Freeland and Associates, Inc.

2500 Elm Street, Suite 1
Bellingham, Washington
360.650.1408

March 12, 2024

City of Bellingham
Department of Public Works
104 E. Magnolia St, Suite 109
Bellingham, WA 98225

Attention: City Reviewer

Subject: **3108 Birchwood Avenue (TPN 380223 382483)**
Preliminary Stormwater Design

To Whom it May Concern:

A single-family development is proposed at 3108 Birchwood Avenue in Bellingham, Washington (TPN 380223 382483). The site is situated in Area 1 of the Birchwood Neighborhood and designated Residential Single. This letter serves as a preliminary drainage proposal.

The subject property is approximately 0.56 acres in size and forms a rectangular shape. The site is currently vacant except for an existing gravel drive along the west side of the property and a concrete slab in the northeast corner. Remaining areas of the parcel are vegetated with trees, shrubs, and grasses. Topography on the property is sloped down from north to south with approximately 16 feet of elevation change. The property is bordered by residential properties to the north, east, and west. Birchwood Avenue abuts the south side of the parcel. Surrounding land uses include single-family homes.

The project includes construction of one single-family residence, driveway, parking, and associated utilities. Access to the site will be provided from Birchwood Avenue using a new driveway along the east property line. As part of this project the owner is incorporating infrastructure for a future subdivision to create 4 single family lots. Utility stubs serving future lots are proposed as part of this project. The proposed driveway will be a shared drive for 3 lots and the existing gravel driveway will serve the 4th lot.

The proposed development will add more than 5,000 square feet of impervious surface and will be subject to Minimum Requirements #1 though #9 as outlined in the city of Bellingham Municipal Code section 15.42.060. Stormwater detention will not be triggered because the project will not exceed 10,000 sf of new impervious surface area for the full build out of four lots. Stormwater treatment is also not expected to be triggered because there will be less than 5,000 sf of new pollution generating impervious surface area for the full build out of four lots. Stormwater will be collected and discharged directly into the municipal storm system.

Please feel free to contact me if you have any questions about these observations.

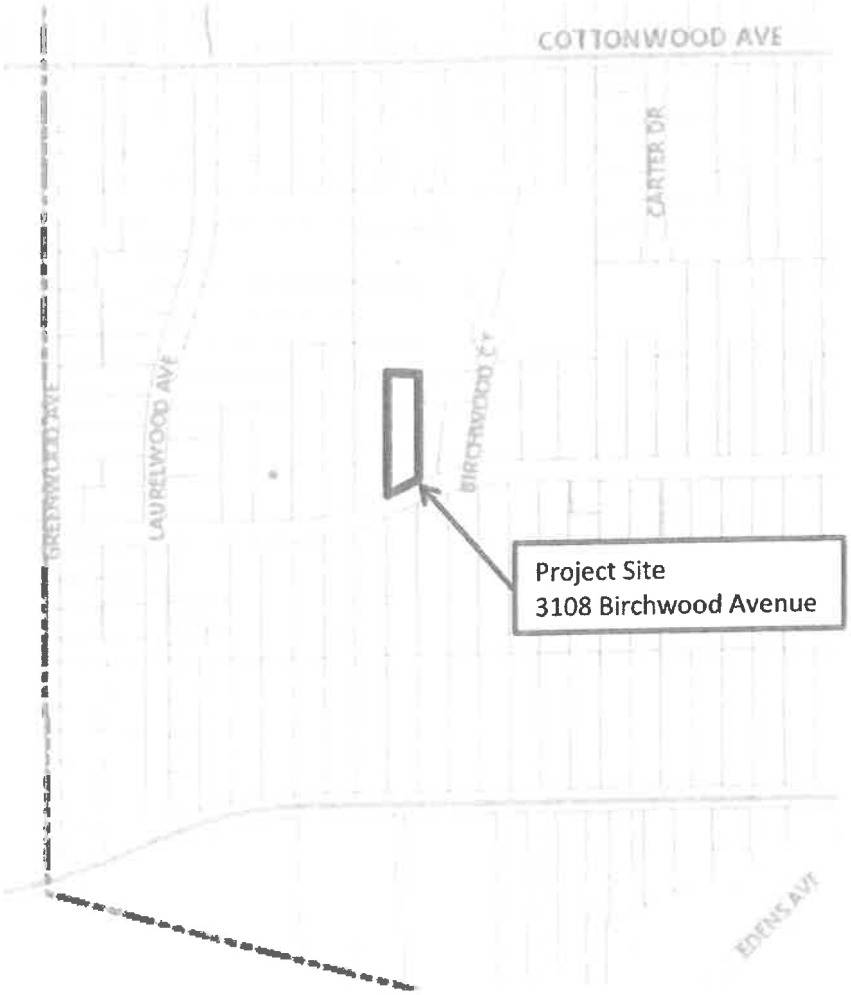
Sincerely,
Freeland and Associates, Inc.

Miles McEathron, P.E.

CC: *Patrick Sutton*

Encl: *Vicinity Map*
Aerial Photograph of Site
Preliminary Site Plan

Vicinity Map

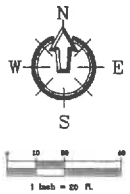


Freeland and Associates, Inc.

Aerial Photograph of Site

Preliminary Site Plan

VICINITY MAP



SURVEYOR'S NOTES

1) BASIS OF BEARINGS HELD S75°04'30"W 203.22' (MEAS. 203.41') BETWEEN 2" BRASS DISK SURFACE MONUMENTS FOUND, AS SHOWN HEREON AND ACCORDING TO THE PLAT OF BENNETT HILL AS RECORDED IN VOLUME 7 OF PLATS, PAGES 38 & 39, RECORDS OF WHATCOM COUNTY, WASHINGTON

2) THIS SURVEY WAS PERFORMED ON FEBRUARY 20 (BNDY.) AND ON SEPTEMBER 15 (TOPO.), 2023. ALL MONUMENTS SHOWN HEREON WERE VISITED DURING THE COURSE OF THIS SURVEY, UNLESS OTHERWISE NOTED.

3) ANGULAR AND LINEAR MEASUREMENTS WERE PERFORMED USING A 2-SECOND GEOMAX10 TOTAL STATION WITH RTK DATA COLLECTOR

4) PROCEDURES USED IN THIS SURVEY MEET OR EXCEED STANDARDS SET FORTH BY W.A.C. 332-130-090

5) THIS SURVEY WAS COMPLETED WITHOUT THE BENEFIT OF A CURRENT TITLE REPORT AND DOES NOT PURPORT TO SHOW ANY OR ALL EASEMENTS, COVENANTS, RESTRICTIONS AND/OR AGREEMENTS THAT A CURRENT TITLE REPORT MIGHT REVEAL.

6) IN ACCORDANCE WITH THE REVISED CODE OF WASHINGTON, 58.09 AND WASHINGTON ADMINISTRATIVE CODE 332-130, THIS RECORD OF SURVEY MAY DEFECT OCCUPATIONAL INDICATORS. THESE INDICATORS MAY REPRESENT A POTENTIAL FOR CLAIMS OF UNWRITTEN TITLE. THIS SURVEY DOES NOT RESOLVE ANY OF THE LEGAL OWNERSHIP ISSUES THAT MAY ARISE FROM UNWRITTEN TITLE CLAIMS.

LEGAL DESCRIPTION

(PER O.C.D. APN 2023-0301731)
LOT 37, BLOCK 1, PLAT OF BENNETT HILL, ACCORDING TO THE PLAT THEREOF, RECORDED IN VOLUME 7 OF PLATS PAGES 38 AND 39, RECORDS OF WHATCOM COUNTY, WASHINGTON

ELEVATION DATUM

ASSUMED ELEVATION 100.00 ON TOP OF MAG NAIL/FLASHER NEAR SOUTH EDGE OF PAVEMENT OPPOSITE #3117 BIRCHWOOD AVE

SURVEY STATEMENTS

1. PURPOSE: DESIGN
2. CONTOURS WERE DERIVED FROM DIRECT FIELD OBSERVATIONS.
3. THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS.
4. THIS MAP DOES NOT PURPORT TO SHOW UNDERGROUND UTILITIES

PROJECT NOTES

CUP (FAT PROPOSAL)
USE: SINGLE FAMILY RESIDENTIAL
LOTS: 1
PROPOSED ROOF AREA: 1,200 SF (1 RESIDENCE)
PROPOSED DRIVEWAY AREA: 3,780 SF
EXISTING GRAVEL DRIVE TO REMAIN: 1,024 SF
PROPOSED PARKING: 2 STALLS

FULL BUILD OUT (FUTURE CONDITION)
USE: SINGLE FAMILY RESIDENTIAL
LOTS: 4
PROPOSED ROOF AREA: 8,040 SF (4 RESIDENCES)
PROPOSED DRIVEWAY AREA: 4,313 SF
EXISTING GRAVEL DRIVE TO REMAIN: 868 SF
PROPOSED PARKING: 8 STALLS (2 STALLS PER LOT)

LEGEND

- ⊕ = FOUND 2" BRASS DISK SURFACE MONUMENT
- ▲ = SET MAG. NAIL/FLASHER
- = EXISTING STORM DRAIN CATCH BASIN (TYPE I)
- ● = PROPOSED STORM DRAIN SERVICE STUB
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- = EXISTING SANITARY SEWER MANHOLE
- ◀ = PROPOSED SANITARY SEWER SERVICE STUB
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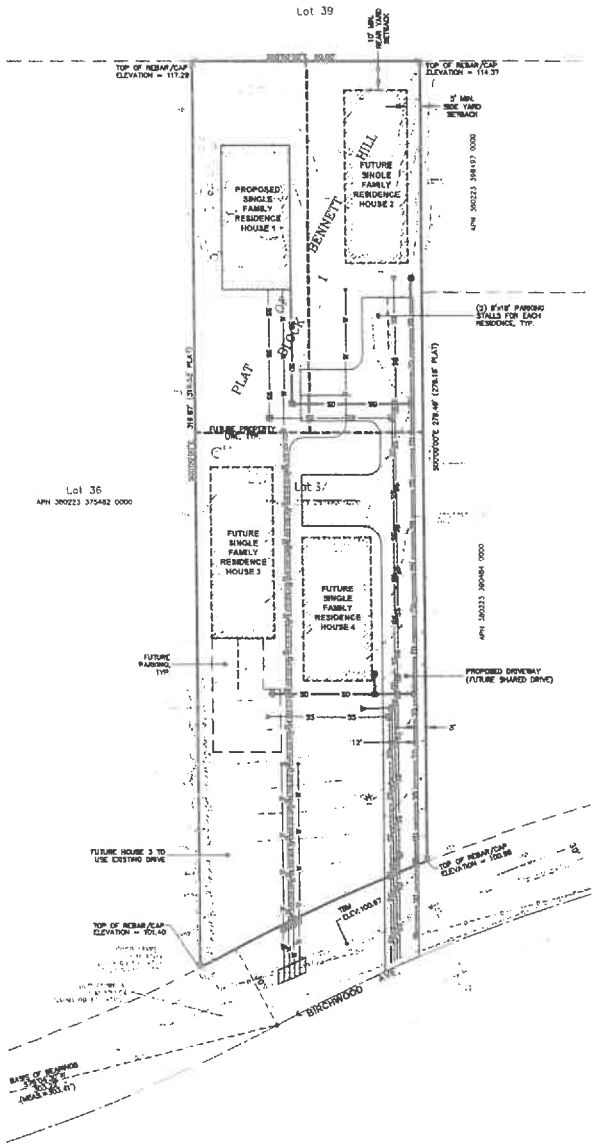

FREELAND & ASSOCIATES

REV	DATE	DESCRIPTION	BY

CLIENT: PATRICK SUTTON
1017 LIBERTY STREET
BELLINGHAM, WA 98225

CALL BEFORE YOU DIG
FOR BURIED UTILITY LOCATIONS
1-800-424-5555

PROJECT LOCATION: 3108 BIRCHWOOD AVENUE
3108 BIRCHWOOD AVENUE
BELLINGHAM, WA 98225

DRAWING #: 24050PSP.DWG
DESIGNED BY: MPM
DRAWN BY: MPM
CHECKED BY: MAF

SHEET CONTENTS: PRELIMINARY SITE PLAN

JOB # 24050
DATE 03-12-2024
SHEET PS1

Freeland and Associates, Inc.

2500 Elm Street, Suite 1
Bellingham, Washington
360.650.1408

March 12, 2024

City of Bellingham
Permit Center
104 E. Magnolia St, Suite 109
Bellingham, WA 98225

Attention: City Reviewers

Subject: **3108 Birchwood Avenue (TPN 380223 382483)**
Pre-Application Conference Request

To Whom it May Concern:

A single-family development is proposed at 3108 Birchwood Avenue in Bellingham, Washington (TPN 380223 382483). The site is situated in Area 1 of the Birchwood Neighborhood and designated Residential Single.

The project includes construction of one single-family residence, driveway, parking, and associated utilities. Access to the site will be provided from Birchwood Avenue using a new driveway along the east property line. As part of this project the owner is incorporating infrastructure for a future subdivision to create 4 single family lots. Utility stubs serving future lots are proposed as part of this project. The proposed driveway will be a shared drive for 3 lots and the existing gravel driveway will serve the 4th lot.

