The 3 E's of Short Term Rental Compliance

A Guide for Municipal Leaders

HARMARI
S T R

FIGURE 5

The 3 E's of Short Term Rental Compliance

A Guide for Municipal Leaders

Contents

Summary

As the short-term rental (STR) industry grows in popularity, municipalities will have to work proactively to bring STR operators into compliance to prevent housing shortages, public nuisance complaints and lost tax revenue. This paper provides the 3-stage framework for how a municipality can think of STR compliance, and what the goals are of each stage.

FIGURE 5

An Overview of the Short-Term Rental Industry

Figure 1: Short Term Rentals are an $83 billion industry

The rise of the sharing economy has helped propel the success of online STR platforms such as Airbnb, HomeAway (subsidiary of Expedia), FlipKey (subsidiary of TripAdvisor) and Booking. Since 2012, short-term rental sales worldwide have grown from $45.6 billion to $82.9 billion in 2017, with a similar increase projected over the next five years.[i] These lodging alternatives are popular with both travelers and operators (who may be homeowners, renters, or professional property managers), but allowing their use to grow unchecked can cause many problems to municipalities.

The benefits of short-term rentals include:

- Affordable lodging for tourists, especially when they are willing to accept very minimal accommodations (such as having only a couch to sleep on).
- Easy geo-located online browsing and booking through a computer or mobile device.
- An inviting, home-like atmosphere, similar to traditional bed-and-breakfasts. Some travelers may want the chance to live among and interact with local residents, while others may be seeking a more comfortable place to stay while a family member is undergoing medical treatment.
- Supplemental or investment income for hosts. The number of individuals buying vacation homes with the intention of paying for them through short-term rentals has increased from 27 percent in 2008 to 73 percent in 2015.[ii]
- Lodging availability for a specific event or festival. When a single event brings many visitors to a region (e.g., Mardi Gras in New Orleans, the Masters Tournament in Augusta, or the Kentucky Derby in Louisville, etc.), STRs can accommodate a greater-than-usual influx of tourists that would exceed the capacity of area hotels.
- An increase in tourists can give an economic boost to other local businesses.
- When in compliance with local ordinances, STRs can lead to increased tax revenue.

However, STRs are prone to many **disadvantages**, especially when they are left unregulated. These include:

- Noise, garbage and safety complaints, especially if a unit becomes a "party house."
- Complaints from neighbors about strangers entering their apartment building or trespassing.
- Increased traffic in residential areas including occupying street parking, which is especially problematic in winter destinations.
- Over-valuation of housing prices caused by investors buying up properties near tourist destinations. In New York City this was shown to have resulted in an inflation of rent by 1.4 percent over the past three years (or $384 more per year for the median household) and the removal of up to 4% of housing from high-end rental neighborhoods.[iii] Houses and apartments that were zoned for long-term residents turn into unregulated "ghost" hotels.
- Lost lodging tax revenue. While many STR operators will be diligent about reporting their local, state and federal taxes, there are also some who take advantage of the combined marketing opportunity and relative anonymity of conducting business online on one of the major STR platforms to run their business off the books.

FIGURE 5

STR Industry Attempts at Self-Regulation

STR rental platforms are not designed to regulate how guests use the property they rent. Hosts are left in charge of complying with local ordinances and conveying those rules to their renters, but unconcerned, *absentee hosts* are not going to care if their neighbors are unable to get enough sleep before leaving for work or school or if their homes become unlivable due to noise, traffic and litter.

"Party houses" are a particular concern to the neighbors of an STR host. Without warning, the quiet house next to theirs can become unbearably noisy and disruptive, potentially lowering the property values of the homes around it. While STR platforms do offer ways for neighbors to make complaints, they often fail to provide an acceptable level of care (in 2016, 82% of people who registered a complaint with Airbnb expressed dissatisfaction with Airbnb's customer service).[iv] When residents find themselves living next to a party house, their ability to register a complaint and have their concerns heard depends on what sort of framework city planners already have set in place.

