

# THE POLITICS AND POLICY OF SHORT- TERM RENTALS

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*30 October 2019*

**Urban Politics  
and Governance  
research group**



*[upgo.lab.mcgill.ca](http://upgo.lab.mcgill.ca)*



**airbnb**



Barcelona



San Francisco



New Orleans

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Montréal

**1) HOUSING IMPACTS** What impact have STRs had on housing availability, affordability, and quality of life in cities around the world?

**2) SOCIAL DYNAMICS** How is the platform economy changing social and economic relationships between inhabitants, housing, and urban space?

**3) POLICY OPTIONS** What policy options are available to governments seeking to regulate STRs in the public interest?



# Methodology

**We have data about...**

- 1. Every Airbnb/HomeAway property in the world**
- 2. Every single day since 2015**

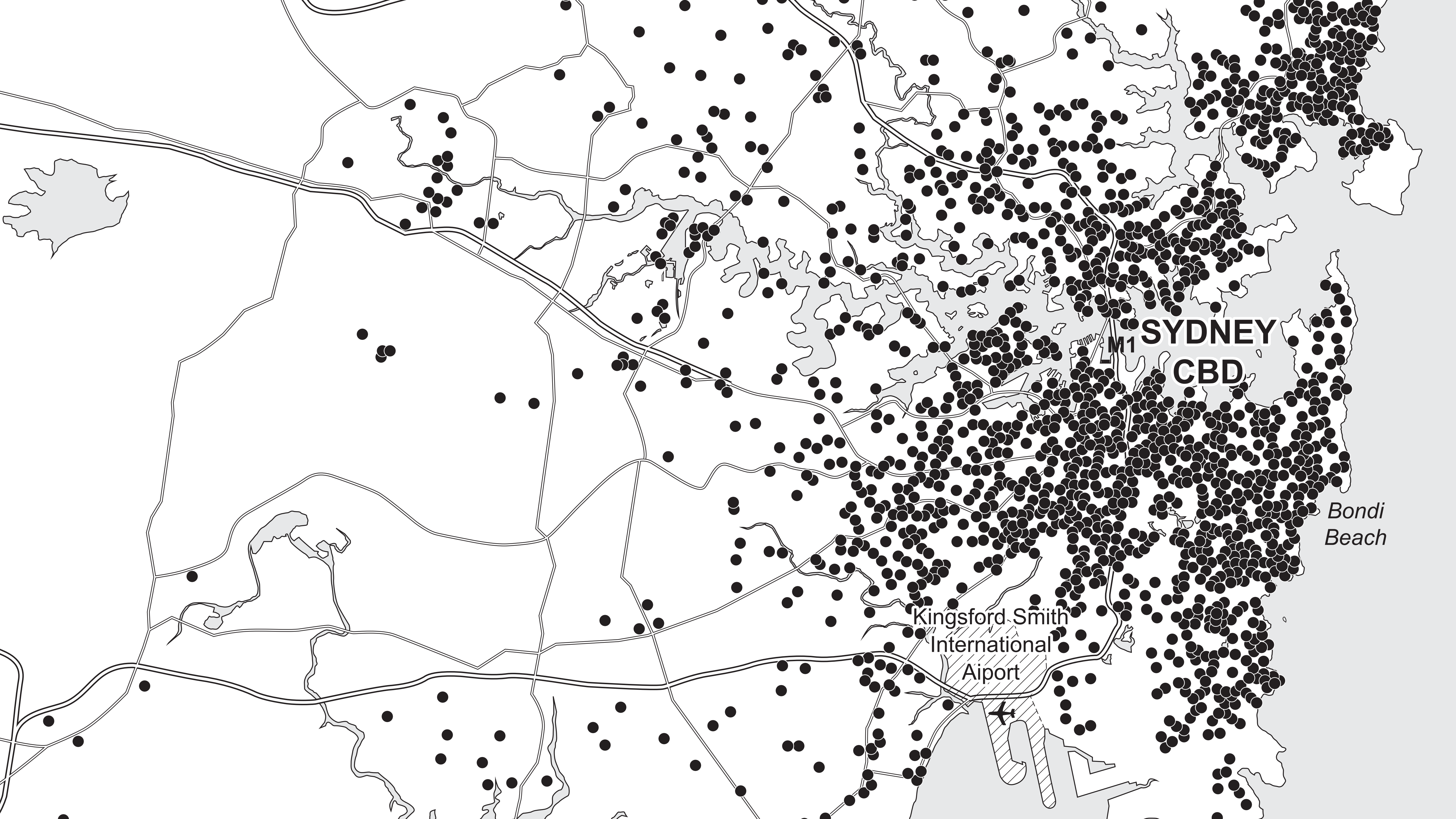
***15 billion activity data points (and 15 million more each day), and 300 GB of review text***

# Methodology

## **Three goals**

- 1. Improve spatial resolution**
- 2. Leverage detailed activity and performance data**
- 3. Raise the bar for the field**



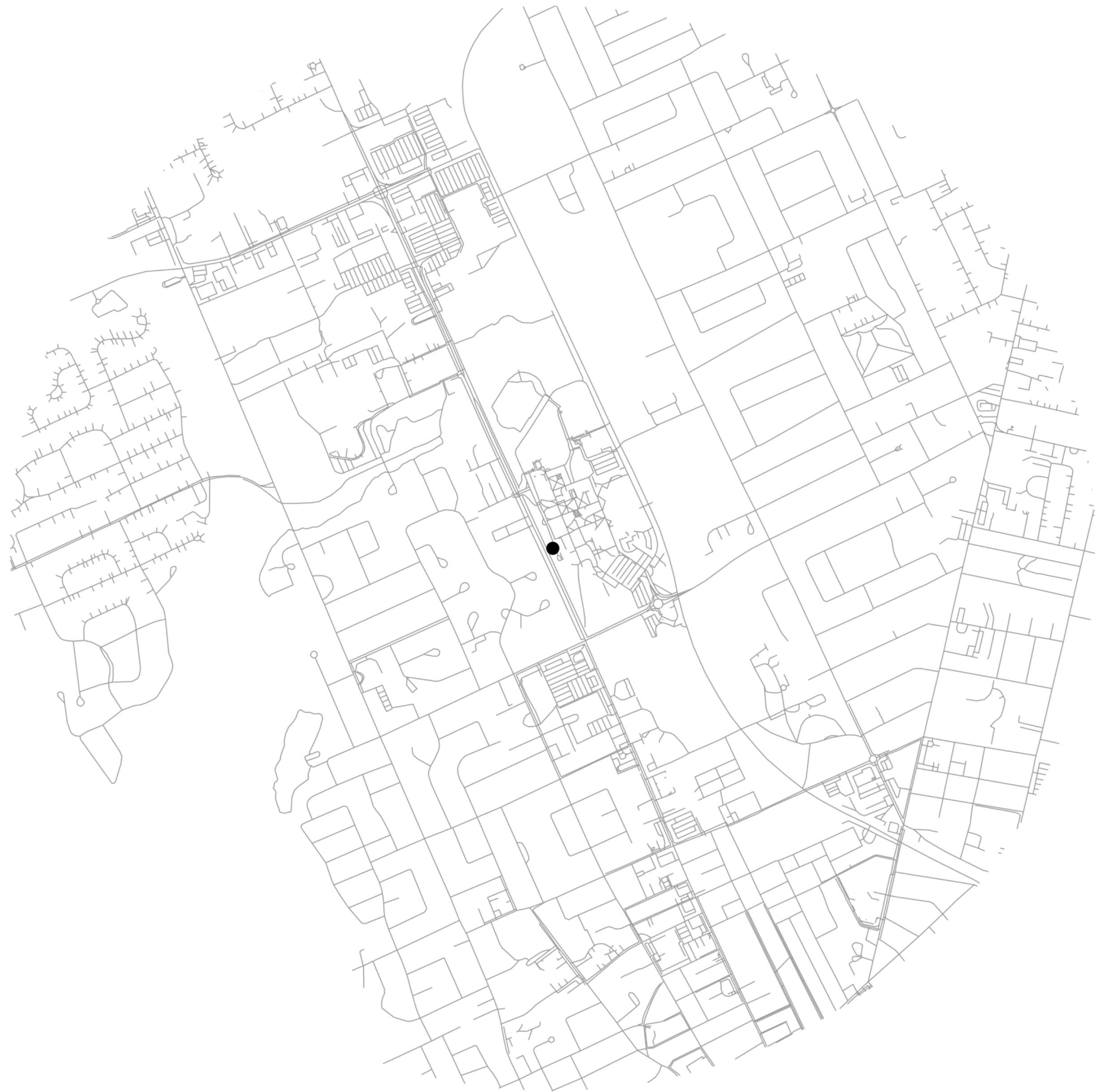


**SYDNEY  
CBD**

**M1**

Kingsford Smith  
International  
Airport

*Bondi  
Beach*



# Reservations on 2019-08-01



# Methodology

## **Three goals**

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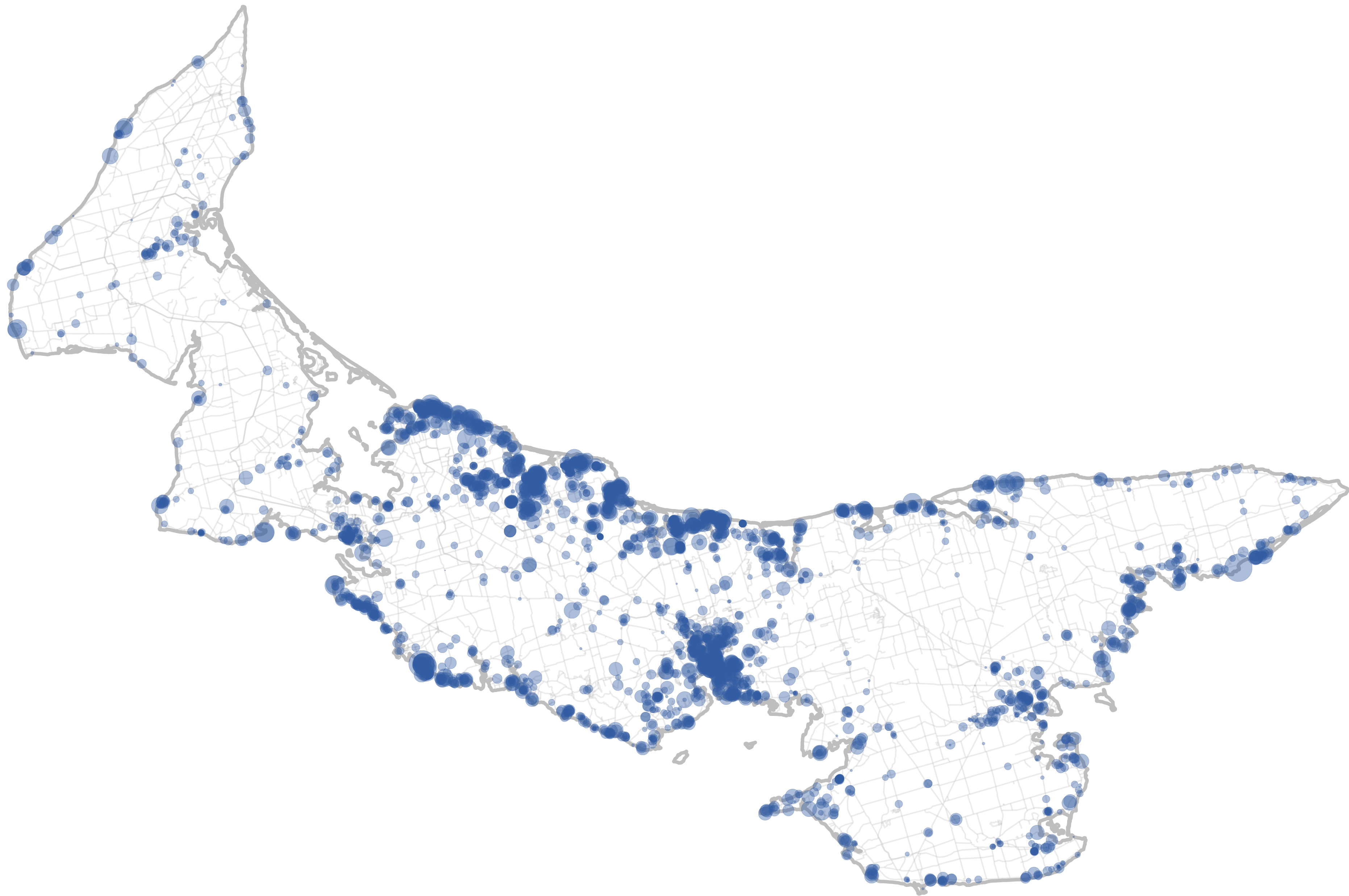
# **strr** package for R

*[github.com/UPGo-McGill/strr](https://github.com/UPGo-McGill/strr)*

## **Three goals**

- 1. Improve spatial resolution**
- 2. Leverage detailed activity and performance data**
- 3. Raise the bar for the field**