The following questions are included:

- Please confirm there are no frontage improvements
- Please confirm whether any of the residences will need to be sprinkled
- The proposed driveway is 12 feet wide, less than 300 feet long with no fire turnaround. We are assuming this is acceptable as fire access as it will serve two residences (one proposed and one future residence). Another future residence will utilize this same shared driveway but will be within 150' of Birchwood Avenue. A fourth residence will have its own driveway.
- Please confirm two driveways in the future condition will be acceptable

- Please confirm the water, sewer, and drainage stubs for future lots are acceptable to be installed with the current proposed project for a single-family residence on one lot.

Please feel free to contact us if you have any questions.

Sincerely,
Freeland and Associates, Inc.

Miles McEathron, P.E.

CC: Patrick Sutton

Freeland and Associates, Inc.

2500 Elm Street, Suite 1
Bellingham, Washington
360.650.1408

March 12, 2024

City of Bellingham
Department of Public Works
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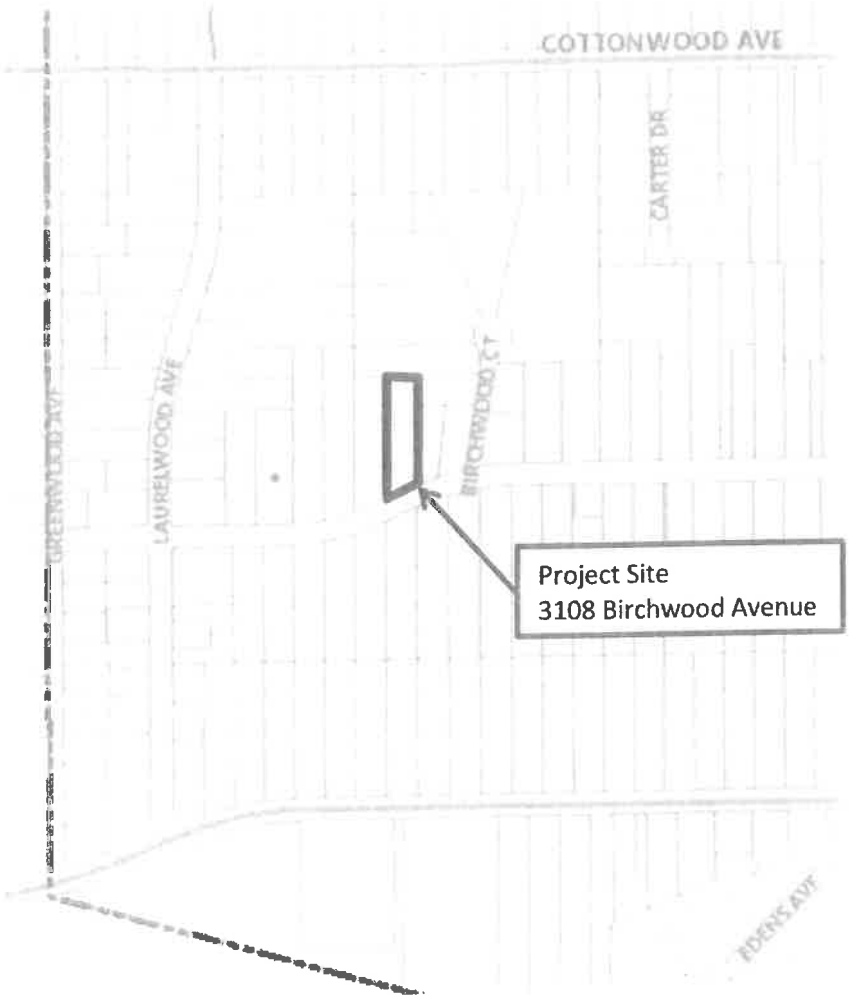
Encl: *Vicinity Map*
Aerial Photograph of Site
Preliminary Site Plan

Vicinity Map



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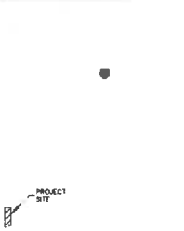

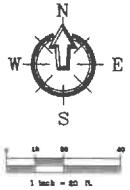

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(PER Q.C.D. A/N 2023-0301172)
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PROJECT NOTES

CURRENT PROPOSAL:
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FULL BUILD OUT (FUTURE CONDITION)
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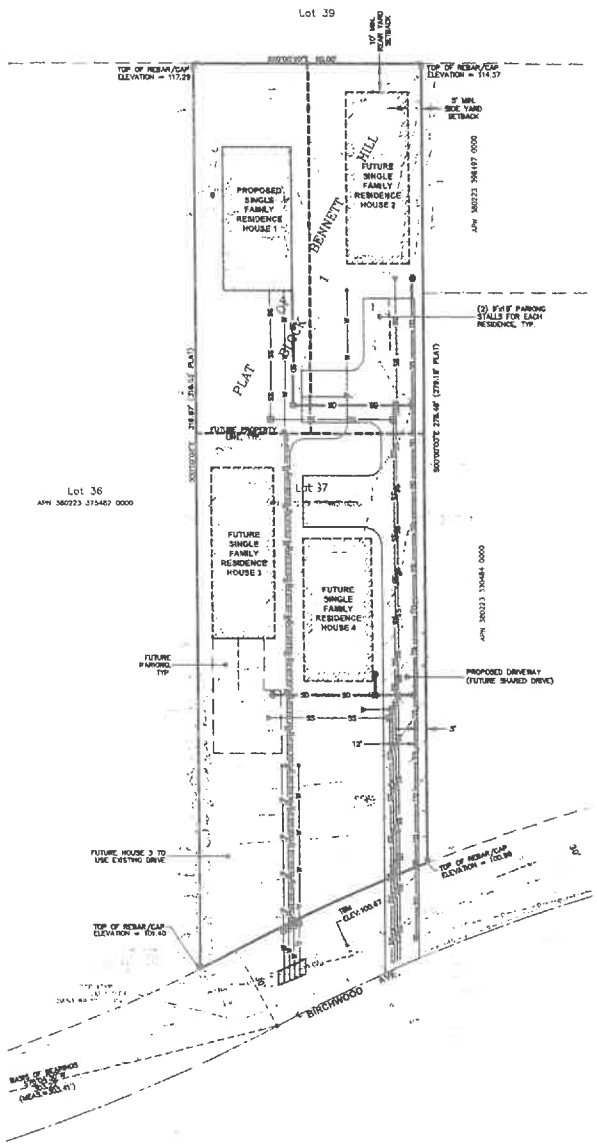


FREELAND & ASSOCIATES

BY	DESCRIPTION	REV. DATE:

CLIENT: PATRICK SUTTON
1017 LIBERTY STREET
BELLINGHAM, WA 98225

CALL BEFORE YOU DIG
FOR BURIED UTILITY LOCATIONS
1-800-424-5555

PROJECT LOCATION: 3108 BIRCHWOOD AVENUE
3108 BIRCHWOOD AVENUE
BELLINGHAM, WA 98225

DRAWING #: 24050SPI.DWG
DESIGNED BY: MPM
DRAWN BY: MPM
CHECKED BY: MAF

SHEET CONTENTS: PRELIMINARY SITE PLAN

JOB #: 24050
DATE: 03-12-2024
SHEET: PS1

EXHIBIT E

Hello Neighbor,

We are reaching out to you because the variance notification you received from the City does not explain why a variance is necessary for us to rent out our accessory dwelling (ADU) for short terms.

The City already allows an ADU to be rented out for short terms up to 95 days annually – but only if it's *attached* to the main house. Our ADU lies just *behind* our main house. We did not want to build a large main house, which would have been out of scale on Liberty Street and harder for us to live in as we age. **The only reason we need a variance is that the ADU is 25 feet away from the house and not hanging off the back.**

We use the ADU as an extension of our home, so in effect we occupy it most of the year (as the City requires). We simply want to rent it out when we are not using it.

If you have any questions, please don't hesitate to contact us.

Best Regards,
Kathryn and Patrick Sutton

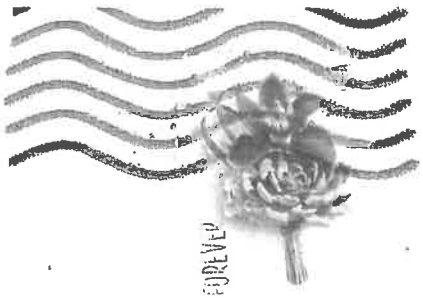
1017 Liberty St.
512.492.5245

I do not object to your STR request via the C.O.B. I only request that you ask your guest to respect the "lack of parking" along Liberty St & be aware of current residents needs to enable them to park close to their home, ie Rich & Jean; Dianne, etc...

Brian

Sutton
1017 Liberty St.
Bellingham, WA 98225

SEATTLE WA 980
8 MAR 2024 PM 7 L



Brian Benjamin
1018 Liberty St.
Bellingham, WA 98225

→ Kathryn & Patrick

98225-556518

EXHIBIT A

https://www.dropbox.com/scl/fi/t14t0z93wb85po77ao3x8/Open-Rec-Req-All.pdf?rlkey=f49nlaiv6idb9pilklf6dskuk&dl=0

EXHIBIT B

CAUSE NO. 22-CV-1659

CRYSTAL CRUISE INVESTMENTS, LLC D/B/A NAUTICAL NAVY and HARRISON YAT, Individually and as Managing Member of CRYSTAL CRUISE INVESTMENTS, LLC,	§	**IN THE DISTRICT COURT OF**
Plaintiffs,	§	
v.	§	**GALVESTON COUNTY, TEXAS**
CITY OF DICKINSON, TEXAS And SEAN SKIPWORTH MAYOR OF THE CITY OF DICKINSON.	§	
Defendants.	§	**405TH JUDICIAL DISTRICT**

FINDINGS OF FACT AND CONCLUSIONS OF LAW

On November 1, 2023, the Court called this case to trial. The parties appeared in person and through their attorneys and announced ready for trial.

The parties waived their right to a jury, and all questions of fact and law and all matters in controversy were submitted to this Court for determination.

Following the close of evidence, the Court makes the following Findings of Facts and Conclusions of Law. The Court, as fact finder, makes all Findings of Fact by the appropriate legal standard, after considering all the evidence and assessing the credibility of the witnesses.

FINDINGS OF FACT

1. On April 12, 2016, the City of Dickinson adopted Ordinance No. 840-2016 (the Ordinance) which, inter alia, amended the City's Code of Ordinances to require a specific use permit (SUP) for the operation of a Vacation Rental in its Rural Residential (RR) and Conventional Residential (CR) zoning districts.

2. The Ordinance defines a Vacation Rental as "a residential facility that is offered for rental for a period not to exceed thirty (30) days ...." The Ordinance requires a SUP to operate a Vacation Rental in the CR Zoning District.

3. On April 21, 2022, Plaintiff Crystal Cruise Investments, LLC d/b/a Nautical Navy (Crystal Cruise) purchased a single-family residence located at 5122 Casa Grande in the City.

4. Plaintiff Harrison Yat (Yat) and counter-defendant Russell Chad Griffin (Griffin) are managers of Crystal Cruise and have control over the properties owned by Crystal Cruise, including 5122 Casa Grande.

5. The houses along Casa Grande were constructed and are being used as single-family residences. The house at 5122 Casa Grande is located within the City's CR Zoning District.

6. Crystal Cruise, Yat, and Griffin began operating 5122 Casa Grande as a Vacation Rental without seeking or obtaining a SUP from the City.

7. On August 16, 2022, the City notified Crystal Cruise, Yat, and Griffin about the SUP requirement to operate a Vacation Rental at 5122 Casa Grande. On November 7, 2022, Crystal Cruise, Yat, and Griffin submitted a completed SUP application. The City denied the application.

8. Acquiring a SUP requires posting public notices on the property, mailing notices to surrounding property owners, posting notices in the newspaper, a public hearing at Planning and Zoning Commission, a public hearing at City Council, and at least two readings at City Council.

9. The City's regulations list several factors that may be relevant to the decision to grant a permit, but these factors are not dispositive. The ordinance allows the City to consider other factors, but does not specify the other factors. City Code Art. V, Sec. 18-59.

10. The City has granted at least one other SUP, but denied Plaintiffs' request for a SUP. The City denied Plaintiffs' SUP application because having an STR on Casa Grande impairs the quiet seclusion of the residential neighborhood. The record does not contain evidence that any noise citations were issued related to Casa Grande or any other

Vacation Rental. The record does not contain evidence that any speeding tickets were issued related to Casa Grande.

CONCLUSIONS OF LAW

1. Texas recognizes a right to acquire and own real property. *Zaatari v. City of Austin*, 615 S.W.3d 172, 200 (Tex. App.—Austin, 2019) (quoting *Spann v. City of Dallas*, 235 S.W. 513, 515 (Tex. 1921)). Texas also recognizes the right to lease real property on a long-term and short-term basis. *Id.* at 190–91; *City of Grapevine v. Muns*, 651 S.W.3d 317, 346–47 (Tex. App.—Fort Worth, 2022); *Vill. of Tiki Island v. Ronquille*, 463 S.W.3d 562, 578 (Tex. App.—Houston, 2015). Texas courts have held that short-term leasing is a residential use of property. *Tarr v. Timberwood Park Owners Ass'n*, 556 S.W.3d 274, 291 (Tex. 2018).

2. Municipal ordinances restricting property rights must be rationally related to a legitimate government interest and not be unduly burdensome. *Patel v. Tex. Dep't of Licensing & Regulation*, 469 S.W.3d 69, 87 (Tex. 2015).