STR platforms are also unable to measure the effect an unknown number of short-term guests will have on the ability of a municipality to respond to *disasters and other emergencies.* Hosts often allow more guests than the City has determined could live in a unit safely, in part because visitors can be impossible to distinguish from renters.[v] In the event of a natural disaster, a city may unexpectedly have to evacuate hundreds of unregistered tourists.[vi]

An additional compliance effort Airbnb and other sites now offer is to collect and remit taxes in some areas. While this function is useful and a step in the right direction (assuming your region is one of the areas covered), it still does not address the public safety and housing affordability problems caused by unchecked growth and activity of STRs. Short-term rental platforms may be willing to work out a tax deal, but they still won't voluntarily place limits on the number of rentals in an area, their density, or the number of nights available for rent. For example, Airbnb and HomeAway rejected or delayed the processing of administrative subpoenas issued by the city of New Orleans in an attempt to enforce their 90-day rental cap.[vii]- In Santa Barbara, nearly 400 area rentals are still listed on Airbnb, despite only a small fraction of them being legal.[viii]

Is a Ban the Answer?

In the face of the disruption caused by STRs, some cities may be tempted to enforce a ban. Typically, the legacy ordinance has a restriction that forbids any rentals lasting fewer than 31 days in residential neighborhoods, which was written prior to the Internet age. While this restriction still allows longer rentals, it effectively forbids rentals to the average tourist. Some cities choose to "reactively enforce" this ordinance when a nuisance complaint is filed. Some areas like Santa Monica[ix] chose to systematically enforce on all STR operators and eventually succeeded, but only after a long process involving expensive litigation. Nearby Santa Barbara attempted a similar ban, but ultimately was forced to allow STRs in coastal areas.[x] Some cities use a full ban as a "hammer" to enforce rule of law when the platforms do not comply, as in New Orleans. In April 2018, NOLA City Council unanimously voted to ban STRs as an assertive gesture to show the STR platforms "who's in charge."[xi] Yet even with all of the problems inherent in allowing STRs, there may be enough residents who support and wish to profit from them that most city planners will choose to adapt their ordinances to limit their activities in place of an outright ban.

One form of limiting activity is by setting limits on the number of nights available. Some cities allow up to 30 nights of rental on a host's primary residence, specifically to allow rental during a peak season, and then allow only the homeowner to reside there the remainder of the year (with New Orleans as an example[xii]). Other cities have placed limits on the maximum number of nights higher than that (e.g. Los Angeles has a 120 cap, with room for flexibility[xiii]).

FIGURE 5

Even with these restrictions, however, there are a couple of ways non-compliance can happen:

1) The STR operator will rotate through different STR platforms to increase the number of days they can rent out their space. They may post to the maximum number of nights on Airbnb, then deactivate and post again on VRBO. When they max out their nights on VRBO, they deactivate that account and reactivate on FlipKey, and so on.

2) The STR operator will claim personal use on their property for some or most of the calendar that shows "booked" on their listing. Some hosts will even ask their renters to say they are personal friends of the owner if they are questioned.[xiv]

Common Ways Cities Cap STRs

CITIES CAN LIMIT RENTALS BY HOMESHARE, BY DENSITY, BY MAXIMUM NIGHTS, EACH OF WHICH HAS ENFORCEMENT CHALLENGES

Other caps on STR activity include setting a *maximum number of permits* and introducing a *lottery system*. STR operators tend to react very negatively to these types of caps, and they are likely to take their businesses underground and operate without compliance. Finally, other caps regarding *maximum density* (e.g. Nashville 2%) or *maximum rentals per block-face* (e.g. New Orleans) are difficult to enforce and difficult to ensure fairness. In many ways, limiting the maximum number of nights to rent is the simplest of these caps to regulate and enforce.

Finally, a third form of STR limitation is on restricting STRs to primary residences only, also called "homesharing." This, in principle, forbids speculators from offering large swaths of rental units at one time. However, a cunning speculator can still create dozens of "straw host" accounts, each renting one unit at a time, but controlled by a single puppet-master. The straw host accounts obfuscate the true nature of the controlling operator being a real estate speculator. This phenomenon is documented internationally and in cities throughout the U.S. – including New York[xv] and San Francisco[xvi] – and is a true investigative challenge to ferret out.

The conclusion for a City to take away is that any form of regulation will need enforcement because someone, somewhere will circumvent the rules and ruin it for everyone.

The Three E's of Compliance

Regulating short-term rental compliance takes place in three stages. Where you direct your efforts depends on what STR compliance stage you are in. The goals of each stage are different and they build upon each other.