# Prince Edward Island



**Annual revenue**

- \$20,000
- \$40,000
- \$60,000
- \$80,000
- \$100,000

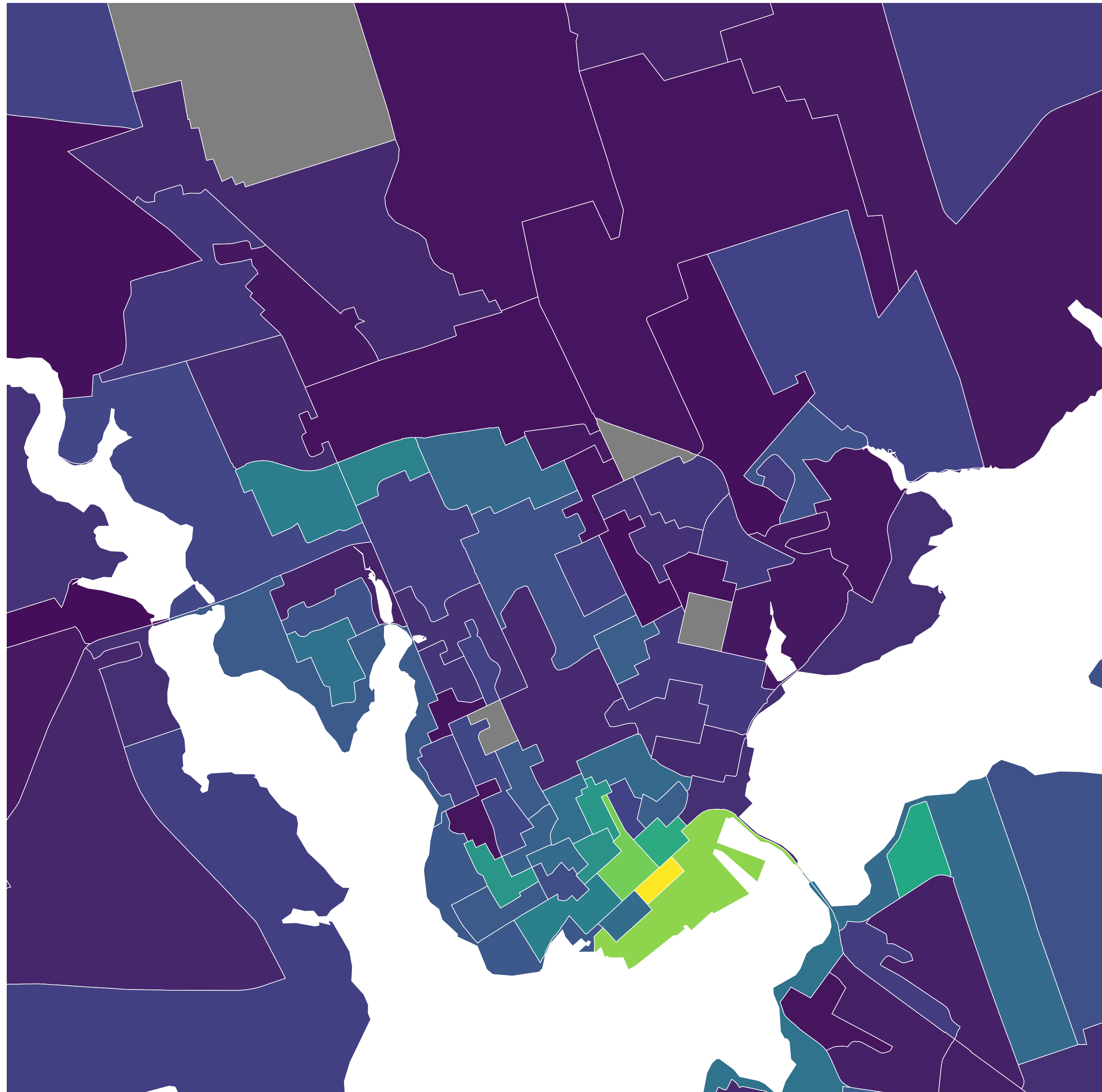


**Annual revenue**

- \$20,000
- \$40,000
- \$60,000
- \$80,000
- \$100,000







**Listings per dwelling**

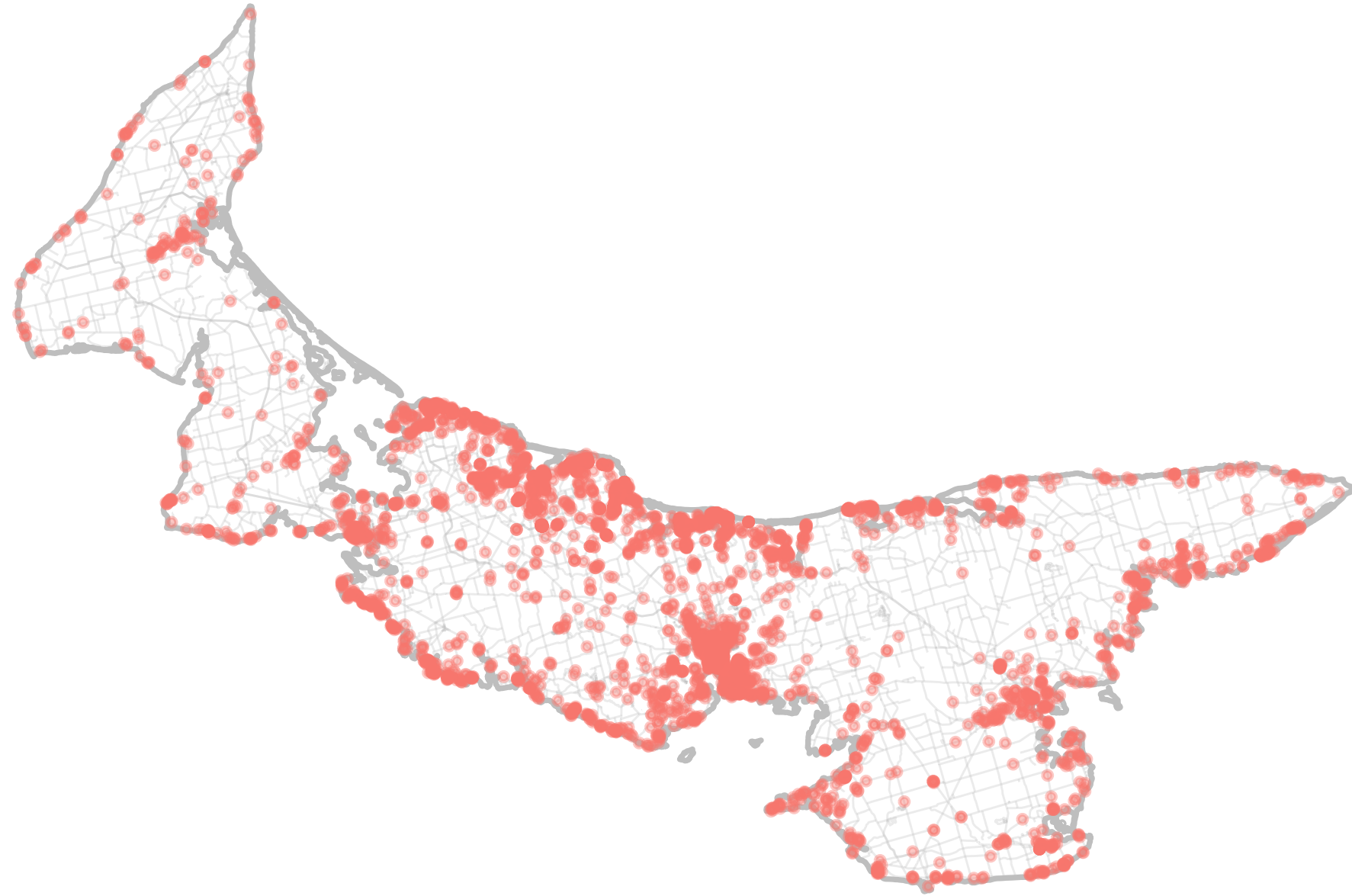


10.0%

5.0%

0.0%

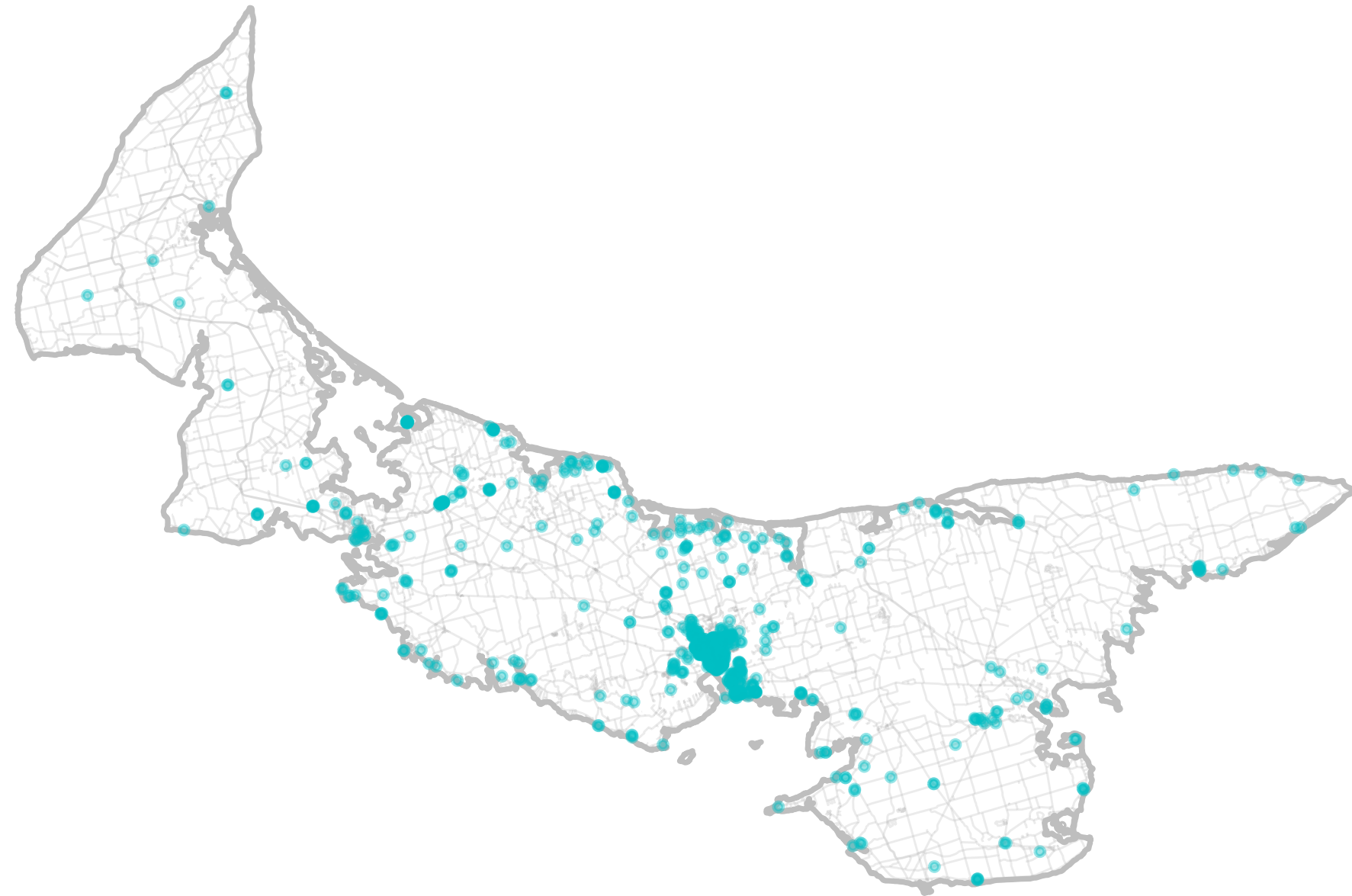
**Entire home/apt**



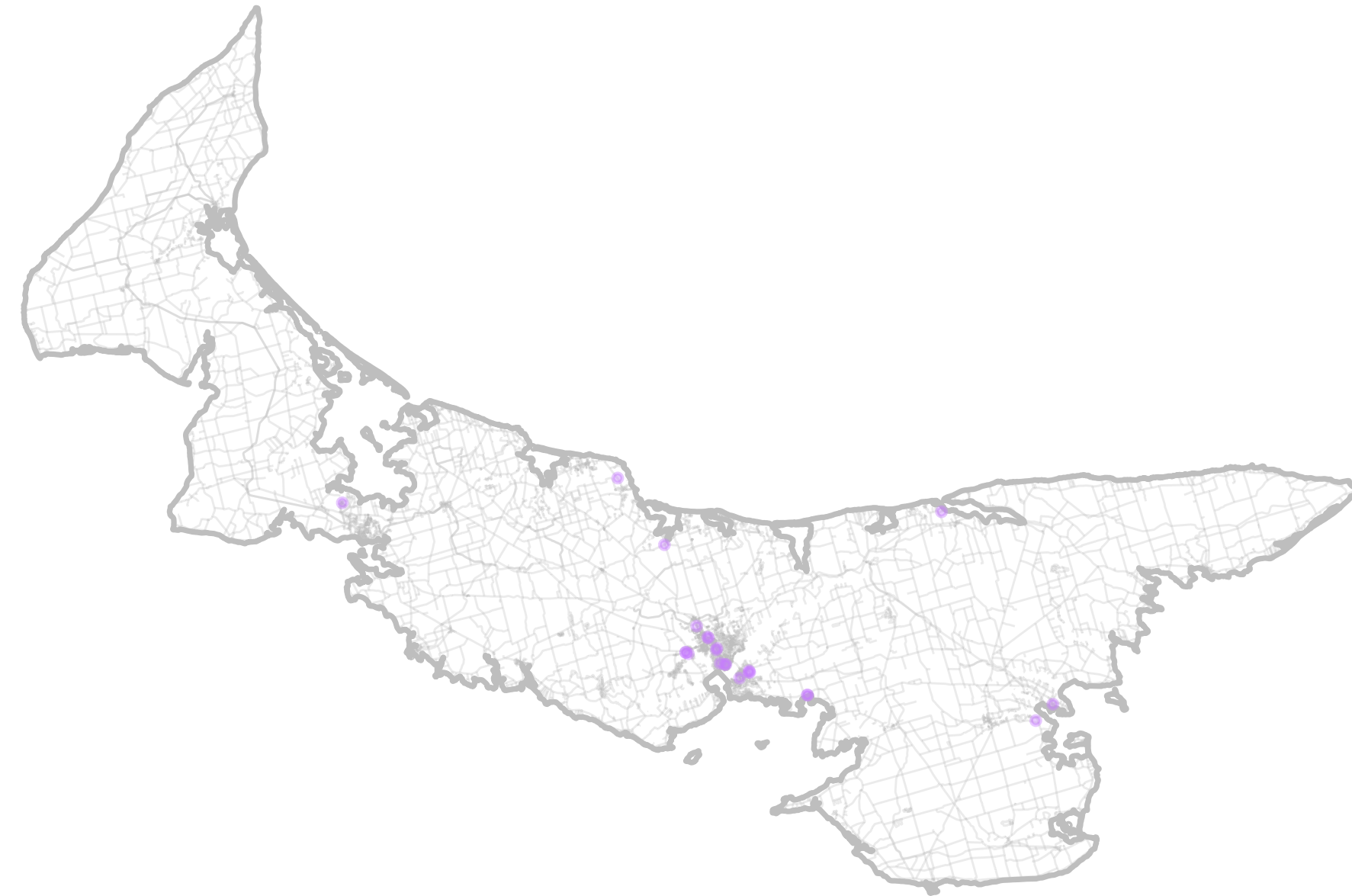
**Hotel room**



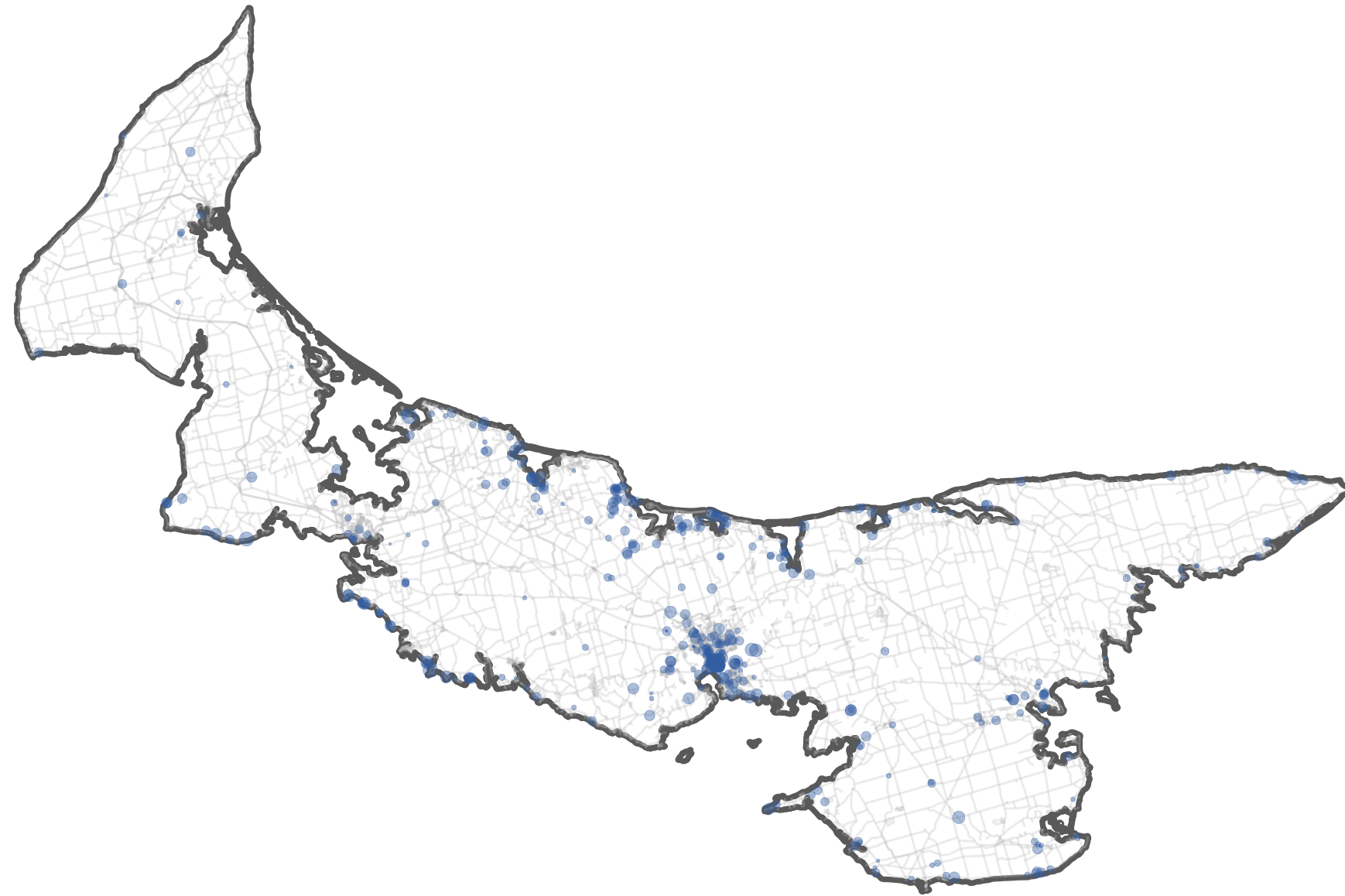
**Private room**



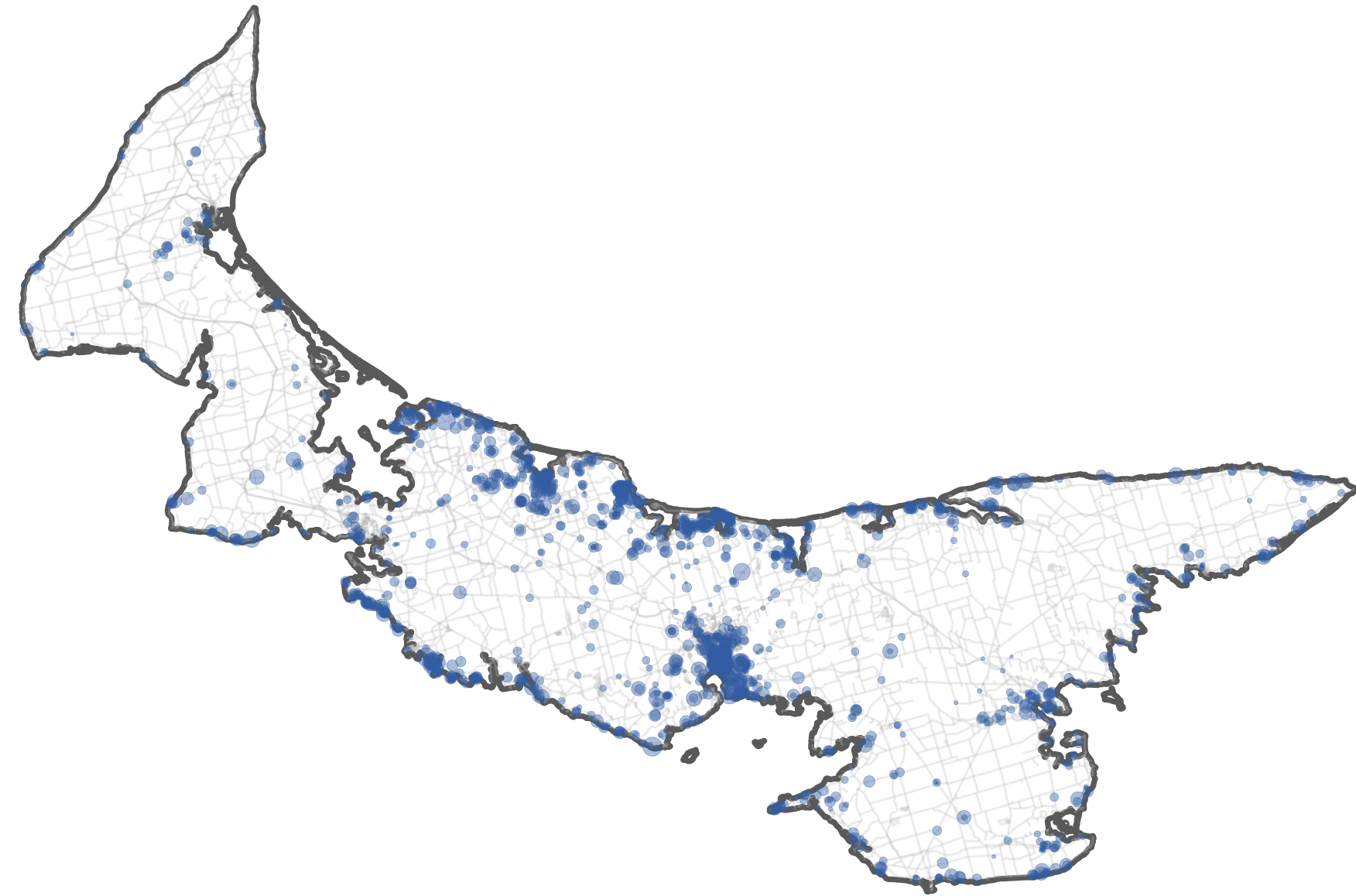
**Shared room**



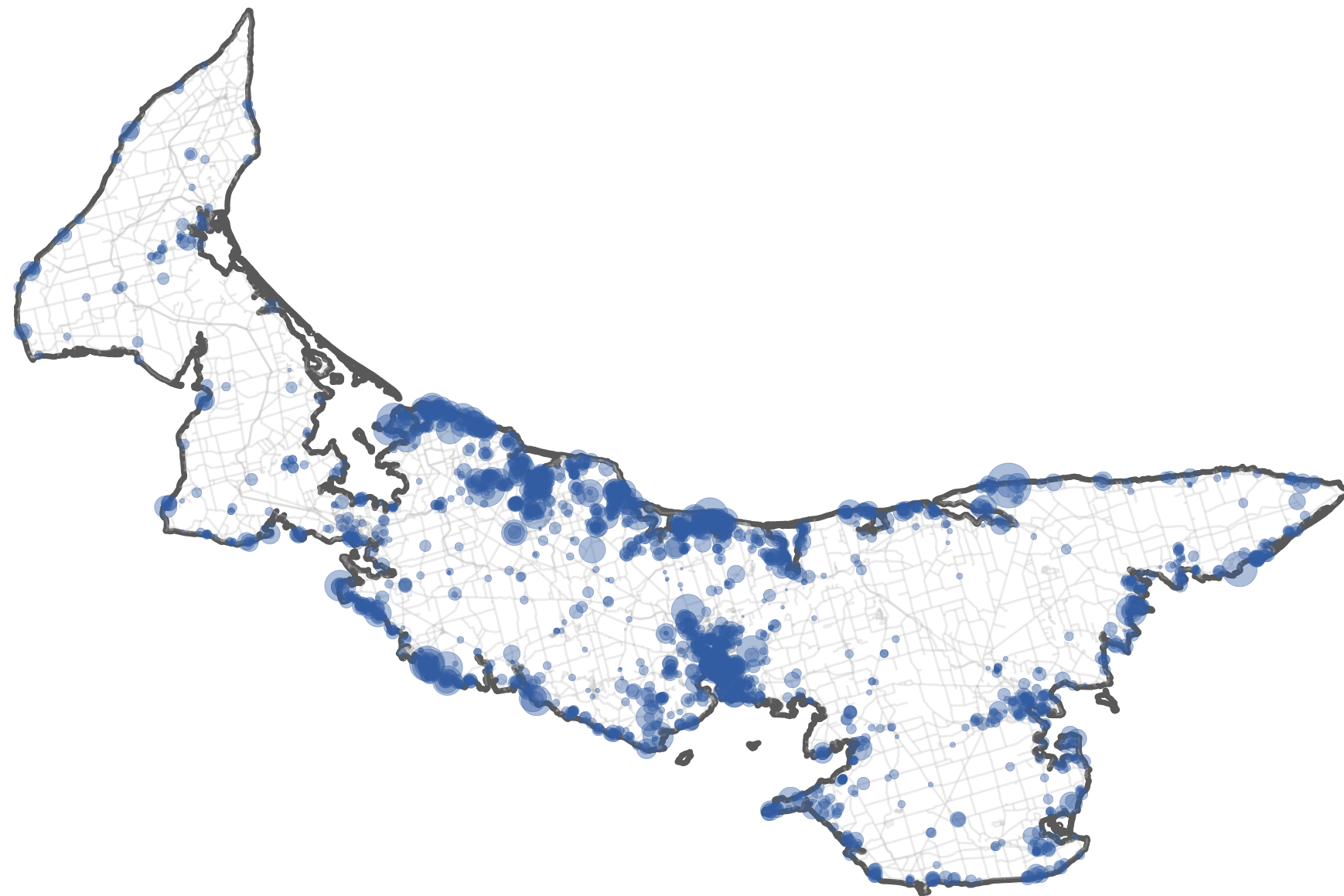
**2016**



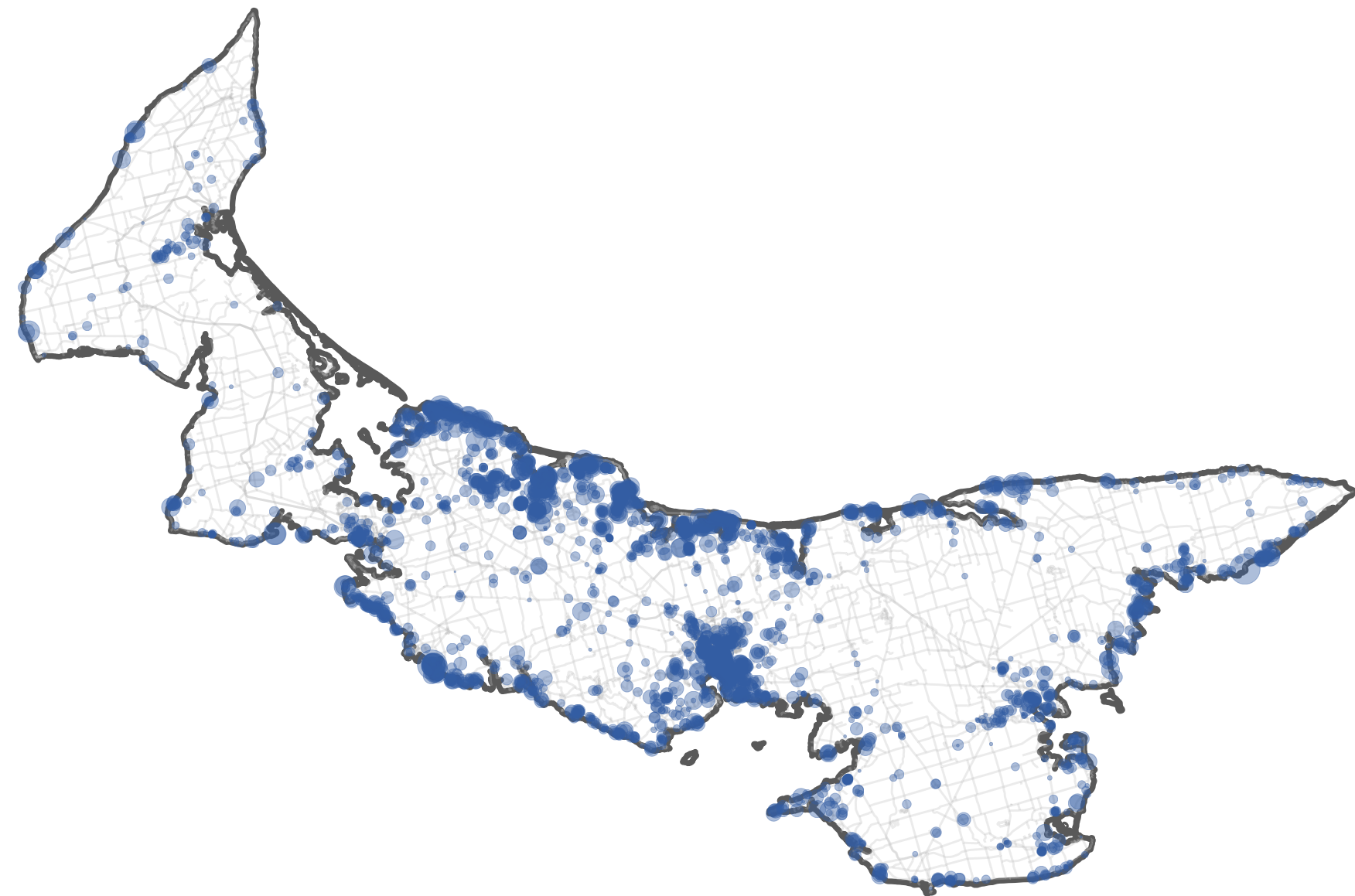
**2017**

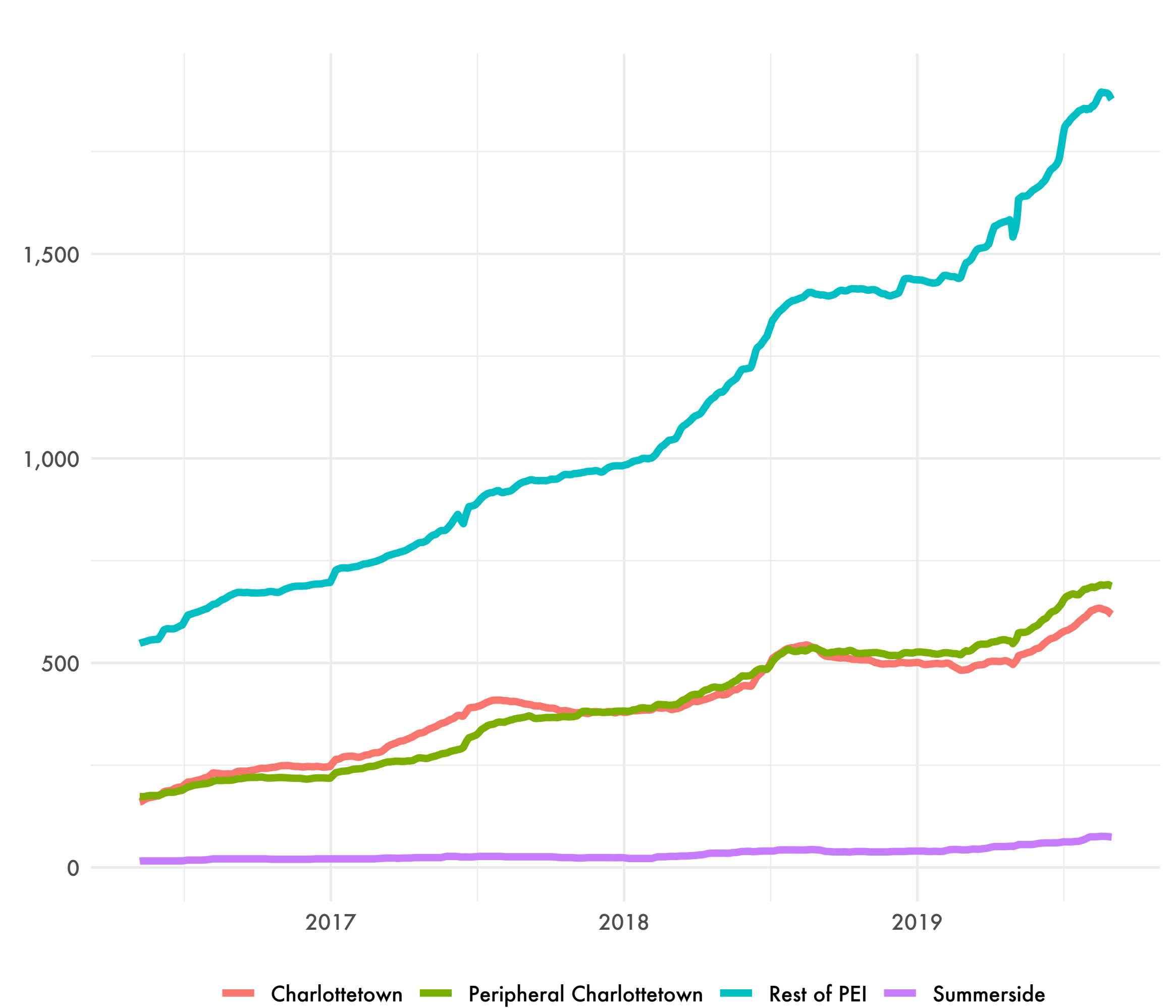
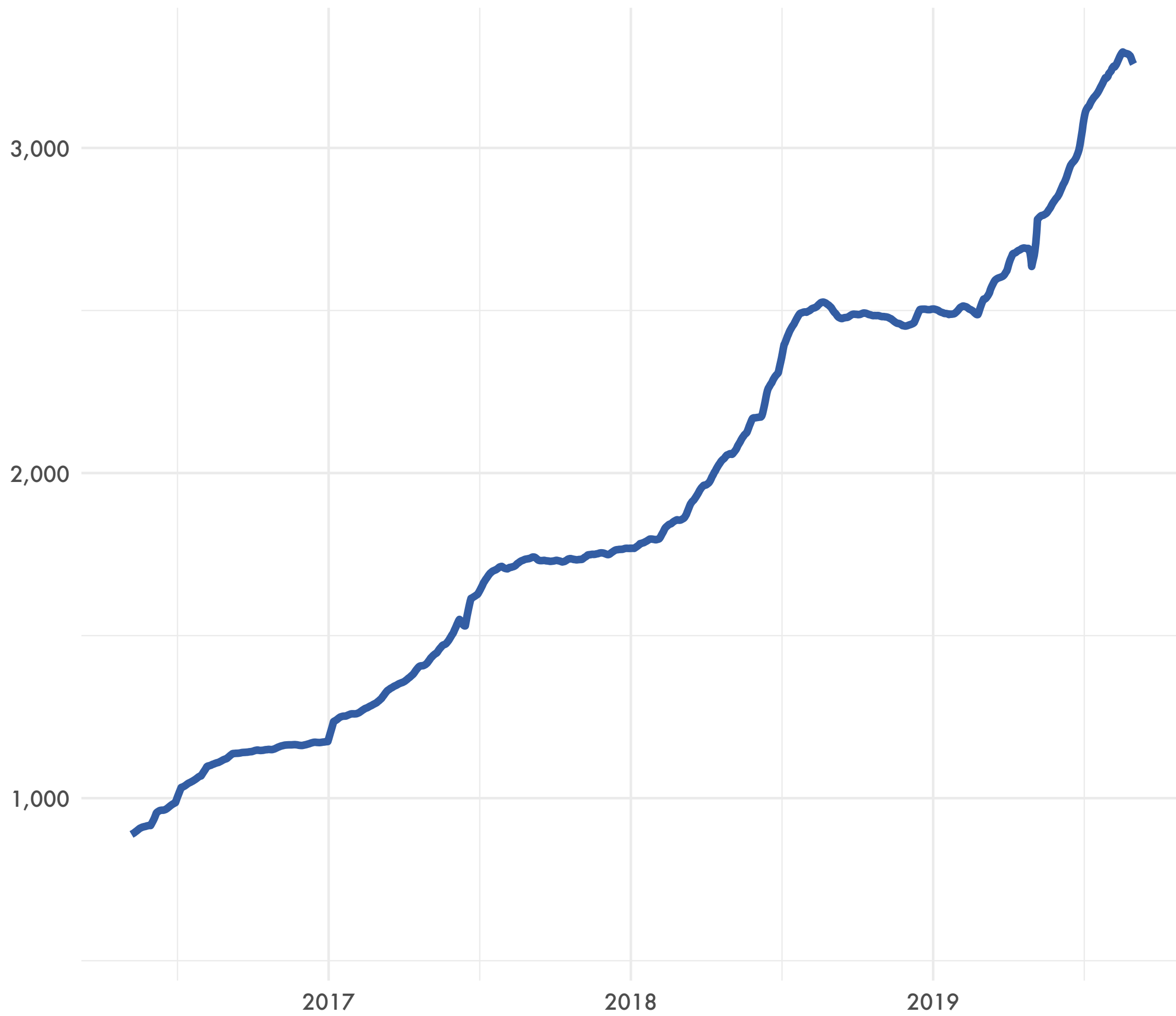


**2018**

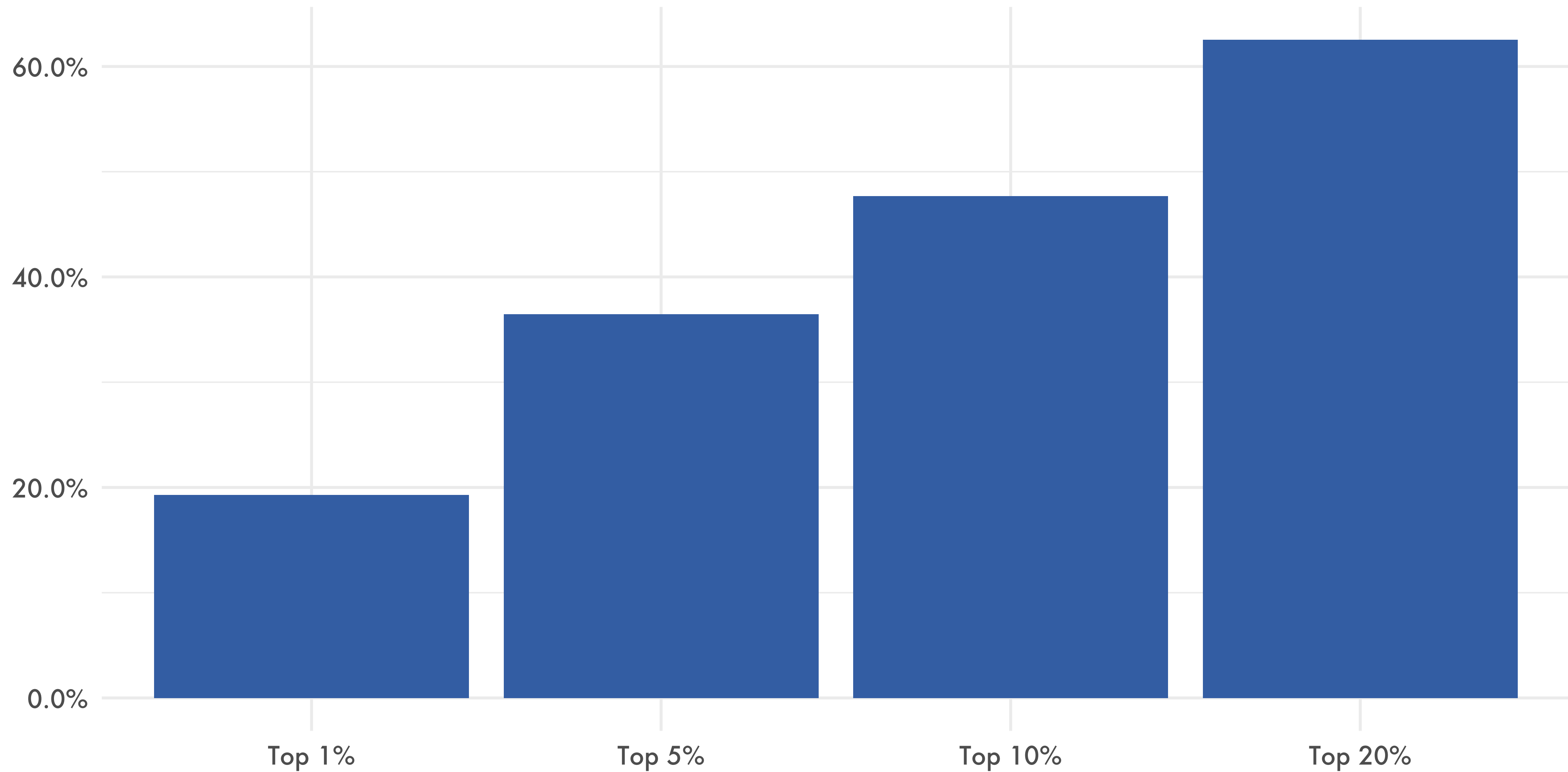


**2019**





# Active listings



**Host revenue concentration**

**Over the past year, 41.6% of STR listings in PEI were commercial operations (run by hosts with multiple listings). This proportion has increased by 50% in three years.**

**16 hosts had 10 or more listings active in PEI on August 31, 2019. One host had 135 listings.**

**120 hosts had listings off the island. 37 hosts had listings out of the country. These non-local operators run one in twelve STRs in PEI.**

**Commercial operators**

# Housing impacts

1



**How do short-term rentals interact with housing availability and affordability?**

## *The basic story*

**Most short-term rentals are operating out of housing. If they are full-time operations, they take housing off the market. If they are part-time, they increase the economic value of the housing.**

## *Exceptions*

**If the "housing" isn't really housing, because it wouldn't be used for actual housing otherwise. E.g. some vacation rentals.**

*Winners and losers*

**The operators of STRs benefit—home sharers earn some side-income and commercial operators earn more than they would have from a long-term rental.**

