION HOME RENTAL PERMITS IN RESIDENTIAL NEIGHBORHOODS

Numerous jurisdictions with strong tourist economies have elected to either prohibit or severely restrict VHRs in residential neighborhoods. Most of these jurisdictions cite the shortage of available housing as a key factor in their decision to forgo potential TOT revenues in lieu of keeping housing units available for long-term occupancy. Many of these jurisdictions also have hotel and motel industries that have developed to support the tourist base, which would see a loss of profitability

if VHRs entered the tourist accommodation market. The following scenario assumes a range of increased restrictions and how they might impact the community and the VHR industry. There is also some discussion about what completely phasing out all VHR permits in single-family units might look like.

#### 4.3.1 Projected Impacts

##### Increased Restrictions on VHRs

Increasing restrictions on VHRs in the city could have a range of impacts, from mild to significant, depending on the restriction. Completely phasing out VHRs in South Lake Tahoe, on the other hand, will have considerable social and economic impacts for both property owners and residents and employees that work in the city's tourist economy. The below table (4.3) includes a range of restrictions not currently included in the City's ordinance, and evaluates the potential impacts of those restrictions if applied in South Lake Tahoe. Impacts on the secondary tourist economy (entertainment, recreation, and food service) is identified as no impact, marginal, moderate, or significant. Marginal impact infers that there may be some impact, but it is unlikely to adversely impact employment or overall business viability. Moderate impact infers that the impacts will have some adverse impacts on business and may result in reduced employment opportunities. Significant impact infers that there will likely be fairly serious adverse impacts to local tourist-oriented businesses as well as reduced employment opportunities.

**Table 4.3**  
**Increased Restrictions Table**

| VHR Restriction                                  | Community Impacts                                                                                                                                                                                                                      | Economic Impacts                                                                                                                                                                                                                                                                                        |
|--------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Limited number of VHR permits available annually | Can slow or stop the increase in the total number of VHRs in a given neighborhood or citywide; could be used to reduce neighborhood VHR saturation.                                                                                    | May slow the growth in TOT collected from VHRs; increased demand will be focused on restricted stock. May shift some tourists to hotel/motels or toward VHRs outside the city. VHR permits may act as an additional commodity. Marginal to significant on secondary tourist economy.                    |
| Increased VHR permit and renewal fees            | Similar to limiting permits, this could slow the increase of VHRs by discouraging potential owners and operators unwilling to pay the increased fees. Would likely encourage more VHR operators to try operating their unit illegally. | Increased cost recovery for administration of the VHR program, including managing registrations and responding to code enforcement complaints. May slow the growth in new VHRs, depending on the total cost increase. Marginal to no impact on secondary tourist economy.                               |
| Required business license                        | Provides another point of regulation for the City; clearly identifies VHRs as a business; provides additional fees; would allow tourists and residents to file business complaints against poorly operated VHRs.                       | Additional fee and regulatory step may discourage less serious operators from entering the market. Might encourage some owners to attempt to operate the VHR illegally. Might slow the number of new VHRs, potentially slowing the increase in TOT. Marginal to no impact on secondary tourist economy. |

## 4. REGULATION MODELING

| VHR Restriction                                                                                                                                                                                      | Community Impacts                                                                                                                                                                                                                                                                                                          | Economic Impacts                                                                                                                                                                                                                                                                                                                                                                                    |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Local certified manager required and local manager available at all times unit is occupied                                                                                                           | Would reduce impacts that result from absentee owner-operators and encourage a more standardized management approach. Ensures managers are well educated in the local issues and are available to respond to complaints immediately. Reduces pressure on code enforcement and City staff to respond to VHR complaints.     | Increased operation cost, particularly for absentee VHR owner/operators. Increased cost will likely raise prices and may price some tourists out of the market. May slow the increase in TOT depending on how many absentee VHR owners/operators decide to no longer operate their unit as a VHR. Marginal impact on secondary tourist economy.                                                     |
| High penalties for illegal units (including advertising illegal units—based on New York’s penalties that range between \$1,500 and \$3,000 per instance for advertising and operating illegal units) | Increased penalties for units operating illegally will encourage units to register and operate legally, making it easier to track and enforce regulations, including nuisance regulations across the community. Will strongly discourage VHR owners and operators from considering operating outside the City’s ordinance. | Encourages all VHR owners and operators to legalize their units; may discourage less serious owners/operators from continuing business. May remove some of the more poorly managed VHR units from the market. Would temporarily increase applications for new VHR permits as owners work to get legal prior to implementation. No impact on secondary tourist economy.                              |
| House policy contract for VHR occupants (to enforce nuisance requirements)                                                                                                                           | Requires tourists to sign a contract with penalties that agrees to comply with the City’s nuisance regulations. Requires full acknowledgement of nuisance regulations, and strongly incentivizes compliance. Would require protection from/more investigation into frivolous complaints.                                   | Puts some of the burden of compliance with City code on tourists; will discourage tourist groups intending to host boisterous parties; allows VHR owners and operators to recoup costs from citations and other public safety cost recovery expenses. May slow TOT revenues or shift some tourists into the hotel/motel or adjacent VHR market. Marginal to no impact on secondary tourist economy. |
| Full cost recovery for calls for service for VHR complaints                                                                                                                                          | Encourages strong proactive measures to prevent neighbor complaints and unnecessary calls for service. May be used in combination with the house policy contract to forward costs. Strong incentive to prevent complaints. Would require protection from/more investigation into frivolous complaints.                     | Puts the full cost of all calls for service and code enforcement on the property owner. Would most directly impact absentee VHR owner/operators without a local manager and would encourage them to either hire managers or withdraw from the market. May slow TOT increases as some VHR operators decide to no longer operate the unit as a VHR. Marginal impact on secondary tourist economy.     |

| VHR Restriction                                                                                                                                                                                                                                                                   | Community Impacts                                                                                                                                                                                                                                                                                                                                                                                                                                       | Economic Impacts                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>Restrict VHRs to specific zones or neighborhoods.</p> <p>Assumes no new VHR permits would be allowed in restricted zones or neighborhoods, and existing VHRs would either be grandfathered in or gradually phased out as properties are sold and permits allowed to lapse.</p> | <p>Stabilized or gradually reduced VHR density in restricted zones or neighborhoods. Significantly increased VHR density in unrestricted zones. Reduced nuisance impacts in restricted zones; increased impacts in unrestricted zones. Some properties in unrestricted zones may reenter the permanent occupancy market. The full range of impacts depends on the restricted zones, and if/how quickly existing VHRs in those zones are phased out.</p> | <p>Depends on implementation, but this could significantly reduce the number of new VHRs and slow or stall the increase in VHR TOT revenues. Could impact VHR owners/operators unevenly, giving an advantage to owners with properties already in the designated zones. If a retirement or phase-out of VHRs outside the allowed zones is part of the regulation, there could be an overall loss of total VHR units, depending on how many units are available in the allowed zones. Marginal to significant impact to secondary tourist economy, depending on implementation.</p> |
| <p>Proof of liability insurance</p>                                                                                                                                                                                                                                               | <p>Ensures that properties are properly insured against damage, and provides protection for neighbors against potential property damage that could impact housing prices or their ability to enjoy their neighborhood. Best business practice that protects property owners from liability.</p>                                                                                                                                                         | <p>Best business practice. May filter out less responsible VHR owner operators (particularly if in tandem with other regulations). Minimal impact to TOT growth. No impact on the secondary tourist economy.</p>                                                                                                                                                                                                                                                                                                                                                                   |
| <p>Limited application window (applications only received for a limited time each year / could also apply to renewals)</p>                                                                                                                                                        | <p>Reduces administrative burden in ongoing management of application process; reduced number of applications; properties sold would be required to wait until next application window, likely leaving properties vacant; may slow the turnover of properties for VHR use. Would likely have a minor effect in slowing the increase of VHRs in the community.</p>                                                                                       | <p>May slow the increase in TOT collected from VHRs. Could result in some VHRs being removed from registration for noncompliance if renewals are also regulated by term. Marginal to no impact on secondary tourist economy.</p>                                                                                                                                                                                                                                                                                                                                                   |
| <p>Permit waiting period (applied either as a universal waiting period for all new permits or as a waiting period for applications on properties that have just sold)</p>                                                                                                         | <p>Would either dramatically slow or temporarily stop the increase of VHRs in residential neighborhoods. Would discourage property owners interested in purchasing units as VHR investments; may result in a few units reentering long-term occupancy agreements. May reduce VHR saturation in neighborhoods where VHRs are less profitable.</p>                                                                                                        | <p>Would slow increases in TOT due to less increase in new VHRs. Would allow current VHR owners/operators to marginally increase prices based on supply and demand. May push some tourists to use hotels, motels, and VHRs out of the area as a result. Marginal impact on secondary tourist economy as the current supply of VHRs would not be immediately impacted.</p>                                                                                                                                                                                                          |

## 4. REGULATION MODELING

| VHR Restriction                                                                                                                                    | Community Impacts                                                                                                                                                                                                                                                                                                                                                                             | Economic Impacts                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|----------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Hard total unit occupancy limits (sets a max occupancy limit for all units, regardless of unit size—individual units may have lower max occupancy) | Would discourage the development of “mega-homes” and the operation of larger homes as VHRs. Would reduce the number of tourists that could occupy large units, reducing impacts in some neighborhoods, including parties. Is unlikely to add many units back into long-term occupancy as larger luxury units tend to be less affordable to residents.                                         | Would slow increases in TOT due to fewer high cost/high occupancy units; may encourage large groups to look for VHRs outside the city. Would adversely impact some VHR owner/operators more than others as larger units would be more impacted than smaller units. Marginal impact on secondary tourist economy as larger groups may look elsewhere in the region for large group accommodations (including non-tourist focused areas). Depending on the limit, may impact only a very small portion of tourists.                                       |
| Required stay minimums (e.g., 7-night minimum)                                                                                                     | Reduced guest turnover in VHRs. Will drive less profitable VHRs and VHRs in less desirable neighborhoods out of market, resulting in far fewer VHRs and reducing saturation in all but most profitable/desirable neighborhoods. Slow or stop conversion of units to VHRs, may encourage more investors to rent properties long-term, though absentee owned units are likely to remain vacant. | Significant decrease in operating VHRs and reduction of TOT received from VHRs. Would push a large segment of the existing VHR tourist market into hotels and motels, and more likely, into VHRs outside the city, resulting in additional infrastructure and environmental impacts. Moderate to significant impact on secondary tourist economy as tourists interested in weekend or holiday stays look elsewhere or change accommodation location.                                                                                                    |
| Limits on number of VHR nights allowed per unit                                                                                                    | Similar to minimum stays, the impacts depend on the limit, but would likely reduce the number of VHRs operating in the neighborhoods by reducing VHR profit. Reduce VHR saturation in all but most profitable neighborhoods. May result in some units reentering the long-term occupancy market, though absentee-owned units are likely to remain vacant.                                     | Similar to minimum stays, the impacts depend on the limits. Would remove less profitable units from the VHR market, shrink overall VHR stock, and reduce TOT revenues. Would push some portion of the tourist market into hotels/motels/VHRs outside of the city. Largest impact on full-time VHR units, and new units would be focused in the most profitable neighborhoods, resulting in exceptionally impacted areas. Marginal to moderate impact on secondary tourist economy as reduced inventory would result in some tourists looking elsewhere. |
| Restrict VHRs from operating in single-family structures (not including condominium units)                                                         | See phasing out VHR permits analysis below.                                                                                                                                                                                                                                                                                                                                                   | See phasing out VHR permits analysis below.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |

### Phasing Out VHR Permits from Single-Family Homes

Different levels of regulation have different impacts; the more severe the regulation, the more dramatic the economic impact. Some regulations can be coordinated to emphasize positive impacts and reduce negative impacts. The following scenario assumes the most stringent of regulations—phasing out VHR permits from single-family homes, and estimating the potential results on the community and economy.

### Social/Community Impacts

Phasing out VHR permits and prohibiting their operation will have significant community impacts. It is very likely that some of the units currently operating as VHRs will reenter the housing market and become available for long-term occupancy. However, a significant number of units will revert to second or seasonal homes and spend much of the year vacant. Housing prices will stall or lower slightly, and some units currently used as VHRs may become available for long-term rentals. The impacts of tourists on the residential neighborhoods will be mostly eliminated, though there will still be some impacts as second-home owners utilize their property and host friends and family.

