



North Carolina's Short-Term Rentals Pathways to Solutions

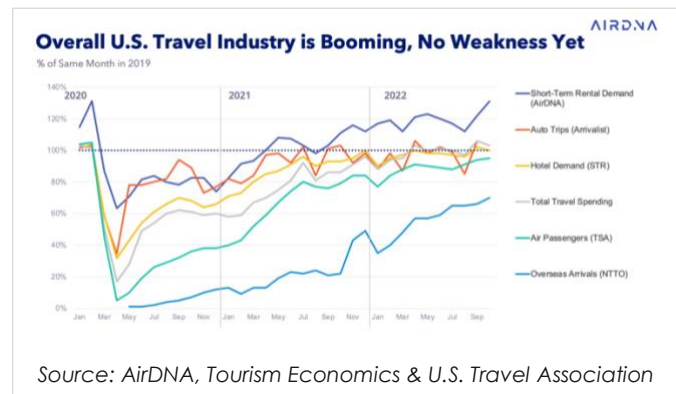
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Summary

Over the last decade, the short-term rental (STR) industry has been booming in the U.S., with the popularity and accessibility of online travel agency (OTA) platforms contributing to the staggering growth in the number of STR properties. Interest in vacation rental stays has exceeded even high expectations, with 2022 up more than 20% over 2021, and 2023 projected to grow by another 5.5% year over year ([AirDNA 2023 STR Outlook](#)¹). The strength of the economy, remote working trends, and the broad rise in tourism have all greatly impacted communities throughout the nation.

According to the North Carolina Department of Commerce, visitors to North Carolina generated \$3.9 billion in federal, state, and local taxes in 2021, representing a 29% increase from 2020. [State tax receipts from visitor spending rose 34% to nearly \\$1.2 billion in 2021](#)². Asheville has been the epicenter of this growth, attracting almost [11.9 million visitors in 2019](#)³, 4.2 million of which were overnight guests.

To continue to meet STR demand, grow local economies sustainably, and address unique challenges from STRs, we will outline a roadmap to best practices and the GovOS STR end-to-end solution. Every STR management program will be unique to each city or county. Focusing on the true issues and the utilization of tools, stakeholder involvement, and data-driven decisions will lead you down the road to success.



North Carolina Vacation Rental Act

The North Carolina Vacation Rental Act (NCVA) was enacted by the General Assembly to respond to the growth of the tourism industry and unique conflicts amongst stakeholders stemming from STRs. The legislation intends to regulate and balance the interests of landlords, real estate brokers, neighborhoods, and tenants.

Registration, Periodic Inspections, and Zoning Permits

The [North Carolina Vacation Rental Act](#)⁴ prohibits a local government from adopting or enforcing an ordinance that requires an STR host to register their rental property. However, effective July 1, 2019 (S.L. 2019-73), the [NCVA stipulates](#)⁵ that STRs are subject to state periodic inspection statutes. Pursuant to G.S. 153A-364 and 160A-424, both cities and counties may perform periodic inspections for hazardous and unlawful conditions in buildings and residential structures if there is reasonable cause to believe that there are unsafe, hazardous, or unlawful conditions therein.

Additionally, the statutes do not prohibit local governments from using land use and development tools to regulate STRs. For example, a local government can limit STRs to certain zoning districts, require owners to obtain zoning permits, and set operational guidelines, such as requiring parking capacity or limiting occupancy.

Best Practices – The Pathway to Success

North Carolina jurisdictions must operate within the boundaries of the NCVA to balance residents' values while protecting property owners' rights and minimizing the perception of government overreach. Supporting business and tourism increases while capturing available tax revenues ensures sustainable economic growth.



Identify the Real Issues

The path to success begins with identifying critical issues that need to be addressed by your community. Is it growing the local economy? Ensuring property owner's rights? Protecting the renter? Protecting residents' quality of life? Are there community character concerns around labor supply and property values? What burden is the growth of the tourism industry placing on local government staff? Once the core issues are identified, working within the opportunities and constraints of the NCVA will help policymakers formulate decisions that are legal, enforceable, and not overreaching.

Identify Who is Renting

Identifying renters can lead to a wealth of information to support making data-driven decisions. Be clear on the information you want to gather and the resources available to support an information-gathering campaign. Consider the human capital required to stand up an STR division versus working with a technology partner to assemble and efficiently use the information. With technology, jurisdictions can see addresses, property owner contact information, platform listings, occupancy, average daily rates, etc. Just be sure the technology partner is not applying a template and is nimble enough to address your unique challenges.

Identifying Unique STRs

Knowing the number of unique STRs in a city or county is a fundamental building block and the first step in identifying possible tools to manage conflict among stakeholders. This information can only truly be provided accurately by utilizing a technology partner. Local governments are tasked with finding solutions that protect the interest of all stakeholders, including STR hosts, property managers, residents, and existing businesses.