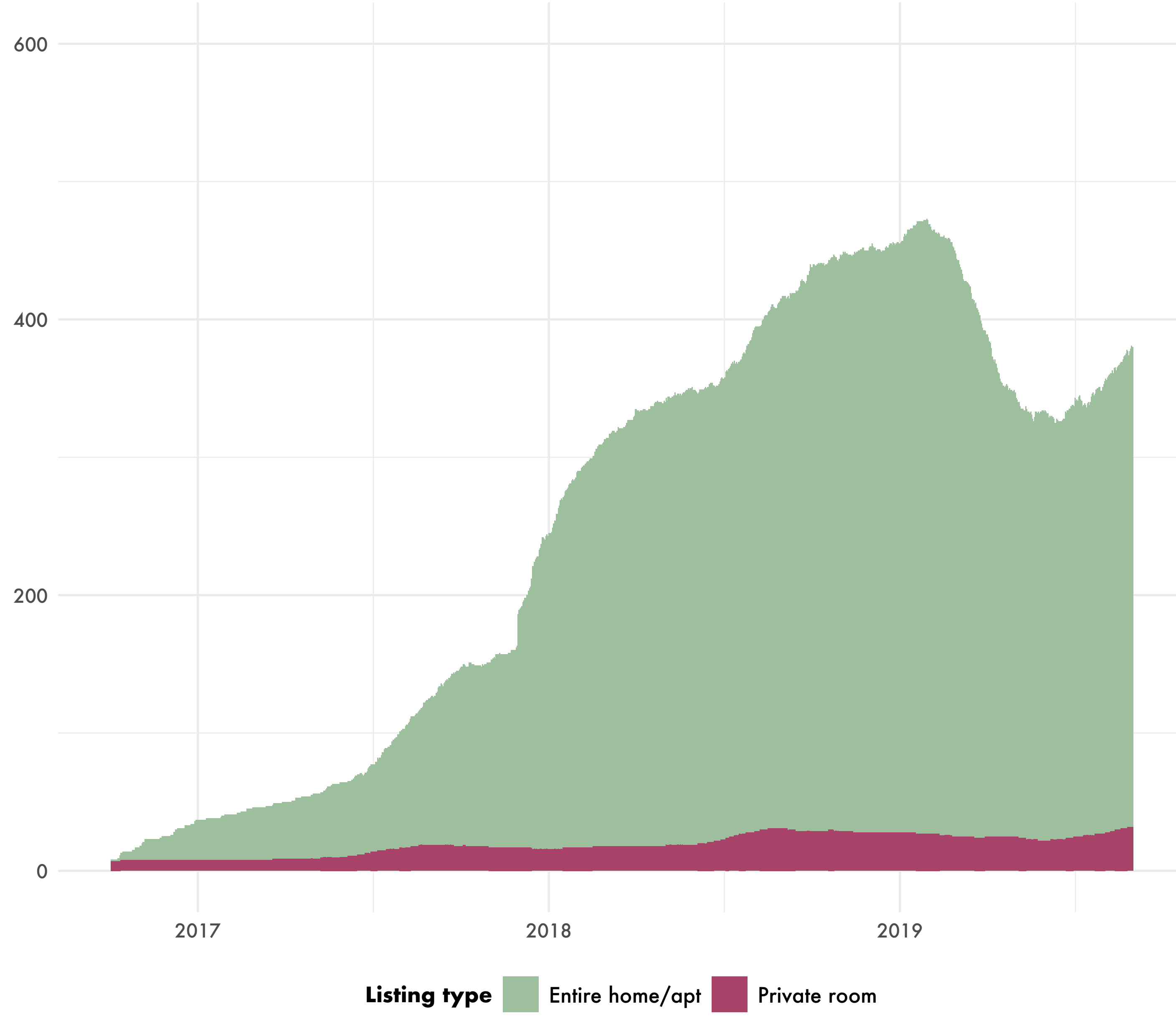
**Everybody else pays more for housing.**

*Empirical evidence from the US*

**A 1% increase in Airbnb listings leads to a 0.018% increase in rents and a 0.026% increase in house prices.** *(Barron et al. 2019)*

*Our estimates*

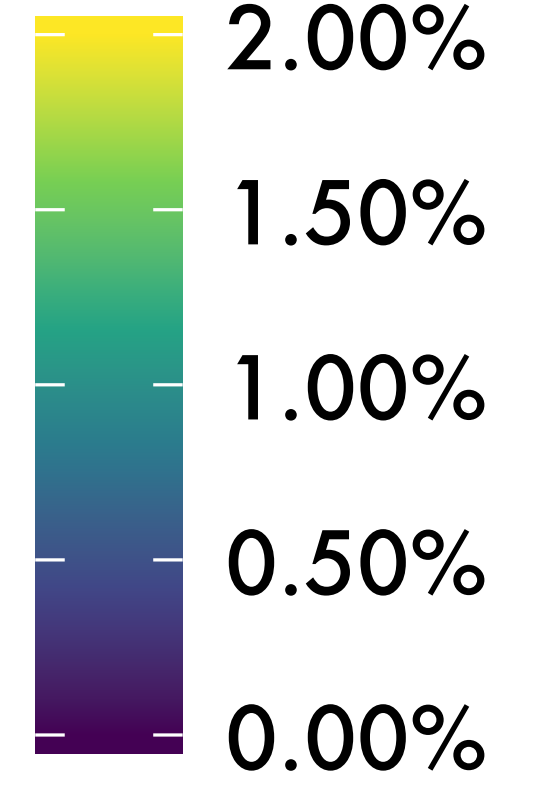
**"Frequently rented entire-home listings":  
Available a majority of the year ( $\geq 183$   
nights) and booked at least three months  
( $\geq 90$  nights)**



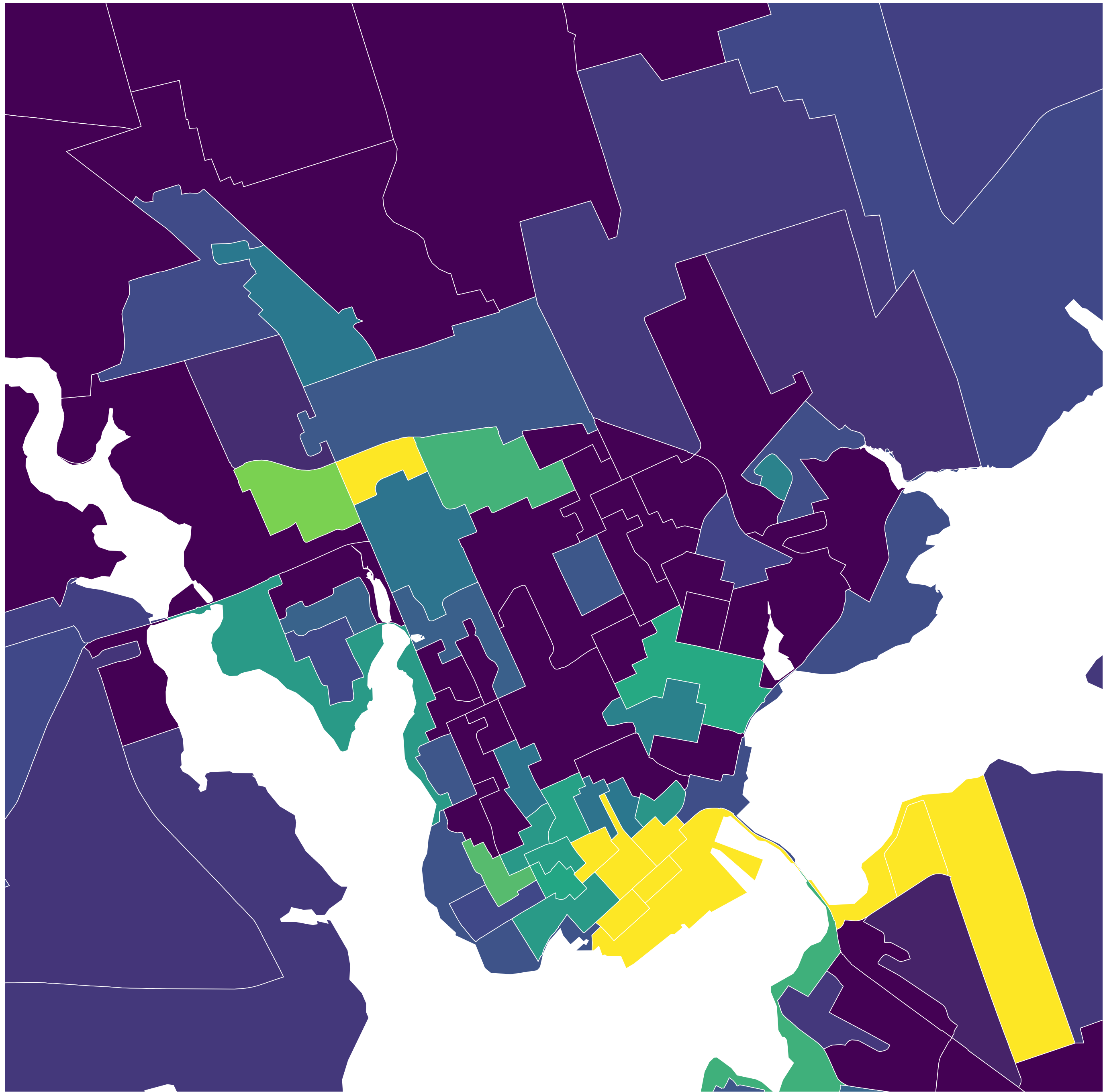
# Housing units operating as full-time STRs



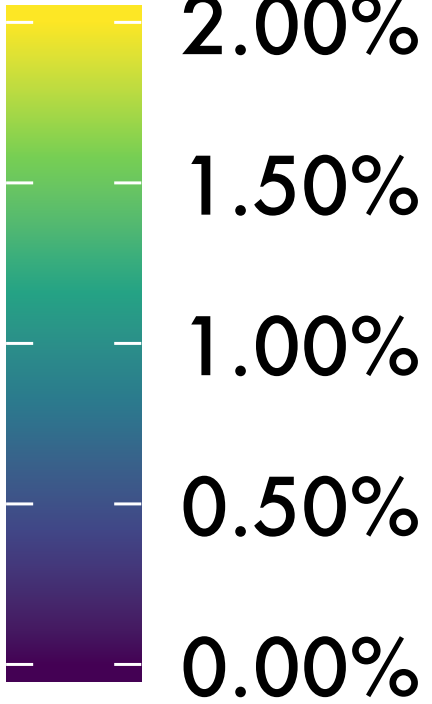
**Full-time STRs per dwelling**





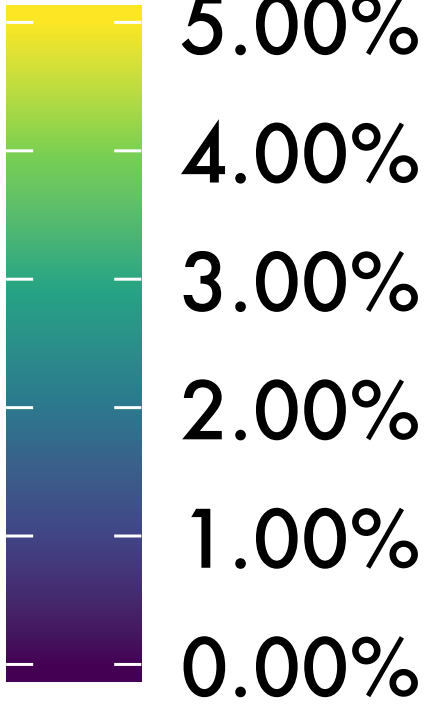


**Full-time STRs per dwelling**





**Full-time STRs per dwelling**



*The bottom line*

**STR housing loss is narrowly concentrated, but the effects ripple out into the housing market.**

# **Social dynamics**

**2**

The good and bad about short-term rentals

**Strangers staying in our homes**

The good and bad about short-term rentals

## **Strangers staying in our homes**

*New social encounters as a tourist* **but** *Transience in neighbourhoods*  
*More convenient for families* **but** *More convenient for parties*  
*Extra money to pay the mortgage/rent* **but** *More money needed for the mortgage/rent*