Economic and social impacts in this scenario are closely linked, and the loss of VHRs as accommodation options will result in a shrinking of the South Lake Tahoe tourist-based economy. The result will be a loss of residential population, particularly households supported through the tourist economy. As households with a working age population leave the area for other employment opportunities, the average age of the remaining residents will rise, as retirees and other households not reliant on local employment will be less impacted by the shrinking economic opportunity. The shrinking economy will reduce the demand for service employees, raise unemployment rates, and reduce the wages that tourist industry jobs must pay for qualified employees. This means that even if housing prices and rents drop, the reduced incomes will still price many service industry employees out of the housing market.

A critical impact in this scenario is the transfer of the VHR market out of the city and into the county. Tourists will continue to look for VHRs in the Lake Tahoe Basin, but the lack of VHRs in the city will put substantial pressure on the VHR market outside the city, resulting in more housing conversions, and shifting many of the externalities currently facing the city into the neighboring jurisdictions. South Lake Tahoe will continue to be the main center for recreation and entertainment, but tourists will need to drive farther from their VHRs to the city, which will increase the impact of traffic and transportation-related externalities on the whole region, including South Lake Tahoe.

### Economic Impacts

The most dramatic impacts that phasing out VHRs in the city will have is the significant loss of TOT, and a shrinking of the city's tourist economy. Occupations that support the VHR industry will follow the VHR market, and move into neighboring jurisdictions where VHRs are still allowed. While the city will still be the primary location for much of the region's entertainment and recreation, there will likely be less diversity in the tourist economy as tourists staying in VHR accommodations outside the city look for recreation options closer to their VHRs.

This scenario would provide some resurgence in hotel/motel occupancy rates, as the only accommodations available in the city; however, the real potential for improvement in hotel/motel occupancy would most likely be dampened by the dilapidated condition of many of the city's hotels and motels. The City would likely see some increase in TOT from reduced hotel and motel vacancy, but it is unlikely that the amount increased will offset the amount lost from the VHR market without a significant increase in the quality of available hotel/motel beds.

City costs related to the enforcement of the current VHR program will likely be reduced, though code enforcement attention will likely be shifted to addressing issues related to vacant housing units, which often have deferred landscape maintenance, and similar issues that result from prolonged vacancy. Police response to VHR complaints will disappear, and the need for additional VHR response teams will disappear. The City will see increased road maintenance and traffic costs as more tourists are driving in and out of the city for recreation and entertainment purposes. There will likely also be new environmental impacts associated with the increased vehicle miles traveled, and the intensification of VHRs in environmentally sensitive areas outside the city.

## 4. REGULATION MODELING

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Phasing out the VHR market in the city is probably not economically catastrophic, but it will have significant negative economic impacts. It will likely depress the City's tourist economy and shift VHR impacts to areas outside the city. It may increase available housing, but will likely also reduce employment opportunities and household incomes, which will likely provide only marginal improvement to the City's affordable housing problem.

As discussed above, phasing out VHRs is not in the best interest of the community or the economy of South Lake Tahoe. However, some additional regulations could be included to help address specific problems and priorities.

### Regulation Analysis

Several restrictions identified in the matrix above could be used to create a more comprehensive VHR policy without incurring significant adverse impacts on the secondary tourist economy. For example, limiting the number of annual permits available, increasing the permit fees, requiring full-time local managers and liability insurance, implementing high penalties for illegal units, requiring house policy contracts, and requiring full-cost recovery for calls for service could be combined into a cohesive VHR program. Such a program would strongly discourage illegal operations, and would filter poor performers (both in a regulatory and a profitability sense) out of the market. It would require the same level of response from both local and absentee VHR owner/operators and would even the market from a regulatory perspective. Such a program would also act as a soft brake on the conversion of units to VHRs; however, it probably wouldn't add a significant number of units back into the long-term occupancy market. As it would only remove the poorest performers from the VHR market, the bulk of the VHR stock would remain available for tourist accommodation. Per night prices might increase slightly, but the overall impact on the tourist economy is likely to be marginal.

Adding restrictions like a limited application period and a waiting period for new application approvals would do more to respond to housing availability issues, but would also have a more significant impact on the tourist economy. Determining priorities in regard to what social issues need to be addressed, and how much economic benefit can be forfeited to address those issues, will be key to developing a responsive and appropriately tuned regulatory framework.

### 4.4 OTHER POTENTIAL POLICY RESPONSES

VHRs are a very visible component of the city's housing market, and the activity inherent in operating as a VHR makes them an obvious target when looking for contributing factors to the city's high housing costs and the other negative externalities that residential neighborhoods are experiencing. However, VHRs make up less than 25 percent of the city's vacant housing stock. Addressing problems with the currently operating VHRs treats only a part of the problem facing the city in regard to the lack of affordable housing and the mismatch between incomes and housing costs experienced by residents employed in the tourist industry. Policy responses aimed at the larger population of second and vacation home owners could by default capture both VHRs and vacant homes and address some of the impacts that both have on the city's neighborhoods.

#### 4.4.1 Mixed Regulation Models

California's Proposition 13 property tax restrictions limit the ability of the City to use property taxes as a means of mitigating impacts that result from vacant properties. However, the City may be able to implement other regulatory means to respond to the externalities associated with large quantities of generally vacant housing. The following analysis assumes a fee-based regulation that targets second homes, vacation homes, and other vacant properties.

### Social/Community Impacts

Increasing the fundamental costs of owning a second home or vacation home rental property in South Lake Tahoe would likely act as a brake on the conversion of units from occupied to vacant. The severity of the brake would depend on the magnitude of the increased costs, but it would eliminate some of the incentive for absentee and vacation home owners to purchase properties in South Lake Tahoe. The result would likely be at least a little more housing available for long-term occupancy, and some relief from the pressure on the existing housing market.

A moderate fee-based regulation on vacant homes would be less likely to directly impact the tourist industry than regulations that specifically target VHRs, and the residents dependent on tourist-focused employment are less likely to be negatively impacted by economic shifts resulting from dramatic adjustments to the costs of accommodations. Neighborhoods would likely see a slight reduction in vacant homes, including some of the poorest performing VHRs, and the reentry of that stock into the long-term housing market. Additionally, second home and vacation home owners could be incentivized to offer their homes for rent to long-term tenants through measures that allow relief from the vacant housing regulations, which would act to increase the availability of housing appropriate for families.

The population impacts could range from negligible to mild, but would likely be more positive. The increased availability of housing would allow more families and employment-dependent households to remain in the city. This would support the city's increasing racial and ethnic diversity, and would slow or even stop the average age of city residents from increasing as more age groups would have greater representation. Fewer employees would be commuting from outside the area, and the impacts on public assets like schools, street infrastructure, and public services would stabilize.

### Economic Impacts

As with the other scenarios, the social and economic impacts of this scenario are intertwined, and it could be assumed that some of the increase in the costs of second and vacation homes might be passed to tourists through increased VHR prices. Since many tourists base their accommodations on the cost per person per night, a modest increase in the total cost of the VHR would be unlikely to act as a deterrent for tourists looking for VHR accommodations. Hotels and motels might experience some increase in occupancy, with a net result in increased TOT from the traditional accommodation industry and slower increases in TOT from VHRs.

In addition to TOT, the City would have a new revenue pool derived from the vacant unit regulatory fees. These fees could be used to further address the affordable housing challenges, improve neighborhood assets, and could even be a resource to help support redevelopment of the city's downtown to better facilitate environmental, economic, and community needs. VHRs would continue to have impacts on the community, and the need for public safety, code enforcement, and administration would remain. Community complaints regarding public nuisances like noise, trash, parking, and other problems would continue to require resources from the City, and may be improved by additional VHR specific regulation.

## 4. REGULATION MODELING

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### Mixed Regulation Analysis

Combining regulation aimed at addressing issues with high levels of vacant units with a VHR regulatory program, as discussed earlier in the previous regulation analysis, could provide multiple points of leverage in addressing both the social and economic needs of the community. The existing VHR market is a valuable asset; however, mitigating the negative impacts of VHRs on residents is also vital. An additional factor that deserves consideration is the fact that South Lake Tahoe's accommodation market and secondary tourist economy are parts of a larger regional marketplace, and changes in the city's regulations can echo through the region, resulting in a variety of potentially unforeseen externalities. Effective regulation should consider the regional market, even if regional cooperation is not required, and evaluate how to best regulate for the desired effect without triggering additional negative impacts.



*VHR in-between rentals*

One component of this analysis that has been only briefly reviewed is the role of the different planning and environmental protection agencies in this process. One finding in this study is that the increase of VHRs in residential neighborhoods has essentially transferred the environmental impacts of tourists from the properties/areas where those impacts have been calculated and mitigated to properties/areas where those impacts were not part of the planning process. Due to the sensitive environment, and the fact that the natural environment is a major tourist draw, there may be value in a regional reevaluation of the interplay between tourist and residential commodities and how to best address the impact of increased numbers of tourists (as opposed to VHRs) in the residential neighborhoods.

### 4.5 HYBRID POLICY RESPONSES

Hybrid policies are policies intended to address both the second and vacation homes that spend long periods vacant and the VHRs currently operating in the city. In addition to the VHR regulations discussed above, hybrid policies could include regulations such as:

- Property transfer fee for properties that are not primary residences or intended for long-term rental.
- Vacant property impact fees for properties that are left unoccupied for more than a certain number of days each year.
- Regulatory relief or other incentives for absentee property owners who elect to offer their property as a long-term rental.
- Partnership with the TRPA to explore opportunities for creating a new commodity market that addresses the environmental impacts resulting from tourists moving out of hotels/motels and into the neighborhoods.
- Establishing a means for motel owners to convert units to permanent housing.

Policies that take a moderate approach and spread the regulatory impact across the housing market are less likely to have a direct impact on the city's tourist economy and are more likely to support the needs of the community. Section 5 discusses the key issues involved in selecting which policies and regulations to implement.

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### 5. CONCLUSIONS

Jurisdictions throughout California are facing challenges in how to address affordable housing shortages and mismatches between labor and housing markets. The City of South Lake Tahoe is no different in that the same shortages and mismatches have put measurable pressure on the existing lower-cost housing and have priced many of the households who work in the city out of the housing market. The stories diverge there, however, as South Lake Tahoe is also facing challenges unique to tourism economies and environmentally sensitive destinations. Additionally, the city's housing market is complex and diverse, with many different stakeholders with different interests, and a complicated interplay of both positive and negative externalities that impact far more than housing. Policies intended to address specific issues can echo throughout the social and economic fabric of the community with unintended impacts. A thorough understanding of the relationships between the different housing sectors, local economics, and long-term trends can help provide a solid foundation from which policy-makers can take informed action. Below is a brief summary of the key findings in this report and a discussion of some of the available policy options.

#### 5.1 KEY FINDINGS

Throughout this study, the data supported many of the more common impressions and perceptions collected through the community outreach. The data often provided the connections between the different factors facing community members, and helped to frame a more cohesive story.

VHRs have been a part of the city's tourist accommodation stock for a very long time; however, the more recent popularity of online VHR marketing and management tools, like VRBO.com and Airbnb.com, have contributed to a boom in VHRs by making it easier and more profitable for property owners to operate VHRs, in particular from afar. Therefore, much of the growth has been the increase in non-resident vacation home owners using the online tools to manage their properties as VHRs. This growth has resulted in:

- Significantly increased TOT revenues for the City.
- VHRs capturing larger shares of the tourist accommodation market.
- Increased code enforcement complaints and other evidence of potentially incompatible uses.
- Downward pressure on home values in the city, as discussed in the regression analysis in Section 3.2.

The growth of VHRs in South Lake Tahoe indicates a thriving market that is still profitable enough to encourage new property owners to enter, and existing property owners to expand. The City's ordinance and regulations also make VHRs and related issues more visible, and this visibility has somewhat inflated the community perception of the role that VHRs play in the larger housing issues facing the city.