3. The Ordinance restricts Plaintiffs' right to lease Casa Grande for less than 30 days. The City produced some evidence that there were complaints related to Casa Grande, but the evidence does not show that these complaints were specific to a short-term lease and that a long-term lease of the Casa Grande property would not cause the same complaints. There is no evidence that citations were issued for activities at the Casa Grande property while it was rented as a STR.

4. The City's basis for denying Plaintiffs a SUP is the promotion of quite seclusion in this residential neighborhood. The City has issued a SUP to another property owner, but the City denied Plaintiffs an SUP. The City has not provided a rational basis justifying the disparate treatment.

5. Chapter 211 of the Texas Local Government Code authorizes Texas municipalities to adopt zoning regulations, including regulations governing the location and use of buildings.

6. The City has not provided a rational basis that justifies the disparate treatment between a short-term and long-term rental.

7. Short-term rentals qualify as residential use of property as identified in Chapter 211.003 of the Texas Local Government Code.

8. The Ordinance is not rationally related to a legitimate government interest.

9. The Ordinance violates Plaintiffs' right to equal protection.

10. The Ordinance does not advance zoning interests. The City's attempt to regulate lease duration through the zoning power is *ultra vires* and unconstitutional.

In the event any finding of fact is determined to constitute conclusion of law, it shall be treated as a conclusion of law. In the event any conclusion of law is determined to constitute a finding of fact, it shall be treated as a finding of fact.

Signed this 4th day of January, 2024.

JUDGE PRESIDING

CAUSE NO. 22-CV-1659

CRYSTAL CRUISE INVESTMENTS, LLC D/B/A NAUTICAL NAVY AND HARRISON YAT, Individually And as Managing Member of CRYSTAL CRUISE INVESTMENTS, LLC, Plaintiffs,	§	IN THE DISTRICT COURT
v.	§	405TH JUDICIAL DISTRICT
CITY OF DICKINSON, TEXAS AND SEAN SKIPWORTH, MAYOR OF THE CITY OF DICKINSON, Defendants.	§	GALVESTON COUNTY, TEXAS

JUDGMENT

On October 31, 2023, the above-styled case was tried to the Court. Having heard and considered the pleadings; the filings in the case; the parties' trial briefing; the evidence at trial; and the arguments of counsel; and furthermore having adopted Plaintiffs' findings of fact and conclusions of law; this Court hereby enters the following JUDGMENT in favor of the Plaintiffs:

The Court declares that Dickinson City Code Art. V, Secs. 18-57 through 18-61 ("Ordinance"), in prohibiting vacation rentals in residential areas without a special use permit, is in that respect *ultra vires*, unconstitutional, void, and unenforceable. Given the foregoing declaration, the City is hereby enjoined from enforcing the Ordinance to prohibit such rentals.

The Court will conduct a final hearing on attorney's fees within 30 days of the date of this judgment.

SO ORDERED on this ~~4th~~ day ~~November, 2023~~ January 4, 2024.

JUDGE PRESIDING

MONICA PURDY
95TH DISTRICT COURT
GEORGE L. ALLEN, SR. COURTS BUILDING
600 COMMERCE STREET, 6TH FLOOR
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12/6/2023

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Re: Cause No. DC-23-16845;
DALLAS SHORT-TERM RENTAL ALLIANCE, et al vs. CITY OF DALLAS

TRIAL IS SET ON THE COURT'S TWO-WEEK DOCKET, AS FOLLOWS:

NON-JURY TRIAL: 06/03/2024 at 9:00 AM

TRIAL ANNOUNCEMENTS MUST BE MADE IN ACCORDANCE WITH RULE 3.02, LOCAL RULES OF THE CIVIL COURT OF DALLAS COUNTY, TEXAS.

WHEN NO ANNOUNCEMENT IS MADE FOR DEFENDANT, DEFENDANT WILL BE PRESUMED READY. IF PLAINTIFF FAILS TO ANNOUNCE OR TO APPEAR AT TRIAL, THE CASE WILL BE DISMISSED FOR WANT OF PROSECUTION IN ACCORDANCE WITH RULE 165a, TEXAS RULES OF CIVIL PROCEDURE.

COMPLETION OF DISCOVERY, PRESENTATION OF PRETRIAL MOTIONS AND OTHER MATTERS RELATING TO PREPARATION FOR TRIAL ARE GOVERNED BY THE TEXAS RULES OF CIVIL PROCEDURE, UNLESS OTHERWISE PROVIDED BY THE COURT'S SCHEDULING ORDER.

PLEASE FORWARD A COPY OF THIS NOTICE TO COUNSEL OF RECORD FOR EACH PARTY AND ALL PRO SE PARTIES BY A METHOD APPROVED IN TEXAS RULES OF CIVIL PROCEDURE 21a.

SINCERELY,

MONICA PURDY
JUDGE, 95TH DISTRICT COURT

CAUSE NO. DC-23-16845

DALLAS SHORT-TERM RENTAL ALLIANCE, SAMMY AFLALO, VERA ELKINS, DANIELLE LINDSEY, and DENISE LOWRY,	§	**IN THE DISTRICT COURT**
Plaintiffs,	§	**DALLAS COUNTY, TEXAS**
v.	§	
CITY OF DALLAS,	§	
Defendant.	§	**95th JUDICIAL DISTRICT**

PROPOSED TEMPORARY INJUNCTION ORDER

On December 1, 2023, this Court heard Plaintiffs Dallas Short Term Rental Allicance ("DSTRA"), Sammy Aflalo, Vera Elkins, Danielle Lindsey, & Denise Lowry's (collectively, "Plaintiffs") Application for Temporary Injunctive Relief against Defendant City of Dallas (the "City"). The Court considered Plaintiffs' application, evidence presented at the hearing, and the written and oral arguments of counsel. The Court finds that Plaintiffs have met their burden to establish that they have a probable right of recovery on their causes of action against the City of Dallas, on the finding of the facts as set forth below. The Court further finds the Court must enjoin the City from enforcing the STR Ordinances to prevent imminent and irreparable harm.

Based on the evidence presented at the hearing on Plaintiffs' application for temporary injunction, Plaintiffs have a substantial likelihood of success on the merits of each of their causes of action, as described below.

The City of Dallas has enacted certain ordinances[1] that seek to regulate short-term rentals ("STRs") within city limits. Plaintiffs presented evidence that short-term rentals have been a vibrant industry in Dallas for decades. Short-term rentals are generally defined as rentals of property for less than 30 days. Commonly known today as "AirBnb," "VRBO," or "HomeAway," for the online platforms that facilitate them, Plaintiffs presented evidence that STRs provide temporary lodging for a variety of guests: out-of-state visitors traveling to Dallas for weddings, concerts, to see family members who are hospitalized, or local Dallas citizens who are briefly dislodged from their residence for construction or an emergency. Plaintiffs presented evidence that STRs provide needed housing for people who prefer to stay in a home rather than a hotel.

Plaintiffs presented evidence that Plaintiffs recognized the need for this important kind of temporary housing, and along with thousands of other STR owners and operators in Dallas, Plaintiffs purchased and established single family residences for the purpose of operating STRs. Specifically, Plaintiff Dallas Short Term Rental Alliance ("DSTRA") is a non-profit organization with a mission to educate STR owners on laws and best practices for effective and harmonious operations within their communities, promoting reasonable and effective legislation that allows unencumbered operation of reasonably operated STRs, and to leverage the resources of the STR community to boost economic growth and prosperity.

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[1] The relevant ordinances are Dallas, Texas, City Code § 5l-4.216.1, 51A-4.110, 51A-4.l2l, 5lA-4.124, 51A- 4.125, 51A-4.126, 514-4.727, and 51A-4.205 (2023) ("Zoning Ordinance"); Dallas, Texas, City Code § 27-30, 42B, (2023) ("Registration Ordinance").

The other plaintiffs—Sammy Aflalo, Vera Elkins, Danielle Lindsey, and Denise Lowry (collectively, "Homeowners")—are members of DSTRA. ("DSTRA" and "Homeowners" are referred to collectively, "Plaintiffs"). Plaintiffs presented evidence that each of them lawfully operates an STR or STR-related business within the City. They have invested hundreds of thousands of dollars, excluding mortgages which exceed millions of dollars, into the STR industry in Dallas.

Capitalizing on the booming industry, Plaintiffs presented evidence that at least as early as October 2019, the City began collecting Hotel Occupancy Taxes ("HOT Taxes") from STRs and even established an online registration portal to help STR owners to register their STR properties with the City. Plaintiffs presented evidence that the City has collected over $3.4 million in tax revenue from STRs this year alone, and nearly $10 million since 2019. Plaintiffs presented evidence that STR owners, including Plaintiffs, faithfully paid those HOT taxes to the City, just to be informed of the City's new ban against STRs in residential areas.

Plaintiffs presented evidence that the legal environment for STRs changed on June 14, 2023, when the City Council enacted two new laws. The first, called the Zoning Ordinance, defined a new land-use category called "[s]hort-term rental lodging," and banned that use from areas zoned for single-family residential use. Plaintiffs presented evidence that the Zoning Ordinance will ban approximately 95 percent of STRs within City limits.

The Court considered the City's studies, specifically the June 2023 study, that the City claims it relied on in enacting the STR Ordinances. Plaintiffs presented evidence

regarding the City's alleged governmental interests, including concerns that appear to be a centered around a small number of "nuisance" properties, the City's apparent concern regarding the lack of affordable housing in the City, complaints from members of the Dallas community, preventing excessive traffic, noise, and density, and other broad and undefined interests regarding life, health, safety, and welfare. Plaintiffs presented evidence that the June 2023 study is ~~unreliable~~ (~~indeed, that study's authors caution against reliance on it~~), and ~~grossly~~ overestimates the associated concerns with STRs that the City claims are the basis for its governmental interests. Plaintiffs thus presented evidence that the STR Ordinances do not rationally relate to the claimed governmental interests based on any available data. Plaintiffs also presented evidence that the City's claimed interests about housing, "neighborhood character" and the like are unquantified and unquantifiable, and that the City does not know how much improvement the Ordinances will actually achieve in those areas—if any.

Plaintiffs presented evidence that as soon as December 13, 2023, STRs will only be allowed where other "lodging" is permitted—specifically, in areas zoned for multi-family residences, hotels or commercial properties. And Plaintiffs further established that those STRs are subject to another new law—the Registration Ordinance—that imposes several oppressive regulations on those few remaining STRs.

In summary, Plaintiffs have presented competent evidence as to each and every element of their causes of action:

a. Plaintiffs are likely to prevail on their due course of law claim because the

STR Ordinances are likely unconstitutionally oppressive in light of the alleged government interests. The right to conduct STR activity is a vested right in Texas that is a component of home ownership. It appears likely that the City cannot show that the STR Ordinances are rationally related to deterring nuisances, and in any event, nuisance ordinances that already exist in the Dallas City Code could be enforced to prevent any nuisance violation.[2] It further appears likely that the STR Ordinances are not rationally related to increasing affordability of housing in Dallas, and the City's other stated interests do not appear connected to the overly broad and excessively detailed regulations in the Registration Ordinance.

b. Plaintiffs are likely to prevail on their takings claim because the STR Ordinances are likely a regulatory taking. A regulatory taking occurs when the government's regulations impact the value of a property without just compensation. It appears likely that the STR Ordinances constitute a taking of Plaintiffs property, particularly those properties that were acquired and improved upon for the purpose of operating an STR, in that they can no longer engage in the STR activity which they have a vested right to conduct

[2] Dallas, Texas, City Code § 27-17 (Public Safety Nuisance); 27-11 (Minimum Property Standards); 107.6 of the Dallas Fire Code (Overcrowding); 7A-18 (Duty to Maintain Premises Free From Litter); 18-13 (Growth to Certain Height Prohibited); 30-1 (Loud and Disturbing Noises and Vibrations); 30-4 (Loudspeakers and Amplifiers); 51 and 51A ("Parking").

under Texas law.

c. Plaintiffs are likely to prevail on their claim that the STR Ordinances are unconstitutionally retroactive. The Texas Constitution protects the reliance interests of its citizens by preventing the government from, such as here, banning an industry that citizens have invested in. Plaintiffs are likely to establish that they relied on the minimally nature of the STR industry (reflecting the status of STR activity as a vested property right under Texas law), coupled with the payment of hotel occupancy taxes to the State of Texas and the City of Dallas (and the City's encouragement of and acceptance of same), and in reliance on the ability to operate STRs, Plaintiffs did so and invested millions of dollars into their businesses.

d. Plaintiffs are likely to prevail on their equal protection claim. Plaintiffs are likely to show that STR owners and Dallas homeowners are similarly situated. Specifically, Plaintiffs are likely to prevail on their claim that the City unconstitutionally discriminates against STR owners and operators because there is ~~no~~ not sufficient evidence that STRs cause excessive traffic, noise, density, or other nuisances that the City claims justify the STR Ordinances. Further, Plaintiffs are likely to prevail on its claim that the Registration Ordinances unconstitutional discriminates against STR owners with disparate and punitive fines that Dallas homeowners are not subject to for

the same or similar code violations. Additionally, as to all such classifications, the City has not established that any term of the Registration Ordinance is sufficiently tailored to support a compelling state interest to satisfy strict scrutiny, since those classifications all burden the fundamental vested right in Texas law to engage in STR activity as a homeowner.

e. Plaintiffs are likely to prevail on their claim that the Ordinances violate the Zoning Enabling Act. That Act limits local zoning power and purposes as to residential use. Tex. Loc. Gov't Code §§ 211.003-004. The Zoning Ordinance exceeds those limits because it is a ban on residential use, not a restriction (remembering that STR activity is a vested property right as a component of home ownership). As to both Ordinances, the City failed to articulate a claimed interest with a specific connection to any particular grant of authority in the Act, and in particular the claimed interests about "housing stock" and the like are not referenced in the Act at all. Accordingly, as a matter of law, the Ordinances are void and unenforceable.

f. Plaintiffs are likely to prevail on their claim that the Ordinance violate the so-called "Death Star Act," enacted in the last legislative session as HB 2127, and codified in relevant part of section 1.004 of the Property Code. The Court notes that this law is presently the valid and enforceable law of Texas, and that the City will have received any required notice of this claim by the

time of trial on the merits. The Court concludes that sections 92.001, 92.002, 92.010, and 92.153 of the Property Code, when construed in the full context of applicable Texas law (including established rights under property law and the HOT Tax provisions of the Texas Tax Code), show the Legislature's intent to occupy the field of STR regulation and thus cause the Ordinances to be preempted and unenforceable under HB 2127.