**What predicts positive or negative  
neighbourhood sentiment toward STRs?**

**What predicts positive or negative  
neighbourhood sentiment toward STRs?**

**Not the number of STRs!**



**What predicts positive or negative  
neighbourhood sentiment toward STRs?**

**HOUSING VULNERABILITY**

## **Neighbourhoods with...**

High numbers of commercial STRs

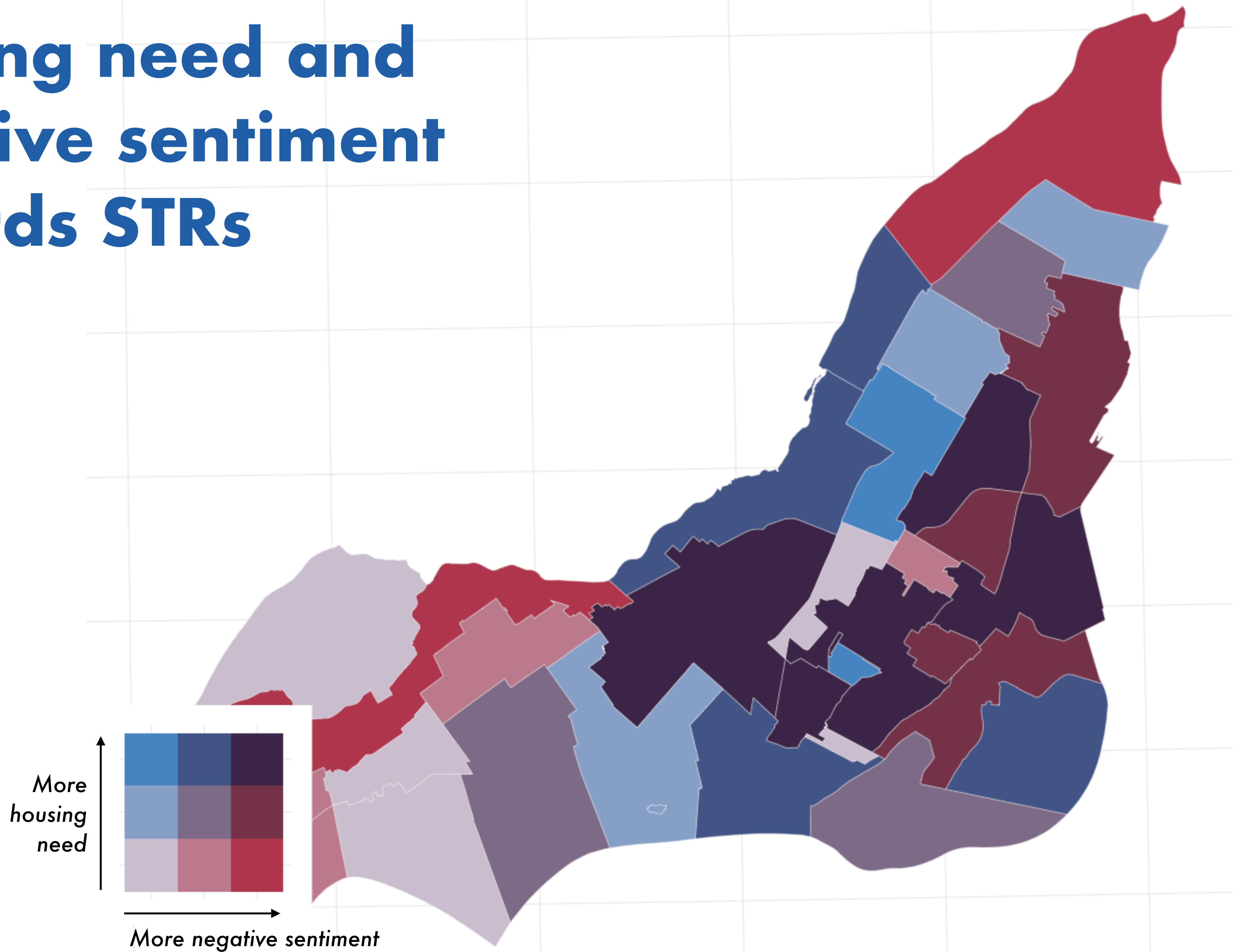
Unaffordable housing

High numbers of renters

High numbers of newcomers

**...tend to be negatively disposed to STRs**

# Housing need and negative sentiment towards STRs



*The bottom line*

**Communities don't object to STRs,  
they object to STRs making their  
housing situation worse.**

# Policy options

3

**Should cities regulate STRs?**

**Can cities regulate STRs?**

**How should cities regulate STRs?**

**Should cities regulate STRs?**

**Can cities regulate STRs?**

**How should cities regulate STRs?**

**DATA??????**



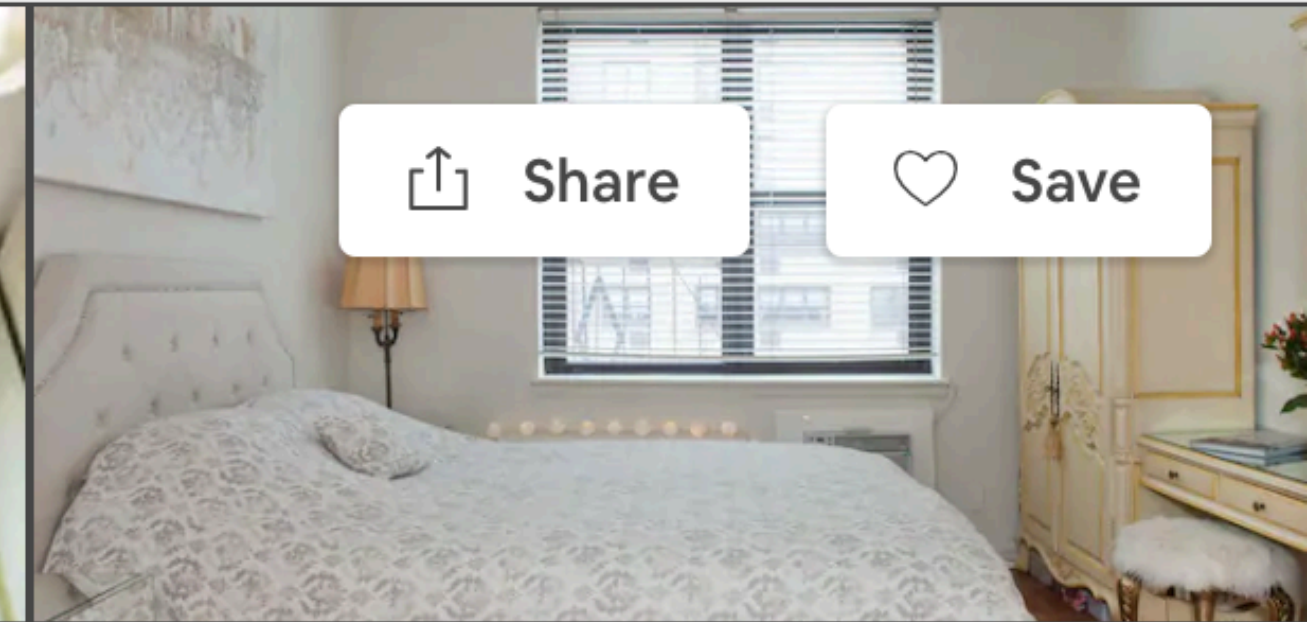
Search

Become a host

Help

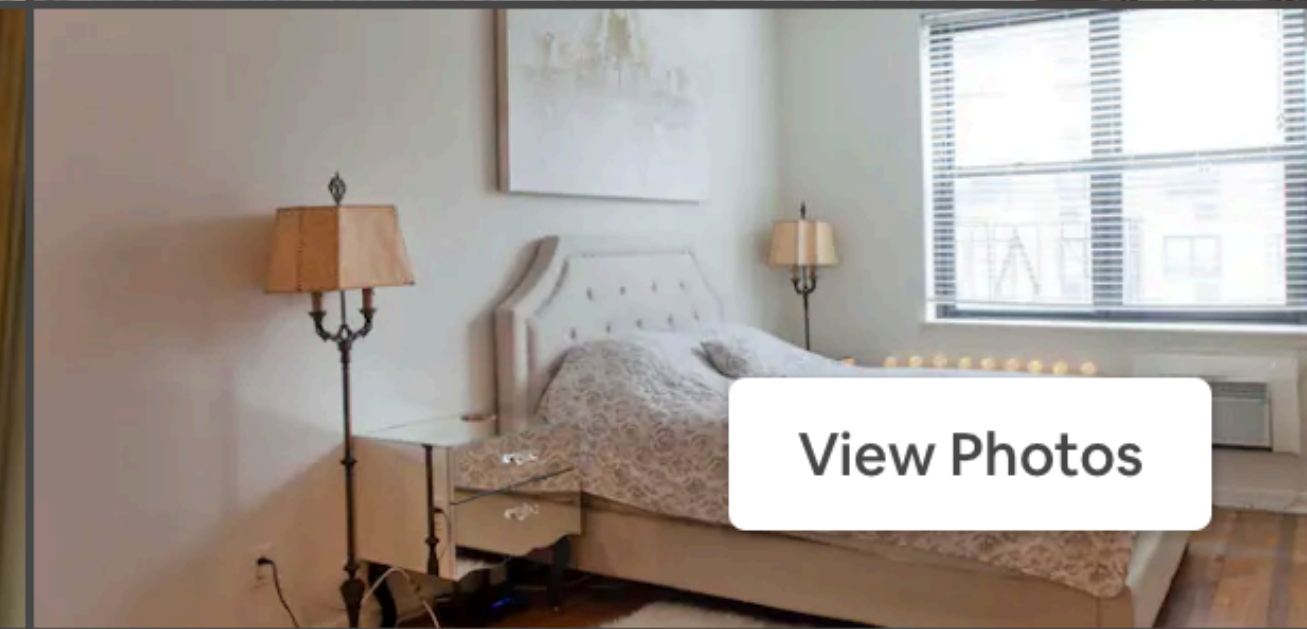
Sign up

Log in



Share

Save



View Photos

ENTIRE FLAT

# Gorgeous Sunny Studio step away from Central Park

New York

2 guests Studio 1 bed 1 bath



LiLy

\$177 per night

★★★★★ 21

Dates

23-11-2018

→ 27-11-2018

Guests

1 guest



HOME HIGHLIGHTS

Great check-in experience - 100% of recent guests gave this home's





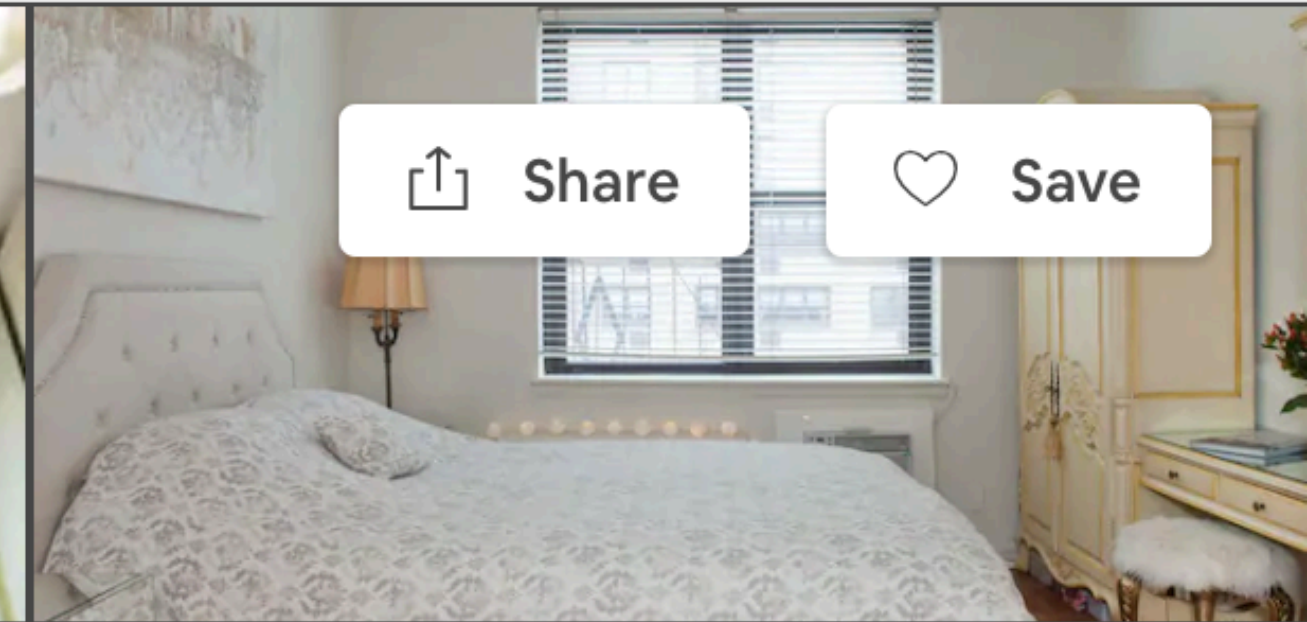
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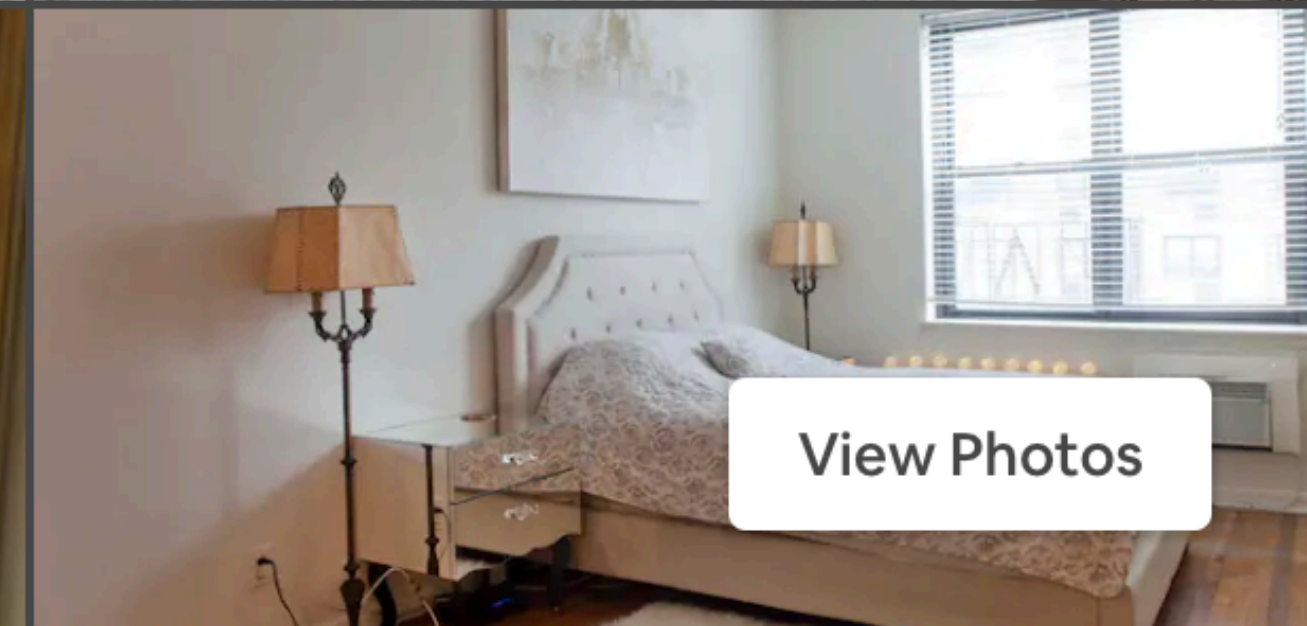
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\$177 per night

★★★★★ 21

Dates

23-11-2018

→ 27-11-2018

Guests

1 guest



HOME HIGHLIGHTS

Great check-in experience - 100% of recent guests gave this home's

2 night minimum stay · Updated 1 day ago

Clear dates



?????

21 Reviews ★★★★★

Search reviews

Accuracy ★★★★★

Location ★★★★★

Communication ★★★★★

Check-in ★★★★★

\$177 per night

★★★★★ 21

Dates

23-11-2018 → 27-11-2018

Guests

1 guest

\$177 x 4 nights

\$709

Cleaning fee

\$30

Service fee

\$114

Total

\$853

Book

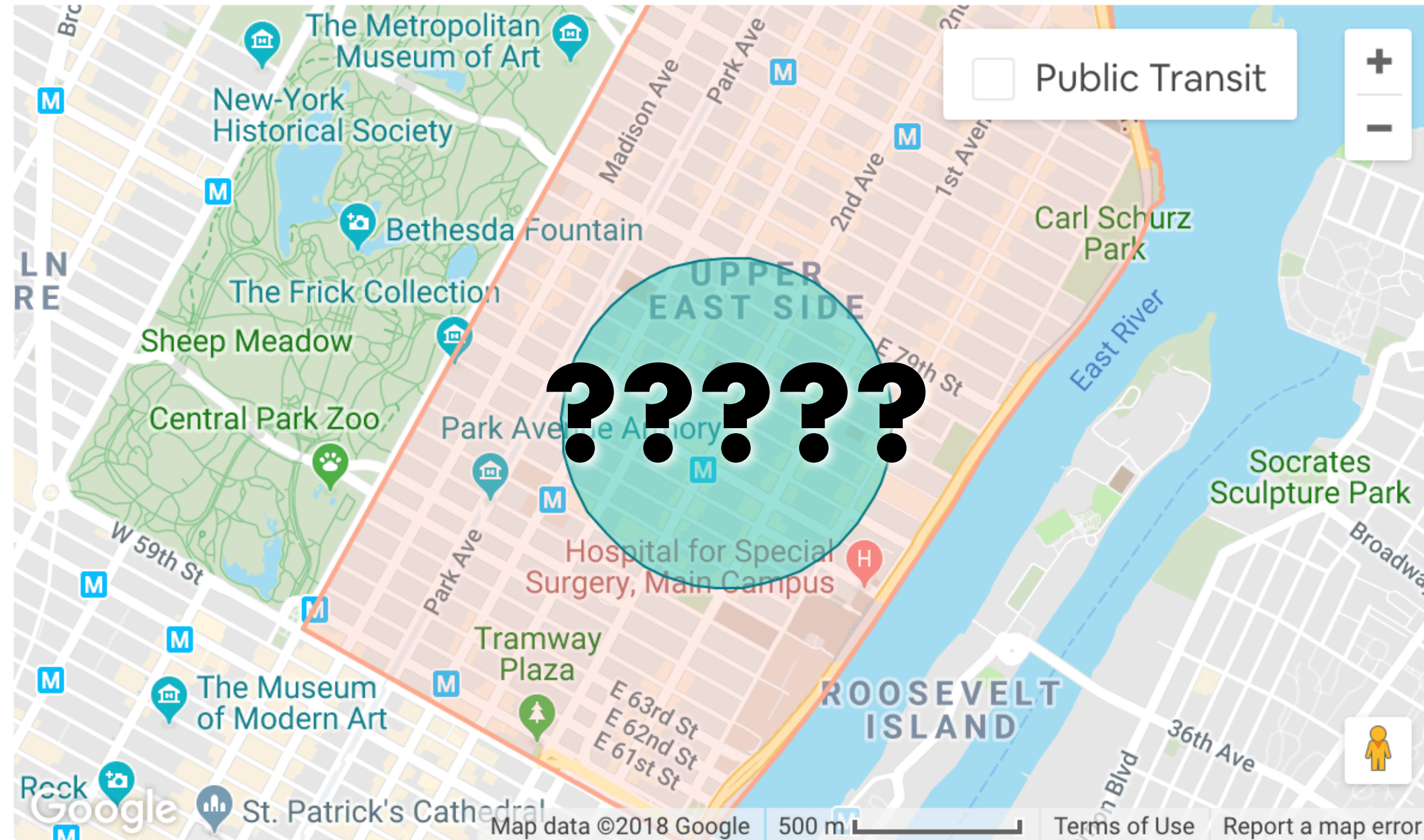
You won't be charged yet

People are eyeing this place.

12 others are looking at it for these dates.



Read more about the neighbourhood



Exact location information is provided after a booking is confirmed.

## Policies

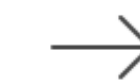
### House Rules

**\$177** per night

★★★★★ 21

Dates

23-11-2018



27-11-2018

Guests

1 guest

\$177 x 4 nights

\$709

Cleaning fee

\$30

Service fee

\$114

**Total**

**\$853**

**Book**

You won't be charged yet

People are eyeing this place.

12 others are looking at it for these dates.



**Hosts are anonymous.**

**Calendars are hidden.**

**Locations are obfuscated.**

“Cities have to let go of the dream that they have control over these platforms, because that’s not the world we live in anymore.”

*Arun Sundararajan, NYU*

“Enforcement is so problematic. Let’s say you said you could rent it out 30 days in a given year; in order to actually determine that someone is not complying, you have to send an inspector on 31 separate days to verify that.... It’s just unenforceable. The ability to profit from it is too great.”

*Manhattan non-profit director*

# **Ban or limit on entire-home rentals**

(Barcelona, Berlin, New York)

# **Annual cap on nights booked**

(Amsterdam, London)

# **STRs restricted to primary residence**

(Toronto, Vancouver)

# **Mandatory host registration**

(Barcelona, San Francisco, Toronto, Vancouver)

# **Data as the key to STR regulation**

**The most important constraint on local regulation of short-term rentals is the lack of data.**

**Two brief examples...**





**Ghost  
hostels**

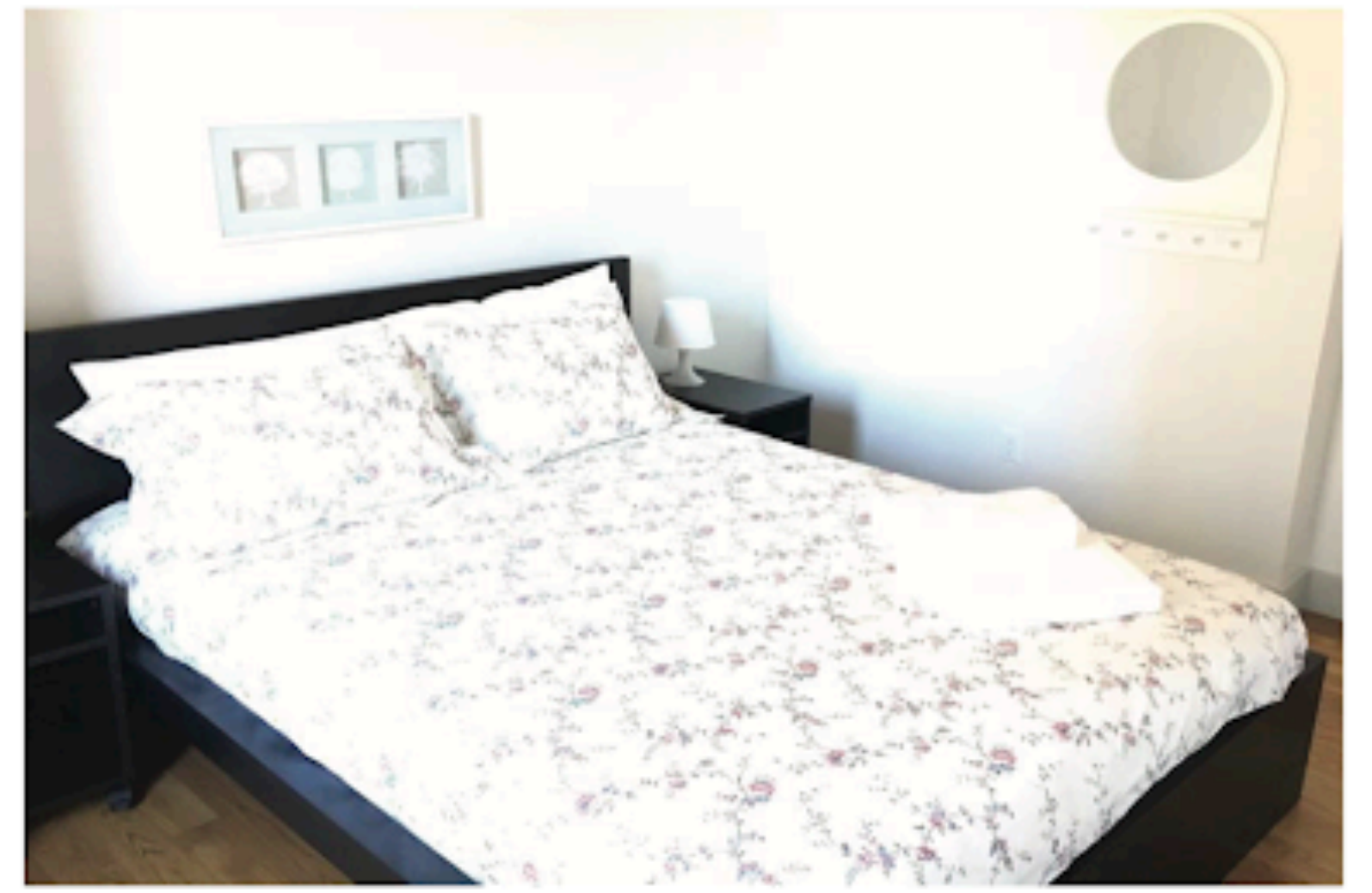
**A key assumption of STR regulation is that entire-home listings are the problem.**