South Lake Tahoe has significantly lower median incomes, but only slightly lower median home values as compared to El Dorado County and the state of California as a whole, despite the downward pressure that VHRs put on home values city wide. This means many households earning median wages in the city cannot afford to purchase homes, while higher-income households outside the area can afford homes in South Lake Tahoe. The city has seen a dramatic increase in housing units converting from full-time occupancy to vacant (VHRs are considered vacant by most data sources) or units being built with the intent to be used as VHRs, which means they are

## 5. CONCLUSIONS

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being built to be vacant. The city's housing shortage is not an overall shortage of units, as almost 50 percent of the city's housing is vacant, but a shortage of units available on the market for long-term occupancy. VHRs exacerbate the conversion of occupied housing to vacant housing by providing a more profitable alternative to long-term rental agreements and vacant seasonal or vacation homes. The result, in multiple areas in the city, is partially occupied residential neighborhoods saturated with VHRs. VHRs typically have maximum occupancies that far exceed the number of persons that would occupy the home in a long-term situation (typically two persons to a room for VHRs and one for long-term occupancy), and turnover rates that result in high parking demands, additional traffic, and a host of other externalities that result from intensified uses in low-density areas.

The City's regulatory response so far has focused on ensuring that fees and TOT revenues are collected, ensuring that residents have a venue to voice complaints, and addressing the nuisance problems associated with VHRs. The City's regulations have not been intended to address the increase in VHRs in residential neighborhoods. Nor are the current regulations designed to address the result that VHRs shift tourist impacts out of mitigated hotels and motels (i.e., where the environmental impacts of high-volume tourism have been identified and addressed), and into unmitigated residential neighborhoods originally intended for a less intense environmental impact. The existing regulations also do not address the incentive that VHRs contribute to the conversion of units from occupancy to vacancy.

There are different policy options to address different issues, both in terms of VHRs and in regard to the more pervasive vacant housing issues and the interplay between available housing and the City's economic base.

### 5.2 POLICY OPTIONS

New regulations and ordinances are typically driven by one of two motivations: they are either a reactive response to a problem, or they are a proactive means toward a desired outcome. The rapid evolution of technology and the dramatic economic cycles and market shifts that have taken place over the last couple of decades have made many reactive regulations necessary and increased the difficulty of developing effective proactive regulations. The best point of balance between economic growth and social stability is unique to each jurisdiction and region, and requires the consideration of a vast number of variables with highly nuanced interplay. Some key questions face each jurisdiction that tries to find that balance: What are the community priorities? What positive and negative impacts matter the most? What is the long-term vision for the community? How committed is the community to reaching that vision? A thorough evaluation of these questions and a clear priority path should be identified prior to making policy decisions that will impact this complex socioeconomic network.

#### 5.2.1 What are the goals of regulation?

Different regulations have different impacts, and strategically identifying which problems are priorities and how to directly address those problems will be important in determining what regulatory actions to take. The research team identified several challenges during this study, many of which have been identified as problems by the community and were voiced during the community outreach process; these challenges are intertwined with the city's housing market, the tourist economy, and the operation of VHRs in residential neighborhoods. The section below identifies some of the key problems and suggests potential policy responses the City could take to address those problems. This a la carte approach is intended to assist policy-makers in identifying priorities and establishing regulations designed for progress toward specific goals.

### 1. Long-Term and Affordable Housing Shortage

The shortage of available long-term housing and the shortage of affordable housing are intrinsically linked, and addressing one can help address the other. Many jurisdictions attempt to address the shortage of affordable housing through subsidized development. This is less of an option for South Lake Tahoe, due to various restraints, including environmental issues, the availability of suitable sites, and financing challenges. Therefore, other policy options need to be considered. The policy options below are potential responses that could be implemented to address specific issues. Some of these options require interagency cooperation, while others may work best through a long-term implementation plan. The pros and cons of these policy options are included in Section 4, and a more detailed discussion of potential implementation is included in the Policy Considerations section below.

#### Policy Options

- Regulate vacant housing units.
- Incentivize absentee owners to use second homes for long-term rentals.
- Coordinate with the TRPA to address mismatched commodities and better align commodity mitigations with property uses.
- Establish a process by which underutilized motels can legally convert to long-term housing units.

### 2. Increasing Number of VHRs in Residential Neighborhoods

The increased number of VHRs throughout the city has had disparate impacts on different residential neighborhoods. These impacts range from code complaints and public nuisances to housing shortages to influence on home values in the city. As described in Section 3.2, housing units within the ¼ mile radius of VHRs experience increased values. Overall VHRs provide a dampening effect on home values. The following policies could be used to help create balance between VHRs and their resident neighbors.

#### Policy Options

- Establish VHR limits per neighborhood.
- Limit the number of new VHR units that can be added in any given year.
- Require a waiting period after a property is sold before it can become a VHR.
- Significantly increase fees and/or non-compliance penalties, possibly associating fees or penalties with the VHR saturation in a given neighborhood to discourage new VHRs in neighborhoods already heavily impacted, and to better fund mitigation for impacts in VHR dense areas.

### 3. Lack of Response from Problem VHR Operators and Absentee Owners

VHRs are a valuable component of the city's tourist accommodation market, and properly operated and managed properties can reduce the impact they have on residential neighborhoods.

## 5. CONCLUSIONS

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### Policy Options

- Increase the registration permit fee and renewal fee to discourage inexperienced and unprepared owners and operators from entering the market.
- Require full-time local property management with managers available any time the unit is occupied.
- Offer management certifications that verify managers have been trained in proper VHR management and have the tools necessary to actively manage their VHR properties. These certifications could involve training from both lodging industry and property management experts on how to address common lodging and nuisance problems, and would include education on compliance with the city's VHR regulations. The certification program could be created and hosted by the city, or it could be contracted out to a professional association, such as a property management professionals association or a lodging professionals association, and include added modules to provide training on the city's regulations and other VHR specific issues in addition to property management best practices or similar. Certifications could be required as a response to violations.
- Increase penalties on properties that advertise as VHRs without VHR permits.
- Adopt cost recovery options that recoup the cost of calls for service from property owners.
- Require best practices for trash and waste management, including bear boxes where appropriate.

Identifying the best set of solutions starts with a thorough understanding of the problems. The goal of this report is to provide suitable guidance for the City's efforts to improve the quality of life for residents and tourists alike.

### 5.3 POLICY CONSIDERATIONS

Vision planning is a key step in preparing successful proactive policies. Determining a long-term community vision starts with identifying community priorities, and follows by using those priorities to find common interests and establish community goals designed to propel the city toward that vision. Without the vision, the priorities, and goals, policies become reactive, and it can be very difficult for decision makers to analyze policy decisions thoroughly enough to identify the most critical positive and negative externalities. All regulation has externalities, many of which are only visible in hindsight, but an engaged community visioning process combined with careful proactive policy making can encourage positive externalities and limit the impacts of negative externalities.

The research team has provided the following policy considerations to facilitate proactive planning. Each program is associated with specific problems identified in the other sections of this report. As the problems run the gamut from housing to economics, so too do the programs, and the policies may contradict each other, depending on the problem they are designed to address. The research team intends these sample policies to serve as a menu of options, not as a comprehensive program. Neither city staff nor industry experts have vetted any of these policy considerations, and the research team has included them as samples for reference and consideration during the community visioning and goal setting process.

#### **1. Community Focused Policy Considerations**

Different regulations have different impacts, and strategically identifying which problems are priorities allows decision makers to best determine what regulatory actions to take. The research

team identified several challenges facing housing in South Lake Tahoe, from affordability to availability, and both VHRs and vacant second and vacation homes are directly contributing to some of the challenges facing the city's housing market. These challenges are not new to the community, who identified many of these issues during the community outreach process. However, these challenges are neither simple nor easy to address. The interaction between city services, the housing market, the tourist economy, the local labor market, VHRs, and traditional lodging providers is complex and any regulation will require careful consideration. The section below provides short- and long-term regulation recommendations intended to address the impacts that VHRs and vacant housing in general are having on the community. These regulations can be implemented piecemeal or as part of a cohesive plan. Some additional analysis may be required for some of the more nuanced regulations.

**1.1 Problem: VHR saturation in residential neighborhoods.** Sections 3.2.3 and 3.2.4 reveal that within a ¼ mile radius, VHRs have an inflationary effect on home values, which acts to encourage other home owners in the immediate vicinity of VHRs to convert their units to VHRs. These results indicate a self-reinforcing cycle that encourages increased VHR saturation, particularly in VHR dense neighborhoods, which increases other problems identified in Sections 2.3.2 and 2.3.3 such as loss of units available for long-term occupancy, increased housing cost burden, and high demand for code enforcement services. The following programs are sample policies that could be used to reduce VHR saturation in sensitive neighborhoods.

- 1.1.1 Short-Term Program: Limit the number of new VHR permits available each year. Consider establishing the limit based on ratio of occupied housing to VHRs (e.g., 1VHR to 5 occupied units), or through another formula that responds to specific community priorities. Permits can either be issued as first-come-first-served or received during a set window and issued as part of a lottery. New VHR applications for units in the tourist core can be exempt from the limits to encourage focusing VHR impacts in the areas best situated to manage those impacts. Consider exempting applications for VHRs that significantly deviate from other homes in the neighborhood either in character or in larger size from the new permit limits, with alternate requirements for these units designed to address disproportionate impacts on different neighborhoods (see Program 3.3.1 below). Limiting the available number of permits will help slow the increase of VHR units, and will provide more control over VHR density in sensitive neighborhoods.
- 1.1.2 Short-Term Program: Implement a waiting period (recommended one year minimum) from the time of sale of a unit (or other transfer of title) before that unit is eligible to apply for a VHR permit. Consider exempting VHR permits for new units in the tourist core, condominiums, and units significantly deviating from other homes in the neighborhood either in character or in larger size from waiting period (see Program 3.3.1 below). Implementing a waiting period may discourage prospective property buyers from purchasing a home to use as a VHR by delaying the return on investment.
- 1.1.3 Short-Term Program: Develop a permit fee structure that substantially increases the cost of permitting for VHRs in heavily impacted or saturated neighborhoods. Consider using the number of VHRs in the ¼ mile radius as a saturation guide. Increased costs will discourage additional VHR saturation in sensitive neighborhoods while additional revenues could be used to address neighborhood priorities and mitigate issues originating from VHRs, or could be part of a program designed to increase the supply of long-term rental housing.

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- 1.1.4 Long-Term Program: Analyze the total number of existing VHRs, either by census tract, neighborhood, or sub-neighborhood. Establish per geography VHR permit limits. Invite public participation in the analysis to determine which neighborhoods are particularly sensitive, and which neighborhoods can better handle higher VHR densities. Set limits according to neighborhood capacity and sensitivity, and phase out by attrition VHRs in neighborhoods assessed as oversaturated. Long-term implementation should result in reduced VHR saturation in sensitive neighborhoods, and provide well founded controls to prevent future VHR saturation issues.

**1.2 Problem: Shortage of available long-term occupancy housing.** Section 2.3.2 identifies the loss of housing units available for long term occupancy as a critical issue, and the limited supply of housing contributes to high housing cost burdens and puts households at risk of overcrowding. Section 2.3.3 analyzed the incomes for households in the city and shows that median household incomes are not sufficient to meet the high cost of housing in the city, forcing many who are employed in the city's tourist economy to either accept overcrowded or substandard living conditions, or to find housing outside the city, which contributes to traffic congestion, infrastructure wear, and increased environmental impacts. The following programs are sample policies intended to slow turnover of occupied housing to VHRs and vacant second or vacation homes.