Engaging with Stakeholders

Before suggesting local ordinance changes, creating a stakeholder engagement process, and understanding different pressure points is key to standing up a successful STR management program. The STR ecosystem has a broad mix of stakeholders, not limited to:

- A rental host who plays by the rules
- A rental host who isn't aware there are rules at all
- A neighbor next to an impactful rental
- A local business association
- A realtor
- A local municipality responsible for collecting tax, completing inspections, or responding to complaints

It is critical to ensure everyone has a seat at the table to build consensus toward legislation that won't polarize stakeholders. Identifying tools and creating solutions together will create a path forward and open communication channels. This helps prevent strong blowback at public meetings when various stakeholders otherwise could arrive underrepresented or misinformed.

Establishing Basic Health, Safety, and Welfare Standards

There are many ways to address these complex issues head-on. Subjective, value-based community issues like neighborhood quality, mixed with the potential of disrupting an individual's property rights or supporting the local economies, can be unsettling. However, working towards a baseline of health, safety, and welfare standards creates a level playing field and baseline of accountability that all stakeholders agree on.

Using Zoning Tools

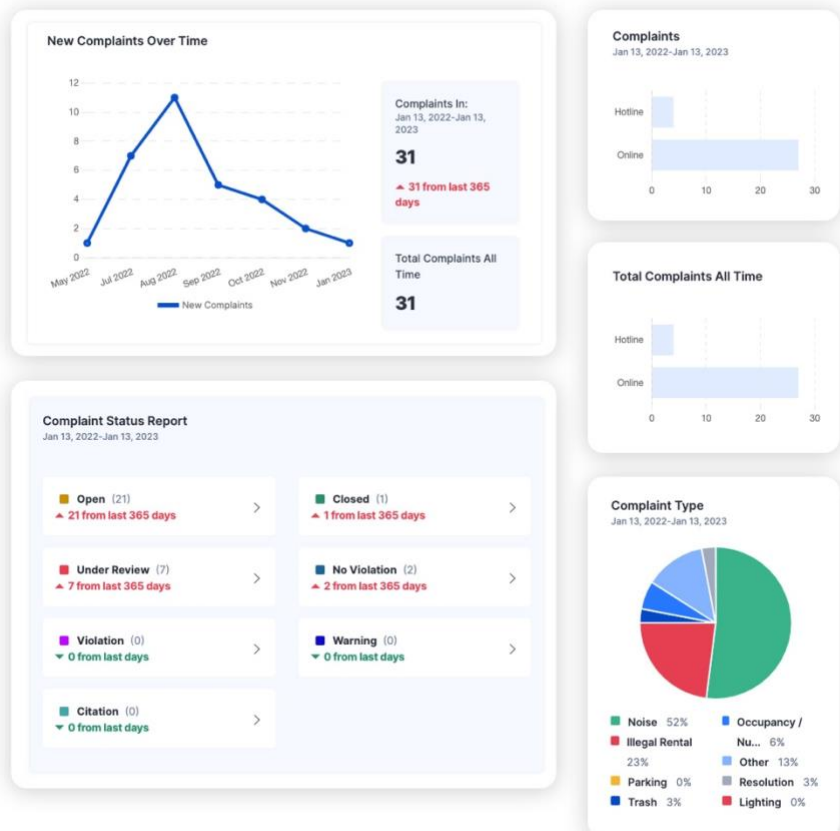
Registration programs involve an owner submitting basic information about the rental property (such as property address, owner name, 24-hour contact, etc.). The NCVA prohibits registration programs. Zoning permits, on the other hand, commonly involve an application form with information to confirm compliance with applicable land use standards. Specific standards can include:

1. Defining STRs as regulated land use;
2. Limiting that land use to certain zoning districts;
3. Applying development standards and operational limits such as parking restrictions, trash standards, occupancy limits, operational restrictions, etc.
4. Using separation that requires a certain distance between STRs;
5. Using caps to limit the number or proportion of STRs in a specific area.

Your normal zoning application process will allow you to collect basic information about the rental property, including the owner, property manager, emergency contact information, etc.

Establish a Complaint Hotline

Another way to reduce the burden on staff while providing a support mechanism to help ensure there aren't hazardous and unlawful conditions at STRs is to use your technology compliance company to establish a complaint hotline. Securing a 24/7 hotline that categorizes the type and location of all complaints, as well as who made the complaint informs you "how bad the issue really is" and if progress is being made. Regular reporting protects residents, rental hosts, and guests alike by removing perceptions and allowing you to base your next steps on data.