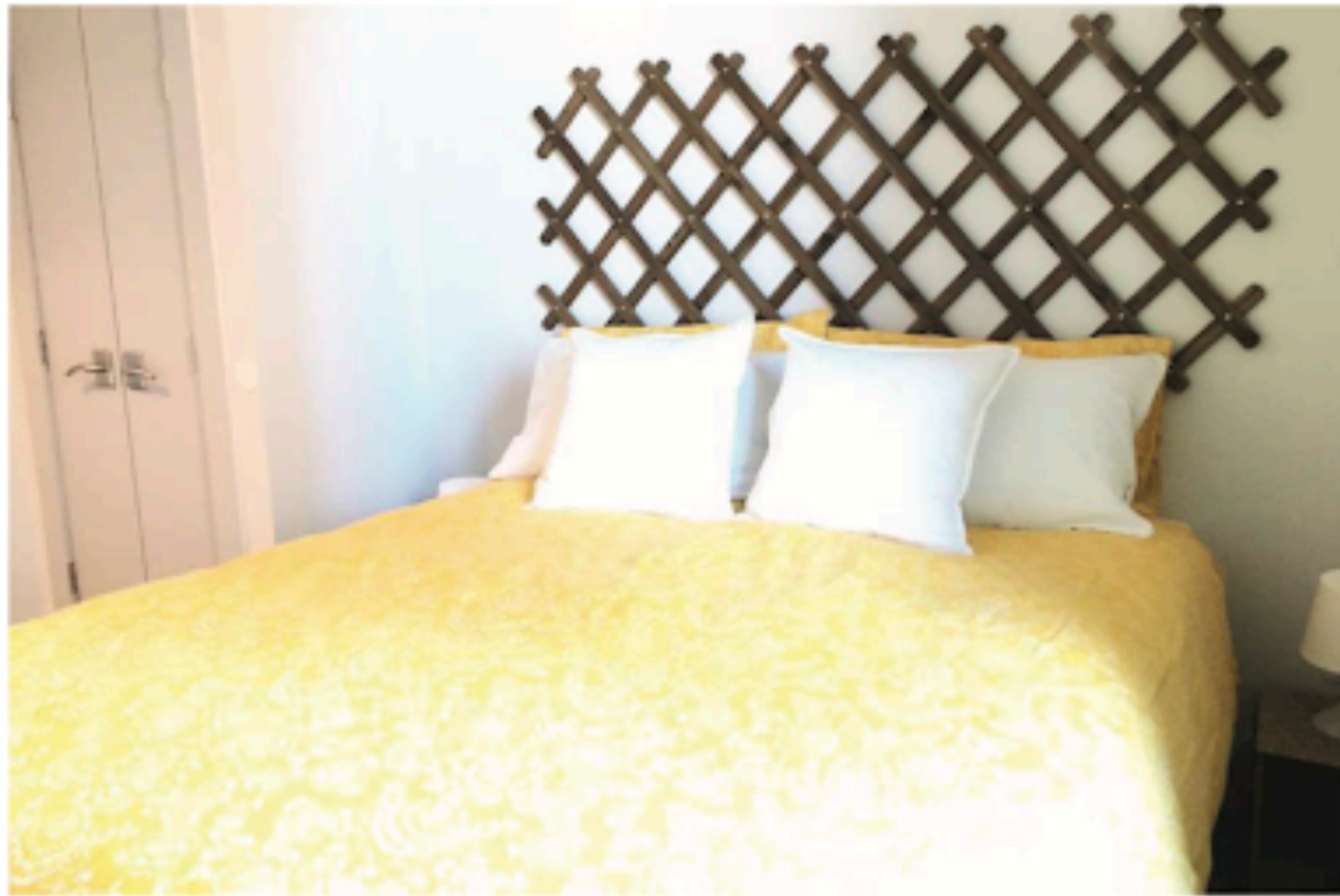
**Private “dreamy” room in  
Williamsburg’s center**



**Stay in the “Golden” room**



**Private executive room - Williamsburg -  
explore NY!**



**Private “country” Room -  
Central Williamsburg**



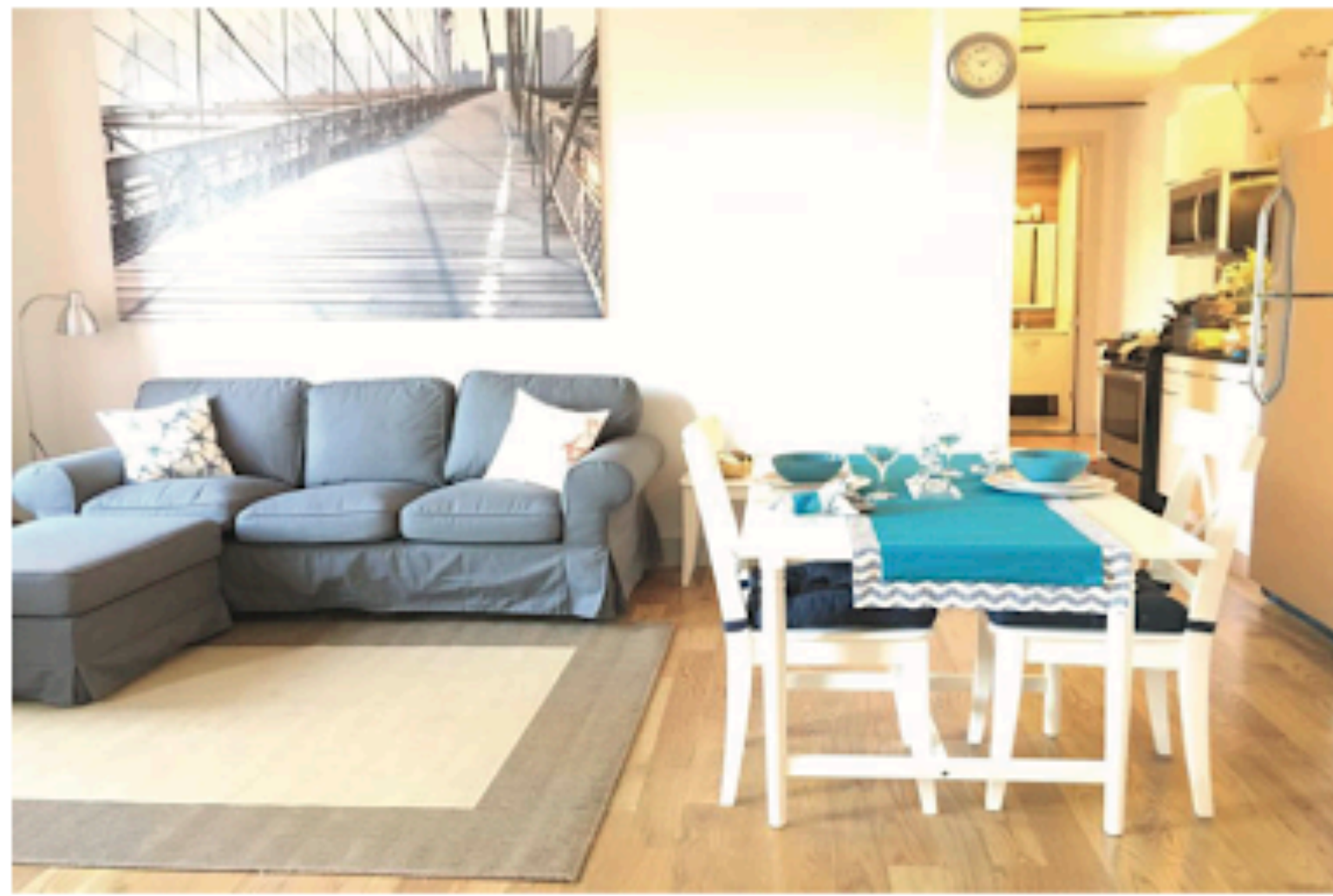
**Peaceful private bedroom in Wburg**



**Great private room in center of W!**



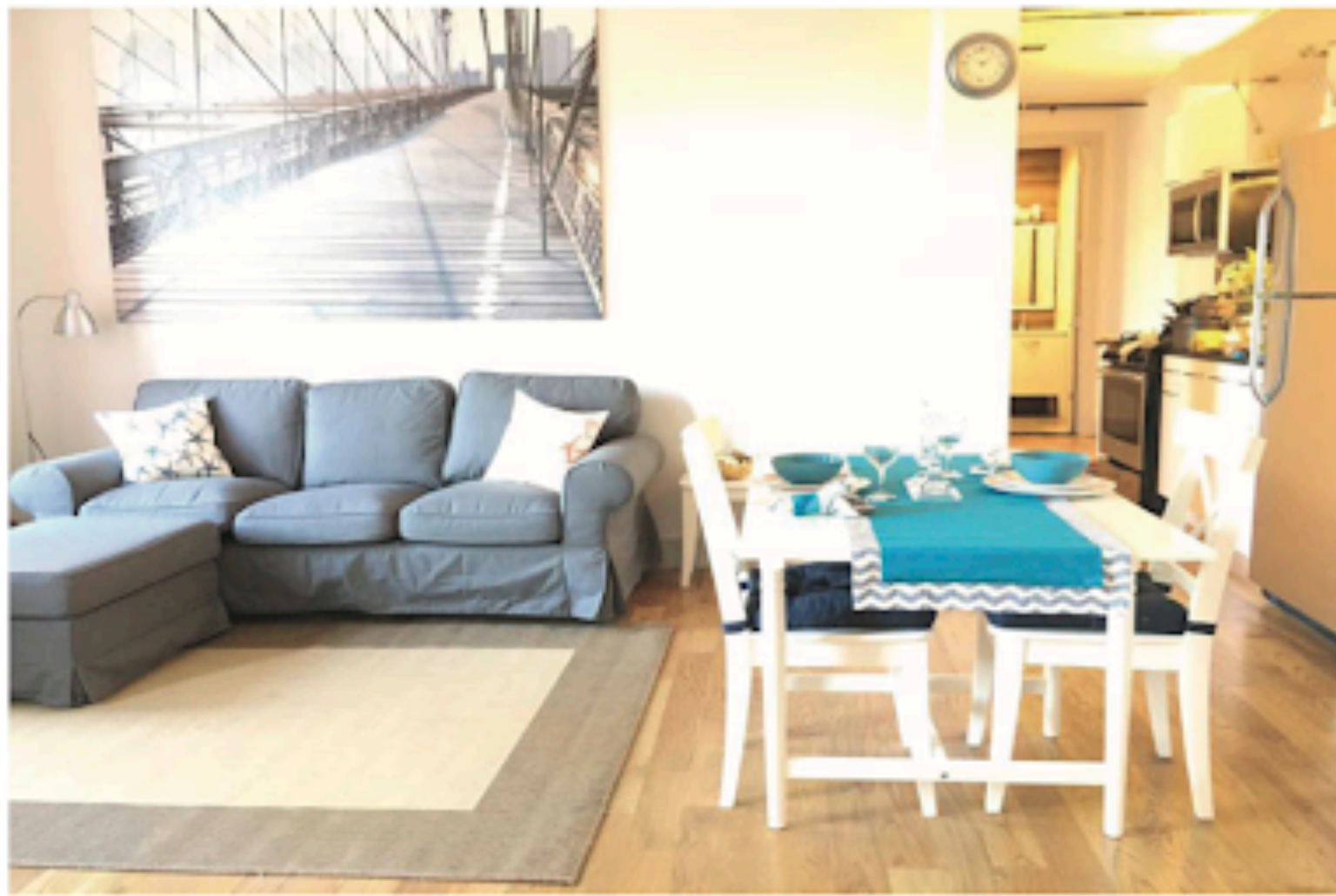
***Private "dreamy" room in Williamsburg's center***



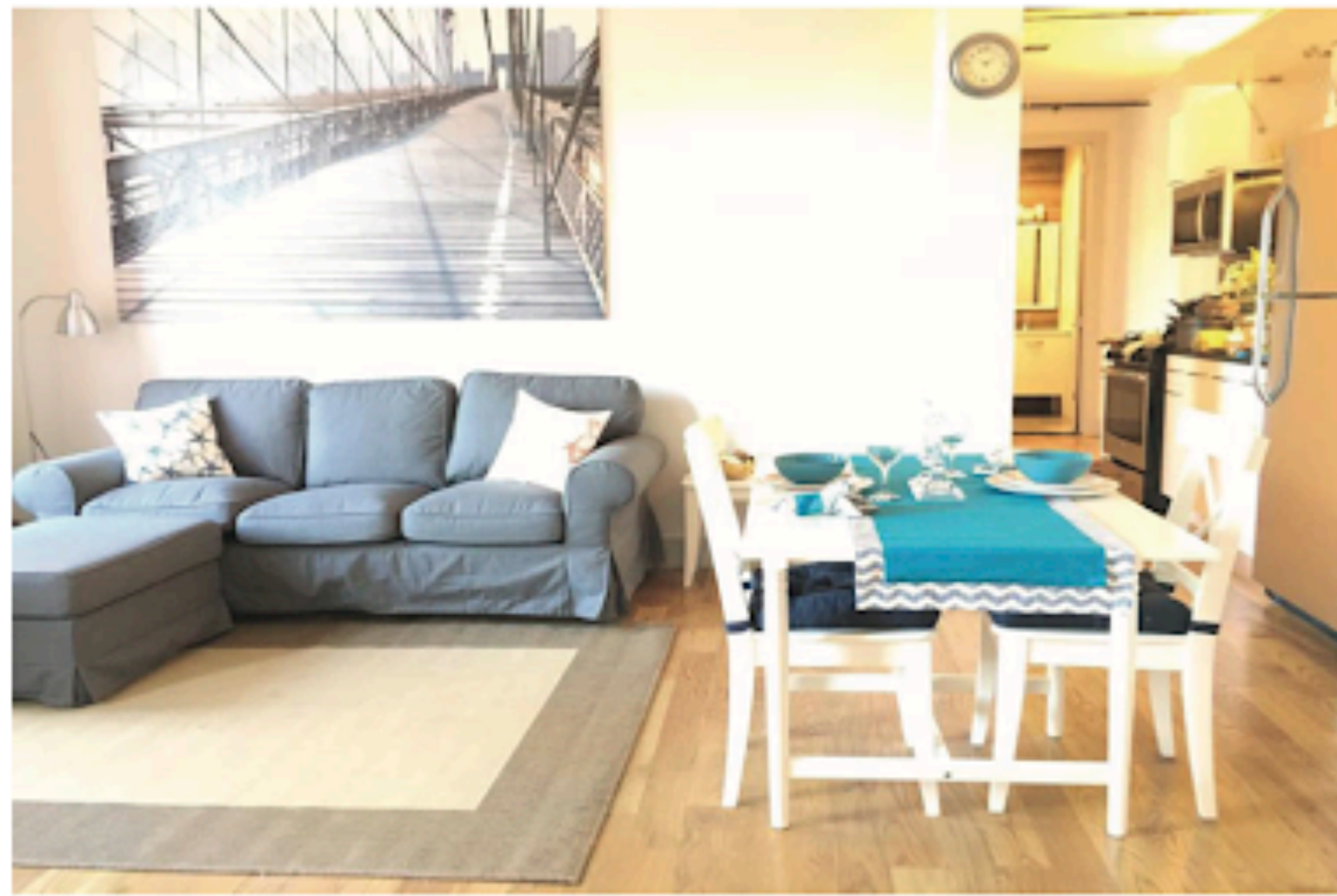
***Stay in the "Golden" room***



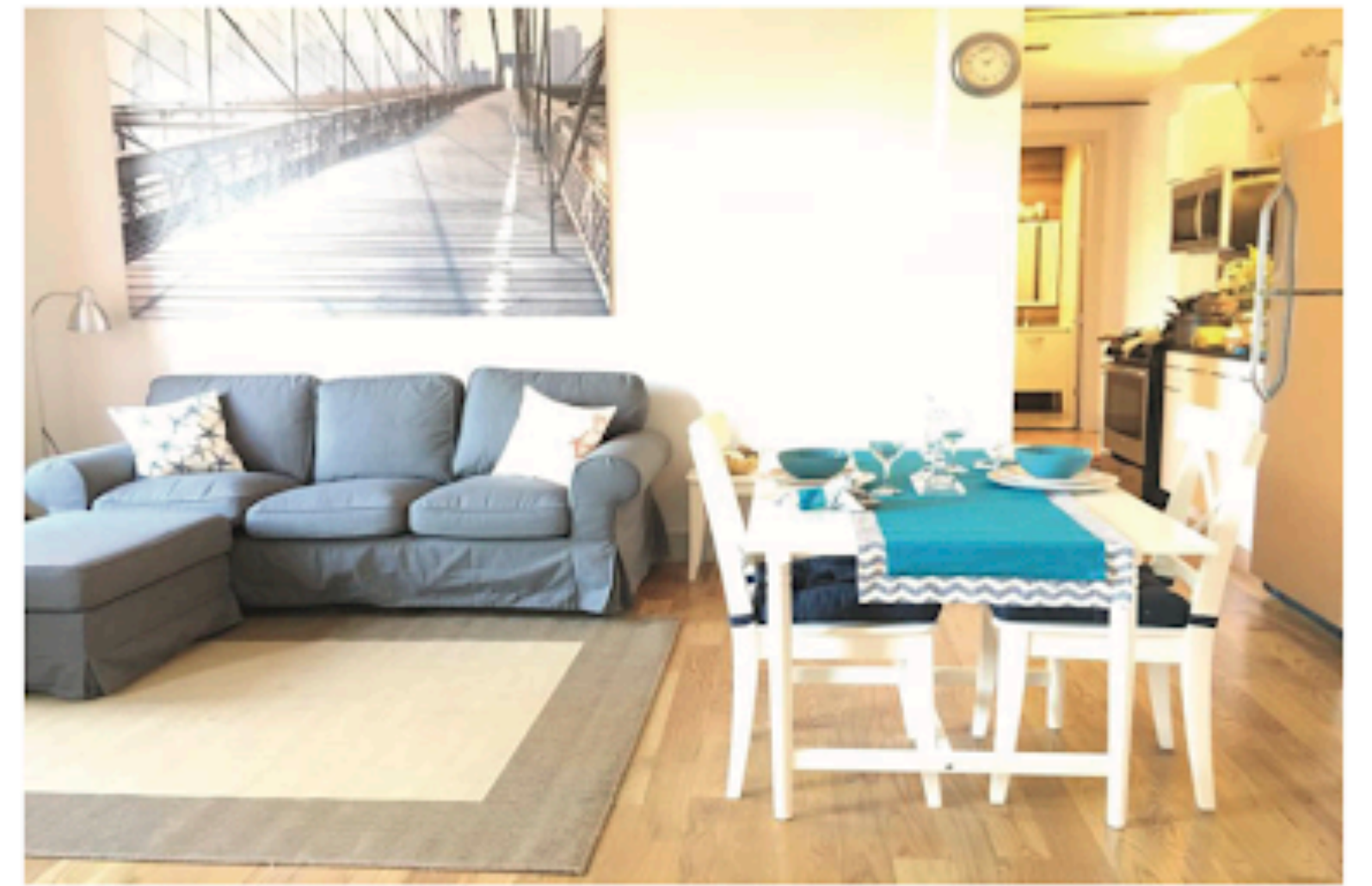
***Private executive room - Williamsburg - explore NY!***