- 1.2.1 Short-term Program: Require registration of every vacant unit (any unit unoccupied for more than 30 days consecutively) with a nominal annual fee (e.g., \$100). Implement program designed to provide windshield inspections of vacant units that will identify problems associated with prolonged vacancy, such as deferred building maintenance that may render the unit unfit for occupation, overgrown or unmaintained landscaping that poses a potential fire hazard, or storm damage that may render the unit uninhabitable if not immediately addressed. Program will use the registration lists to inform property owners of potential problems, and to require enforcement of code violations. Implementation helps cover code enforcement costs for vacant units, and increased maintenance requirements may encourage some vacant property owners to consider selling or otherwise occupying their unit.
- 1.2.2 Short-term Program: Include a transaction fee for all units sold in the city that will not be used as: 1. A primary owner's residence/full-time residence; 2. A VHR; or 3. A long-term rental unit. The target of this fee would be units that are purchased but will sit vacant most of the year. The transaction fee will increase the cost of purchasing a unit and act as a potential deterrent for buyers looking for inexpensive second or vacation homes. Additional revenues could be used to address neighborhood priorities or could be part of a program designed to increase the supply of long-term rental housing.
- 1.2.3 Long-term Program: Implement an additional graduated annual fee for units that spend more than 30 consecutive days vacant (e.g., units vacant for 100 days of the year, \$200 per year; units vacant for 200 days out of the year, \$400 per year; units vacant 300 or more days out of the year, \$600 per year). Consider including optional inflators/deflators linked to increases/decreases in long-term housing costs in the city. Increased costs for vacant units may encourage some property owners to either increase occupancy frequency, sell the unit, or consider the unit for long-term rental occupancy. This policy may appear to encourage some owners to use their property as a VHR to escape vacancy costs, however, it is intended to provide a vacancy cost that is less than the cost of a VHR permit and operations, to prevent property owners from casually converting their unit to a VHR. Ongoing property

costs may discourage new buyers looking for lower cost second or vacation homes from purchasing units that will remain vacant most of the year.

- 1.2.4 Long-term Program: Designate a portion or all of the new fees collected from vacant and VHR units for affordable subsidized housing and long-term rental housing development. Consider using a trust fund model to accumulate funds that may be used as match for state and federal housing grants and loans. May also consider a conversion program designed to help convert under-utilized, poorly maintained, or under-performing motels into long-term housing; either as rental units (apartments) or ownership units (condominiums).

**1.3 Problem: Nuisance VHRs.** Section 2.3.3 and Figure 2.23 discusses the impact that VHRs have on residential neighborhoods, including the high volume of VHR complaints, and problem units with multiple complaints. These issues echo community concerns voiced through the public engagement process, specifically survey questions 2 and 5 which identified trash, noise, and parking as frequent problems with VHRs. While the city's existing VHR programs do address nuisance issues, much of the enforcement is complaint driven. Community members repeatedly stated that a first step toward dealing with VHR issues would involve increased enforcement of the city's existing regulations. The following programs are sample policies intended to help address and prevent VHR nuisance problems.

- 1.3.1 Short-term Program: Require all VHRs to have full-time certified local managers. Managers must be available any time the VHR is occupied. Provide a public list of VHR managers with the existing VHR list that includes 24 hour contacts. Certification could include professional training, best practices, association membership, and could be hosted by the city, a contractor, a professional association, or a partnership. Certification should include specific training on the city's VHR regulations and enforcement, with focus given to dealing with issues in sensitive neighborhoods. While many VHRs are currently managed through professional management groups, non-resident VHR owners are only required to have a local contact, who may or may not have experience in addressing VHR issues. During the stakeholder meetings non-resident owner managed VHRs were identified as particularly problematic in terms of nuisance resolution.
- 1.3.2 Short-term Program: Increase permit fees for all VHR units, including both whole house VHRs and hosted home sharing VHRs. The city currently assesses fees based on maximum occupancy, and the fees range from \$150 for two occupants to \$800 for 14 occupants. Significant fee increases (e.g., \$500 for permit for two person occupancy, \$1,500 for 14 occupancy for whole house VHRs, and \$250 for permit for hosted housing shares) could discourage property owners from casually entering the VHR market. Additional revenues from fees could be used to fund management certification courses or other nuisance prevention efforts.
- 1.3.3 Short-term Program: Establish high cost penalties for illegal VHRs. The city already penalizes properties that operate as VHRs without a permit, however, these penalties would extend to property owners that advertise without a permit. Example: Unregistered whole house VHRs: \$1,500 for advertising without a permit, \$2,000 for complaints originating from units operating without a permit. Fully hosted units (where the property owner lives in the unit full-time and is present during all guest stays): \$500 for advertising without a permit, \$1,000 for complaints originating from units operating without a permit. Provide a grace period prior to the increase of permit fees and the implementation of high cost penalties for all units to become

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legally permitted. High cost penalties would discourage property owners from attempting to operate illegally and may work to discourage inexperienced or unprepared property owners from entering the VHR market. Additional revenues could be used to fund proactive sweeps for illegal advertising (requirement could include VHR permit number in listing title) or could fund management certification training or other nuisance abatement efforts.

- 1.3.4 Short-term Program: Require all VHRs in neighborhoods vulnerable to bear activity to have a bear box for trash. Property owners and managers should be required to instruct guests on how and when to use the bear box, and could require that guests leave a deposit to ensure they will use the bear box. Requirement could be tied to violations in lieu of a universal obligation, requiring VHR owners and managers to install the bear box in response to a violation involving trash management.

## 2. Economic Growth Focused Policy Considerations

VHRs make up a substantial segment of the city's tourist accommodation stock. This is in part due to the current state of the traditional hotel and motel options in the region, but it is also due to the nature of VHRs themselves. They provide a wider range of comforts, increased access to traditional amenities, like kitchens and outdoor space, and allow larger groups that can better spread costs. They are also an attractive alternative for vacationing families with children who prefer quieter, more private, and more spacious accommodations than commonly available or affordable through the traditional hotel and motel accommodations. This segment of the tourist population is integral to the area's economy and is a net asset for the city and the region as a whole. Increased regulation of VHRs in the city will likely increase costs to owners and managers. As discussed in the regulation modeling in Section 4, increased operational costs will lead to increased costs for tourists and may result in a migration of some VHR units out of the city and into adjacent areas where there is less regulation. If during the community visioning and goal planning process, the city determines that marginal increases in VHR accommodation costs and the migration of some VHRs into other areas is an undesired result of regulation, the city may want to implement policies that provide relief from the increased regulations. Programs in this section are sample policies intended to support the VHR industry and provide some compensation or relief from some of the regulations suggested in the Community Focused Policy Considerations section above.

- 2.1 **Problem: Increasing both fees and TOT puts financial pressure on VHRs, requiring price increases, or pushing VHRs out of the city and into the county, contributing to additional impacts.** Section 4 discusses potential results from increased regulation, including increased costs for tourists which may negatively impact the tourist economy in South Lake Tahoe. It also discusses the potential migration of VHRs out of the city and into more environmental sensitive areas, which would also lead to increased vehicle miles traveled and the associated environmental impacts. Section 2.3.3 in the narrative about TRPA, commodities, and environmental mitigations discusses environmental challenges, including tourism impacts on areas intended for lower intensity residential use. The following programs are sample policies intended to prevent rapid cost increases for tourists, provide stability and predictability for VHR owners and managers, and address concerns arising from the migration of VHRs out of the City and into environmentally vulnerable areas.

- 2.1.1 Short-Term Program: Establish regulations wherein the city may increase fees or may increase TOT during a given year, but cannot do both. This program is intended to

provide VHR owners and managers with more stable operational costs, and allow for more reliable budgeting.

- 2.1.2 Short-Term Program: Provide a TOT discount to VHRs that meet all of the city's regulations within given deadlines (e.g., 1% to 1.5% discount). Consider also providing a discount to VHRs that are not reported with a nuisance complaint. This type of discount would benefit VHR owners and operators who employ best practices in managing their units, self-mitigate the impacts of their unit on the neighborhood, and proactively address the City's regulatory requirements.
- 2.1.3 Short-Term Program: Consider allowing hardship deferrals for full-time hosted home sharing VHRs. Full-time hosted home sharing is less of a nuisance for neighborhoods, as local hosts are experienced in managing trash, hosts can immediately address noise issues, and hosted properties typically have much lower maximum occupancies. While parking nuisances may still be a problem at hosted properties, the overall impact on the neighborhood is typically less than from whole house VHRs.
- 2.1.4 Long-Term Program: Regularly review economic conditions of VHR industry (suggested twice a year) to identify potential trends indicating excessive economic depression in the tourist economy that correlates with regulatory pressure on VHRs. Allow for a temporary deferral or reduction of any of the above Community Focused Policy Considerations to allow for flexibility and responsiveness to changing economic environments. Consider limiting any reductions or relief efforts to existing VHRs only, to prevent increased saturation of VHR units in sensitive neighborhoods that would result from reducing new permit fees and other start-up costs.

**2.2 Problem: Increased regulations result in increased administrative costs.** Increased regulations and administrative costs impact both the VHR industry and the city. The Executive Summary (Section 1.1) and Section 2 discuss some of the data collection challenges resulting from multiple databases that the city manages. Interfacing these databases can be time consuming and expensive. Similarly, VHR owners and managers who must interact with multiple city departments to achieve full compliance with city regulations may find that effort burdensome, and potentially expensive as it increases the risk of missing a regulation and falling into noncompliance. The following program provides a policy option that could streamline administrative efforts for both city staff and VHR owners and managers.

- 2.2.1 Short-Term Program: Implement online interface by which VHR owners and managers can update and manage permits, report TOT, respond to nuisance complaints, make payments, and interact with city staff. The city already has an online interface for fee payments. Expanding that capacity to include all regulatory aspects of VHR management would consolidate transactions and may take some administrative burden off of city staff. A comprehensive online interface could, at some future point, interact with the online marketing tools, such as VRBO and Airbnb to streamline permit enforcement and possibly give the city an opportunity to link complaint data from high nuisance units to their online profiles, to encourage additional nuisance prevention.

**2.3 Problem: Increased VHR fees translated to costs to tourists, may negatively impact secondary tourist economy.** The regulation modeling in Section 4 provided several scenarios in which increased fees and regulation resulted in increased tourist costs. While Section 2.3.3 discussed the VHR economy and the significant cost benefits to tourist groups who rent VHRs and share costs, increased VHR lodging costs (such as costs that narrow the

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gap between VHRs and traditional lodging) could result in fewer tourists and fewer tourist dollars spent in the secondary tourist economy of recreation, entertainment, and food service. The following program provides a policy option to help mitigate a loss of tourism resulting from increased VHR costs.

- 2.3.1 Long-Term Program: Reinvestment in the tourist core, including small businesses assistance, street improvements, property frontage improvements, hotel/motel rehabilitations and other primary and secondary tourist economy features, will help to improve South Lake Tahoe's role as both a local and international tourist destination. Better integration with the natural environment, improved transportation alignment, and redevelopment of auto-oriented designs into more walkable and tourist-friendly atmospheres will also help to boost the tourist economy and continue to support demand for VHRs. A portion of the fee increases or penalties considered elsewhere in these policies could be dedicated to revitalizing the tourist core and reinforcing the secondary tourist economy. A scheduled redevelopment timeline with identified milestones could be used to help show progress and prepare long-term financial plans.

### 3. Comprehensive Policy and Program Considerations

The following considerations are separated into two categories. The first category includes considerations for the city to help address some of the fundamental administration problems identified in this study. The second category offers some regional or multi-jurisdictional considerations that the city may want to contemplate while addressing problems in the local VHR market.

- 3.1 **Problem: VHR program administrative burden and data recording inconsistencies.** As mentioned in Problem 2.2, and as discussed in the Executive Summary (Section 1.1) and Section 2.2, data recording inconsistencies both limit the usefulness of the available data and add to the overall administrative burden involved in cross referencing and updating fluid data sets, like the VHR lists. Implementing data systems that interact seamlessly and that encourage consistency in data entry and reporting may have initial set-up costs, but reduce the overall administrative burden in the long-run. The following programs provide policy options to address data inconsistencies and offer some relief from the administrative burden.

- 3.1.1 Short-Term Program: Complete an audit of the current VHR program to identify obsolete data, redundant practices, inconsistent uses of existing programs and databases, excessive administrative demands, and other capacity and consistency gaps and breakdowns. Catalogue program deficiencies and identify resources to better integrate program administration across departments, improve consistency in existing practices, and reduce redundancies and extraneous tasks.
- 3.1.2 Long-Term Program: Adopt a consolidated and dedicated program management module, preferably one that has an online client side interface for VHR owners and operators and that can communicate with the existing database used for code enforcement and police case management processes. Adopt best practices that will keep VHR permit lists accurate and track past actions on each permit, property, and VHR management. The designated program should automate reminders, allow for customized detailed reports, and provide a functional interface for both city staff and VHR owners and managers. Additional functionality with the city's financial system is desirable. Consider open data opportunities that could help to increase public transparency, and that could possibly facilitate integration of online VHR marketing tools like VRBO and Airbnb.