Technology to Capture Tax Revenues

Lodging Tax Revenue is key to local economies. Finding a solution that is automated, fully integrated and designed to assist the City with STR identification, permitting and tax collection will ensure efficient regulation of STR's, and you are capturing all lodging tax revenues.

It is important to partner with a technology company that understands your unique needs and is nimble enough to adjust with you. Self-service functions, including tax reporting, permitting, and making payments with tax forms that auto calculate based on customized logic results in a decrease in amended returns and an increase in user friendliness.

Tools such as a bulk filing feature add significant value for the City and property managers. Property managers with multiple properties can remit tax returns in a single upload with individual property data preserved for the City. This will go a long way to serve your businesses and reduce staff time.

A Remittance Audit tool will enable you to detect under-reported STR tax remittances and robust reporting will provide you the information needed to make data driven decisions.

Employ Digital Tools to Educate and Communicate

Once a series of potential tools is identified and vetted, and there is momentum in creating guardrails for managing STRs, stakeholder communication is the last step before making policy changes. Getting the word out through a multi-channeled communication strategy is necessary to help drive high compliance and adoption rates. Overcommunication and public dialogue will prevent misunderstanding or misinformation, paving the way for public conversations and informed decisions.

This is where identification, permitting, and tax tools can add further value because your community will know how to reach the right audience to engage in education effectively.

Conclusion

Every STR management program will be unique to each municipality. Focusing on the true issues, utilization of tools, stakeholder involvement and data-driven decision will lead you down the road to success. The key is to continue to evaluate the program and adjust as your community and market changes. As the STR industry grows and economic conditions change, technology is offering cities the ability to achieve positive results for property owners, businesses, and their communities.

The Solution

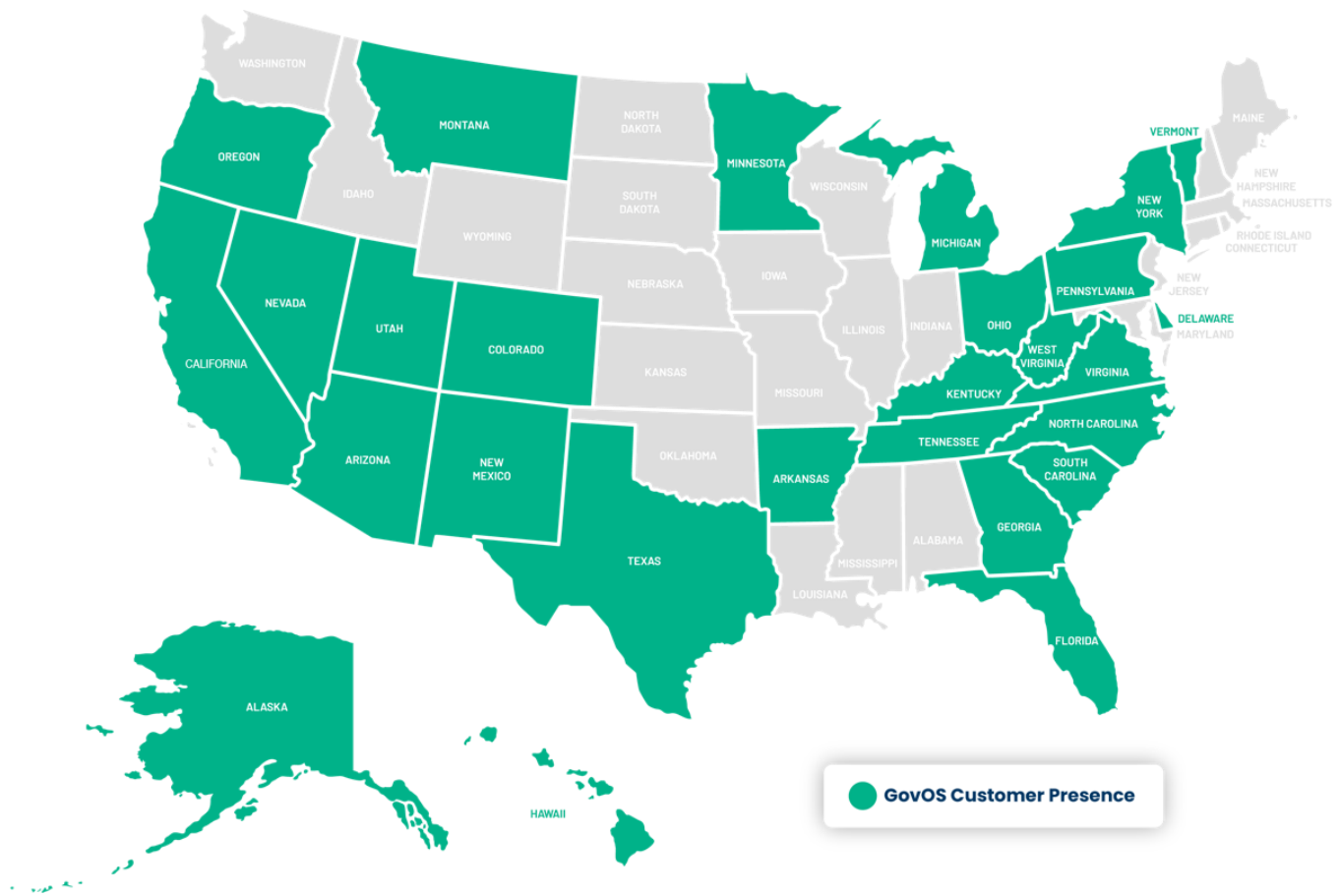
Our STR solution has deep roots in local governments across the country. We have refined the system by working with communities such as Vail, CO; Big Sky, MT; Hilton Head Island, SC; and Sedona, AZ. In fact, the use of the GovOS platform has positively impacted more than **340,000 businesses** and has accounted for more than **\$4 billion in paperless revenue** generated.