The Establish Stage

Initially, short-term rentals may not even be an issue in the city. But once the short-term rental inventory exceeds more than 50 in its region, a municipality must begin to take action. Without a well-defined ordinance in place, a city does not have the legal grounds to pursue offenders inside its boundaries. With the rapid rise of STRs, the problem will only grow worse if unchecked. City council members must be convinced of the need to allocate budget and resources for compliance issues.

Note: Before making any attempt to identify or enforce regulations on non-compliant properties, a viable, enforceable ordinance must already be in place, and the ordinance must require all STRs to register with the City regardless of any deal arranged between the City and the platforms themselves.

How to know when you are in the Establish Stage: Either (a) you do not have an up to date ordinance, or (b) you have an ordinance and less than 30% of STRs are compliant. There are attractions or events that draw tourists, but during peak season there is a shortage of affordable housing. Licensing, permitting and taxation language in ordinances are non-existent or outdated. Neighbors are complaining about noise, trash and parking.

Goals for the Establish Stage:
☐ Create a well-defined ordinance
☐ Educate STR operators of the need for regulation and compliance
☐ Assign resources and budget for increasing compliance (possibly funded from recovered tax revenue)
☐ Post easy-to-follow registration forms and instructions
☐ If your region has more than 1000 STRs listed, attempt to engage the platforms directly

FIGURE 5

The Enforce Stage

At the Enforcement Stage, an ordinance may need revision. There may be loopholes or boundary conditions that were not contemplated in the initial draft, other questions may have arisen over time, or a major event may be coming like the Superbowl or the US Open of golf. It may be necessary after 1 or 2 years of the original ordinance being drafted to review some of the complaints from citizens to ensure that the ordinance is fair to all parties.

How to know when you are in the Enforcement Stage: 30% to 70% of STRs are compliant. A well-defined ordinance is in place. There are reasonable licensing requirements and fees established. Property managers and real estate brokers are more aware of compliance issues. Resources are dedicated to enforcement, including inspection, monitoring and a complaint hotline.

Goals for the Enforcement Stage:
☐ Make adjustments to the ordinance, if necessary
☐ The only remaining non-compliant STR operators will be the ones that are intentionally obscuring their identity
☐ Permit number are required to be displayed on STR listings in order to easily filter out licensed and compliant online advertising

The Endgame

The Endgame stage is defined by two main elements: *turnover* and *difficult cases*. Real estate **turnover** averages 10-20% each year, due to the natural process of people moving in and out of communities. As a result, the goal of attaining full STR compliance will be ongoing because new properties will be entering the marketplace each year. Your 100% compliance rate today will drop down to 80-90% the following year, simply as a result of properties being bought and sold, STR operators listing/de-listing with property managers, or even by drop-hosts* appearing online. If your region experiences a higher-than-average rate of turnover each year, the task of maintaining high rates of compliance will be all the more time-consuming.

Secondly, at this stage compliance is the exception rather than the rule. The last remaining non-compliant listings that are not due to turnover will be particularly *difficult cases*. Therefore, it is vital that city workers are able to easily separate the compliant listings from the noncompliant, so that the former group can simply be validated each year, while the remaining properties can be set aside for more advanced identification techniques.

The best way to make listings easier to sort is to require that the *permit numbers* are displayed. Airbnb will provide a field for a license or registration numbers,[xix] but they won't block any operator who neglects to fill it out. The responsibility of enforcing the requirement still falls to the municipality.

How to know when you have reached the Endgame: 70% to 100% of STRs are compliant. You have a well-defined ordinance, which includes adjustments to boundary cases, an experienced hotline service that appropriately handles nuisance reports, a system for proactive monitoring of STR advertisements, and resources allocated to education, outreach and enforcement.

Goals for the Endgame:
☐ Initiate one-on-one communication to non-compliant STR operators about the need for regulation and compliance, including presenting proof of rental activity.
☐ Begin advanced, transparent STR identification techniques, including field work.
☐ Create a citizen tip line for reporting non-compliant STRs.
☐ Proactively reach out to real estate purchasers about STR obligations.

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* Drop-hosts are like drop-shippers except their "merchandise" is the short-term rental. They act as the middle-man and mark up existing STR listings, but they still need to be inventoried and regulated just like any other operator.