**3.2 Problem: Changes in city policies can result in unintended externalities regionally.** As discussed in the TRPA narrative in Section 2.3 and in the regulation modeling in Section 4, city regulations have the potential for regional impacts. Regulations that increase the costs of starting or operating a VHR in the city may push new VHRs into the county or other adjacent communities. Yet VHRs that migrate out of the city will still have impacts on city traffic and infrastructure as tourists drive to South Lake Tahoe for recreation, entertainment, and food service. Displacing VHRs into other areas may also lead to increased environmental impacts, including air quality issues from vehicle miles traveled, water quality issues from intensified uses in vulnerable environments, and noise and trash impacts already experienced in the city.

3.2.1 Short-Term Program: Compare ordinances and regulations for VHRs across the Lake Tahoe Basin. Evaluate programs to identify where differences in regulations may result in increased tourist impacts in environmentally sensitive areas or in neighborhoods facing other housing-related negative impacts.

3.2.2 Long-Term Program: Create a regional agreement or board that works to establish cohesive and consistent cross-jurisdictional VHR policies that address environmental concerns, economic impacts, and negative externalities on residential neighborhoods in the Lake Tahoe Basin.

**3.3 Problem: Shifting of VHR Impacts to the Environment.** VHRs, particularly large VHRs, shift tourist impacts on the environment from properties that have paid tourist environmental mitigations through the development voucher program, to residential properties that have only mitigated the environmental impacts of residential units. As discussed in the TRPA narrative in Section 2.3.3, many of the traditional accommodations that originally paid environmental mitigations for the intensity of use inherent in tourism are under-utilized, with high vacancy rates and unused units. Conversely, many properties that originally paid environmental mitigations for the lower intensity residential uses are now being used as tourist accommodations, creating increased parking demands, increased occupancy, and increased occupant turnover. Many of the large VHR units, particularly the newer units, are well built, include many energy efficiency features and are designed to reduce their overall environmental footprint. However, their use as de-facto tourist accommodations is still arguably more intense in terms maximum occupancy, parking associated with maximum occupancy, and traffic to and from the unit (also associated with maximum occupancy) than if the unit was used as a full-time single family residence. Yet, based on the assignment of development commodities, these units have only paid environmental mitigations for the lower intensity residential use. The following program suggests a policy intended to re-align the mitigation with the use, and better respond to the environmental impacts of tourist concentrations in residential neighborhoods.

3.3.1 Long-Term Program: Consider changing the designation of VHRs that significantly deviate from other homes in the neighborhood either in character or in larger size from residential VHRs to tourist accommodation VHRs. Require that these VHRs obtain tourist commodities at going market rates. Commodities could be prorated according to maximum occupancy (e.g., one commodity per two person occupancy.) Require new VHRs (new construction of units intended to operate as a VHR) that significantly deviate from other homes in the neighborhood either in character or larger size to meet the same health and safety standards as required by hotels and motels, or as were required for bed and breakfast accommodations.

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# Technical Appendix



### Survey Demographic Information

This portion of the survey collected demographic data to see if there were specific groups that were less represented or that may be disenfranchised. This provides an understanding of how perceptions may differ within the community, and ensures that results honestly reflect the opinions of the range of community members. Demographic data was collected from both the resident's survey and the owners survey, however the summaries for the income, race and ethnicity, and employment focus on the resident survey responses as that survey was specifically targeted for resident participation. The responses to the resident survey are more relevant in assessing whether or not segments of the South Lake Tahoe community were disenfranchised in this process.

#### **QUESTION 13: WHERE IS YOUR FULL-TIME RESIDENCE?**

##### *Residents*

Of the responses from the resident survey, 54 percent said that they live in the City of South Lake Tahoe, 11 percent said they live outside the city but in El Dorado County, and 35 percent said they lived outside El Dorado County. Both the property owner and the resident surveys were available, and respondents self-selected which survey best represented their role in the community. Additionally, many people work in South Lake Tahoe, but live in Douglas County across the state line in Nevada, and therefore have an interest in the city's housing market. Douglas County was not included as an option on the survey.

##### *Owners*

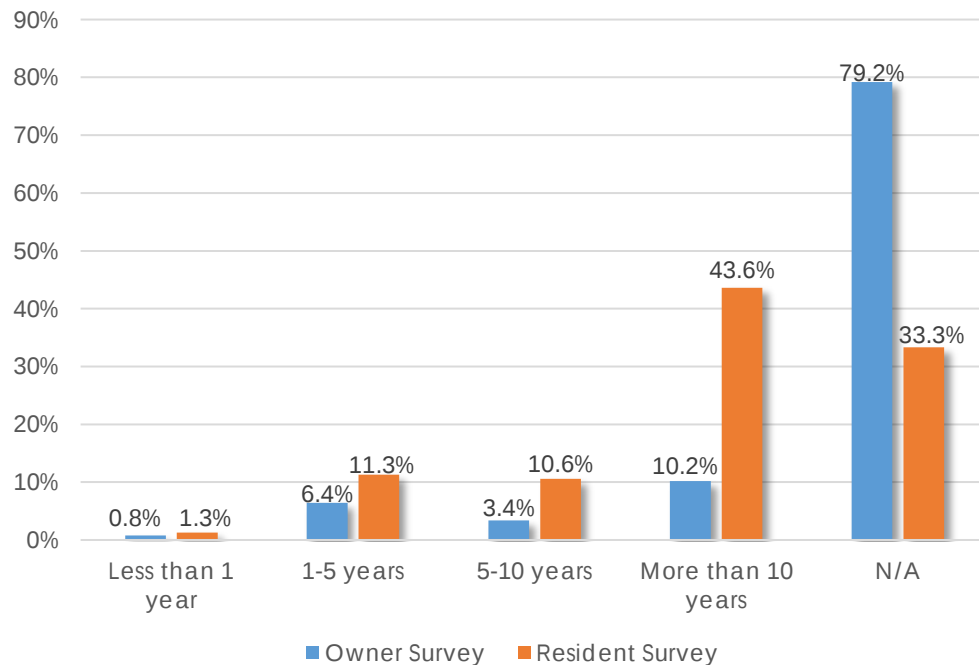
Of the responses from the VHR owner survey, 17 percent said that they live in the City of South Lake Tahoe, 10 percent said they live outside the city but in El Dorado County, and 73 percent said they lived outside El Dorado County.

#### **QUESTION 14: IF YOU ARE A FULL TIME RESIDENT OF SOUTH LAKE TAHOE, HOW LONG HAVE YOU LIVED HERE?**

This question serves as a follow-up to the previous question, to understand the balance of long-term and new residents. A large portion of those who took the resident survey are long-time residents (44 percent). Unsurprisingly, the vast majority of owners put "not applicable" for this answer. The results are displayed in Figure A.1 below.

*Residents and Owners*

**Figure A.1**  
**If You Are a Full-Time Resident of South Lake Tahoe – How Long Have You Lived Here?**



**QUESTION 15: ABOUT HOW MANY MONTHS A YEAR DO YOU LIVE IN SOUTH LAKE TAHOE?**

*Residents*

The responses to the resident survey indicated that the majority of respondents live in South Lake Tahoe year-round (51 percent), but that there is a range in average time spent for part-time residents (1 to 6 months).

*Owners*

The responses to this survey question showed that most VHR owners live in South Lake Tahoe at least part of the year (with 62 percent living in South Lake Tahoe living at least 1 month per year). About 13 percent of owners live in the city for the entire year.

**QUESTION 16: WHAT IS YOUR TOTAL HOUSEHOLD INCOME?**

*Residents*

The following table (Table A.1) compares the reported income from the survey results to that of the actual income breakdown of South Lake Tahoe. It demonstrates that survey respondents were disproportionately wealthier than actual residents.

**Table A.1**  
**What is your total household income?**

| Income Brackets   | Survey Results | 2015 ACS Data |
|-------------------|----------------|---------------|
| \$0 To \$24,999   | 2.7%           | 27.7%         |
| \$25,000 \$49,999 | 11.9%          | 29.6%         |
| \$50,000 \$99,999 | 24.4%          | 26.4%         |
| \$100,000 or more | 39.1%          | 16.4%         |
| Decline to answer | 22.0%          | N/A           |

2015 Data Source: 2015 5-year ACS Estimates

**QUESTION 17: WHAT RACE/ETHNICITY DO YOU IDENTIFY WITH?**

*Residents*

Table A.2 compares the reported race and ethnicity from the survey results to that of the actual race and ethnicity breakdown of South Lake Tahoe. The breakdown of white residents is nearly comparable to the demographic data, but other races and ethnicities are underrepresented in the survey respondent group.

**Table A.2**  
**What race/ethnicity do you identify with?**

| Race/Ethnicity Categories                  | Survey Results | 2015 ACS Data |
|--------------------------------------------|----------------|---------------|
| White                                      | 69.5%          | 70.2%         |
| Black or African American                  | 0.2%           | 1.7%          |
| American Indian or Alaskan Native          | 0.2%           | 0.5%          |
| Asian                                      | 3%             | 6.2%          |
| Native Hawaiian and Other Pacific Islander | 0.6%           | 0.1%          |
| Other/More than One Race/Decline to Answer | 23.6%          | 21.3%         |
| Hispanic or Latino of Any Race             | 2.9%           | 33.4%         |

*\*Note: Percentages do not add up to 100% because respondents had the option to choose multiple races and/or ethnicities.*

*\*Note: Hispanic is considered an ethnicity and is therefore tabulated separately from race.*  
2015 ACS Data Source: 2015 5-year ACS Estimates

**QUESTION 18: WHAT KIND OF WORK DO YOU DO?**

The following table (Table A.3) compares the reported industry of employment from the survey results to that of the actual industry and employment breakdown of South Lake Tahoe from 2015 Census data. The breakdown shows that highly represented sectors include real estate (12 percent of respondents and 4 percent of the population), arts, entertainment, and recreation (11 percent of respondents and 41 percent of the population), and construction and manufacturing (11 percent of respondents and 22 percent of the population). It is likely that the representation is due to the stake these individuals have in the VHR industry. There was also a large percentage of retired people (21 percent) and respondents who declined to answer (17 percent) who took the survey, but these are not categorized in the ACS data.

**Table A.3**  
**What kind of work do you do?**

| Industry                                                                                      | Survey Results | 2015 ACS Data |
|-----------------------------------------------------------------------------------------------|----------------|---------------|
| Construction, manufacturing, wholesale trade, retail trade                                    | 10.6%          | 22.2%         |
| Information and technology                                                                    | 10.1%          | 1.5%          |
| Real estate, including rental and leasing                                                     | 12.0%          | 4.3%          |
| Educational services, health care or social assistance                                        | 9.0%           | 13.6%         |
| Arts, entertainment, or recreation, visitor services, accommodation, food services or lodging | 10.7%          | 40.8%         |
| Government/public administration, including utilities, waste management                       | 7.0%           | 3.8%          |
| Retired                                                                                       | 21.4%          | N/a           |
| Student/homemaker                                                                             | 1.3%           | N/a           |
| Unemployed                                                                                    | 0.6%           | N/a           |
| Decline to answer                                                                             | 17.1%          | N/a           |

Source: 2011-2015 ACS

**QUESTION 19: WHICH OF THE FOLLOWING STATEMENTS ACCURATELY DESCRIBES YOU? (RESIDENT SURVEY)**

This question was intended to provide insight to help the research team understand which segments of the community were represented in the resident survey. The survey provided the following options:

- Owner Occupied Homeowner in South Lake Tahoe
- Renter in South Lake Tahoe
- Owner of a “second home” in South Lake Tahoe
- Vacation Home Rental owner/operator in South Lake Tahoe
- Business owner in South Lake Tahoe (other than a VHR)
- Live on a street or adjacent to VHR(s) in South Lake Tahoe
- No Permanent Residence

Respondents were able to select any and all statements that applied to them, and were also given an option to select “other” and provide their own explanation.

