BU Initiative on Cities

Short-term Rentals in Boston

Regulation, Compliance, and Impact

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The short-term rental (STR) market experienced robust growth during the 2010s. While STRs provide various benefits to the tourism and local services sectors, the conversion of housing supply into tourist accommodation has exacerbated housing challenges in major cities, leading to intense policy debates and a growing number of municipalities imposing restrictions on STRs. The City of Boston adopted STR regulations in June 2018 with the aim of protecting the housing market and maintaining livable neighborhoods. These rules restrict professional STR businesses and investors while allowing home-sharing activities, provided that hosts register with the City.

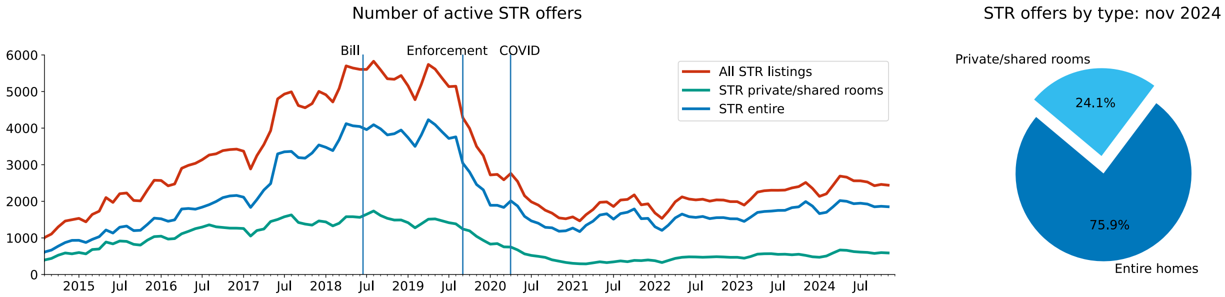
Across the United States, cities are experimenting with a range of regulatory approaches—from very liberal frameworks to complete bans on entire-home hosting (as in New York City). However, there is no "one-size-fits-all" solution for mitigating the negative effects of STRs. The case of Boston, which employs a relatively simple registration scheme yet differentiates between "sharing-economy" and professional hosting and introduces specific exemptions, offers an opportunity to better understand the overall impact of regulation on the STR market and local residents. The aim of this study is to examine the effects of these rules on both the size and characteristics of the STR supply in Boston. In addition, it investigates host compliance, with particular attention to enforcement weaknesses and the rule-evasion strategies used by major actors in the STR market.

Reduction in STR Listings

The analysis demonstrates that Boston's STR regulations were effective in reducing the size of the market. On average, the introduction of regulations led to a **56% reduction in STR listings**. When focusing specifically on **entire home offers** (including both STR and mid-term rentals), the decline amounted to **46%** across Airbnb and Vrbo.

At the citywide level, approximately **3,000 STR listings were removed** between the passage of the bill in June 2018 and the onset of the COVID-19 pandemic (Fig. 1.). Despite this contraction, a substantial STR market persists. As of **November 2024**, the dataset records **2,441 STR offers** alongside **1,061 mid-term rental offers** within the city.

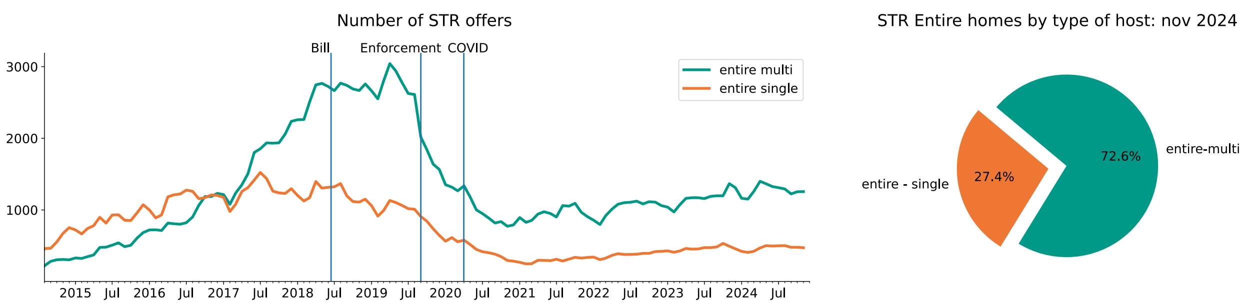
Figure 1. Evolution of the number of active STR listings by type (entire homes vs. private/shared rooms)



The findings suggest that Boston's STR regulations have not shifted the market toward a more genuine "sharing economy" model. Instead, **professional hosts and management agencies remain dominant players**. Although the overall number of entire-home listings has declined, they still account for **76% of STR supply**. This pattern may reflect the costs and administrative burdens of compliance, which may have disproportionately discouraged non-professional hosts from remaining active on the platforms.

Furthermore, the analysis reveals that **73% of entire-home STRs** (1,256 listings) are managed by profiles with multiple entire-home listings in Boston (Fig. 2.). Since investor-owned units are largely prohibited under the city's regulatory framework, this concentration points to a **high degree of non-compliance** among major operators.