FIGURE 5

Here are some examples of how other cities are addressing the issue of STRs, along with their compliance stage (figures current as of January 2019):

City	STR Inventory Count	STR Permit Count	Stage	Done so far	Room for Improvement
Denver, CO	2900	2000	Middle	Airbnb VCA signed, Citizen engagement, community outreach, Required permit numbers in listings with fines for non-compliance	Housing impact study
New Orleans, LA	6000	4500	End Game	Airbnb VCA signed; Ordinance Permit/inspection Past Airbnb registration deal removed Open Data portal	Ordinance to deal with whole-home rentals
Pittsburgh, PA	2300	N/A	Middle	Airbnb VCA signed; require tax return for all STRs	Homeshares not officially covered by zoning code
Santa Fe, NM	2300	900	Medium	Ordinance and FAQs online, Weekend enforcement	Keep permit numbers the same each renewal and just change the year
Ventura, CA	300	128	Middle	Airbnb VCA signed; STR permits required, can be revoked after two violations	Clarity needed on number of guests permitted

FIGURE 5

Before You Begin Planning, Engage the Stakeholders

Creating and enforcing compliance guidelines involves many branches of government, and the plan will work best when all departments can offer their insight at the beginning. The more people are able to offer input early on, the fewer adjustments will be needed in later stages. Include staff members who represent Planning, Code Enforcement, Housing, Finance and Taxation, Communications and Outreach and the IT department (due to web resources inherent in registration, compliance and transparency). Outside stakeholders can include community leaders, STR operator advocacy groups, STR platforms, hotel and motel associations, and the tourism bureau.

One challenge will be how to engage staff members in a new task when they already have full schedules. An important first step that will save time and effort later is to *begin with the end in mind*. Focus on your desired outcome and let each stakeholder know how achieving it will benefit their area of influence. The three stages of compliance addressed below will give you a checklist of goals that are realistic and measurable, and you can use them as a foundation for your own plan.

The next challenge will be striking a balance between staying with a detailed plan and *allowing for flexibility* as new issues and factors arise. The compliance codes your group develops will likely be revised further down the road as you get to see how it plays out in real practice. Perhaps the state will pass some legislation that forbids a ban on STRs[xvii] or limits how much regulation a City can place on it.[xviii] But it's not the state that has to worry about party houses or street parking; it's the City.

Finally, *listen to the input* from each team member and stakeholder. They will each have areas of expertise that the others don't. Even if some members seem to be on opposite sides of an argument, try to keep your common goals in mind. Listening before responding is the first step towards developing a Win-Win strategy for all stakeholders. Generally speaking, if every party goes away a little unhappy, then the ordinance and position of the City was a good compromise.

Involving the Wider Public:

Be sure to engage the public and each community in the Establish Stage of compliance, and then keep them informed of decisions as they happen. Otherwise, attempts to enforce compliance can be met with protests from the operators that they were not informed of the ordinances. In some cases, litigation can ensue. Furthermore, if citizens continue to complain about nuisances instead of acting on the tools given to them (e.g. a 24/7 complaints hotline), then the City can be shown to have been responsive instead of simply paying lip service.

At the Establish stage, schedule "town hall" meetings or "open houses" where residents can offer their comments and suggestions before the ordinances are drafted. Later, when you have a first draft of the ordinances completed, invite the public to give feedback for a set period of time.


When the final version of the ordinances and a starting date are agreed to, promote them through local news outlets and city communications. Help publicize the new policies using real estate professionals or trade associations or agencies that manage housing, such as the University's housing registrar or through outpatient medical clinics. Make it easy for operators to find the information they need. Online resources would ideally include a copy of the ordinances in full, as well as a plain-English FAQs section. Denver's government web site serves as a good example, as it has a complete copy of its zoning code as it pertains to short-term rentals, complete with updates, as well as an easy-to-navigate question and answer section.

In addition, other resources to make accessible online should include all the forms operators would need to fill out, an easy and secure means of submitting those forms and making payments online, and a 24/7 tip hotline where residents can make complaints, ask questions and report violations. By having such a tipline, a City can reduce the need for Code or Police to respond to incidents typically by 50%. The responsibility for the other nuisance complaints can be passed onto the 24-hour contact for the STR.