About Us

GovOS is an Austin-based company, with employees located throughout the U.S. Our unique suite of solutions is built on more than 20 years of real-world experience serving local governments. Particularly, our STR solution has been in use by local governments for more than 12 years. It was built by GovOS Chief Strategy Officer, Erin Neer (founder of MUNIRevs | LODGINGRevs), who was a CPA working in local government when she developed a better way for agencies to identify and collect tax from STRs.

More than 170 municipalities across the U.S. use the GovOS STR Solution

Today, GovOS works with hundreds of government agencies, including some of the most highly trafficked tourist destinations in the country. GovOS provides state-level systems to Alaska and Colorado and serves a range of local jurisdictions including Glynn County, GA; Dallas, TX; Palm Springs, CA; and Hawaii County, HI. Even when working with major tourist destinations, many of which have continually evolving STR markets, we are able to achieve up to 99% property matching rates.





"For over a decade, I have driven our company to build solutions that are powered by automation and easy-to-use tools. We look forward to meeting each client where they are at and anticipating the evolution of their community needs"

Erin Neer, Chief Strategy Officer | Founder MUNIRevs | LODGINGRevs

Dynamic Portal Design

- Secure account access for verified users (property owners/managers)
- Tasks assigned directly to individual accounts
- Track the progress of tasks and issue users' proactive reminders regarding unresolved items

Implementing an STR system can be challenging. GovOS reduces challenges by providing:

- Designated support and success team members to ensure timely onboarding/support escalation
- Proven onboarding methodology and expertise delivered to local governments across the U.S.
- Configured training and user documentation, including both online and physical training materials
- Designated training personnel to ensure best practice training processes and procedures.
- A high percentage of our services/onboarding/training personnel come from government with real work experience from the customer's perspective.



Appendix

Our Solution

GovOS' STR solution provides you with **community preservation through STR identification and compliance**.



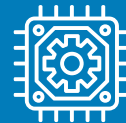
Using proprietary technology, our platform combines artificial intelligence and automation to keep your STR data current and actionable. On top of automation technology, our team of STR data science specialists ensures the accuracy of the listings we identify. This combination of automation and human-powered attention to detail delivers the best look at what's really happening in your area.

Full Visibility & Insight

The identification data provided by GovOS STR allows local governments to see the exact location of all STRs in a jurisdiction. This level of insight enables agencies to reach out to property owners and/or managers who are not in compliance with local renting ordinances and discuss discrepancies in advance of a rental start date. This helps reduce friction between the STR owner and guests and mitigates the chance of an illegal rental.

GovOS STR rises above the industry standard and leads in STR identification, compliance, and code enforcement. Our solution helps jurisdictions streamline processes and consolidate staff efforts. To promote rapid onboarding and user adoption of our STR management solution, we designate a team of industry experts for your project. Your GovOS team provides guidance for industry best practices and delivers a unique onboarding experience by leveraging their extensive backgrounds in customer success, project management, finance, and software engineering.

Our experience and best practices exponentially increase compliance, as well as provide your staff with automated tools and vital data to dramatically reduce the time required for your STR program.



We provide governments with sophisticated technology AND the most reliable client support services in the industry. We build solutions that address your community's specific needs.

GovOS Short-Term Rental Key Components



Identification & Compliance Methodology



Through AI-powered property identification technology, our **expert data scientists** and **property review analysts** produce the highest property identification rates in the industry. On average, our system and team **accurately match 99% of STR ads to properties** after an initial 8-week census. Our team can **match 99% of new ad listings**, which our system gathers and adds to the database.

Key examples of our proprietary property identification technology and processes we use to achieve these results include:

Reverse Geocoding: Uses the location bubble to show the general vicinity of STR properties on sites like Airbnb to determine the approximate address of all STR properties and adds the addresses to our database to be reviewed by our Property Review team.