The survey showed that the owner- and renter- occupied residents comprised 59.4 percent of respondents; however, 23 percent of respondents were VHR owners. Since this question allowed multiple responses, the percentages did not add up to 100 percent, and it is possible that some of the VHR owners were also full-time residents of South Lake Tahoe.

**QUESTION 20: IF YOU HAVE OPERATED A VHR IN SOUTH LAKE TAHOE EITHER PRESENTLY OR IN THE PAST, WHICH OF THE FOLLOWING STATEMENTS DESCRIBES YOUR EXPERIENCE? (PLEASE CHECK ALL THAT APPLY)**

There is a wide range of VHR business models (e.g., owner-occupied home-share, entire home). This question seeks this information from respondents who have operated a VHR in South Lake

Tahoe. A total of 1,133 residents and 311 owners answered this question, with some selecting multiple answers. However, 54 percent of resident respondents and 14 percent of owner respondents answered “this question does not apply to me.” These responses were collected from both surveys because a substantial portion of resident survey respondents are also VHR owners. The results are summarized in Tables A.4 and A.5 below.

*Residents*

**Table A.4**  
**If you have operated a VHR in South Lake Tahoe either presently or in the past, which of the following statements describes your experience? (please check all that apply)**

| Answer Options                                                                                                         | Response Percent | Response Count |
|------------------------------------------------------------------------------------------------------------------------|------------------|----------------|
| I am/was present during my guests' stay.                                                                               | 6.1%             | 69             |
| I am/was not present during my guests' stay.                                                                           | 28.0%            | 317            |
| I rent/rented my entire home.                                                                                          | 35.1%            | 398            |
| I rent/rented out individual rooms.                                                                                    | 1.3%             | 15             |
| I rent/rented out an accessory unit on my property.                                                                    | 0.8%             | 9              |
| I own/owned more than one property, and use/used one as my primary residence, and the other(s) for vacation rental(s). | 7.3%             | 83             |
| I used to operate a VHR, but no longer do.                                                                             | 5.0%             | 57             |
| This question does not apply to me.                                                                                    | 54.1%            | 613            |
| Other (please specify)                                                                                                 | 5.4%             | 61             |
| <b>Answered question</b>                                                                                               | <b>1,133</b>     |                |

*Owners*

**Table A.5**  
**If you have operated a VHR in South Lake Tahoe either presently or in the past, which of the following statements describes your experience? (please check all that apply)**

| Answer Options                                                                                                         | Response Percent | Response Count |
|------------------------------------------------------------------------------------------------------------------------|------------------|----------------|
| I am/was present during my guests' stay.                                                                               | 8.7%             | 27             |
| I am/was not present during my guests' stay.                                                                           | 60.1%            | 187            |
| I rent/rented my entire home.                                                                                          | 70.1%            | 218            |
| I rent/rented out individual rooms.                                                                                    | 1.3%             | 4              |
| I rent/rented out an accessory unit on my property.                                                                    | 1.9%             | 6              |
| I own/owned more than one property, and use/used one as my primary residence, and the other(s) for vacation rental(s). | 13.2%            | 41             |
| I used to operate a VHR, but no longer do.                                                                             | 2.3%             | 7              |
| This question does not apply to me.                                                                                    | 13.8%            | 43             |
| Other (please specify)                                                                                                 | 11.9%            | 37             |
| <b>Answered question</b>                                                                                               | <b>311</b>       |                |

### **QUESTION 21: HAVE YOU EVER STAYED IN A VHR IN SOUTH LAKE TAHOE (OR ANOTHER COMMUNITY)?**

This question was intended to provide insight on how familiar each respondent is with the VHR industry and in what capacity. For instance, people who have used VHRs in their own travels might have a more positive or negative opinion of them. It was clear from the responses to this question that VHR owners have more experience staying in VHRs.

#### *Residents*

This question received 1,225 responses in the resident survey. 66 percent of resident respondents said that they have stayed in a VHR, and 34 percent said that they have not.

#### *Owners*

The question received 318 responses in the owner survey; 82 percent of responses said that they have stayed in a VHR, and 18 percent said they have not.

### **QUESTION 22: WHAT IS YOUR PRIMARY INTEREST IN VHRs?**

This was an open-ended question, to which 847 residents and 229 VHR owners responded, to allow an understanding of why community members participated in the dialogue about VHRs in South Lake Tahoe. Most of the responses reemphasized answers from previous questions. Those that were unique to this question or more specific are summarized below.

#### *Residents*

- It makes it possible to afford housing/retirement/visiting Tahoe (~25)
- Work in a business related to VHRs (cleaning, maintenance, etc.) (~9)
- Concern over affordable housing (~12)
- Want to eliminate VHRs (~9)
- Concern over “mega-homes”<sup>1</sup> (~6)
- Interested in becoming a VHR owner (~5)

#### *Owners*

The majority of owner responses indicated again that they rent out their homes for additional income (approximately 15 comments), or provided additional background information on their individual VHR business. Many comments reemphasized the benefits of VHRs to the community that were already addressed in question one.

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<sup>1</sup> “Mega-home” was a term used widely by community outreach participants. It is defined as a very large home with many bedrooms or bedroom bathroom suites that is often constructed with the intent to operate as a vacation home rental.

### Community Workshop 1 – Stations

Each station contained note paper for attendees to write additional comments, and City staff and consultants took notes during individual conversations. Comment cards were also available to fill out and return to the facilitators. The poster voting results as well as all written comments are summarized below.

#### Station 1: What Do You Think of Vacation Home Rentals in South Lake Tahoe?

The potential impacts were selected based on previous community outreach, best practices research on the issue, and experience from other communities, and are listed below along with a breakdown of votes from both posters in Table A.6

**Table A.6**  
**Voting on Impacts of VHRs**

| Impact                                                                 | Agree (%) | Disagree (%) | Total Votes |
|------------------------------------------------------------------------|-----------|--------------|-------------|
| <b><u>Potential positive impacts</u></b>                               |           |              |             |
| VHRs provide tax and tourism revenue to the city                       | 94.9%     | 5.1%         | 59          |
| VHRs provide supplemental income to property owners                    | 98.0%     | 2.0%         | 49          |
| VHRs expand lodging options which is good for tourists                 | 93.8%     | 6.3%         | 48          |
| VHRs are well maintained to attract customers                          | 88.0%     | 12.0%        | 50          |
| VHRs contribute jobs (management and maintenance) to the local economy | 94.1%     | 5.9%         | 51          |
| VHRs have other positive impacts                                       | 79.5%     | 20.5%        | 44          |
| <b><u>Potential negative impacts</u></b>                               |           |              |             |
| VHRs degrade neighborhood character                                    | 42.3%     | 57.7%        | 71          |
| VHRs decrease the supply of seasonal and long-term, affordable housing | 53.7%     | 46.3%        | 67          |
| VHRs strain public services, such as code and law enforcement.         | 54.4%     | 44.6%        | 57          |
| VHRs encourage/are commercial uses in residential neighborhoods        | 40.0%     | 60.0%        | 60          |
| VHRs have other negative impacts                                       | 57.4%     | 42.6%        | 54          |

Results of the potential impacts posters show that the positive impacts of VHRs were more clearly agreed upon by voters than negative impacts. For each potential positive impact, between 80 and 98 percent of votes were in the “agree” column. For the positive impact statements, votes showed that respondents agreed most strongly with the positive economic impacts of short-term rentals, including the contribution of jobs to the economy (94 percent “yes”), supplemental income to property owners (98 percent “yes”) and providing tax and tourism revenue to the City (95 percent “agree”). Fewer votes agreed that VHRs are well maintained, with only 88 percent of votes for “agree.” Overall, between 44 and 59 votes were cast for each positive impact.

Negative impacts were more controversial and therefore split more evenly, with between 40 and 57 percent of votes affirming the negative impacts listed. Voters agreed more strongly that VHRs decrease the supply of affordable housing and place a strain on public services (54 percent “yes”

for each), but were less convinced that VHRs encourage incompatible land uses (40 percent “yes”) and degrade neighborhood character (42 percent “yes”). Overall, between 54 and 71 votes were cast for each impact, which is more than the number of votes cast for positive impacts.

## *Summary of Additional Feedback on VHR Impacts*

Over 50 written comments addressed VHR impacts, but many of these reaffirmed choices on the poster voting and were therefore seen as duplicates (e.g., “there is a lack of affordable housing” which is a repeat of the corresponding potential negative impact). Unique comments typically fell into a category of additional economic impacts, which are summarized below along with their frequency in parentheses.

- Affordable housing is a separate issue from VHRs (5)
- VHRs are not removing rentals from the housing stock because they would never be long-term rentals but would instead sit vacant (3)
- South Lake Tahoe is a tourist community and will be expensive regardless (3)

## *Station 2: What Should South Lake Tahoe Consider When Addressing Vacation Home Rentals?*

The purpose of this station was to present a list of potential data variables and gain community feedback on their importance. The potential data variables are listed below along with a percentage breakdown of votes from both posters in Table A.7 below.

**Table A.7**  
**VHR Variables**

| Variable                                                                                                      | It's Important (%) | It's Not Important (%) | Total Votes |
|---------------------------------------------------------------------------------------------------------------|--------------------|------------------------|-------------|
| Demographic trends (income, employment, etc.)                                                                 | 66.7%              | 33.3%                  | 42          |
| Rental housing trends (costs, size, condition, etc.)                                                          | 60.0%              | 40.0%                  | 50          |
| Ownership housing trends (value, costs, size, condition, etc.)                                                | 61.0%              | 39.0%                  | 41          |
| Cost of utilities and infrastructure (water, sewer, garbage, parks and trails)                                | 50.0%              | 50.0%                  | 38          |
| Tax and fee income for the city and county (transient occupancy tax, sales tax, etc.)                         | 88.1%              | 11.9%                  | 42          |
| VHR industry information (permitted, non-permitted, total beds, costs, management companies, etc.)            | 87.0%              | 13.0%                  | 46          |
| Other lodging industry information (hotels/motels/B&Bs, total beds, costs, etc.)                              | 40.0%              | 60.0%                  | 35          |
| Calls for service (law enforcement, code enforcement, emergency, non-emergency, snow rental, utilities, etc.) | 80.8%              | 19.2%                  | 26          |
| Business trends (new employees, new business etc.)                                                            | 59.1%              | 40.9%                  | 22          |

Overall, there were between 22 and 50 votes for each variable, and the majority of votes were cast in favor of the importance of each variable, with the exception of Other Lodging Industry Information, which only had 40 percent of votes in favor of its importance, and Cost of Utilities and Infrastructure, which had 50 percent of votes in favor of its importance. The remaining variables

had between 59 and 88 percent in favor of their importance, the most popular variables being Tax and Fee Income for the City and County (88 percent), VHR Industry Information (87 percent), and Calls for Service (81 percent). This indicates that respondents believed that specific data on VHRs in South Lake Tahoe is more important than other types of data in the city, such as utility costs and business trends.

### *Summary of Written Feedback on Data Variables*

Written comments on this issue addressed several factors, including TOTs, long-term rentals, and outreach results. Commenters suggested that additional data on TOT income should be collected and shared with the public, including information on the long-term rental market, and the affiliation of outreach respondents (in order to determine if one group saturated an outreach effort).

### *Station 3: Vacation Home Rental (VHR) Regulations*

This station had large, informational posters outlining the City of South Lake Tahoe's current VHR regulations as well as other potential options. The poster of potential regulatory options is shown in Figure A.2 below. While this station did not have a section for voting, a number of written comments addressed regulation of VHRs, which are summarized below.

Comments fell into four major categories, including those that were directly related to the regulatory options listed on the poster. These are summarized below with the number of comments in parentheses.