Unless the City is enjoined from enforcing the STR Ordinances, there is a substantial risk of probable, imminent, and irreparable injuries to Plaintiffs because Plaintiffs, and the vast majority of other STR owners in Dallas, will immediately lose the ability to lease their property for less than 30 days.

These injuries are probable given that the City intends to enforce the Zoning Ordinance as of December 13, 2023, and the Zoning Ordinance is a complete ban on any STR within a single-family zoned area.

These injuries are imminent because enforcement is set to begin within the next two weeks, and enforcement of the STR Ordinances will cause irreparable injury because violations of constitutional rights are inherently irreparable, and the destruction of a person's business (and therefore, livelihoods) is a sufficient and well-recognized justification for equitable relief. There is no adequate remedy at law because it will be impossible to quantify the near decade of investments Plaintiffs made in their STR businesses, including the hiring of employees, acquisition of numerous properties, and

improvements on those properties made in reliance on the City's representations that STRs were and are a lawful business.

The injuries to Plaintiffs resulting from the City's enforcement of the Ordinances outweighs any damage that this Temporary Injunction, if any, may cause to the City.

This injunction will not disserve the public interest. To the contrary, it is in accord with Texas public policy to protect and preserve the constitutional rights of property owners in Texas, and to prevent government overreach.

The Court hereby ENJOINS the City of Dallas from any enforcement of the Zoning Ordinance and Registration Ordinance. This order does not bar the enforcement of registration, taxation, and general anti-nuisance laws that were in effect before the enactment of those Ordinances.

This temporary injunction shall remain in effect through trial, except upon further order of this Court.

This temporary injunction shall be effective upon Plaintiffs' filing of a bond depositing the amount of ~~$1,000~~ $5,000.- (P). The Court will allow the Clerk of Court to accept a personal, company, insurer, or law firm check. The Clerk of Court shall, on the filing by Plaintiffs of the check, bond, or cash in lieu of bond, and on approving same as required by the law, issue a writ of injunction conforming with the law and the terms of this temporary injunction.

It is further **ORDERED** that this case be set for trial on the merits beginning on

June 3, 2024 at 9:00am in the 95th Judicial District Court of Dallas County, Texas.

The City of Dallas is hereby notified that violation of this Order by the City, its officers, agents, attorneys, servants, employees and/or by any person acting in active concert of participation with the City and who receives actual notice of this Order, may be subject to contempt proceedings.

SIGNED AND ENTERED at 9:00 a.m./p.m. on this 6th day of Dec., 2023.

Judge Presiding

EXHIBIT C

Noisebnb: An Empirical Analysis of Home Sharing Platforms and Noise Complaints

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Abstract

Digital multisided platforms and their societal implications are increasingly attracting attention from scholars. In this prior work, the predominant focus has been on platform participants, with little consideration given other market actors who coexist with the platform, but do not participate in it directly. In this study, we investigate one aspect of the changing economy subject to considerable theoretical ambiguity: the effects of peer-to-peer home sharing on noise complaints, a growing problem associated with urban living. Leveraging the phased expansion of home sharing platform Airbnb into different locations at different times, and a differences-in-differences approach, we find that the entry of Airbnb is associated with a significant decrease in the rate at which city residents file residential noise complaints. This is striking, given the assumption made by academic literature, industry and government reports, and the popular press that externalities will be negative. This significant decrease is intensified further in locations where a material number of tourist attractions exists, suggesting the effect is driven by limited physical occupancy of residential housing. Corroborating this finding, we observe a significant increase in street noise following the entry of Airbnb, indicating that noise moves out of residential space and into streets where tourist attractions mostly take place.

Keywords: *Multisided platforms, peer-to-peer home rentals, urban living, urban quality of life, noise, noise complaints*

Introduction

The social implications of digital multisided platforms have received increased attention from information systems researchers in recent years. This stream of scholarship has examined a plethora of diverse topics with significant social ramifications, ranging from the prevalence of sexually transmitted diseases, to drunk driving, to charitable giving, to personal bankruptcy, to even property crimes and sexual assault (Burtch & Chan, 2014; Chan & Ghose, 2014; Chan et al., 2016; Greenwood & Agarwal, 2016; Greenwood & Wattal, 2017; Martin-Buck, 2016; Park et al., 2017; Wang & Overby, 2017). In doing so, scholars note that digital platforms facilitate transactions by increasing the efficiency of search while simultaneously reducing costs (Parker & Alstyne, 2005), leading to striking shifts in individual behavior. In the case of drunk driving, ridesharing platforms decrease the costs to find and hire transportation (Greenwood & Wattal, 2017; Martin-Buck, 2016). In the case of dating, matching platforms reduce search costs in finding partners (Bapna et al., 2016; Chan & Ghose, 2014). And while this stream of research is increasingly relevant to both researchers and the public, as digital platforms seep into all corners of everyday life, the focus of this work has been on market participants while ignoring those individuals who do not participate in the platform yet may be affected by the platform's presence. These spillovers can be troubling if unaccounted for, notably when platforms engage in regulatory arbitrage during their expansion so as to side-step existing regulations (Malhotra & Van Alstyne, 2014).

In this paper, we investigate spillovers onto non-participants by examining a particularly insidious nuisance of urban living that has been linked anecdotally to the entry of home rental platforms: noise. Defined as "unwanted and high-decibel sound with an adverse effect on health," noise is a leading scourge of urban living (Hartig & Kahn, 2016). Exposure to noise in urban settings is shown to cause both physiological and psychological damage (e.g. hearing impairment anxiety, depression, hypertension, tachycardia, increased cortisol release (Hartig & Kahn, 2016; Muzet, 2007; Passchier-Vermeer & Passchier, 2000; Seidman & Standring, 2010)). Further, while noise in an urban setting can come from numerous sources (e.g. traffic, construction, aviation as discussed in Botteldooren et al., 2011; Dratva et al., 2010; Shepherd et al., 2010), it often comes from neighbors and the sound producing devices they use; all of which has been shown to reduce the quality of life (Bronzaft, 2007; Stokoe, 2006). It therefore is no surprise that state and municipal governments have taken extensive action to curb noise by encouraging residents to file complaints (which can

be remedied by local law enforcement) and strictly zoning urban land.

Yet, despite the insidiousness of noise, considerable theoretical ambiguity exists in how the entry of home rental platforms, in this case Airbnb, will affect the local level of unwelcome noise. On the one hand, noise levels might rise. Airbnb enables homeowners to rent their homes, or part of their homes, when the properties are not used to full capacity. The decision to rent is made exclusively by owners, thereby allowing the owner to generate rents from under-utilized resources through allocative efficiencies.[1] Such rentals create a moral hazard problem. While owners generate revenue from rentals, renters have little incentive to adhere to prevailing community norms. One way in which these inadequate incentives may manifest in renter behavior is in the form of noise. While the owners, and their neighbors, depend on compliance with social and regulatory norms within the community, these incentives are weaker on renters. Moreover, the negative externalities of noise are borne by the community at large, rather than the owners. Thus, there exists a clear tradeoff in this setting between the private good for the owners who may profit from renting their unutilized space, versus the public costs borne by others in the form of increased urban noise.

On the other hand, recent work also suggests that the regulatory mechanisms which govern gig-economy platforms, as well as the conscious actions taken by platform owners to counter opportunistic behavior, may lead to fewer violations of social norms (Thierer et al., 2015). In brief, unlike the traditional regulatory mechanisms leveraged by incumbent firms, sharing platforms have focused on participatory forms of rulemaking, which engender a sense of community and cast the platform as a "partner" rather than an adversary. As a result, sharing platforms have been able to replace traditional models of top-down regulation with "norm-generating non-governmental actors" (Lobel, 2016) that provide better management of the problems that regulation is meant to address. Viewed by scholars either as models of data-driven self-regulation (Cohen & Sundararajan, 2017) or competing institutional logics (Frenken et al., 2020; Vaskelainen & Münzel, 2018), these viewpoints suggest that the moral hazard issue described above is unlikely to manifest. When coupled with the fact that home-sharing platforms are not fully occupied over the course of

[1] While some HOAs have challenged an owner's ability to rent, there is considerable legal tension exists over whether or not this can be done - https://wscai.org/getting-away-in-an-hoa-what-can-associations-do-about-vacation-rentals/

an available period (annual occupancy rates hover around 36-51%), and that they are particularly popular with tourists and vacationers, it is intuitive that the use of rental properties by guests will be considerably different from a traditional tenant. Inasmuch as tourists visit cities to see and experience local attractions (e.g. museums, historical sites, cultural markers), these guests are less likely to physically occupy the property the way a tenant would. Thus, from a pragmatic perspective, the entry of home-sharing might lead to a decrease in noise complaints simply because persons are absent from the property for extended periods of time.

Given the tension between these viewpoints, and the criticality of such questions to policy-makers, we ask the following: *What is the effect of home rental platform (Airbnb) entry on noise-related complaints in urban areas?* To determine the size of any such effect, we exploit the phased expansion of Airbnb into different parts of New York City (NYC) between 2004 and 2019. Airbnb is the largest home rental platform, with more than 660,000 listings in the United States as of 2020. NYC is the largest urban market of Airbnb in the US. Further, NYC's popularity as a tourist and business destination, coupled with the rich administrative data captured by the city, make it an ideal context. Data are drawn from the Airbnb listings in NYC and the NYC Open Data portal offered by New York's Department of Information Technology and Telecommunications. As the entry of rental offerings occurs at different times across zip codes, we are able to execute a difference-in-difference (DID) estimation. In doing so, we compare the changes in noise complaints for treated areas, i.e. those with an Airbnb rental, with those that have yet to receive a rental property. This approach offers a simple yet compelling strategy to identify the effect of home rentals entry on noise complaints.

Results indicate two main findings. First and foremost, we find that the entry of Airbnb in NYC is associated with a reduction in residential noise complaints. Economically, the effect corresponds to a decrease of 2.77 noise complaints made per zip code each month, or a 5.1% decrease based on the 2019 estimates (3.6% based on 2018). Second, we find a greater reduction in residential noise complaints when occupancy rates of the rental properties are lower and where outside attractions are more prevalent; as evidenced by (i) fewer noise complaints when the property's calendar indicates it is less often rented, and (ii) fewer noise complaints near areas with a significant number of restaurants, bars, and other tourist attractions. This suggests that a significant proportion of guests who stay in Airbnbs are vacationers who spend time away

from the rental, i.e. that the negative externalities are smaller in areas with options for tourists. Interestingly, this corroborates recent work showing that Airbnb guests are sensitive to noise (Cheng & Jin, 2019), and undermines recent claims that Airbnb serves primarily as a public nuisance by creating "party houses" (e.g., McNamara, 2014). Probing further, we find that a significant increase in street noise complaints (rather than residential complaints) following Airbnb's entry. This result complements our finding that Airbnb rentals tend to move noise outside of rental properties and into streets, where more tourist activity takes place.

Two primary contributions stem from this work. First, we contribute to the literature on digital platforms by extending the extant work on their societal implications. In particular, we are able to illustrate how the social implications arising from the entry of platforms extend beyond platform participants (Greenwood & Agarwal, 2016; Greenwood & Wattal, 2017; Wang & Overby, 2017). As platforms continue to attract attention, existing research must grapple with both the economic implications of their existence and their social implications. These social implications include quality of life issues for non-participants, such as urban noise, one of the leading problems associated with urban living (Hartig & Kahn, 2016). Our work contributes to this small but growing stream of work in the broader literature on digital platforms.

Second, we contribute to the ongoing policy discussion surrounding home sharing rentals. As many scholars have noted, home sharing has the capacity to create significant efficiencies through the re-use of existing resources, but can also impose significant externalities (Coles et al., 2017; Filippas & Horton, 2019; Gurran & Phibbs, 2017; Guttentag, 2015; Quattrone, Proserpio, Quercia, Capra, & Musolesi, 2016). The negative externalities imposed by home rentals has remained a topic of considerable debate between those who focus on the need for top-down regulation and others who believe that a community-based approach that emphasizes self-regulation can counter such negative externalities (Cohen and Sundararajan, 2016). Still, empirical work on the subject remains limited. We address this gap through a focus on noise complaints. Our analysis suggests that the anecdotal evidence of home rentals increasing noise and other problems[2] may be overblown, albeit based on the evidence from a single -but the largest- market of Airbnb in the United States.