Photo Recognition: Accurately matches interior and exterior pictures in STR ads with pictures from real estate websites to confirm matching addresses. This is particularly helpful for identifying units in multiplexes.

Human Verification: After our suite of programs completes data gathering and identifies STR properties, our specialized team of Property Review Data Scientists perform additional research to confirm the exact address and owner information of each STR. This team uses advanced investigative methods we have been refining for over a decade to ensure results are accurate and time efficient. They collaborate on investigations and work closely with Account Managers to ensure they align with your goals and new ordinances.



During this process, our software and Property Review team will accurately identify:

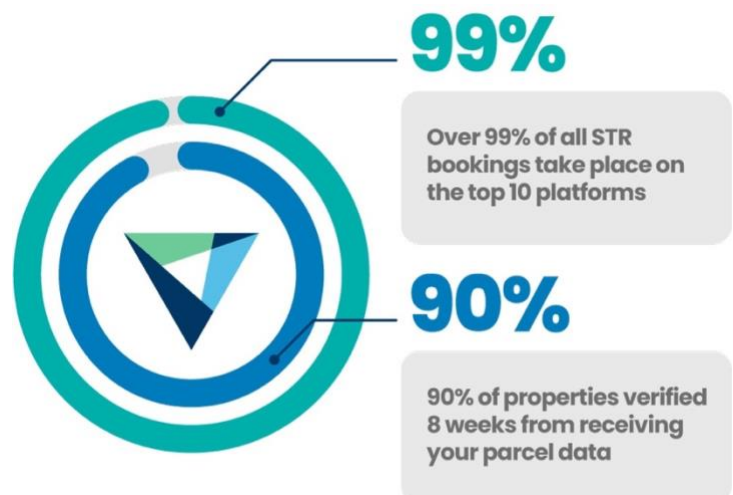
- | | |
|---|---|
| ✓ STR Ad Platform(s) (Airbnb, Vrbo, etc.) & Link(s) | ✓ Advertised vs. Maximum Occupancy |
| ✓ Property Location & Physical Address | ✓ Parcel Record/GIS Data |
| ✓ Management Type | ✓ Owner Mailing Address |
| ✓ Operator Name | ✓ STR Compliance Status |
| ✓ Estimated Date Ad Was Posted | ✓ Entire Unit vs. Room for Rent |
| ✓ Number of Bedrooms | ✓ In/Not-In Jurisdiction Limits |
| ✓ Average Daily Rate | ✓ Minimum/Maximum Stay Limits |
| ✓ Property Type (condo, house, etc.) | ✓ Estimated Calendar Booking Activity |
| ✓ Import Actual TVR Collection Data | ✓ Cross Reference City/County Permit Data |

Data Gathering for Property Identification



In the chart above, you will see the listing of sites that our tools gather data from continuously. In addition to the 5 major site families (Vrbo, Airbnb, Expedia, FlipKey, and Booking.com).

Ongoing analysis of the STR marketplace for the last 12 years shows **nearly all STR bookings take place on just the top 10 platforms, all of which we actively monitor.** GovOS can add additional STR Ad Platforms to our automated monitoring and scraping software at an additional cost if you have other platforms you would like to monitor.



GovOS Exclusive Partnership

In the short-term rental (STR) ecosystem, GovOS facilitates engagement between leaders at public and private organizations. To do this, we draw on years of experience in finance, tax, and local government, and collaborate with a strategic network of partners who exponentially increase our efficacy and expertise. In our mission to educate, empower, and serve local governments nationwide, we are honored to offer the following resources alongside our solutions.

RENT RESPONSIBLY

Rent Responsibly is a community-building and education platform for local short-term rental alliances. The company provides STR owner education to drive higher compliance rates with good neighbor education via webinars and in-person presentations alongside GovOS.

GovOS Offering:

During the first 90 days from the go-live date with GovOS, Rent Responsibly will help drive higher compliance rates by opening communication channels with STR owners, compliance campaigns and good neighbor education.

NoiseAware

NoiseAware helps prevent incidents at rental properties using privacy-safe, noise-monitoring technology. The company currently has sensors in communities throughout the country. Working together with the GovOS STR Hotline, our partnership with NoiseAware addresses community preservation issues around noise.

GovOS Offering:

During the first 90 days from the go-live date with GovOS, communities can offer STR owners a 50% discount on services specifically designed to protect community quality of life and drive higher compliance adoption.

STR ORDINANCE CONSULTATION SERVICES

Our Government Affairs Consultant assists communities by discussing best practices to help develop STR ordinances. Having been the Economic Development Manager for a resort community for the last 23 years, he has unique insight into maintaining residents' quality of life in the face of unprecedented growth.