FIGURE 5

Make Staffing Decisions

Identifying and monitoring STRs is an on-going process requiring many hours of work per week, especially during the Establish Stage. The semi-anonymous information in a typical STR listing shows only a host's first name and a radius of 0.3 mi/500 m (illustrated in the example below) in which the STR is located. This renders it very challenging to identify the full name and exact address of the host, especially in an urban environment or in an apartment complex.
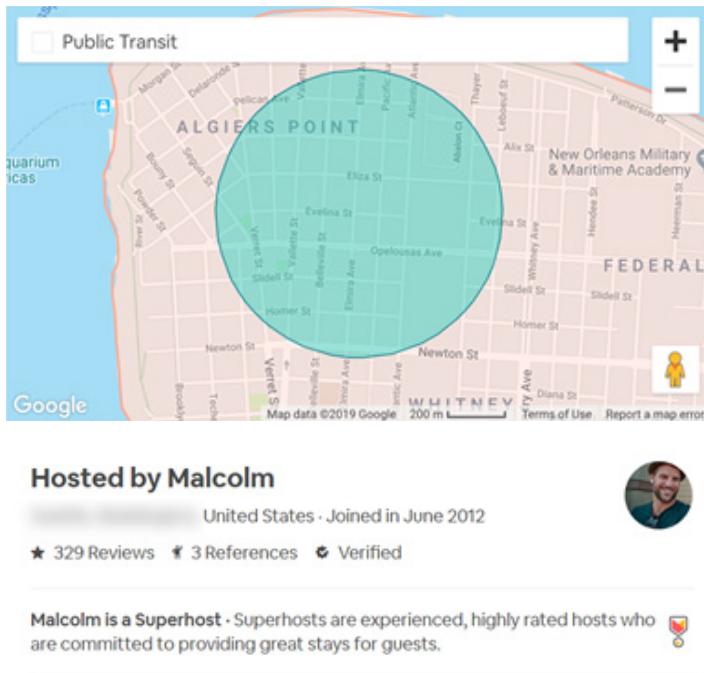
Municipalities choose between assigning the work to an intern, hiring a new staff member or training an existing one, and outsourcing the task. Each has advantages and disadvantages:

Interns are available at little to no cost and using them allows other staff members to focus on their work without taking on new responsibilities. They can also be hired just to cover a short tourism season. *Staff members* can serve as a reliable point of contact and responsibility, and they can effectively identify the least-challenging STR operators (beyond which they may experience a "law of diminishing returns" as their identification efforts become less efficient). The disadvantages include a high rate of errors (up to 20%), greater challenges in keeping up with compliance in a high-turnover city, and the limitations of their 9-to-5, Monday-to-Friday availability. This last factor is particularly important, as some of the most difficult STR operators (so-called "vampire" listings) may only run their listings at night or on weekends, and most nuisance calls will come in during the off-hours.

Outsourcing allows a municipality to transmute many staffing and resource expenses into a single line expense item. A properly set-up web crawler can monitor STR listings efficiently 24/7. The right compliance provider will be available 24 hours a day, seven days a week, have a high accuracy rate, use a transparent and court-defensible method of identification, and it will lower its monthly fees as a city moves from an identification phase to what is primarily a monitoring phase. The disadvantage is the need to interview providers to be certain you are getting the right value and service for their fee.

Costs and Return on Investment (ROI)

Beginning a new program of compliance will incur costs upfront, but the recovered lodging tax revenue often more than pays for the program. Unregistered taxpayer rates in many cities run from 6.7% to 20%, depending on the prior work done by enforcement agents. The capital invested in reclaiming the tax revenue from these properties can lead to a ROI of 300% to 1000% for a new program.

To generate an estimate of how much revenue your city should expect to receive from STRs, calculate your **minimum taxable** sales with the following formula: the number of STRs listed online for your area, times number of reviews, times the minimum night's stay, times the average nightly rate. The result will be the most conservative estimate that can be directly backed up by the data; the actual figure is often higher. However, even this lower estimate will give you a rough idea of how much revenue can be gained from bringing all STRs into compliance, and that number can help you establish an enforcement and regulatory budget. The more active and visible the City is in enforcing compliance,

> THE RULE OF THUMB IS THAT AS COMPLIANCE INCREASES, THE COST OF ENFORCEMENT SHOULD DECREASE.

the easier it is for law-abiding operators to conduct their business appropriately, and the less attractive the environment is for bad actors.

The **turnover rate** for an area is also critical for knowing how much effort a multi-year program will require, and it can be determined by comparing the number of new listings per year to the number of total listings. A region with a high turnover rate will require more effort to identify new listings each year than one with a low turnover rate, but in both cases the cost of ongoing monitoring will be lower than the cost of the initial investigations.