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[2] For example, see the story "In Silver Lake, some have reservations about vacation rental website" at https://www.latimes.com/business/la-xpm-2013-sep-02-la-fi-airbnb-economy-20130903-story.html

Background and Theory

Digital platforms create markets by facilitating transactions between buyers and sellers. In doing so, platforms charge participants a fee for coordinating the transaction but do not take ownership of the exchanged goods or services during the transaction (Hagiu & Wright, 2013; Rochet & Tirole, 2003, 2004; Rysman, 2009). They are therefore able to reduce market inefficiencies for participants by decreasing information asymmetries and transaction costs, and expediting the matching process between individuals and firms on the platform (Bakos, 1997; Brynjolfsson & Smith, 2000; Rysman, 2009). To achieve this accelerated matching, digital platforms rely on network externalities which benefit both buyers and sellers, such as through increased market size, lower fees, and increased matched quality (Armstrong, 2006; Rochet & Tirole, 2004). Originating as an alternative to traditional retailers, platforms like eBay and Amazon created markets in which economic agents process transactions at a near zero marginal cost (Brynjolfsson et al., 2003; Dellarocas & Wood, 2008).

More recently, sharing platforms have emerged which allow individuals to lease or rent out underutilized resources in areas like transportation and accommodation. Dubbed the "sharing economy," because it allows individuals to "share" under- or unutilized resources, these transactions are intermediated by platforms that facilitate the matching of supply and demand (Sundararajan, 2016). In contrast to platforms like Amazon and eBay, sharing economy firms represent a specific case of peer-to-peer (P2P) transactions that are conducted on digital platforms, i.e., services are provided by individuals rather than firms (Greenwood et al., 2017). Firms like Uber and Airbnb represent this category of platforms (Horton, 2016; Zervas et al., 2017; Gong et al., 2017), as they provide markets wherein individuals can offer short term "rentals" of their vehicles or residences. The rise of these platforms has not been without controversy, as they have been disruptive to incumbents in these industries. For example, the valuations of taxicab medallion have plummeted with the entry of Uber and Lyft. Similarly, the hotel industry's revenues have been affected by the low-cost rental options available on Airbnb (Byers et al., 2013; Byers et al., 2013; Farronato & Fradkin, 2018), which have simultaneously stunted the supply of long-term residential rental units (Barron et al., 2018).

While earlier research on digital platforms broadly, and sharing-based P2P platforms in particular, has focused on their economic benefits through the reduction of market frictions and enhanced efficiencies (Bakos, 1997; Brynjolfsson et al., 2003; Brynjolfsson & Smith, 2000; Rysman, 2009), more recent work has

begun to consider their social implications. This has become increasingly important as platforms become ubiquitous in domains that are under-served by traditional firms (e.g. dating and hookups, food delivery, point to point transportation). As a result, their social impacts are becoming increasingly of interest to managers and policymakers alike. In the case of sharing platforms, extant research has shown a diverse set of social implications spanning charitable giving, traffic congestion, drunk driving, HIV incidence rates, and bankruptcies (Erhardt et al., 2019; Burtch, Carnahan, & Greenwood, 2016; Greenwood & Agarwal, 2016; Greenwood & Wattal, 2017; Wang & Overby, 2017).

Yet, despite the rapid expansion of research on the social implications of sharing platforms, structural gaps in our understanding of how they affect the social environment in which they are embedded persist. One area which remains particularly understudied relates to how the behavior of sharing platform participants may spill over onto platform non-participants. One stream of research has addressed this question in part by studying the impact of ride-sharing platforms on traffic congestion (Alonso-Mora et al., 2017; Babar & Burtch, 2019; Erhardt et al., 2019; Hall et al., 2018; Hampshire et al., 2017). Yet, the question is only addressed in-part because platform participants also bear the costs of increased traffic. In this work, we delve into a distinct yet related question– spillovers from home rental platforms (Airbnb) onto non-participants who live in the same residential area. The presence of such platforms benefits local communities by stimulating tourism and other economic activity, but may also disrupt everyday life, representing a significant tradeoff for policymakers and residents alike. We discuss these next.

Home Rental Platforms and Their Tradeoffs

Home rental platforms such as Airbnb and Vrbo (formerly Homeaway) offer homeowners an opportunity to rent their properties to guests when those properties are not fully utilized. As of January 2020, Airbnb alone had more than seven million listings in more than 220 countries.[3] The platform serves as a coordinating mechanism between owners and renters thus generating additional revenue for owners with excess housing. Unsurprisingly, this increase in short-term accommodation options has yielded material increases in economic activity for those urban areas where they are available (for a review, see Horton & Zeckhauser, 2016). When

[3] See the details of Airbnb's size at https://news.airbnb.com/fast-facts/

viewed through this perspective, the ability to use underutilized residential space, generate additional homeowner revenue, and stimulate local economic activity, all indicate that the overall impact of platforms like Airbnb is largely positive.

Despite these positives, such platforms have also yielded negative effects (Malhotra & Van Alstyne, 2014; Slee, 2017). These negatives include, but are not limited to, higher rents as a result of a reduced residential housing supply, reduced affordable housing, loss of tax revenue to local governments, and job losses in the local hospitality sector (Barron et al., 2018; Horn & Merante, 2017; Lee, 2016; Bivens, 2019).[4] Accordingly, municipal governments across the globe have taken measures to rein in the use of such rental platforms by local residents, or imposed strict conditions under which they may operate.[5] Cities including Austin, San Francisco, Los Angeles, Amsterdam, Vancouver, and Paris have all enacted policies restricting home rentals. In 2018, Palma de Mallorca became the first city to ban Airbnb outright. New York City, the context of this work, has been battling Airbnb since 2013 over regulations which prohibit the use of residential areas as vacation rentals when the homeowners do not cohabitate the property with the guests.[6] As expected, the litigious nature of the relationship between Airbnb and local governments has yielded a host of research aimed at informing both policymakers and platform owners about how this contentious relationship may be governed (Coles, Egesdal, Ellen, Li, & Sundararajan, 2017; Filippas & Horton, 2019; Gurran & Phibbs, 2017; Guttentag, 2015; Quattrone, Proserpio, Quercia, Capra, & Musolesi, 2016).

Beyond policymakers and local hotel operators, the entry of Airbnb can also give local residents cause for concern. Most Airbnb rentals are located in residentially zoned areas. To the extent that Airbnb rentals are commercial, rather than residential, municipal governments have argued their operation is illegal.[7]

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[4] The tax treatment of Airbnb rentals is incomplete. It was estimated in 2016 that Airbnb's failure to ensure the payment of lodging taxes cost $440 million in revenue for local governments. $110 million in lost revenue was estimated for New York City alone.

[5] See "Inside Airbnb's 'Guerrilla War' Against Local Governments" at https://www.wired.com/story/inside-airbnbs-guerrilla-war-against-local-governments/

[6] See the chronology of the battle between 2013 and 2016 at https://skift.com/2016/10/25/airbnb-vs-new-york-city-the-complete-battle-up-to-now/, and since 2016 at https://www.vox.com/the-goods/2019/1/9/18174095/airbnb-lawsuit-new-york-city/

[7] See "Unwelcome guests: Airbnb, cities battle over illegal short-term rentals" at https://www.cnbc.com/2018/05/23/unwelcome-guests-airbnb-cities-battle-over-illegal-short-term-rentals.html

Furthermore, allowing short-term rentals in residential areas can yield significant negative externalities, such as crime, infrastructure problems, garbage, parking shortages, water and power usage, and more (e.g., Han et al., 2020). Short-term renters (platform participants) have no ties to the community and no expectations of future interaction, thereby raising the standard set of issues which arise from weak incentives to self-regulate behavior or obey social norms. And while the owner/host is able to defray some of these costs through her rental revenues, others in the community are not compensated for the short-term costs that renters may inflict. One such outcome that could result from these weak incentives operating on renters is noise. We examine this potential relationship next.

Home Rental Platforms and Noise Complaints

Noise is frequently cited in discussions of home rental platforms because it is a leading plagues of urban living (Hartig & Kahn, 2016). Still, despite the pervasive discussion of noise, the effect of platform entry on local noise complaints has not been addressed in any rigorous empirical way beyond the descriptive analysis and anecdotal narrative (e.g. Binzer, 2017; Bivens, 2019; Coles et al., 2017; Filippas & Horton, 2019; Gurran & Phibbs, 2017; Horton, 2016; Khadem, 2016; McNamara, 2014; Sheppard & Udell, 2016). While noise is often cast as a banal precondition of urban living, it can have serious health effects. Exposure to noise from traffic, construction, and nearby aviation (Botteldooren et al., 2011; Dratva et al., 2010; Shepherd et al., 2010) can all cause serious physiological and psychological harm (Hartig & Kahn, 2016; Muzet, 2007; Passchier-Vermeer & Passchier, 2000; Seidman & Standring, 2010). Further, a leading source of residential noise complaints are neighbors and their sound producing devices (Bronzaft, 2007; Stokoe, 2006).

Despite the pervasive assumption in prior work that noise will spike with the entrance of home share rentals, *a priori* this relationship is theoretically ambiguous. One the one hand, anecdotal evidence and the relatively small body of research addressing the issue (as listed above) suggests Airbnb's entry into a community could be associated with more noise complaints. The stereotypical "party house" rented on Airbnb has vividly portrayed in the popular press, leading the firm to ban to "open invite" parties at all of its

accommodations, as well as any large parties at apartment buildings and condos, in December of 2019.[8] Indeed, economic theory suggests that short-term renters are more likely to flout social norms and be less mindful of the non-economic costs incurred by their neighbors, since they do not bear the long-term costs of such behavior (Lambert, 1983; Schneider et al., 2010). Thus, they are more likely fall prey to moral hazard because they do not possess the same incentives to adhere to norms as the owners of the property do (Bhattacharyya & Lafontaine, 1995). This perspective would indicate that, on average, the entry of Airbnb is likely to yield significantly more noise complaints in local communities.

While the risk of moral hazard with short-term renters is warranted, it is also worth considering that in 2019 alone, more than 41 million guests were able to use the platform, up from 33 million guests in 2017, indicating robust growth (Statista, 2020). Clearly, rampant opportunistic behavior by renters would result in some systematic curtailing of rental agreements between guests and hosts on the platform. Why would this not be occurring with the frequency that one might expect? Scholars studying the institutional environments that sharing-based platforms operate in argue that: i) governance mechanisms on platforms are different, and ii) the risk of moral hazard in these markets can be ameliorated by alternate mechanisms based on trust, social norms, and reputational systems that reward good behavior (Thierer et al., 2015). The use of non-contractual means to overcome information asymmetry in markets is not new. Indeed, evidence for these approaches can be found in social norms and reputational mechanisms put in place as far back as the 11th century by Maghribi traders (Greif, 1989). Through the development of social norms associated with sharing and community orientation, coupled with clear reputational systems, it is possible to mitigate the issues associated with information asymmetry (Brandt & Sigmund, 2005). Cohen and Sundararajan (2017) describe how a regime of self-regulation on sharing platforms, based on reputation systems like online reviews, transparency, and norms that reward good behavior, can address the problems associated with information asymmetry. Evidence shows that these data-driven self-regulatory mechanisms can be effective: a 2014 study found that car-sharing drivers are much less likely to engage in unsafe practices (e.g. cell phone use) than taxi drivers,

[8] See "Airbnb introduces new rules to rein in parties, nuisances" at https://apnews.com/2b0302055e65ae6964b0390d7f2f7d6f

since their behavior is more easily made visible through the technology.[9]

Beyond the issues of social norms and governance, there are pragmatic reasons we might expect noise complaints to fall when home-rental platforms enter a neighborhood. Home-rental apps are popular with tourists and vacationers, and experience only 36% to 51% annual occupancy rates, on average.[10] Further, inasmuch as such rentals are typically associated with individuals or families using the rental property as a base while spending large amounts of time away from the property, it is possible that the amount of noise generated within the residence actually falls because renters are physically absent from the property. Put another way, if Airbnb rentals are not fully occupied, i.e. they experience vacancies, during which noise is zero, they will be quieter than homes occupied full time by an owner or longer-term tenant. In fact, a recent lawsuit filed by NYC has documented that more than 100 host accounts and 18 corporations acquired and converted residential properties into Airbnb rentals, which have been used like hotel space since at least 2012.[11] To the degree that Airbnb rentals increasingly operate as hotel spaces, the possibility of non-occupancy increases. Moreover, if guests staying in Airbnb rentals are vacationers or tourists, they are likely to spend less time within the residence. While residential occupants of homes spend significant time living in their dwellings, e.g. eating, relaxing, raising children, and so on; visitors are less likely to do so by virtue of their status as tourists or temporary occupants. They are more likely to spend time outside the rental property visiting restaurants, bars, museums, and shops, or patronizing local tourist attractions. This suggests that the entry of home sharing platforms may significantly decrease the amount of noise in local areas.

In summary, there exists considerable ambiguity in how the entry of Airbnb may affect noise complaints. On the one hand, moral hazard would indicate an increase in noise complaints, while arguments based on self-regulation and occupancy suggest that on average, the number of noise complaints might not be

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[9] See details at https://thebolditalic.com/study-finds-taxi-drivers-are-the-worst-drivers-the-bold-italic-san-francisco-fdc1c187c055

[10] While Airbnb or Vrbo (formerly HomeAway) do not share the occupancy rates, companies that offer home rental management services publish consistent rates. For example, see https://www.alltherooms.com/analytics/average-airbnb-occupancy-rates-by-city/ and https://www.syncbnb.com/research-data/vacation-rental-statistics-2018-occupancy-rates-average-stay-average-price-and-more/

[11] See details at https://www.nytimes.com/2019/02/23/nyregion/airbnb-nyc-law.html

affected or even reduces. In lieu of formal hypotheses, we allow our empirical analysis to provide guidance.