- Economic Issues
  - Dissatisfaction with City's management of TOT income (3)
  - VHR restrictions decrease necessary rental income for VHR owners (2)
  - VHR restrictions impact home values both negatively or positively (2)
- Property Rights
  - Strict VHR enforcement violates and/or disrespects property rights (5)
  - VHRs restrict property rights of long-term residents because the negative impacts of VHRs interfere with quality of life (2)
- Comments on Listed Regulatory Options
  - Owner occupancy requirements (4 – supported, 4 – opposed)
  - Limits on VHR density and location (11 – supported, 3 – opposed)
  - Limits on rental nights per year (2 – supported, 4 – opposed)
  - In support of community-benefiting uses of VHR revenue (5)
- Additional Enforcement Suggestions
  - Increased enforcement (10)
  - VHRs should be separated from affordable housing issues (4)
  - Moratorium and/or cap on VHRs (4)
  - VHRs should be treated the same way as long-term housing (3)
  - Limits on VHR permits to large homes (5+ bedrooms) (4)

- A scoring system for VHRs to assess concerns (2)
- Dedication of TOTs to specific areas, such as affordable housing or VHR security (6)
- VHRs should be required to have bear boxes (3)

Overall, comments on regulatory mechanisms were divided and often correlated to the affiliation of the commenter when they self-identified (i.e., VHR industry versus long-term residents). There were additional comments, though made less frequently than those listed above, addressing the need for additional education about VHRs, and the need for in-depth TOT statistics.

Figure A.2  
Station 3 Regulatory Options Poster



## VACATION HOME RENTAL (VHR) REGULATIONS

### WHAT OTHER WAYS CAN THE CITY REGULATE VHRs?

- **Restrict the location and/or density of VHRs**
  - Can help ensure residential neighborhoods stay residential in nature
  - Limited number of VHRs located per zone, neighborhood, etc.
- **Place owner-occupancy requirements on VHRs**
  - Require owners to live on the property (e.g. 6 months per year)
  - Lower permit fees or give incentives for VHR owners who live on the property
- **Place restrictions on number of rental nights per year**
  - Can lessen neighborhood degradation and land use and public service concerns
  - E.g. Only 90 days of renting permitted per year
- **Community-benefiting uses of VHR revenue**
  - E.g. dedication of revenue from VHRs to affordable housing, homeless services, infrastructure improvements (i.e. new trails), VHR enforcement
  - Can mitigate impacts of VHRs



### Other Comments

Several comments specifically referenced the Tahoe Regional Planning Agency's (TRPA) regulations, stating that regulations through that agency provide limitations to the City and to VHR owners. Some commenters suggested that VHRs are in violation of TRPA's requirements, whereas others argued that VHRs obey all TRPA requirements.

## Community Workshop 2 - Voting Exercise

Between 11 and 38 votes were cast for each question from in-person participants, and between 24 and 40 votes were cast for each question from text message voting participants. These voting results are from a small sample size of community members, and are therefore not representative of the entire community. In addition, it is possible that some of the in-person voters also voted using their phones and are also included in the text message voting. For that reason, the in-the-room voting results are shown separately from the text message voting results. The results to all questions are summarized below.

### QUESTION 1: DO YOU THINK THAT VHRs EXPAND LODGING OPPORTUNITIES, MAKING THEM GOOD FOR TOURISTS?

#### In-Person Voting Results

- Yes – 65.6% (21 Votes)
- No – 25.0% (8 Votes)
- Not Sure – 6.3% (2 Votes)
- Not Applicable – 3.1% (1 Vote)

#### Text Message Voting Results

- Yes - 82.5% (33 Votes)
- No – 15.0% (6 Votes)
- Not Sure - 2.5% (1 Vote)
- Not Applicable - 0% (0 Votes)

### QUESTION 2: DO YOU BELIEVE VHRs STRAIN PUBLIC SERVICES (CODE ENFORCEMENT, POLICE, ETC.)?

#### In-Person Voting Results

- Yes – 60.0% (21 Votes)
- No – 40.0% (14 Votes)
- Not Sure - 0% (0 Votes)
- Not Applicable - 0% (0 Votes)

#### Text Message Voting Results

- Yes – 34.3% (12 Votes)
- No – 54.3% (19 Votes)
- Not Sure – 5.7% (2 Votes)
- Not Applicable – 5.7% (2 Votes)

### QUESTION 3: MANY VHR OWNERS ARE SOLELY RESPONSIBLE FOR MARKETING THEIR UNITS. DO YOU BELIEVE THAT THIS RESULTS IN WELL-MAINTAINED VHRs THAT WILL ATTRACT CUSTOMERS?

#### In-Person Voting Results

- Yes – 25.9% (7 Votes)
- No – 29.6% (8 Votes)
- Not Sure – 14.8% (4 Votes)
- Not Applicable -29.6% (8 Votes)

#### Text Message Voting Results

- Yes – 57.5% (11 Votes)
- No – 27.5% (6 Votes)
- Not Sure – 15.0% (3 Votes)
- Not Applicable - 0% (0 Votes)

### QUESTION 4: DO YOU FEEL THAT VHRs CONTRIBUTE JOBS (MANAGEMENT, MAINTENANCE, CLEANING, ETC.) TO THE LOCAL ECONOMY?

#### In-Person Voting Results

- Yes – 71.9% (23 Votes)
- No – 9.4% (3 Votes)
- Not Sure – 3.1% (1 Vote)
- Not Applicable - 15.6% (5 Votes)

#### Text Message Voting Results

- Yes - 91.7% (22 Votes)
- No – 8.3% (2 Votes)
- Not Sure - 0% (0 Votes)
- Not Applicable - 0% (0 Votes)

**QUESTION 5: DO YOU THINK VHRs IN RESIDENTIAL NEIGHBORHOODS ARE INAPPROPRIATE USES (E.G., COMMERCIAL USES IN RESIDENTIAL ZONES)?**

**In-Person Voting Results**

- Yes – 55.3% (21 Votes)
- No – 42.1% (16 Votes)
- Not Sure – 2.6% (1 Vote)
- Not Applicable - 0% (0 Votes)

**Text Message Voting Results**

- Yes – 21.4% (9 Votes)
- No – 71.4% (30 Votes)
- Not Sure – 7.1% (3 Votes)
- Not Applicable - 0% (0 Votes)

**QUESTION 6: DO YOU BELIEVE VHRs PROVIDE REVENUE TO THE CITY?**

**In-Person Voting Results**

- Yes – 74.7% (28 Votes)
- No – 5.4% (2 Votes)
- Not Sure – 18.9% (7 Votes)
- Not Applicable - 0% (0 Votes)

**Text Message Voting Results**

- Yes – 84.8% (39 Votes)
- No – 10.9% (5 Votes)
- Not Sure – 4.4% (2 Votes)
- Not Applicable - 0% (0 Votes)

**QUESTION 7: DO YOU THINK THAT VHRs HAVE NEGATIVE IMPACTS ON NEIGHBORHOOD CHARACTER?**

**In-Person Voting Results**

- Yes – 66.7% (24 Votes)
- No – 25.0% (9 Votes)
- Not Sure – 8.3% (3 Votes)
- Not Applicable - 0% (0 Votes)

**Text Message Voting Results**

- Yes – 29.0% (11 Votes)
- No – 68.4% (26 Votes)
- Not Sure – 2.6% (1 Vote)
- Not Applicable - 0% (0 Votes)

**QUESTION 8: DO YOU THINK THAT VHRs DECREASE THE SUPPLY OF AFFORDABLE, LONG-TERM HOUSING?**

**In-Person Voting Results**

- Yes – 68.4% (26 Votes)
- No – 21.1% (8 Votes)
- Not Sure – 10.1% (4 Votes)
- Not Applicable - 0% (0 Votes)

**Text Message Voting Results**

- Yes – 27.8% (10 Votes)
- No – 55.6% (20 Votes)
- Not Sure – 11.1% (4 Votes)
- Not Applicable – 5.6% (2 Votes)

**QUESTION 9: DO YOU BELIEVE THAT VHRs PROVIDE NECESSARY SUPPLEMENTAL INCOME TO PROPERTY OWNERS?**

**In-Person Voting Results**

- Yes – 38.9% (14 Votes)
- No – 50.0% (18 Votes)
- Not Sure – 11.1% (4 Votes)
- Not Applicable - 0% (0 Votes)

**Text Message Voting Results**

- Yes – 82.1% (32 Votes)
- No – 15.4% (6 Votes)
- Not Sure – 2.6% (1 Vote)
- Not Applicable - 0% (0 Votes)

**QUESTION 10: IF YOU DID NOT RENT YOUR PROPERTY AS A VHR, WOULD YOU RENT IT AS A LONG-TERM RENTAL, OR LEAVE IT VACANT? (FOR VHR OWNERS ONLY)**

**In-Person Voting Results**

- Long-Term Rental - 0% (0 Votes)
- Vacant – 27.3% (3 Votes)
- Other – 63.6% (7 Votes)
- Not Applicable – 9.1% (1 Vote)

**Text Message Voting Results**

- Long-Term Rental – 9.8% (5 Votes)
- Vacant – 52.9% (27 Votes)
- Other – 25.5% (13 Votes)
- Not Applicable – 11.8% (6 Votes)

During the voting for this question, several respondents made comments via the online chat feature. Two VHR owners stated that in the event they could no longer use their units as VHRs, they would need to sell them.

### Stakeholder Focus Group Meetings – Findings

#### Focus Group 1: VHR Owners and Operators

This group included VHR operators from professional management companies and VHR owners who operate one or more properties by themselves. Employees and owners of cleaning companies were also included.

There is agreement in this group that VHR owners feel they have often been vilified because of some of the negative impacts of VHRs. There is recognition of the negative impacts of VHRs, but also skepticism that VHRs are fully responsible for those issues. There are many concerns over additional research/data needed, distinguishing between different types of VHRs and VHR owners, and overall City enforcement.

#### *Impacts*

- Changes to City
  - Increase in Airbnbs and VRBOs
    - More people want to be absentee owners
  - Number of unpermitted VHRs is not growing but this is the perception
  - Things have improved
- Positive Impacts
  - The wedding industry uses primarily VHRs
  - 1/3 of the City's TOT income is from VHRs
  - Many new tourist businesses
  - People who rent VHRs in South Lake Tahoe eventually buy homes
- Negative Impacts
  - Affordable housing for employees
    - VHRs are not the only problem
  - Commercial uses in residential districts affects neighborhood character

#### *Responsibilities*

- Challenges
  - VHR industry is vilified due to vocal minority that oppose VHRs
  - Seasonality of tourism affects industry employees
- Needs
  - Need to conduct more research on hotel occupancy, economic impacts, determine “correlation versus causation”
  - Additional enforcement is needed
  - Separate absentee owners and professional managers—these are operated very differently than VRBOs and Airbnbs
  - VHR owners, City, and residents need to work collaboratively

## *Regulation*

- Understanding
  - Many iterations in 12 years
    - Raised fees significantly
  - Significant increase in VHRs in the City (from 800 to 1,100)<sup>2</sup>
  - 600 noise ordinance violations between 150 VHRS
    - Repeat offenders that are a larger problem than the majority
    - VHR owners aren't always informed of violations
  - Do not like continued drama
- Opinions
  - Things have improved overall
  - Enforcement is poor
  - Need more City leadership and transparency
  - TRPA has caused the strain on affordable housing
  - Inspections are punitive
  - County regulations are easier
- Vision
  - Stakeholders review VHR report ahead of public release
  - Distinguish between VHR companies and VHR website owners
  - Make process clearer
  - Fees from VHRs should go to affordable housing
  - VHRS should be limited by area and each should have affordable housing

## *Focus Group 2: Lodging Operators*

In this interview, both negative and positive impacts were recognized, but overall concern is less than in other focus groups, because they believe that City regulations are working, but will take time. Similar to the VHR owners group, this group felt that VHRs that are operated and managed by companies are very different than owner-operated homes. Regulation is a key part of managing the impacts of VHRs.

## *Impacts*

- Changes to City
  - Many in 5–10 years

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<sup>2</sup> This is the estimated number of VHRs provided by attendees at the meeting. The actual count is somewhat higher.