FIGURE 5

The Three Stages of Identifiability

Ensuring a high degree of accuracy is very important when identifying STR operators. Sending a tax notice to the wrong individual will result in that individual making angry complaints, perhaps even to the mayor or other elected officials, and will undermine confidence in the compliance program.
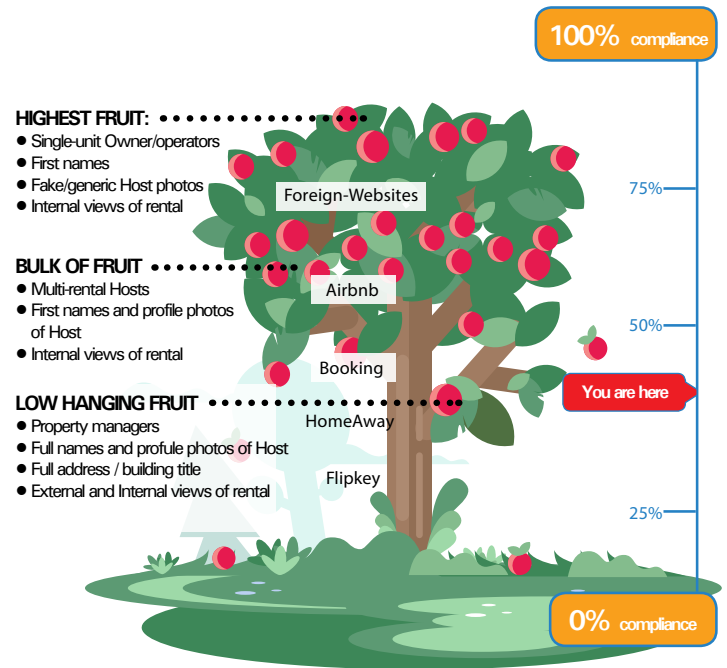
Non-compliant STRs can be correlated to the three stages of compliance described above. As illustrated in the fruit tree graphic below, the "low-hanging fruit" is the easiest to bring into compliance. These are STR units where the hosts and their addresses are fully identified, or the operator is a property management business. The units can be easily recognized by exterior photos.

The bulk of the listings will be located somewhere in the middle, where operators may be partially identified by their first names only, or they may operate more than one unit. These STRs take more effort to identify and bring into compliance.

The most challenging compliance issues can be found at the top of the tree where operators are intentionally making themselves hard to find, either by using fake names or generic terms like "Owner/Operator" instead of a name. They will also restrict their photos to interior shots only, making their property harder to spot by field workers. These are the most difficult to identify from listings alone and will require active fieldwork to track down. These "gumshoe" techniques may include:

- Physical observation and surveillance of driveway.
- Evidence of lock-boxes or keypads on doorknobs.
- Taking pictures of cars and running license plates.
- Interviewing guests/residents of the unit in person, inquiring whether they live there or are renting. Providing the lease agreement if there is one. Leaving flyers under the door to get guests to check if their room is compliant.
- Follow-up on non-registered STR hotline tips and nuisance complaints to see if the subjects are indeed non-compliant.

HIGHEST FRUIT:
- Single-unit Owner/operators
- First names
- Fake/generic Host photos
- Internal views of rental

Foreign-Websites

BULK OF FRUIT
- Multi-rental Hosts
- First names and profile photos of Host
- Internal views of rental

Airbnb

Booking

LOW HANGING FRUIT
- Property managers
- Full names and profule photos of Host
- Full address / building title
- External and Internal views of rental

HomeAway

Flipkey

100% compliance
75%
50%
You are here
25%
0% compliance

Estimating Costs at Each Stage of Compliance

Once you begin to enforce the three stages of compliance, you can expect the cost of the program to drop and eventually stabilize over time, *but only if* the municipality maintains consistent effort at enforcing its ordinances every year. If compliance efforts are allowed to taper off once some stability has been achieved, the problem will creep back, and you may find yourself having to begin all over.

The Establish Stage is when the largest number of STRs will be identified and brought into compliance. As the municipality grows into each successive stage of compliance, the number of non-compliant properties will decrease until it eventually includes only brand-new listings and any few remaining difficult cases. If you are using city staff for the job, plan for a greater number of hours in the beginning. If you are choosing to outsource, ask potential compliance service candidates if their rate for service decreases after STR compliance increases, as this reflects the reduced demands of the Middle or End-game phases as illustrated in the table below.