Data and Analysis

Setting and Data

To test the effect of home rental platform entry on the level of noise complaints, we leverage the phased expansion of Airbnb in different zip codes in New York City (NYC). Taking such an approach offers two benefits. First, Airbnb is the largest accommodations provider in the world, with Marriott International being a distant second, offering only a third of Airbnb's accommodation capacity (Haywood et al., 2017). This ensures that we are capturing the first entry of a home rental platform in any given area. It further ensures visibility of the outcome, inasmuch as the size of the treatment is sufficiently large to plausibly affect the level of noise. Second, we are able to treat the phased expansion rollout as quasi-experimental, allowing us to execute a difference in differences design. We can do so because Airbnb enters different locations at different times, creating treatment and control groups. Figure 1 shows the spaced and staggered entry of Airbnb in a cumulative plot of the number of zip codes with Airbnb listings between 2007 and 2019.

To execute the difference in differences, we draw on multiple sources of data. Data on Airbnb listings in NYC are drawn directly from Airbnb. We focus on active Airbnb rentals (rather than just listings) by cross-checking listing data with the guest reviews posted for each property. Data on noise complaints are drawn from NYC's Open Data portal offered by the NY Department of IT and Telecom. Zip-code level Airbnb and noise data are aggregated monthly to see heterogeneous effects attributable to zip-specific differences. The range of the analysis is from April, 2004 to August, 2019. Control variables (e.g., housing units, income) are drawn from the US Census Bureau. The unit of analysis is the zip code-month.

Variable Definitions

Dependent variable: The primary dependent variable for the analysis is the number of noise complaints received by NYC municipal government via both phone and online at the zip code-month level.[12] When the number of housing units is included in a model as an exposure variable, the dependent variable is then interpreted as the rate of noise complaints rather than the number of complaints, as referenced in the text.

Independent variables: The independent variable of interest is a Boolean indicator showing whether there is

[12] Details can be found at https://portal.311.nyc.gov/about-nyc-311/

an active Airbnb listing in zip code i at time t (1 if present, 0 otherwise), as cross-checked by guest reviews.

Control variables: As we use a difference in difference estimation, location (zip code) and time (month) fixed effects are included. These should absorb any time-invariant endogenous process which might be correlated with both Airbnb entry and the noise complaints in a zip code. Moreover, the time fixed effects should account for any time varying changes which are universal to NYC overall. We further control for housing market indicators, financial and demographic factors, including the number of housing units, the number of units that are occupied by their owners (vs. renters), the number of housing units that are vacant, unemployment, education, age, and population at zip code-year level.[13] Housing market indicators help us control for the potentially time-variant changes across zip codes in housing stocks. Demographics data, which are not expected to change significantly from one year to the next within a zip code, may be critical to control for in large cities also because of the rapid gentrification observed over the last decade. Descriptive statistics are shown in Table 1a and correlations are shown in Table 1b.

Estimation Procedure

As discussed above, we use a difference in differences (DD) approach to identify the effect of the phased entry of Airbnb. DD has been widely used in prior work on multisided platforms and peer-to-peer markets by exploiting the phased nature of platform entry (Burtch et al., 2016; Greenwood & Agarwal, 2016; Greenwood & Wattal, 2017; Wang & Overby, 2017) by paralleling an experimental design using observational data. This is achieved by casting locations where the platform has entered as treatment and locations where the platform has yet to enter as control. Using location fixed effects to control for time invariant zip code heterogeneity, and time fixed effects to account for trends in the noise complaints over time, the effect of platform entry is identified by comparing the change in the change in the DV for treated and untreated locations. Formally:

$$Y_{it} = \beta_1 AIR_{it} + T_t + S_i + \gamma' X_{it} + \varepsilon_{it},$$

where Y_{it} is the number of noise complaints in zip code i in time t, AIR_{it} is a dummy equal to 1 if Airbnb is available to borrowers in zip code i during month t, 0 otherwise. T_t are month fixed effects. S_i are zip code

[13] Education is defined as the number of high school or higher-degree graduates.

fixed effects. X_{it} is a vector of controls and γ are the associated coefficients. ε_{it} is the error term, clustered on the zip-code. The parameter of interest is β_1. The estimator is Poisson Quasi-Maximum Likelihood Estimator (QMLE); which resolves the issues with logged counts DVs (Arvis & Shepherd, 2013). Exposure is the number of housing units. The model is expressed as linear to ease interpretation. Results are in Table 2.

Before discussing any results, it is important to acknowledge and test for the several assumptions that DD estimations are based on, the most important of which is parallel trends assumption. Parallel trends mandate that trends in the dependent variable are parallel for the treated and untreated locations prior to treatment (Bertrand et al., 2004). The absence of parallel pre-treatment trends would weaken the argument that changes in the dependent variable are a result of platform entry and suggests the control is an invalid counterfactual. We use several tests, including a leads/lags model and a Bayesian analysis to test the parallel trends assumption and general of the estimation. These are described later in the robustness section.

Results

Used extensively in prior work (Greenwood & Gopal, 2015; Simcoe, 2008), the baseline QMLE estimator avoids the well-known shortcomings of both logged OLS and fixed effect negative binomial estimations (see Allison & Christakis (2006) and Silva & Tenreyro (2006) for a complete discussion). Results in Column 1 of Table 2 show a strong and significant decrease in the number of noise complaints following Airbnb's entry. In Column 2, results are reported still without the exposure variable, but for the years during which the exposure variable is available (2010-2019). The obtained coefficients are consistent, showing that the number of noise complaints fall with the entry of Airbnb. In Column 3, the number of housing units is added as exposure, with a negative and significant relationship manifesting again. Due to the limited availability of data for the exposure variable, the effective sample for this analysis does shrink considerably, but the results still lend support to the argument that the noise complaints filed by the city's residents in a zip code decrease following the entry of Airbnb. The effect corresponds to a 2-4% monthly decrease in the incidence rate ratio (IRR) of residential noise complaints following the entry of Airbnb.

To calculate an estimate of the effect size, we add the number of housing units to the set of controls instead of setting it as exposure, and estimate the time and location fixed effects explicitly using a standard Poisson specification. Following this procedure, we calculate the average marginal effect using `margins`.

These calculations show that the effect corresponds to a decrease of 2.77 registered noise complaints per zip code each month, which translates into a total of 7,845 less complaints made every year. This corresponds to a 5.1% decrease based on the complaints in 2019 and a 3.6% decrease based on those in 2018, on average.

Finally, we add control variables to the analysis to account for other sources of variation. Despite using time and location fixed effects, it is possible that ongoing unobserved time-variant factors might be correlated with both Airbnb's entry and noise complaints. If this is the case, the estimates in Table 2 are likely biased. To mitigate these concerns, we condition upon the following: the number of zoned residential units in the zip code (i.e. housing units), the number of these units that are occupied by their owners (vs. renters), the number of vacant units, the local levels of unemployment, education, age, and the local population. Results are in Column 4 and are once again consistent, i.e. we observe a strong and significant decrease in the number of noise complaints. Given the length of the panel, we are able to replicate the estimations at the quarterly and yearly level. Results are in Table 3, and consistently show a reduction in the number of noise complaints. We next describe a series of robustness tests that were run to establish the validity of the baseline results we describe thus far.

Robustness Checks

In this section, we describe an extensive set of falsification and robustness tests that were conducted, which include: an examination of the pre-treatment trends, a Bayesian analysis, an investigation of the occupancy rate and the association with outside establishments such as restaurants, bars, and performing arts institutions, as well as further evidence of the mechanisms at play.

Pretreatment Trends

The difference in difference estimation depends on the assumption that the trends are parallel prior to treatment (Bertrand et al., 2004). This assumption is critical because if the treatment and control groups are already trending in the shown opposite direction prior to treatment, it would be inappropriate to ascribe post treatment difference in the differences to the treatment. To assess the validity of the parallel pretreatment trends assumption, we replicate a common variant of the Autor (2003) leads and lags model by interacting the time fixed effects with an indicator of a zip code receiving the treatment. We capture the trend in the effect pre- and post-treatment by modeling the effect semi-parametrically. Our expectation is to obtain a significant

effect post treatment, and ideally see the effect size increasing further in the time series.

Results in Table 4 provide evidence that the pretreatment trends are parallel. Although relative time dummies prior to, and later than, twelve months from treatment are included in the estimation, individual point estimates are omitted in the interest of space. Results are presented graphically in Figure 2. As can be seen, in the months leading up to the treatment, the pretreatment trends are not statistically significant, with no indication of any existing trends *ex ante*. Further, roughly three months after the entry of Airbnb into a zip code, the estimated coefficients become both negative and statistically significant. Such a delay in the effect is intuitive given the network effects platforms like Airbnb rely on. Taken in sum, these effects corroborate the earlier estimations showing that Airbnb is associated with a significant decrease in noise complaints.

Bayesian Analysis

In addition to the frequentist analyses presented above, we also conduct a Bayesian analysis of the effect of Airbnb's entry on noise. Complementing the frequentist approach with a Bayesian model provides us with some clear benefits. First, given the counter-intuitive results we obtain, the use of Bayesian methods allows us to examine if the estimated effects we observe from the Poisson Quasi-Maximum Likelihood estimation are robust to alternative statistical techniques. Further, Bayesian methods allow us to estimate the heterogeneity in the specific effects associated with Airbnb's entry across locations in the form of complete distributions rather than using sampling distributions to achieve a point estimate (Cumming, 2014; Gelman et al., 2013). This is important because it is plausible that some entries yield an increase in noise complaints, even if the overall effect is significantly negative. From a policy perspective, this is useful since we can point to underlying variations in the estimated effects and identify suitable policy responses based on these, rather than an overall treatment effect. Bayesian inference also fits an estimation of the gradual entry of Airbnb, since the posterior distribution of noise complaints is updated every time Airbnb appears in a new zip code.

We thus run a Bayesian Poisson regression to check the robustness of our PPML estimations. To prevent any bias from the selection of priors, we use flat and weakly informative priors and compute four Monte Carlo Markov chains, each with 10,000 iterations and 2,000 warmup runs. Therefore, the resulting posterior distributions are drawn from a total of 32,000 post-warmup samples. Results are in Table 5. Due to computational limitations, the model is run at the zip code-year level to match the analysis shown in Table 3.

Results show the entry of Airbnb is associated with an approximately 2% decrease in the IRR number of noise complaints (comparable to the 2.6% decrease presented previously in Table 3). More to the point, the distribution of the effect sizes is plotted in Figure 3. Here we observe that the distribution of the posterior samples for the effect is concentrated in the lower end, showing that the modal effect is one of a reduction in noise complaints. The 95% credible (quantile) interval and highest posterior density interval for the posterior clearly lie below zero, indicating that the effect of Airbnb's entry on noise complaints is significantly distinct from zero and negative. In terms of the magnitude and direction of effects, the Bayesian results match well with those obtained from frequentist analyses and show support for our emerging thesis that home-share platforms appear to reduce noise complaints.

Other Types of Noise

While the above evidence is compelling, it is plausible that noise in general may be trending down in the city and may be doing so in a manner which is correlated with the Airbnb rollout. To the extent that our theory relates to residential noise, as opposed to other forms of urban noise, administrative data from NYC offer us a powerful placebo test. We therefore collect additional data and replicate our analysis using two additional sets of noise complaints from the same data source: those originating from *collection truck noise* and those coming from *street and sidewalk noise* as our dependent variables, rather than residential noise complaints. As one might expect, any decrease in these forms of noise would strongly undercut our argument that the entry of Airbnb is associated with lowered levels of residential noise complaints.

Results in Column 1 of Table 6 for collection truck noise indicate that Airbnb's entry is not associated with any material change in complaints stemming from the operation of trash collection. This is encouraging, as sanitation work and the collection of urban trash should be unrelated to Airbnb entry. We next turn to noise complaints originating from street and sidewalk activity. Interestingly, results in Column 2 of Table 6 show that there is a *positive* and significant effect of Airbnb's entry on street and sidewalk noise complaints. All else equal, this lends credence to the idea that Airbnb guests are likely to spend more time outside the rental property during their stays, as compared with a permanent occupant. Put another way, if economic activity is stimulated by the entry of Airbnb in the form of tourism and other explorations of the city, it is reasonable to expect additional noise complaints from street and sidewalk activity following the entry

of Airbnb, which we observe here.

Issues of Serial Correlation

As noted by Bertrand et al. (2004), one critical problem with panel datasets and DD estimations is the potential for serial correlation in the standard errors. This is concerning because it can increase the probability of a significant effect manifesting purely by chance by artificially deflating the size of the standard errors. One standard approach to ensure DD estimations do not suffer from serial correlation is to include lagged values of the outcome variable in the model, so as to explicitly account for serial correlation that may exist across one or two periods within the panel. Results are in Table 7. In executing the tests, we first include a single lag (first order), a second lag (second order), and both in our full model. The coefficients of both lags are positive and significant, which is expected given that complaints are correlated within zip codes. However, and importantly, the effect of Airbnb's entry remains negative and significant in the presence of these lags.