- In 1999 there were lots of second homeowners, but now many more rent them out
- Problems occurred due to the advances of DIY VHR management (Airbnb, VRBO, etc.)
- Positive Impacts
  - Revenue to the City and restaurants
  - Niche market with unique accommodations that pressures the lodging industry to upgrade
- Negative Impacts
  - Affordable housing for employees
  - Homes have converted to VHRs
  - Conversion and second homes have increased
  - Businesses in residential zones
    - Arguments on both sides
  - A few “bad seeds”

### *Responsibilities*

- Lodging Association
  - Neutral toward VHRs, but the economy is good so that could change in different conditions
  - VHRs in association pay into a Tahoe Business Improvement District (TBID); they pay \$4.50 per night, hotels pay \$3.00 per night
    - TBID has 2/5 members that represent VHRs
  - Any VHR can join
- Management Companies
  - Do security and oversight themselves and so fewer issues
  - City does initial inspection but management companies do a lot themselves—security, etc.
  - Pay City fees but do not utilize City resources the same as private VHRs
- Local Residents
  - It is okay to be vocal
- City
  - Enforcement
  - City Council could incentivize long-term rentals
- Needs
  - Long-term renter affordability so they do not have to live far and commute
    - South Lake Tahoe is not that bad yet but it will get there

## *Regulation*

- Opinions
  - South Lake Tahoe’s approach is working but can use improvements
  - VHRs are businesses and it is fair to impose business regulations on them
  - Heavenly area has more friction
    - Is it actually denser or just more vocal?
    - Others have same density but less complaints
  - Local property management businesses are responsible and have stepped up to own enforcement
- Vision
  - More regulation
  - Affordable housing
    - Options for middle-income range (\$40,000–\$50,000)
  - Additional fees for VHRs that operate outside of tourist zones

## *Focus Group 3: Real Estate Community*

This group recognized that there are positive and negative impacts of VHRs, but the City is overwhelmed and therefore unable to keep up with all of the issues. Education, outreach, and additional research are needed to gain a better understanding of and address issues. Ordinances have had negative impacts on the real estate industry due to the fact that many people want to own VHRs.

## *Impacts*

- Changes to City
  - Changed hotel models and the way people vacation
  - More babies and more schools
- Positive Impacts
  - Filled a void in accommodation types
    - Niche market that visitors want
  - 1/3 of TOT revenue
  - Many good visitors
- Negative Impacts
  - Not enough rentals for workers
  - Home prices—locals have to compete with out-of-area buyers
  - Second homeowners do not want to rent long-term
  - Partying/violations—the worst with Airbnb; VRBO is more savvy
  - Neighborhood character

- Noise, trash, parking
- Most complaints come from Heavenly
  - Could eventually evolve to tourist core?
- Impacts to other lodging—unfair regulation
- Opposition is fierce and emotional

### *Responsibilities*

- City
  - Public/private partnerships
  - Education
  - Data/research
    - Hard to correlate home sales with the ordinance because of overall booming economy
- Property Managers
  - Have stepped up a lot over the past year

### *Regulation*

- Understanding
  - Unsure if staff still audits
  - 54 multi-family properties that can no longer rent as VHRs
  - Enforcement is overwhelmed, especially over holidays
  - Police must respond to all complaints—cannot be just code enforcement
  - Local contact requirement—unsure if they need to actually go to the property though
    - Has changed so City is primary contact
  - Other cities
    - Mammoth—very strict program
    - Avalon—2-year waiting program
  - Many people rent in the Bay Area and own second homes in South Lake Tahoe
  - South Lake Tahoe is unique among vacation communities
    - More absentee landlords and more tourism
- Opinions
  - Real estate community is impacted by VHR regulations because it makes it more difficult to sell homes
    - Home sales canceled if VHR is not approved
  - Process to resolve issues is slow
  - Primary contact should be City AND property's local contact/manager

- County's program
  - Easier and doing well with enforcement
  - Zero tolerance
  - Good neighbor policy brochure
- Vision
  - More research and information is needed
    - Revenue generated
    - Costs for permitting and enforcement
    - How many nights and how many properties
    - What difference the 300-foot notification rule had generated
  - Get all VHRs permitted
    - Deadline
  - Use Craigslist/Airbnb to catch unpermitted properties
  - All guests should set firm rules
  - City needs to enforce the existing ordinance
  - Enforcement is also needed for permanent rentals, which have similar problems
  - There are problems but also South Lake Tahoe has always had a large number of second homeowners

#### Focus Group 4: Residents

Residents show more opposition to VHRs and their negative impacts, and there is the most concern over zoning/nonconformity, affordable housing, mega-homes, and neighborhood character. Residents noted that the City needs more clear and enforceable standards. Not all VHRs are bad, and distinctions between those are needed.

#### *Impacts*

- Changes to City
  - More VHRs every year
  - Neighborhoods that are mostly VHRs
    - Mega-homes due to development loopholes
  - More sales to investors—they outbid local professionals
  - Big turnover on VHRs every few years
  - Older people are moving out of South Lake Tahoe
  - Used to be all R-1, but moving toward mixed use and density
    - Duplexes now allowed in R-1
  - First population increase in 20 years
  - Impacts to businesses

- Markets are changing to larger homes
- Hotels have to compete to keep up
- Positive Impacts
  - Better money for landlords—long-term renters are more difficult
- Negative Impacts
  - Taking the “neighbor” out of neighborhood
  - Local employees and families cannot afford to live there
  - Homelessness
    - Students
    - 200/6,000 hotel rooms are occupied by full-time tenants
  - Home values are lower in VHR-dominant neighborhoods
  - Market is like the Bay Area because of VHRs
  - More cars which contributes to lake clarity
  - Burden on police and fire service

### *Responsibilities*

- City
  - Document what is happening
  - Hold spring summit on VHR and affordable housing issues
- Neighbors
  - Should NOT be responsible for “watch-dogging”

### *Regulation*

- Understanding
  - Essentially no limits due to lack of enforcement
  - No denied applications
  - City does not collect TOT from hosted housing
  - People are afraid to call in for complaints because of retaliation
  - Other cities
    - Mammoth—Protecting residential neighborhoods
  - Challenges
    - TRPA transfer of development rights for Tourist Accommodation Units (TAUs)
    - Consistency with General Plan and other regional plans
- Opinions
  - Would like to have a moratorium
  - Houses with 10 bedrooms are not residential

- Police are unresponsive
- 300-foot notification radius is not enough
- City is having trouble keeping up with administration
- Vision
  - No VHRs in residential neighborhoods
    - Do not want to move entirely
  - Maximums in neighborhoods and distance requirements
  - Houses over a certain size should be deed-restricted non-VHR
  - Should only be able to own one VHR (two if married)
  - Should not be able to transfer development rights from TRPA
  - Categorize all types of VHRs
    - They aren't all bad
    - 10-bedroom mega-homes versus second units versus owner-occupied Airbnb
  - Permanent solutions
  - Incentivize full-time renting through programs like fee reductions
  - Limit total number of days they can be rented out
    - Already present in condominiums downtown
    - Be careful because of shoulder season
  - Different solutions for different ownership and management scenarios

### Literature Review – Alternative Regression Models

#### *Benefits and Costs of VHRs to a Community - Data Needed If a Similar Study Is Conducted for the City of South Lake Tahoe*

Most of the studies cited in this literature review are theoretical in that they just describe the potential costs and benefits of VHRs to a jurisdiction like the City of South Lake Tahoe. The exceptions are the three regression-based studies described at the end of the previous section that examine how the presence of VHR in a community influence the community's effective property tax rate or per capita local government spending. To get the amount of data necessary to conduct these regression studies, they use data gathered from a cross section of cities in a state at one point in time. If only looking at data from the City of South Lake Tahoe, and wishing to use a similar regression analysis, it would require annual values for at least a continuous period of 30 years. For a California city, it is also problematic to examine the influence of VHRs on its effective property tax rate because Proposition 13 effectively eliminated cities' ability to alter the 1 percent rate that the proposition mandates. Thus, for South Lake Tahoe, a regression analysis that looked at the influence of the presence of VHRs on its annual real (inflation adjusted) local government spending per capita is what is feasible. Minimal data needs for such an analysis are yearly City data from 1985 to 2015 of the variables:

- Real expenditures on city services / Population
- Percent of residential property used as a seasonal home
- Percent of residential property used as a VHR
- Employment / Population
- State and federal aid received / Population
- Non-property tax revenue / Population

#### *Economic Impact of VHRs to a Community - Data Needs if a Similar Study Is Conducted for the City of South Lake Tahoe*

The City could attempt an informal economic impact analysis of the presence of VHRs of the form described above by subdividing the city into neighborhoods or census tracts that possess a large percentage of homes devoted to VHRs, and neighborhoods that possess a small percentage. Census tracts are a common geography for this kind of analysis because it is fairly universal across data sets and the boundaries are clearly delineated. Data needs then include variables representing both the expected positive and negative impacts of VHRs for the most recent year available, and preferably even for previous years. Impact variables, gathered for each of the designated census tracts, could include:

- Average market value per square foot of residential property
- Average police incidents (of different types) per residential property
- Average fire/emergency incidents per residential property
- Average trash collection and disposal cost
- Average utility (electric, gas, and water) usage
- Average public infrastructure maintenance
- Demographics (percent lower-income, median household income, average number in household, etc.)

A more formal impact analysis of VHRs on the City's economic activity, in the form of economic activity and employment that they generate (as conducted for Maui County and the United Kingdom), is possible if data exists or is gathered for the entire city on:

- Number of VHRs
- Average length of stay in days in a VHR
- Average rental cost per day of VHR
- Average daily expenditure in SLT by a tourist staying in SLT (as opposed to tourists staying in the casinos or hotels across the Stateline border)
- Percent of occupants of VHRs that would not have come to SLT if VHRs did not exist
- Percent of occupants of VHRs who would have cut SLT stay short if VHRs did not exist
- Average days stay cut short in SLT if no VHRs

Data needs to be given in averages, but it would be desirable to collect these as totals, if possible.

*Effect of VHRs on Neighboring Residential Properties - Data Needs if a Similar Study Is Conducted for the City of South Lake Tahoe*

Hedonic regression is the recommended method to detect the influence of the proximity of VHRs on the market value of single-family, owner-occupied residences within the city's borders. Reliance on multiple listing service (MLS) data available from a realtor on all home sales in SLT is recommended. The total number of observations (minimum) to accomplish such an analysis is in the range of 500–1,000 sales, so this would need gathering over multiple years. Doing this for the years 2015 and 2016, 2010 and 2011, and 1995 and 1996 is suggested. If this does not yield the necessary number of sales, then add additional cross sections of years in a similar manner. This data should include all of the standard information collected on a property that sold (address, parcel number, home characteristics, and lot characteristics). A hedonic regression analysis with sales price as the dependent variable, and these explanatory variables as causal control variables, then becomes the basis of the proposed analysis.

Essential to completing this analysis is the location and size (square footage and number of bedrooms) of VHRs within the city's boundaries. This is only possible through a multi-pronged approach. First, for the given years of homes sales used, find the residential properties in the City whose contact address for the owner is not the same as the property. These are likely to be second homes not rented out, long-term rental properties, VHR properties, or properties where the owner-occupied resident uses a post office box. Making this distinction is necessary for every property, and city licensing records, post office records, and property tax rolls could provide the way to categorize each of these properties. For the most recent years, the determination of this may occur through a search of rental property lists, or even knocking on the door of neighbors adjoining the property under question.

Once the previous data is gathered for each of the years under investigation, the addresses of the homes that sold and the addresses of homes whose owner does not live there needs loading into a geographic information system (GIS) program (like ArcGIS). This is necessary to enable the calculation of distance between each home that sold, and each neighborhood VHR, long-term rental, and vacation home. In addition, the census tract that the home sits is then identifiable, and the calculation of distances to other SLT amenities (casinos, Heavenly, Y interchange, etc.)

becomes possible. The GIS program will then be able to calculate the number of each type of these homes within specified radial bands of a tenth-mile, quarter-mile, half-mile, mile, etc.

Once this additional data is added to the original MLS spreadsheets described above, it is then read into a statistical program (like STATA) to appropriately conduct the hedonic regression analysis using home sales price as the dependent year, and the following as causal explanatory variables:

- Home characteristics
- Lot characteristics
- Controls for the years that data is drawn from
- Controls for the census tracts that data is drawn from
- Distances to desirable amenities
- **Number of VHRs within designated distance bands**
- Number of long-term rentals within designated distance bands
- Number of vacation homes within designated distance bands

The effect calculated for the variable in bold on the selling price of a home, holding other causal factors listed above constant, is the influence needed.

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