GovOS Offering:

Free two- hour consultation to discuss best practices for the community's local ordinance.

breezeway

With a focus on community preservation, Breezeway works with GovOS to enable local governments to provide their STR owners with discounted property care and safety services to ensure responsible renting.

GovOS Offering:

Local governments can provide STR owners with discounted property care and safety services to ensure responsible renting.

Major Factors to Consider When Choosing Your Solution Partner

Ideal State	GovOS 	Others
Customer Retention Rate	98.5%	Varies
Listing Address Accuracy	99%	60%
Configurable to Local Regulations and Jurisdiction's Unique Needs	✓	✗
Custom Compliance Statuses	Unlimited	Fixed
Autonomy in the System <i>(e.g., ability to change compliance status, property's emergency contact, mailing address, etc.)</i>	Self-Serve	Must email support to request changes
Out-of-the-Box Reporting <i>(e.g., Gross Earnings by Property, Top Gross Earning Properties by Area/District, Type of Rental, Managed vs. Owner Managed, Advertised vs. Approved Occupancy, etc.)</i>	✓	✗
24/7 Bilingual STR Complaint Hotline	Customizable, Live Operator	Inflexible, Automated
Notification Templates	Unlimited	Fixed
Strategic Partnerships	Rent Responsibly, NoiseAware, Breezeway	N/A
Add-On Tax Filing Functionality	✓	✗
Client's Choice of Payment Gateway	✓	✗
Security		
SOC 2 Type 1 & Type 2 Certified	✓	✗
Multi-Factor Authentication for Admins	✓	✗
Hosting Application Data on AWS	✓	Varies
Support		
Assigned Account Manager	✓	✗
Implementation Training Included	✓	Varies
Average Support Email 1 st Response Time	2 Hours	Days
Support Available for Jurisdictions and STR Property Owners/Managers	✓	✗
Cost of Training Included	✓	Varies

Short-Term Rental Solution Dashboard and Reporting

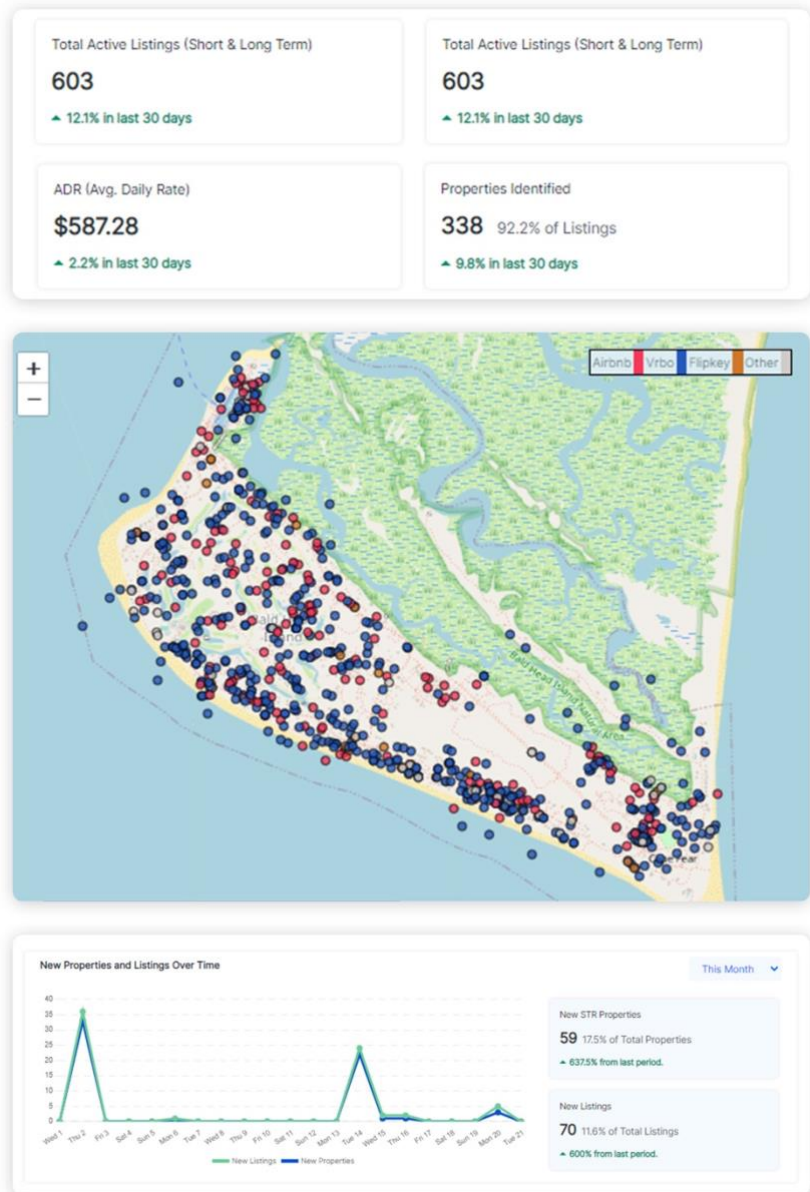
We create a configured cloud-based portal that both our team and your staff utilize to manage STR zoning permitting, monitoring, compliance, enforcement, notifications, and licensing compliance. Members of your team will receive individual login credentials to access our System 24/7/365.