FIGURE 5

Special Identification Challenges

Duplicate listings. Operators may list the same property on multiples platforms, or they may list on one platform while also maintaining a stand-alone promotional web site (e.g. BobsBeachHouse.com). Our research has shown a 5 to 10% duplication rate across platforms, increasing to 10 to 20% when including home-made websites. To match up duplicate listings, look for identical photos, titles and operator names.

Border issues: Avoid wasted effort and the risk of accidentally billing someone not in your municipality by using the shapefile from your GIS department to be certain of jurisdiction boundaries.

Obfuscated numbers. Some operators may spell out parts of their phone numbers instead of using numerals to avoid being detected in online searches.

Listings that "go dark." As mentioned earlier, operators may only list their STRs after hours or on weekends to avoid being detected by staff working regular business hours.

Straw Hosts. Real estate speculators may concoct a separate identity for each of their STR properties to try to cover up the scope of their business. They may use real people to appear as owner/operators, or they may invent a fictitious person. This can also happen with condos or HOAs where the original host was caught operating STRs without the HOA's permission, and they want to avoid getting caught again.

The Advantages of Using Harmari

Harmari was developed by LTAS Technologies, a company founded in 2011. Harmari has over 150 government, insurance and retail customers in the US and Canada.

Harmari forms a court defensible evidence chain of custody, which is crucial in the event disputes arise. We collect no "back-door" data. All of our intelligence is open-source and verifiable. We lead the industry with a 95% accuracy for houses and 75% accuracy for condos.

Our services are designed to meet your needs at each of the three stages of compliance:

Establish Stage: Free STR Ordinance Tool that allows users to drag and drop sections of other cities' ordinances into a new ordinance custom-tailored for their city • Free inventory count and dashboard report showing important overview information on the STRs in the city • Short-term rental compliance, monitoring and outreach service.

Enforce Stage: Continued short-term rental compliance, monitoring and outreach service • Hotline complaints regarding nuisances such as noise, parking, garbage and public safety delegated to correct authorities.

Endgame: Free cross-checking tool to filter out of all licensed STR listings • Identifying and reporting on remaining non-compliant short-term rental operators.

What is unique about our fees is that our pricing adjusts to your stage of compliance. After the initial, more labor-intensive identification stage, our rates drop to reflect the reduced effort required by monitoring. This transparency in pricing saves you money over the long term.

To learn more about our service, please email us at info@harmaristr.com or call us toll-free at 1-877-352-3277

Service Provider	Cost - Establish (0-30% Compliant)	Cost - Enforce (30-70% Compliant)	Cost - Endgame (70-100% Compliant)
Harmari STR	$$$$	$$$	$$
Competitors	$$$$$	$$$$$	$$$$$

FIGURE 5

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FIGURE 5

PRICE QUOTE for Colorado Springs, CO

Below are costs of each component over a 3-year term (Year 2 and 3 are option years).

Costs *** All Listings ***	Initial Report/Year 1	Year 2	Year 3
Listing Detection (Airbnb, VRBO/HomeAway + Affiliates, FlipKey/TripAdvisor + Affiliates, Booking, Craigslist), Archived Listing Information, Web Portal, Dashboard Report	$30,000	$24,000	$24,000
Monitoring Fee (performed weekly)	Incl.	Incl.	Incl.
Total	**$30,000**	**$24,000**	**$24,000**

Advanced Archiving

Item	Description	Cost
Level 1	Detect websites for listings that are up/down from the previous month. Websites checked on a weekly basis staggered over day/night and over weekday/weekend. Report includes 4 columns for each time-stamp of previous 4 checks to see if listing was up/down	Included with agreement
Level 2	All features of Archiving Level 1, with additional archive folder of the date/time of check, and containing **the captured listings (HTML, Images) and rendered as a PDF** for each listing found each time a check is run.	$9,000 per year
Level 3	All the features of Archiving Level 2 with additional **change tracker XLS for differences between the current and previous version of the listing (tracked changes).** Note there is no guarantee that the changes are attributed to the Host, and it may incorrectly flag website "layout changes" as a false positive despite nothing changing in the listing. It still requires human scrutiny and detective work to confirm which changes were due to the host.	$13,500 per year

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FIGURE 5