Additional Robustness Tests

In addition to the above, we run two additional robustness tests. In the interest of space, we briefly describe these tests here. Additional information is available upon request. In the first, we execute a Logit Hazard Model to examine if changes in the number of noise complaints explain Airbnb's entry (Singer et al., 2003). To the extent that entry may be endogenously related to changing levels of noise, this provides a powerful falsification test that entry can be considered exogenous when conditioned upon controls. To execute this test, we regress our main independent variable, Airbnb's entry, on the number of yearly noise complaints using a logit estimator. Results indicate no significant relationship between noise and entry (Table 8).

Finally, to account for within-zipcode trends, we include time splines per zip code in the estimation. The purpose of the test is to partial out any hidden trends in the dependent variable which may be idiosyncratic to zip codes, but unrelated to the entry, above and beyond the average time fixed effects. Results in Table 9 indicate that the negative and significant effect persists in the presence of the zip code level linear time trends. From this, we are able to reasonably conclude that our results are robust to any potential trends in the noise which is idiosyncratic to the location but unrelated to the treatment.

Tests for Moderation

Thus far, our results show remarkable consistency - we see a persistent negative and significant effect of Airbnb entry on local levels of residential noise complaints. However, it is equally interesting to consider the

possibility of heterogeneity in these effects. Identifying the sources of such heterogeneity may allow us to tease out the empirical mechanism, or mechanisms, by which the effect manifests, which is important to both the managers and the academic community. We explore three potential moderators: occupancy rate, accommodation capacity, and the presence of local attractions near specific rentals.

Occupancy Rate

Recall that our arguments for why Airbnb's entry may yield a decrease in noise complaints: i) governance mechanisms instituted by platforms might be able to redress the issues of weak renter incentives, and ii) Airbnb rentals may be under capacity and not be fully occupied. We can empirically test for the second mechanism by examining if the treatment effect intensifies or attenuates as occupancy rates of rentals change, i.e. testing for the moderating effect of occupancy. Based on this reasoning, our expectation would be that when occupancy is lower, i.e. the rental is not occupied by guests, the associated noise complaints will be lower. Conversely, as occupancy rises, the odds of noise complaints being generated will increase.

Actual occupancy data is not made available by Airbnb. In fact, this data secrecy is a central theme of the ongoing legal fight between NYC and Airbnb is based on access to simple occupancy data. One solution to this problem might be to examine days on the rental calendar for a specific property and treat any day the rental is not available as "occupied." However, such an approach does not differentiate between unavailability due to lack of demand and those days when the owner elects to not make the property available for rental. This issue has been noted in practitioner circles as well, and has been dubbed the "booked vs. blocked" problem. As a result, other players in the hospitality and home sharing industry have developed a series of methodologies to proxy actual occupancy.[14] Absent actual occupancy data, we follow suit in leveraging such a proxy to differentiate the number of days when the rental was occupied by guests from those days when the rental was "blocked" by the owner, i.e. not available for rental. Details are in Figure 4.

To calculate the measure, we use Airbnb's calendar feature to collect the number of days each property is booked in 30- and 60-day intervals. We first calculate the number of days a property is available between Day 30 and Day 60 (shown as "x" in the figure). Then, we subtract from this value the availability

[14] See AirDNA's solution, for example, at https://www.airdna.co/blog/short-term-rental-data-methodology

between Day 0 and Day 30 of the following month. The difference serves as a close proxy for the number of days the property is booked between the days 30 and 60. For example, if the property has an availability of 22 days between Day t+30 and Day t+60 (hence, "x" as shown in the figure), but the availability between Day t0 and Day t+30 is only 7 days in the following month's data, we infer that 15 days of the month, i.e. the difference, are booked by the guests. For the occupancy in 60 days, we repeat the same procedure using the t+60 to t+90 interval, as it is indicated in the figure. The advantage of this calculation over a simple calendar reading is that it takes into account the number of days the property is not made available for rent at the first place. This approach avoids a potential base rate fallacy that may lead to unaccounted bias in estimations.

To test for the presence of moderating effect, we split the sample at the median values of calculated occupancy and replicate the estimations on the two sub-samples. Results are in Table 10.[15] As can be seen, the effect is strongly moderated by occupancy levels. More specifically, the reduction in noise complaints in zip codes where occupancy is lower is roughly double the reduction in noise complaints when occupancy is higher. All else equal, this provides support for our argument that noise complaints may be decreasing as a function of residences being unoccupied, and that less occupied Airbnb homes cause fewer noise complaints.

Accommodation Capacity

In addition to whether properties in a zip code experience high occupancy or not in a given month, it is also worth considering the effect of accommodation capacity, i.e., the total number of guests who are permitted to stay in a property. When viewed in aggregate, zip codes that have rental properties that have high accommodation capacities are likely to see a different effect in terms of noise complaints. We thus probe any moderation effect which might come from the mean rental capacity. To do so we consider the average number of guests that can be hosted in a property per zip code and split the sample at the median. Based on this split, zip codes are assigned to the High-Occupancy or Low-Occupancy subsamples across the full dataset.[16] We then conduct the split-sample analysis shown in Columns 1 and 2 of Table 11.

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[15] Table 10 also shows the results for the occupancy in 60 (vs. 30) days calculated by applying the same rolling basis (using 60-day and 90-day availabilities instead). The results are consistent with those based on the monthly occupancy.
[16] We keep the zip codes in their respective subsamples over the course of the panel because the accommodation capacity available in a zip code does not have any significant variation. 88% of the zip codes have a median absolute deviation of 0 guests. Nevertheless, we repeat the analysis for individual years and the results are qualitatively the same.

Results indicate that noise complaints are negatively associated with Airbnb's entry in the zip codes where Airbnb rentals accommodate fewer guests, and the negative effect disappears in the zip codes where Airbnb rentals accommodate more guests, on the margin. This result provides further evidence that the less crowded the properties are, the greater the noise reduction is. On the other hand, Airbnb properties accommodating larger groups may see an increase in noise complaints. This positive effect exhibits itself when the fourth quartile for accommodation levels is used as a subsample (using the same split criterion described above). Column 3 of Table 11 shows that the effect is positive and significant. From a regulatory perspective, this is worth noting since hotels are regulated in terms of how many guests are allowed to stay in each unit. No such regulation exists for Airbnb even though the platform imposes its own advisories on how many guests are ideal for a given property. It is largely up to the hosts if they are willing to adhere to such guidance from the platform – we observe here that the expected negative externality on noise complaints shows up in the relatively rare cases of large group rentals, rather than the model rental agreement which is much smaller.

Number of Establishments

In our discussions of underlying mechanisms, we also noted that guests, be they tourists, vacationers, or business travelers, who stay in Airbnbs are likely to spend more of their time outside the rental than an owner or a traditional longer-term occupant would. To the extent that such travelers are visiting NYC not to see the rental, but to experience the city, it would follow that they would spend less time in the rental property per se. Thus, we would expect to see a greater reduction in noise complaints in locations where there are significant reasons to not stay within the Airbnb property but remain active within the city. To explore this possibility, we split the sample across locations where there are more restaurants, bars, and pubs; as well as locations where there are more establishments relating to performing arts.

To conduct this analysis, we gather the data on the number of establishments in a zip code from the U.S. Census Bureau available for the year 2011, i.e. the mid-point of our sample. We then split the sample at the median. Results in Columns 1 and 2 of Table 12 show that the number of noise complaints decreases in the zip codes with higher than median number of restaurants and bars, hence more options to spend time outside a rental. In the zip codes with lower than median restaurants and bars, the noise reduction effect

disappears. Similarly, Columns 3 and 4 of Table 12 show that the decrease in the number of residential noise complaints is larger in the zip codes where there are higher than median number of performing arts establishments, albeit the difference is marginal. Here again, we see evidence that the impact of Airbnb's entry on noise complaints is largely contingent on factors that drive guest behavior such as where to spend time.

Discussion

The advent of home-sharing platforms like Airbnb has led to significant speculation in the academic community and popular press about the ostensible effects on the economy, businesses, and individuals. One such outcome that has been associated with the entry of Airbnb, but has not been rigorously investigated empirically, is noise pollution. In this paper, we attempt to fill this gap by studying the relationship between Airbnb entry into in New York City and noise complaints registered with the city authorities. We also add to the broader work examining the implications of digital platforms by studying the effect on non-participants, i.e. those who do not participate on platforms but are nevertheless affected by their entry. As platforms become more pervasive in society, and more social and economic activities become digitally mediated, it is important to consider a more expansive view of the implications of platforms for at least two reasons. First, from a managerial perspective, it is useful to understand how platforms affect outcomes in the ecosystem that they operate in, whether these outcomes are economic in nature or social (Babar and Burtch 2019, Chan and Ghose 2014, Mejia and Parker 2020). Second, and equally important, platforms raise important regulatory questions about they affect local businesses and communities, particularly when they are viewed as being disruptive to existing industries (Filippas and Horton 2019). Our work addresses both goals by providing rigorous analysis to decision makers on the pragmatic and localized effects of Airbnb's entry, rather than relying on anecdotal accounts or press reports (e.g., Lobel, 2016; McNamara, 2014).

The common narrative surrounding the entry of Airbnb and residential noise has been a deleterious one, i.e. home rentals were assumed to lead to greater noise (e.g., Binzer, 2017; Bivens, 2019; Coles et al., 2017; Filippas & Horton, 2019; Gurran & Phibbs, 2017; Horton, 2016; Khadem, 2016; McNamara, 2014; Sheppard & Udell, 2016). Noise affects not only those who choose to rent their properties but also others in the community. Moreover, noise represents one of those assorted outcomes from sharing-based platforms that may require a regulatory response from policy-makers, notably if incentives to adhere to social norms are

weak for renters (Lambert, 1983; Quattrone et al., 2016). Strikingly, we find that noise complaints decrease significantly once Airbnb listings appear in a local area. There are two potential explanations for such a result. On the one hand, platform-based incentives and reputational systems may be able to mitigate any such spillover effects. On the other hand, it is possible that renters simply are not as noisy as residents because they are not present in the property as much (if the unit is rented and occupied at all). When probing these potential mechanisms, we consider three potential sources of variation – the presence of restaurants, bars, and performance arts establishments within the region, the number of days the property is rented, and the average number of individuals within a rental party. In each case, our results support the notion that diminished occupancy is driving the observed result, suggesting that the cumulative contribution of Airbnb rentals to noise in a region is actually, and surprisingly, negative. A series of robustness tests confirm these findings, providing strength to the inferences that we draw here.

Our work thus contributes to the scholarly research on platforms in two ways. First, we study the impact of platforms not only in economic terms but in social terms, by focusing on how they affect even those that do not participate in them (Chan & Ghose, 2014; Greenwood & Agarwal, 2016; Greenwood & Wattal, 2017; Wang & Overby, 2017). There is an increasing focus on understanding how digital platforms lead to changes in individual behavior in social settings. Our work contributes by pushing this literature to consider non-participants. Second, we further the building of a critical mass of empirical research that informs regulators and policy-makers of the ways platforms affect their constituents. While it would be inappropriate for us to draw any overall conclusion about the net welfare effects of platform entry, this work serves as another tile in the increasingly rich mosaic regulators can draw from. As is evident, integrating sharing-based platforms into an ecosystem that also includes traditional firms requires an updated approach to regulation and governance (Sundararajan, 2016). Our work provides cues as to how this can be done.

Our work also informs the ongoing legal battles between Airbnb and city authorities, where questions of how home-rental platforms affect noise, security, and safety within residential neighborhoods

have come to the fore.[17] Indeed, it appears residential neighborhoods may be the areas where the reduction in noise complaints is greatest, in contrast to the common narrative referred to earlier. Using our Bayesian analysis, we can identify heterogeneity in the effect of Airbnb's entry across locations and show where noise complaints are lower. For the purposes of this exploratory analysis, we consider those NYC zip codes where Airbnb entered in 2010-2011 – there are seven zip codes where Airbnb rentals were first observed, representing a diverse set of locations from Lower Manhattan to Central Harlem. We coarsely divide these areas into residential and recreational areas, based on the presence of housing units and parks. We then plot the distributions of the effect sizes of Airbnb's entry on noise across these groups of zip codes based on the estimated Bayesian model. Results are in Figure 5.[18] As is evident, the distribution of treatment effects is more negative for regions that include significant proportions of residential areas than for those that are mostly recreational. Further, the density plots are consistent with the results in Table 5. To the extent that Airbnb's entry is associated with fears of noise in residential areas, this analysis indicates that generalizing from specific high-profile and visible incidents that may appear in the media may not be representative of the true effects of Airbnb's entry. This is particularly relevant for regulators considering such issues.