Figure 2. Evolution of the number of active entire home STR listings by type of host (single: managed by host with one entire home listing; multi: managed by host with multiple entire home listings)



Regulatory Challenges

> *"These findings […] highlight the persistence of rule-avoidance strategies among hosts, particularly larger operators."*

Non-Compliance of Professional Hosts

The analysis underscores a substantial level of non-compliance with Boston's requirement for hosts to present a valid STR license. Approximately **20% of listings claimed exemptions**, though many of these exemptions are difficult to verify without access to more detailed data. Among the **81 listings classified as institutional or business stays**, only **four complied** with the mandated minimum rental period. More broadly, just **41% of listings displayed an STR license** that could be matched to the city's official registry. Even within this subset, evidence of rule evasion is apparent, as some hosts presented licenses that were registered to other properties. Moreover, our investigation into the top 10 hosts—who collectively managed over 700 listings—found that the number of valid licenses among those listings was in the single digits. These findings point to **weaknesses in enforcement** and highlight the persistence of rule-avoidance strategies among hosts, particularly larger operators.

Uneven Enforcement

For those who remain in the market legitimately, the regulations do not appear to be causing significant problems. Thirteen of the 15 respondents reported little to no engagement with the city, although many were not fully informed about the exact nature of the regulations.

> *"Smaller property management companies appear to have been hit hardest."*

On the other hand, the **reactive nature of investigations and the city's limited enforcement capacity may have a disproportionate impact on "amateur" landlords.** The cases of the two investigated landlords highlight issues with mandated inspections: (1) a more "professional" STR landlord, who operated a bed-and-breakfast style business, was able to use his network to arrange a building inspection, while (2) the "amateur home sharer" struggled to access the city's limited inspection capacity.

Furthermore, among the interviewed hosts, there was a widespread perception of "uneven treatment" and a shared belief that larger players on Airbnb and other platforms frequently violated the rules. Smaller property management companies appear to have been hit hardest; one we spoke to saw its portfolio drop from 16 to two properties.

Interviews also suggested that for most landlords, particularly in gentrifying neighborhoods with MBTA access such as Dorchester, **significant financial incentives to operate STRs remain.** Several reported earning three times as much as they would from long-term tenants.

Recommendations

The evidence indicates that Boston's regulatory framework has been effective in curbing STR activity. Absent these measures, the STR market would likely have mirrored trends in comparable cities, with a substantially higher number of housing units diverted into tourist accommodation. At the same time, the findings reveal significant shortcomings in enforcement. Several areas for improvement emerge:

1. **False or Misused License Numbers**
   Many listings present false or borrowed license numbers. With access to platform-level data (e.g., Airbnb) or third-party sources, such as Inside Airbnb or AirDNA, such cases could be identified and flagged systematically.
2. **Exemptions and Loopholes**
   Certain exemptions—such as those for hospital or institutional stays—create opportunities for abuse. Many hosts claiming such exemptions continue to accept general bookings, undermining the intent of the rules. Stronger verification mechanisms, including direct matching of claimed exemptions with the city's official license registry, could limit this practice.
3. **Minimum Rental Period Requirements**
   For categories requiring extended stays (e.g., business or institutional accommodations), rule breaches are easily detectable in listing descriptions. Enforcement in this area could be strengthened by automated cross-checks of advertised minimum rental periods.
4. **Additional Resources for Enforcement**
   In addition to data-driven improvements, strengthening the enforcement team is essential to effectively identify and investigate rule-evading hosts. The costs of additional staff could be financed through registration fees collected from hosts or levies imposed on staying guests.

Overall, while the regulations have achieved notable reductions in STR supply, their design and enforcement mechanisms require refinement. In particular, exemptions should be revisited to ensure they are both clearly defined and readily enforceable, reducing opportunities for strategic evasion by professional operators. Verification should be proactive, rather than reinforcement and investigation reactive.

Methods

The empirical analysis is complemented by a qualitative approach. The quantitative analysis draws on AirDNA data (on both Airbnb and Vrbo listings). The sample is restricted to active listings available for rental for less than 28 days (or already reserved).

The dataset allows for the exclusion of duplicate listings across Airbnb and Vrbo. In addition, all listings categorized as hotel offers are removed to focus exclusively on the peer-to-peer STR market.

The analysis considers both city-level trends and spatial patterns at the ZIP code level, using Zip Code Tabulation Areas (ZCTAs) as the unit of geographic reference.

To assess the impact of STR regulations, the study employs a **difference-in-differences** (DiD) approach. This method compares changes in STR activity in Boston with those in a group of control cities—Atlanta, Dallas, Houston, Philadelphia, Phoenix, San Diego, and Washington, D.C.—that introduced regulations at later points in time. This design helps isolate the causal effect of Boston's regulatory framework by contrasting it against cities not yet subject to similar enforcement during the study period.

For this analysis, the onset of Boston's regulatory regime is set for **September 2019**, corresponding to the end of the sunset period for STR hosts and the beginning of active rule enforcement.

The qualitative approach involved **full-length interviews with 15 holders of active STR licenses** from the City of Boston register, and investigations of the top 10 Airbnb hosts.

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