***Private "country" Room - Central Williamsburg***



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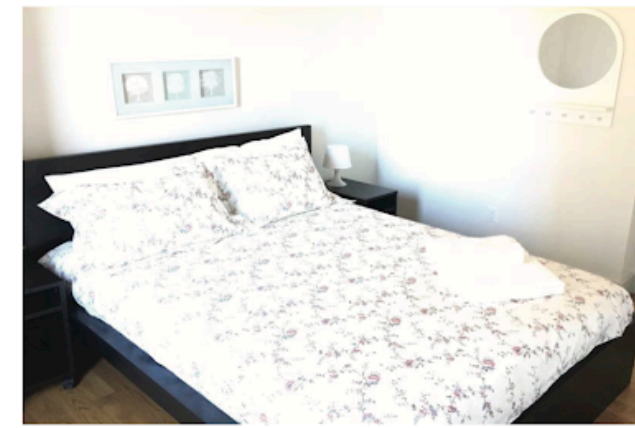
# Ghost hostels



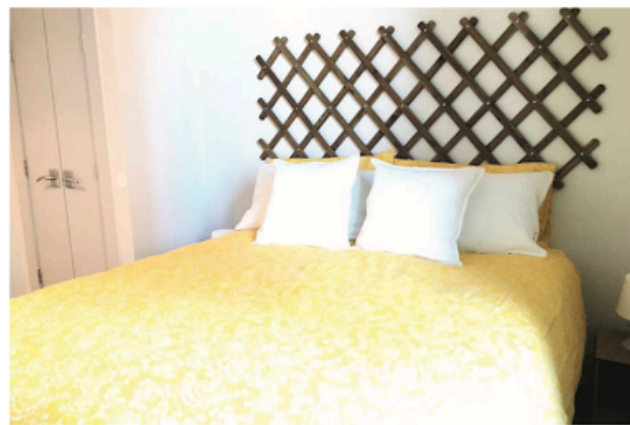
*Private "dreamy" room in Williamsburg's center*



*Stay in the "Golden" room*



*Private executive room - Williamsburg - explore NY!*



*Private "country" Room - Central Williamsburg*



*Peaceful private bedroom in Wburg*



*Great private room in center of W!*



*Private "dreamy" room in Williamsburg's center*



*Stay in the "Golden" room*



*Private executive room - Williamsburg - explore NY!*



*Private "country" Room - Central Williamsburg*



*Peaceful private bedroom in Wburg*



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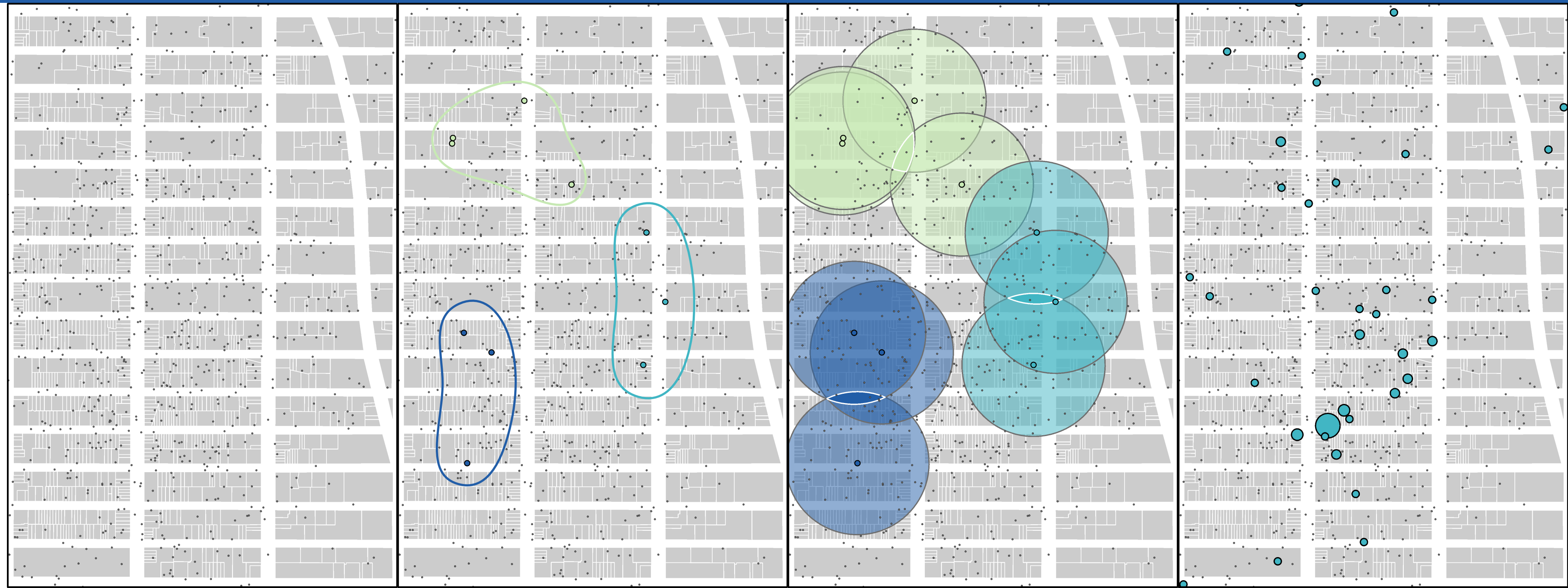
**"This is made to look like a couple sharing their home on Airbnb, but it's actually more like a hostel run by multiple people.** Very misleading listing. There are like 20ish tiny rooms and you can hear people snoring and cleaning and such....

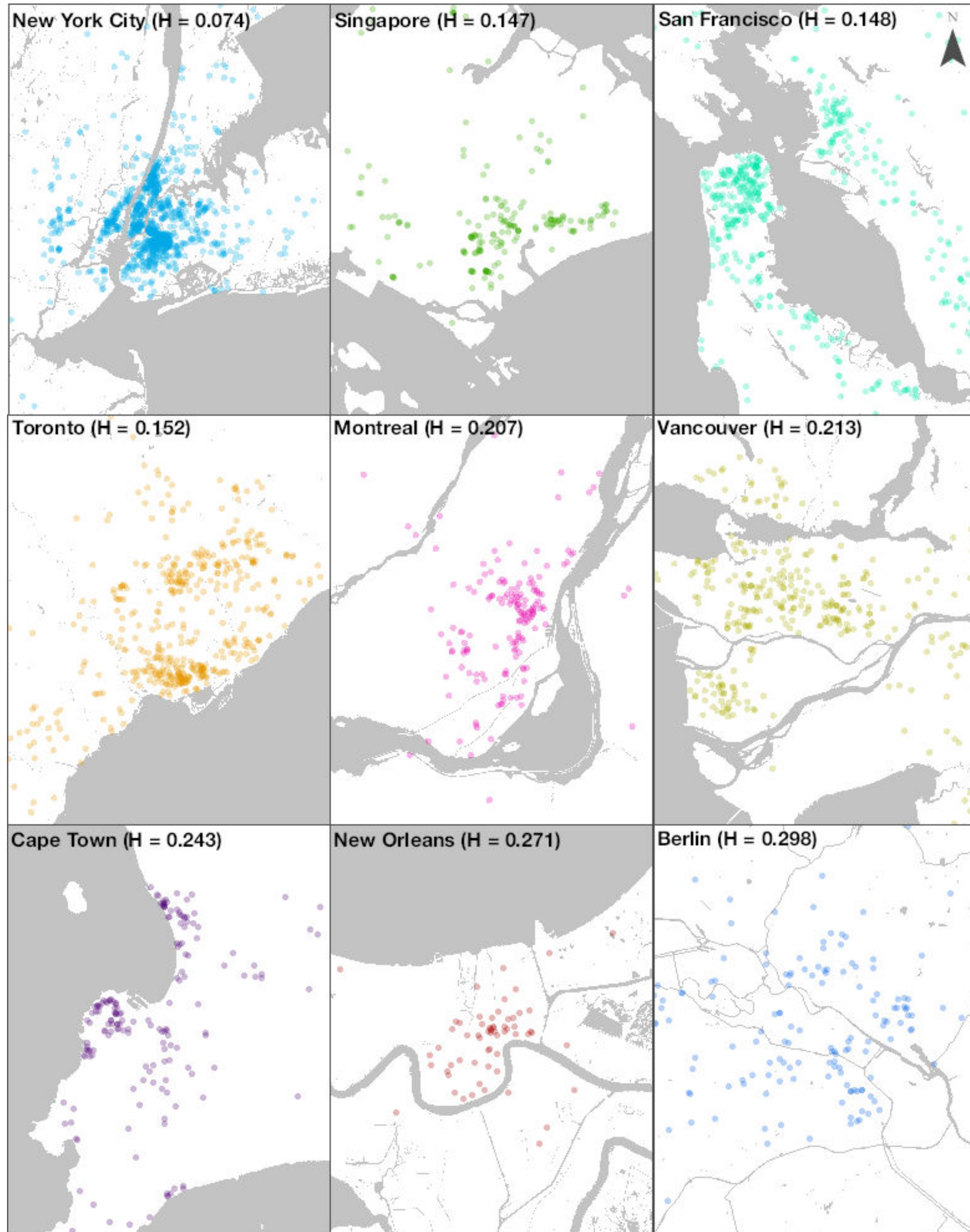
For those who believe every small room is "private", it's actually not. On my check in, I was given room keys for room 116, but my room was 115, but my key still worked for room 115.... The door key to every single "room" is the same."

*Guest review of a ghost hotel*

# Ghost hostels

# Ghost hostels





City or region	Ghost hostels on 30 April 2018	Annual growth rate	Annual growth rate of all PR listings
Berlin	156	8.1%	20.6%
Cape Town	191	62.8%	52.5%
Montreal	178	31.4%	20.9%
New Orleans	68	23.6%	1.4%
New York	1,281	17.9%	12.7%
San Francisco	490	24.0%	7.3%
Singapore	211	20.6%	17.4%
Toronto	515	67.8%	36.2%
Vancouver	356	49.9%	31.0%





City	Avg. ghost-hostel distance to tourism centre	Avg. other private-room distance to tourism centre	Avg. entire-home distance to tourism centre
New York	18.3 km	13.5 km	26.2 km
<i>New York City</i>	8.8 km	7.5 km	5.9 km
Toronto	14.2 km	12.8 km	8.2 km

**Compared to entire homes and other private rooms, ghost hostels...**

**are further from the city centre...**

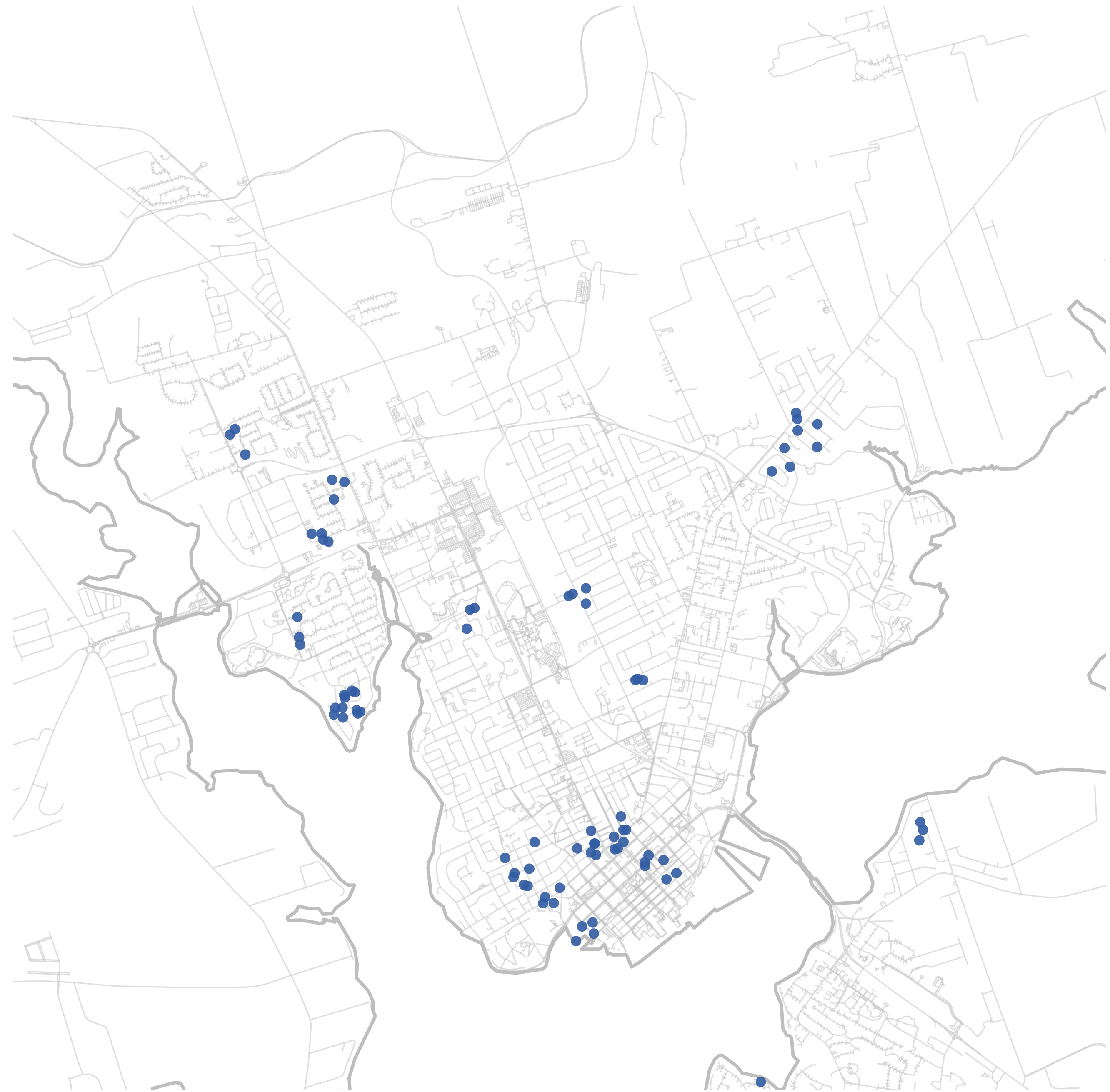
City	Entire homes	Entire ghost hostels	Private rooms	Individual GH rooms
<i>Median price per night</i>				
New York	\$190	\$240	\$70	\$60
<i>New York City</i>	\$170	\$240	\$70	\$70
Toronto	\$120	\$160	\$50	\$40
<i>Median annual revenue</i>				
New York	\$14,000	\$20,400	\$3,700	\$5,900
<i>New York City</i>	\$12,200	\$21,400	\$3,700	\$6,500
Toronto	\$7,600	\$10,500	\$2,300	\$2,900
<i>Median nights booked per year</i>				
New York	76	81	51	90
<i>New York City</i>	70	89	52	98
Toronto	80	67	49	69

**and charge less per night...**

**but earn more money!**

# Ghost hostels

Ghost hostels are a significant but “invisible” segment of the commercial short-term rental market, with their own spatial and performance dynamics.





**Do we actually know what  
we think we know about  
regulation?**

**BIZ & TECH // BUSINESS**

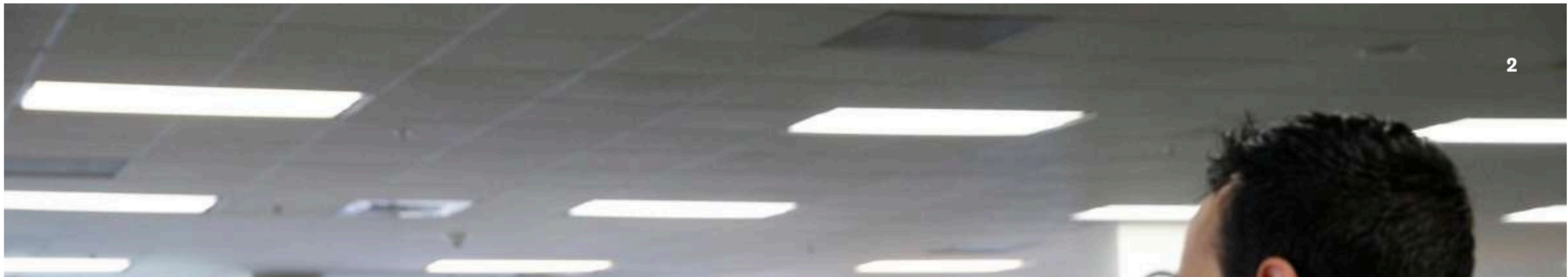
# Airbnb loses thousands of hosts in SF as registration rules kick in