Below is an example showing Bald Head Island, NC

Our dashboard map is a search engine telling you everything you want to know about each STR in your area. It shows the aggregated data our proprietary programs consolidate from the STR market in and around your area. Each dot represents a clickable STR ad listing with each dot's color representing an ad platform on which the listing is hosted.

From our dashboard, users have a live view of:

- ✓ Total number of STR ads
- ✓ Number of ads in each ad platform
- ✓ Compliance/non-compliance status in the County
- ✓ Average Daily Pricing for STR listings
- ✓ Number of new listings per month
- ✓ Breakdown of property types and number of bedrooms



Targeted Outreach and Notifications



GovOS assists staff to create custom notification templates and instructions for property owners depending on their compliance status. Our outreach methods are fast, simple, and effective.

Jurisdictions can batch (bulk) notifications based on compliance status, suspension notices, zoning, property type, specific owner/manager, etc. Property/listing details for each STR in the GovOS database will auto-populate smart fields (i.e., full name, address, phone number, and more) within each notification. You can then print letters to physically mail, or issue e-notifications and track when they are opened. Copies of notifications sent are saved in the database.

Common examples of notification templates include:

- Information about new or current STR regulations
- Instructions on how to come into compliance
- Description of a violation (i.e., illegal STR type) and consequences if a property continues to advertise
- Reminder(s) to remit taxes after the property owner has registered the STR or prior to filing due dates

Code Enforcement Activities



Our Listing Tracker feature monitors the removal and re-activation of all non-compliant STR listings every ten minutes. Simultaneously, our Evidence Tracker records each non-compliant ad listing instance via high-resolution screenshots of the entire ad listing with our Evidence Capture tool. By clicking a compliance status group in the dashboard, your staff and our team can access reports specific to each compliance status group.

From here, a user can send batched (bulk) non-compliance notifications or address issues with individual STR properties. Your designated Account Manager and GovOS team are experts at executing these tasks and are available as a resource for the Code Compliance Division. Our team will assist with strategy development, using our System's resources and best practices.

Mobile-Enabled Complaint Form



Our Mobile-Enabled Complaint Form is available online to the public, allowing your citizens to submit STR-related complaints. This form can be embedded into your website.

When a complaint form is submitted, it enters the centralized online complaint database. This database is a Code Enforcement dashboard offering additional reporting functions. All complaint form information is uploaded to the GovOS database. From the database, your staff can track complaint information and compliance actions taken in response.

Our database tracks the following information:

- Date, time, and reported concern for complaints (trash, noise, etc.) lodged against an STR property
- Description of the complaint
- Name and contact information for persons lodging complaints against an STR property
- Full documentation of incidents/complaints, including uploaded documents, photos, audio/video recordings
- Copies of any correspondence with STR operators
- Copies of all notifications and notices



Data Security & Accessibility



Secure Access & Permissions

- Multi-factor authentication is required to access any sensitive data in our system.
- Each system user can have specific permissions to govern what they can and cannot access within our system.
- User permissions support segregation of duties and protect sensitive data. GovOS works with staff to set up each user with appropriate permissions from an extensive list of options.



Data Storage & Redundancy

- Our databases utilize the RDS hourly backups with a 35-day retention lifecycle.
- Backups utilize a real time database backup system to a secondary RDS instance in a different region. Using AWS, backups are taken every 5 minutes and stored for 30 days.