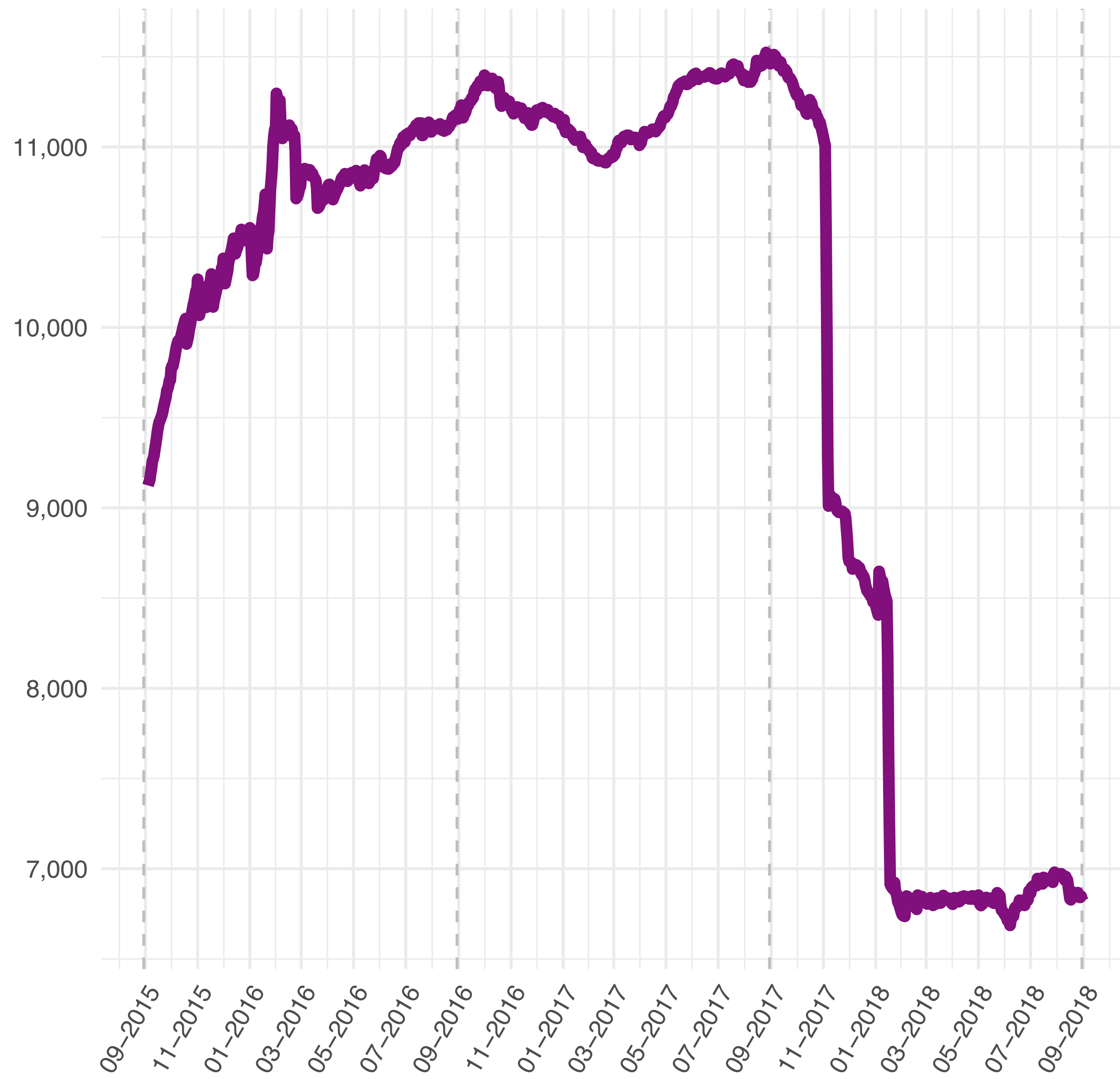


**Carolyn Said**

Jan. 14, 2018

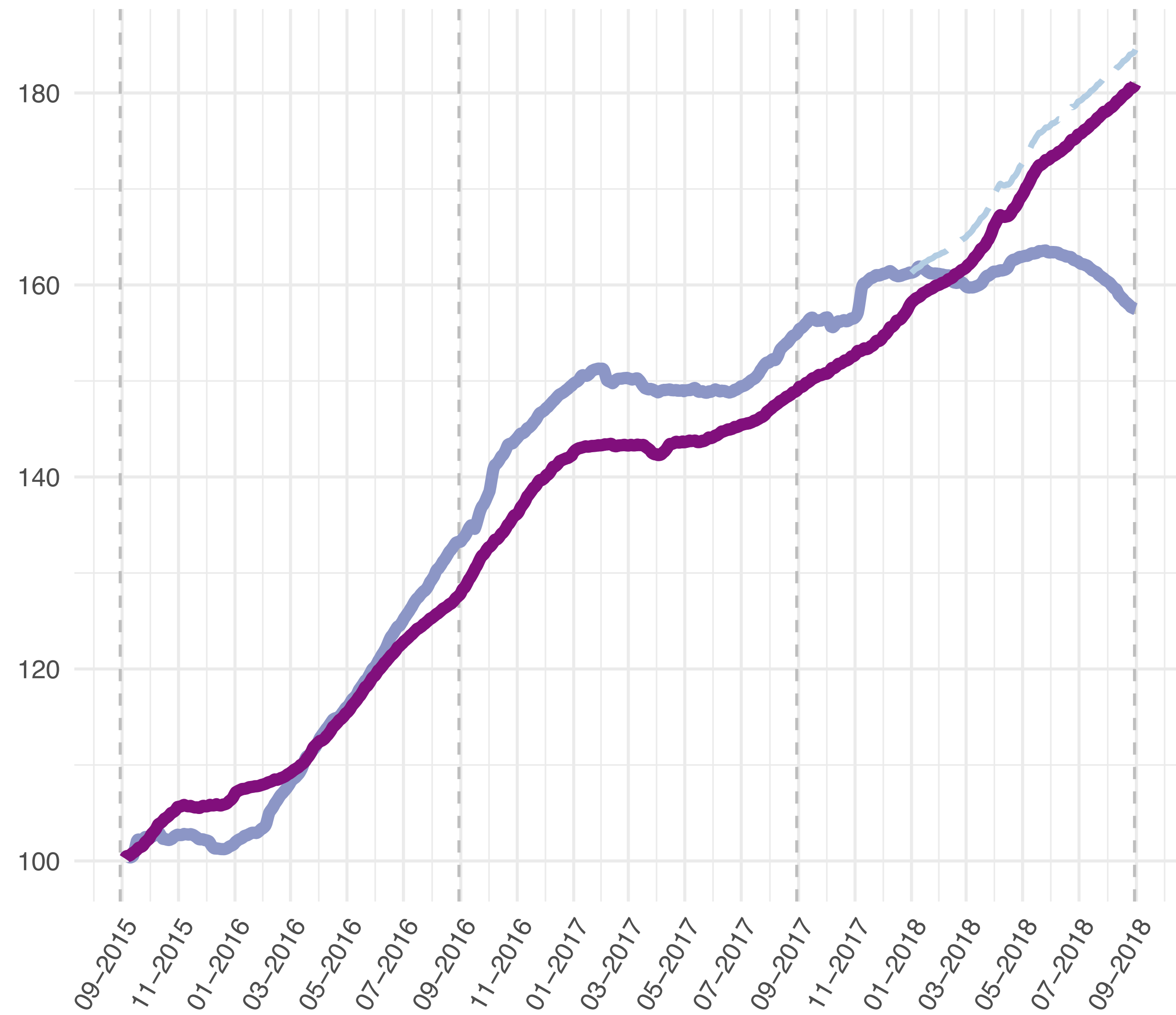
Updated: Jan. 14, 2018 6 a.m.





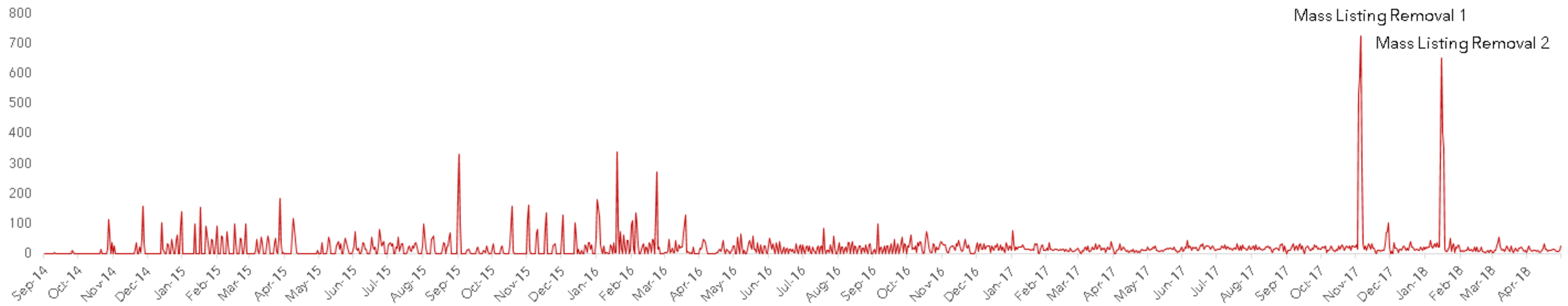
**Active daily listings dropped 42% in San Francisco.**

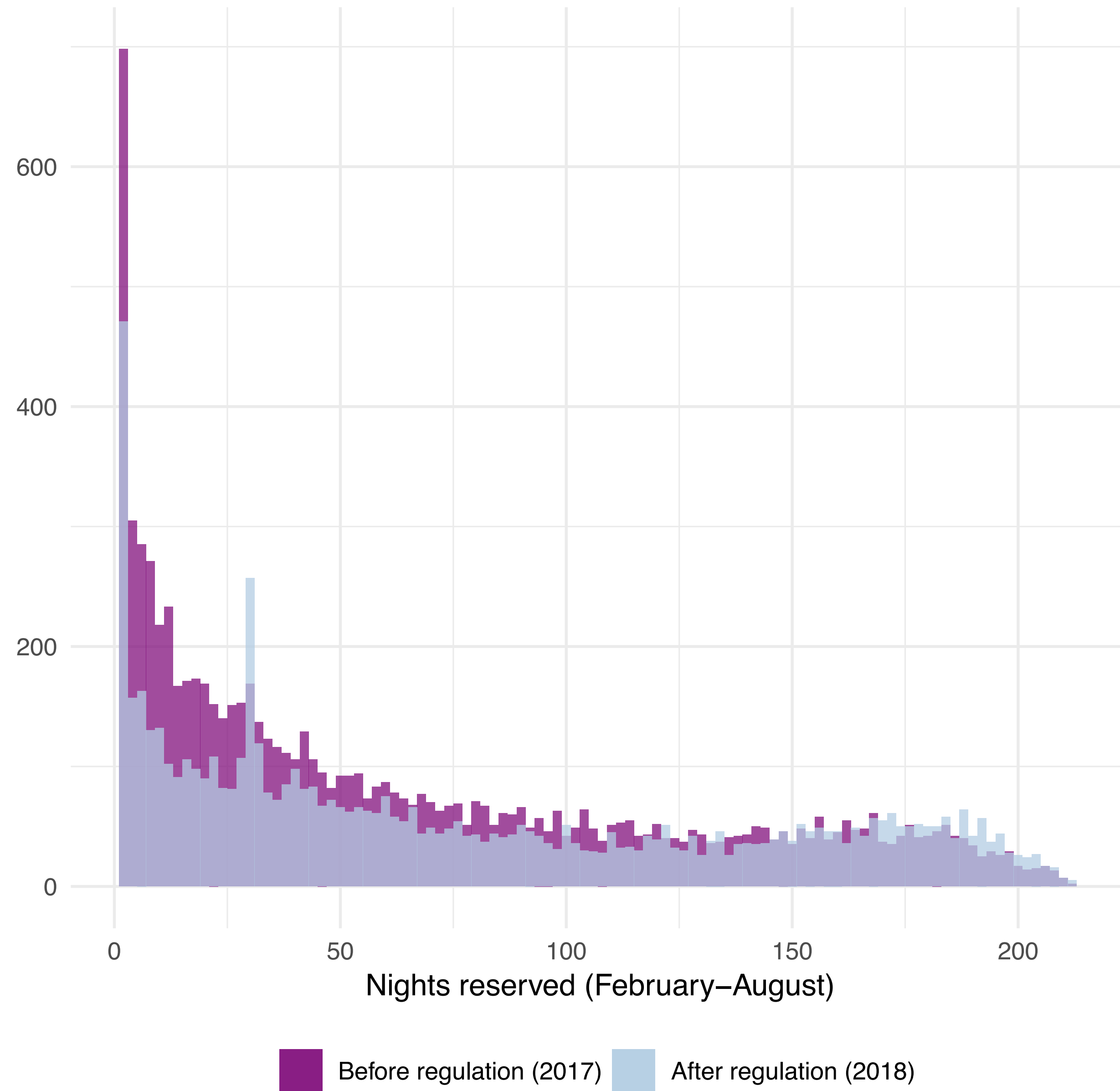




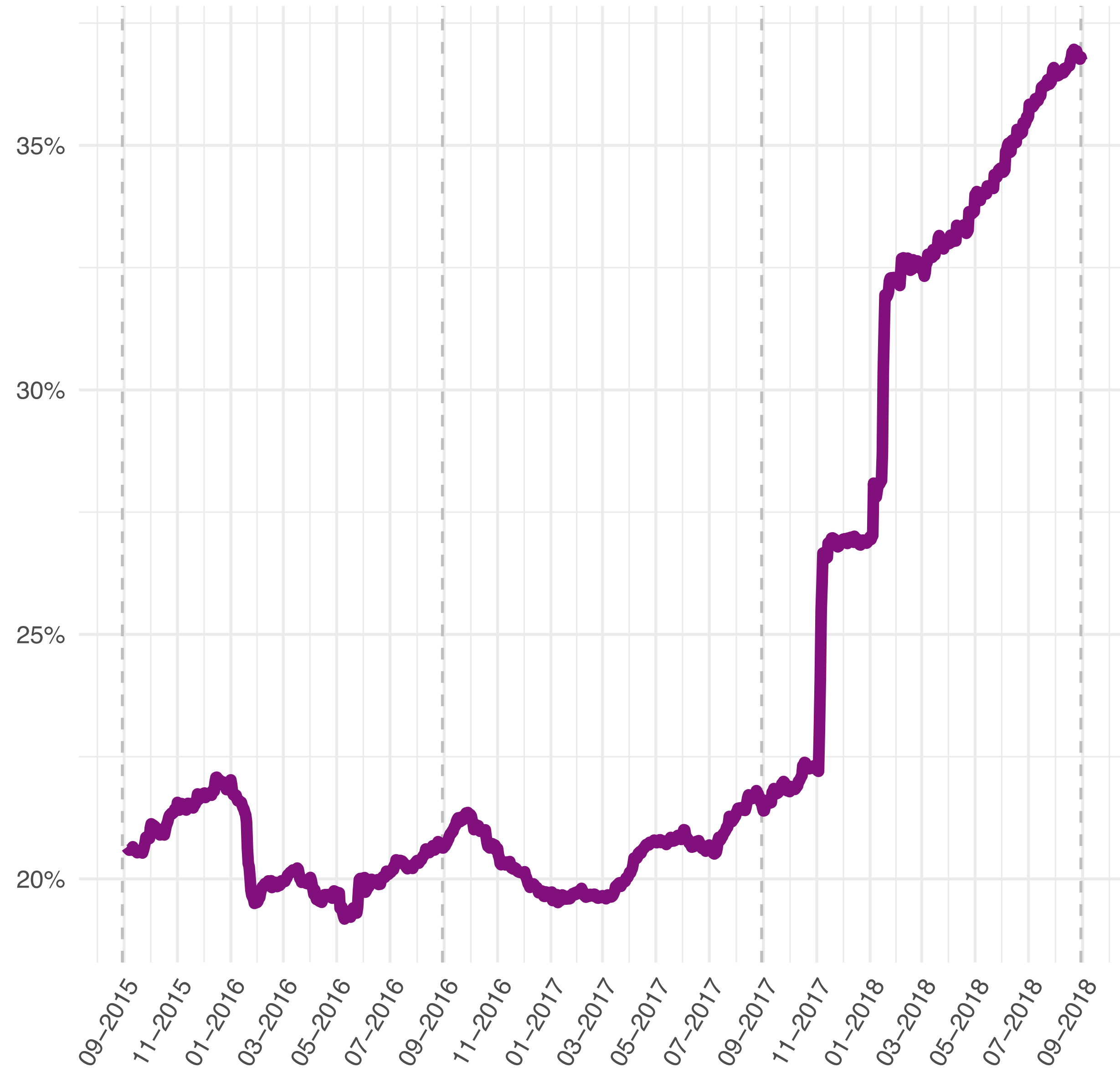
**Host revenue  
dropped  
15%.**

■ New York City ■ San Francisco ■ San Francisco trend (pre-regulation)

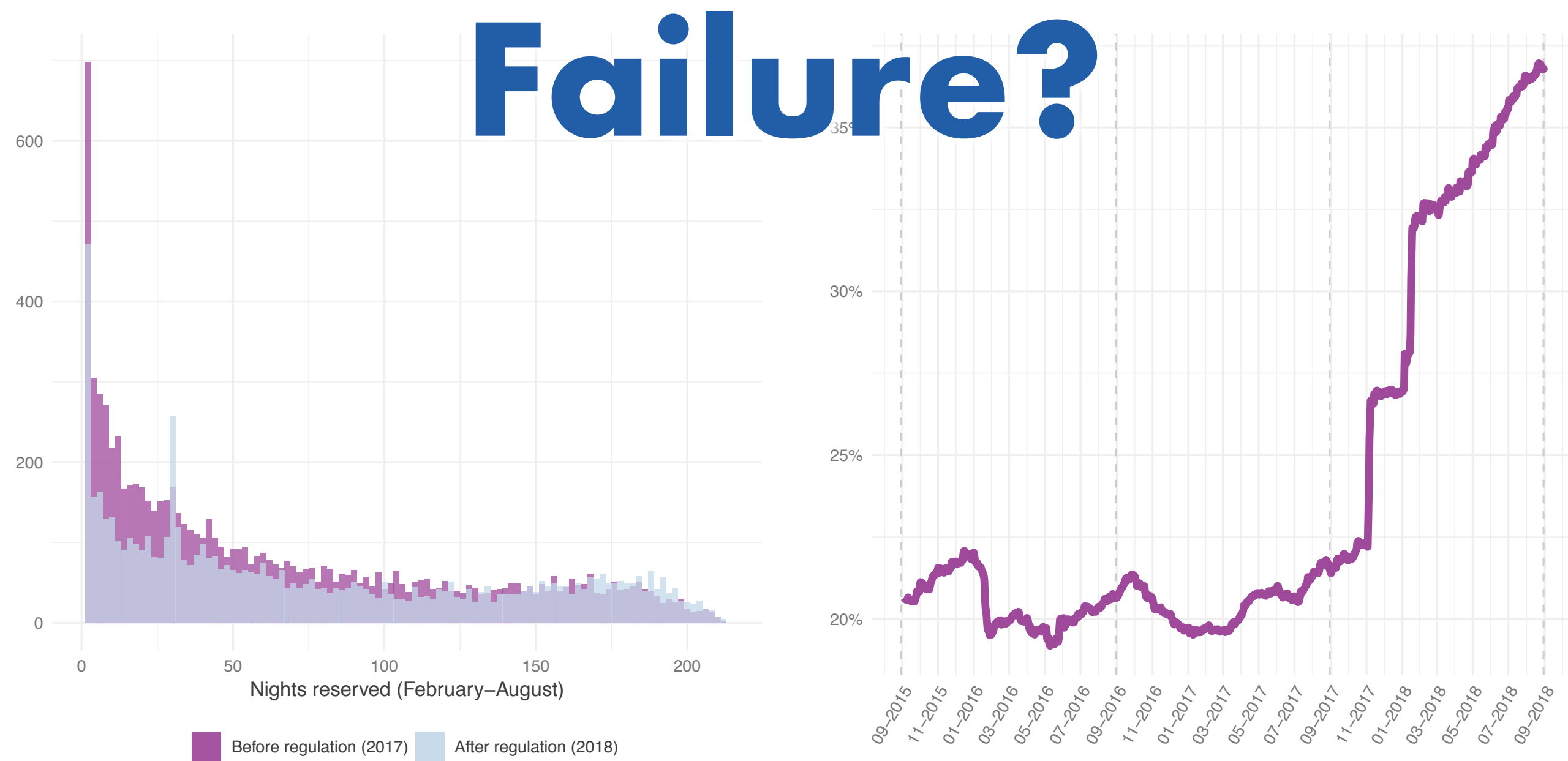




**Removed listings were mostly defunct.**



**Commercial operators are now a bigger slice of the pie.**



# **Do we actually know what we think we know about regulation?**

**STR policy is being set in the absence of actual data, and sometimes on the basis of incorrect understandings of what is happening.**

# Conclusions

- 1. Housing vulnerability drives concern about STRs.**
- 2. Mandatory host registration, with a principal residence distinction, is a promising regulatory path.**
- 3. Restricting commercial operators is low-hanging fruit for addressing housing problems, but should be balanced with other economic concerns.**



**Thank you!**



**@dwachsmuth**

**[upgo.lab.mcgill.ca](http://upgo.lab.mcgill.ca)**