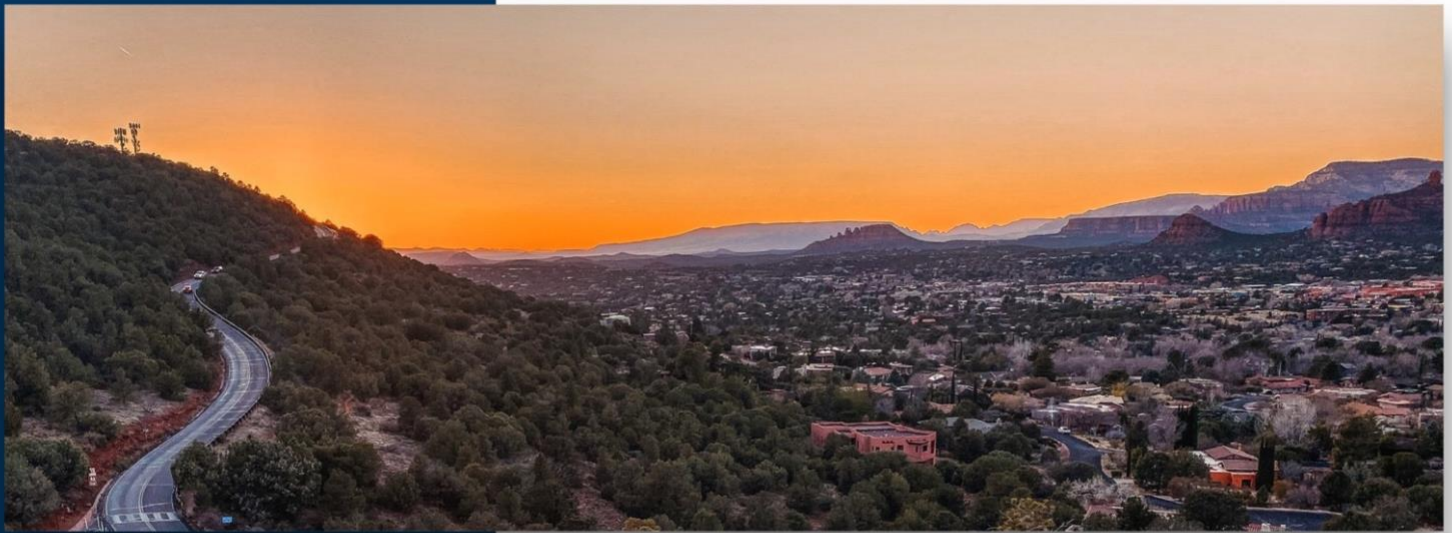
Data Accessibility

- Our 'role-specific user permissions' allow the jurisdiction to offer a public-facing site for property owners and managers to manage their compliance 24/7/365.
- Jurisdiction users have access to all data records in our System, allowing the jurisdiction to craft multiple user groups to manage distinct levels of access for varying departmental users.
- The jurisdiction owns the data in the GovOS system. They can choose to share the data with the public when required.
- Should the jurisdiction change providers, all data in GovOS will be relinquished.



Data Privacy & Encryption

- GovOS implements GeoTrust SSL certificates on site to ensure all data between the business owner and our server is encrypted using the industry standard AE-256 encryption algorithm.
- Our system containing Personal Identifiable Information is SOC2 Type II certified.



SUCCESS STORY

How Sedona, AZ Uses GovOS to Identify and Collect STR Contact Info

Sedona, AZ

Population: 10,322

STR Ads: 7,445

STR Properties: +1,250

**Current Compliance
Rate:** 90%

**Resolved 260+ complaints in a
9-month span**

The Need

As a popular tourist destination with over 1,000 short-term rental (STR) properties, Sedona sought to build a database of all STRs so they could get a handle on complaints, collect emergency contact information for property owners/managers, and start gathering data to determine the impact of STRs on the community.

The Solution

Sedona began using GovOS STR to identify all properties so they could contact owners/managers to collect emergency contact information. They also used the GovOS STR 24/7 bilingual hotline to answer resident complaints.

The Results

Since implementing GovOS STR, Sedona has increased their compliance rate to 90%. With the ability to collect emergency contact information for STR properties, the jurisdiction can communicate directly with STR owners and managers. Through this enhanced collection of information, Sedona can quickly reach out to STR contacts regarding complaints. Sedona's use of the GovOS hotline helped them resolve more than 260 complaints in a 9-month span.

**Scan to read
the full story**



Executive Bios



Michael Crosno

Chief Executive Officer

+30 years in leadership positions in the software and technology enabled services industries

Michael has successfully led Information Management, Workflow, Business Process Management, Content Management, Enterprise Security, and E-commerce companies. He focuses on creating loyal customers, best-in-class solutions, and growth driven organizations. Product innovation and services leadership is core to his success model. Michael started his tenure in late 2017 and continues to expand GovOS' market leadership in local governments.



Erin Neer

Chief Strategy Officer

+20 years' experience in municipal finance

As a CPA, and former finance director for a town in Colorado, Erin realized the way sales & lodging taxes were collected was archaic. Businesses were still manually calculating and submitting paper coupons to remit their taxes — even worse, city staff then had to handle that mail, key in the data, and make a deposit to the bank.



Matt Coury

President & Chief Operating
Officer

+12 years' experience improving organizations and customer experience

Matt has led digital transformation and strategic initiatives across a broad range of organizations, optimizing operations to the benefit of end customers. Based in Austin, TX, he has enabled GovOS to take advantage of best practices from other industries into the Government sector.

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