Our findings regarding the decrease in residential noise associated with Airbnb has one further implication which is worth noting. As discussed, results show a systematic *reduction* in noise complaints after Airbnb enters, which is consistent with the notion that rentals are empty when they are not occupied by renters. Indeed, even when they are rented, the aggregate noise complaints fall, rather than being unaffected. Thus, if rentals are otherwise empty, it is reasonable to surmise that the common narrative of renting a spare bedroom or a mattress is simply not true in aggregate. Rather, these properties are likely to be investment properties that owners are leasing out on Airbnb. The strategy of acquiring investment properties in order to lease them out through sharing platforms is not new – prior work has shown this to be case in the case of Uber, for instance (Gong et al., 2017). Further, press reports indicate that there has been extensive corporate

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[17] For example, see https://www1.nyc.gov/site/specialenforcement/stay-in-the-know/about-illegal-short-term-rentals.page

[18] The reductions in noise complaints are normalized within the [-1, 0] scale for ease of comparison.

transition of residential units to Airbnb rentals (which also serves a basis for NYC's lawsuit against Airbnb),[19] suggesting an increasing level of professionalism and capital investments in the peer-to-peer sharing platforms. This increased professionalism and the associated consolidation of housing units by professional Airbnb "owners" raises material concerns. First, it may lead to further pressure in the already tight NYC housing market. Furthermore, if these are indeed professional owners competing in the hospitality sector, they clearly enjoy regulatory advantages over traditional hotels (i.e. owners are engaging in regulatory arbitrage (Marshall and van Alstyne, 2014)). Viewed through this lens, our findings suggest a need to leveling the playing field between hotels and Airbnb, while also ensuring that professional owners operating on Airbnb do not stress local markets for affordable housing. We note that these inferences must be further tested empirically. However, this is a fruitful area for future research, whereby indirect indicators of professionalization and social impact (e.g. noise) can be used in assessing appropriate policy responses to broader issues stemming from the sharing economy.

Our work is subject to certain limitations. First, we consider noise complaints at the zip code level, which is a level of aggregation based on data availability. We acknowledge that noise complaints at the level of the street or immediate neighborhood would be ideal, but the current data is not available at this level of granularity. Second, we account for occupancy using data gathered from the calendar facility provided by Airbnb as well as limits on the number of guests allowed in each rental, but we do not have specific information on actual guest stays, which can only be obtained from within Airbnb. This remains a limitation, although any non-availability stemming from the property not being on the market would be subject to the same theoretical mechanisms as a guest not occupying the space. Third, while we run a series of falsification and robustness tests to establish the validity of our results, there may be other unobserved factors that could introduce bias into our estimations. Finally, while we can establish the critical role of occupancy in terms of its effects on noise, we cannot rule the alternative explanation of improved data-based governance on sharing platforms that scholars have discussed (Cohen & Sundararajan, 2017). We leave this for future research.

[19] See details at https://www.nytimes.com/2019/02/23/nyregion/airbnb-nyc-law.html

Our work also shows the way for future work. The need to provide an appropriate regulatory framework for sharing-based platforms, and their role within the economy, requires significant amounts of empirical and theoretical research – all of which represent opportunities for actionable and impactful work for information systems (IS) scholars. Furthermore, as digital platforms enter into highly social and institutionalized sectors, more research is needed to examine their social impact as well as their effects on community and social welfare. Finally, platform governance itself remains an interesting area for future research. In our own context, we do not explicitly account for Airbnb's policies or guidance provided to guests about noise, for instance, but it is worth considering how influential the platform itself is in terms of generating prosocial outcomes and reducing negative spillover effects (Lobel, 2016). Not all participants are obliged to adhere to these guidelines but to the extent that digital platforms allow greater visibility into participant behavior through information technology, negative externalities can be reduced while nurturing positive effects. Theoretically, a significant proportion of prior work in information asymmetry and market design will need to be re-evaluated if such platform-based governance models are viewed to be successful. These questions fall directly into extant IS research and represent an interesting and vital area of research.

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Table 1a: Descriptive statistics

Variable	N	Mean	SD	Median	Range
(1) Noise counts	32219	51.56	79.24	15.00	0-1550
(2) Airbnb's entry	32219	0.50	0.50	0.00	0-1
(3) Median age	16078	36.57	4.62	35.90	0-52.6
(4) # of vacant units	16205	1668.86	1305.55	1364.00	0-9173
(5) Population	16205	47049.84	26427.31	42054.00	0-114647
(6) Income	14108	17408.88	9514.73	15846.00	0-43607
(7) Education	14043	3054.12	4643.37	78.70	0-27508
(8) Unemployment	13981	9.30	3.85	8.60	0-45
(9) # of owner occupied	16205	6864.33	6349.42	5441.00	0-61657

Table 1b: Pairwise correlations

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(1) Airbnb's entry	1.000						
(2) Median age	-0.183						
(3) # of vacant units	0.274	-0.088					
(4) Population	0.175	-0.257	0.482				
(5) Income	0.231	-0.155	0.670	0.935			
(6) Education	0.309	-0.075	0.252	0.345	0.367		
(7) Unemployment	-0.094	-0.333	-0.127	0.202	0.079	-0.165	
(8) # of owner occupied	-0.040	0.404	0.303	0.491	0.521	0.147	-0.262

Table 2: Poisson fixed-effects model (Monthly)

	Noise counts			
	(1) 2004-2019	(2) 2010-2019	(3) 2010-2019	(4) 2010-2019
Entry	-0.015*** (0.003)	-0.014*** (0.003)	-0.037*** (0.004)	-0.024*** (0.004)
Median age				-0.004** (0.002)
# of vacant units				-0.00009*** (0.000004)
Population				-0.000 (0.000)
Income				-0.00002*** (0.000003)
Education				-0.000008*** (0.0000005)
Unemployment				-0.004*** (0.001)
# of owner occupied				0.00002*** (0.000005)
Observations	32342	20609	16286	14033
Zip fixed effects	Yes	Yes	Yes	Yes
Month fixed effects	Yes	Yes	Yes	Yes
Exposure (# of units)	No	No	Yes	Yes
Note:			*p<0.05; **p<0.01; ***p<0.001	

Table 3: Poisson fixed-effects model (Quarterly and yearly)

	Noise counts			
	(1)	(2)	(3)	(4)
	Quarter	Year	Quarter	Year
Entry	-0.005***	-0.026***	-0.013***	-0.049***
	(0.001)	(0.004)	(0.001)	(0.004)
Observations	11293	2982	5676	1441
Zip fixed effects	Yes	Yes	Yes	Yes
Quarter/Year fixed effects	Yes	Yes	Yes	Yes
Exposure (# of units)	No	No	Yes	Yes
Note:		*p<0.05; **p<0.01; ***p<0.001		

Table 4: Results of the leads/lags (relative time) model

	Noise counts
tm12	-0.010
	(0.015)
tm11	0.017
	(0.015)
tm10	0.013
	(0.015)
tm9	-0.010
	(0.015)
tm8	0.008
	(0.015)
tm7	0.002
	(0.015)
tm6	0.009
	(0.015)
tm5	0.0001
	(0.015)
tm4	-0.010
	(0.014)
tm3	-0.024
	(0.014)
tm2	-0.001
	(0.014)
tm1	0.016
	(0.014)
t0	Omitted
t1	0.006
	(0.014)
t2	0.012
	(0.014)
t3	0.009
	(0.014)
t4	-0.059***
	(0.014)
t5	-0.083***
	(0.014)
t6	-0.096***
	(0.014)
t7	-0.059***
	(0.014)
t8	-0.040***
	(0.013)
t9	-0.084***
	(0.014)
t10	-0.085***
	(0.014)
t11	-0.050***
	(0.013)
t12	-0.077***
	(0.013)
Observations	32233
Zip fixed effects	Yes
Month fixed effects	Yes
Note:	*p<0.05; **p<0.01; ***p<0.001

Table 5: Results of Bayesian Poisson regression

Number of observations: 2906
Samples: 4 chains, each with iteration = 10000; warmup = 2000; thin = 1;
total post-warmup samples = 32000

Group-Level Effects:
~zip (Number of levels: 184)

	Estimate	Est. Error	l-95% CI	u-95% CI	Rhat
sd(Intercept)	1.779	0.096	1.600	1.975	1.00

Population-Level Effects:

	Estimate	Est. Error	l-95% CI	u-95% CI	Rhat
Entry	-0.020	0.004	-0.027	-0.013	1.00
Year 2005	-0.318	0.066	-0.446	-0.188	1.00
Year 2006	-0.779	0.076	-0.928	-0.630	1.00
Year 2007	-1.219	0.090	-1.398	-1.048	1.00
Year 2008	-0.866	0.078	-1.019	-0.714	1.00
Year 2009	-1.347	0.094	-1.534	-1.165	1.00
Year 2010	5.371	0.043	5.289	5.455	1.00
Year 2011	5.338	0.043	5.255	5.421	1.00
Year 2012	5.474	0.043	5.392	5.558	1.00
Year 2013	5.644	0.043	5.561	5.727	1.00
Year 2014	5.886	0.043	5.804	5.970	1.00
Year 2015	5.701	0.043	5.619	5.784	1.00
Year 2016	5.949	0.043	5.866	6.033	1.00
Year 2017	6.064	0.043	5.982	6.148	1.00
Year 2018	6.009	0.043	5.927	6.093	1.00
Year 2019	5.658	0.043	5.576	5.742	1.00
Intercept	0.372	0.133	0.102	0.622	1.04

- Samples were drawn using NUTS, a Hamiltonian Monte Carlo Method.
- Rhat is the Gelman-Rubin convergence diagnostic; the scale reduction factor on split chains (Gelman & Rubin, 1992). Rhat=1.00 at full convergence. While Rhat < 1.2 is acceptable, Rhat < 1.1 is a more stringent evidence for model convergence (Brooks & Gelman, 1998; Gelman et al., 2013).

Table 6: Falsification Tests – Collection Truck and Street & Sidewalk Noise

	Noise counts	
	(1)	(2)
	Collection Truck Noise	Street and Sidewalk Noise
Entry	-0.062	0.053***
	(0.113)	(0.009)
Observations	20235	20235
Zip fixed effects	Yes	Yes
Month fixed effects	Yes	Yes
Exposure (# of units)	Yes	Yes
Note:		*p<0.05; **p<0.01; ***p<0.001

Table 7: First and Second Order Lags in the Poisson Estimations of Airbnb Entry

	Noise counts			
	(1)	(2)	(3)	(4)
	Original model	With the first lag	With the second lag	With the both lags
Entry	-0.024***	-0.014**	-0.017***	-0.013**
	(0.004)	(0.004)	(0.004)	(0.004)
Noise first order lag		0.002***		0.002***
		(0.00001)		(0.00002)
Noise second order lag			0.002***	0.0006***
			(0.00001)	(0.00002)
Median age	-0.004***	-0.010***	-0.008***	-0.011***
	(0.002)	(0.002)	(0.002)	(0.002)
# of vacant units	-0.0001***	-0.00002***	-0.00004***	-0.00001***
	(0.00000)	(0.00000)	(0.00000)	(0.00000)
Population	-0.00000	0.00000	0.00000	0.00000
	(0.00000)	(0.00000)	(0.00000)	(0.00000)
Income	-0.00002***	-0.00003***	-0.00003***	-0.00004***
	(0.00000)	(0.00000)	(0.00000)	(0.00000)
Education	-0.00001***	-0.00001***	-0.00001***	-0.00001***
	(0.00000)	(0.00000)	(0.00000)	(0.00000)
Unemployment	-0.004***	-0.002*	-0.002*	-0.001
	(0.001)	(0.001)	(0.001)	(0.001)
# of owner occupied	0.00002***	0.00004***	0.00003***	0.00004***
	(0.00000)	(0.00000)	(0.00000)	(0.00000)
Observations	13931	13931	13931	13931
Zip fixed effects	Yes	Yes	Yes	Yes
Month fixed effects	Yes	Yes	Yes	Yes
Exposure (# of units)	No	Yes	Yes	Yes
Note:				*p<0.05; **p<0.01; ***p<0.001

Table 8: Logit model of Zip-Level Noise Counts on Airbnb's Entry (Entry Model)

	Airbnb's entry
Noise counts	0.00002
	(0.00001)
Observations	2,906
Zip fixed effects	Yes
Year fixed effects	Yes
Note:	*p<0.05; **p<0.01; ***p<0.001

Table 9: Replication of the Base Model with the Zip Code Time Splines (Poisson Estimation)

	Noise counts
Entry	-0.013***
	(0.003)
Observations	32342
Zip fixed effects	Yes
Month fixed effects	Yes
Zip code time splines	Yes
Note:	*p<0.05; **p<0.01; ***p<0.001

Table 10: Airbnb's Effect on Noise Complaints based on Occupancy

	Noise counts			
	Based on occupancy in 30 days		Based on occupancy in 60 days	
	(1)	(2)	(3)	(4)
	Lower median occupancy	Higher median occupancy	Lower median occupancy	Higher median occupancy
Entry	-0.031***	-0.021***	-0.033***	-0.015***
	(0.005)	(0.004)	(0.004)	(0.004)
Observations	19548	26064	21901	22082
Zip fixed effects	Yes	Yes	Yes	Yes
Month fixed effects	Yes	Yes	Yes	Yes
Note:				*p<0.05; **p<0.01; ***p<0.001

Table 11: Airbnb's Effect on Noise Complaints based on Accommodation Capacity

	Noise counts		
	(1)	(2)	(3)
	Lower median capacity	Higher median capacity	Higher than 75th percentile
Entry	-0.030***	0.011	0.113***
	(0.004)	(0.006)	(0.009)

Observations	18281	18100	9231
Zip fixed effects	Yes	Yes	Yes
Month fixed effects	Yes	Yes	Yes
Note:			*p<0.05; **p<0.01; ***p<0.001

Table 12: Airbnb's Effect on Noise Complaints based on the Number of Establishments

	Noise counts			
	Restaurants and bars		Performance arts establishments	
	(1)	(2)	(3)	(4)
	Lower than Median Restaurants/Bars	Higher than Median Restaurants/Bars	Lower than Median Performance Arts	Higher than Median Performance Arts
Entry	0.005	-0.028***	-0.021***	-0.022***
	(0.005)	(0.005)	(0.005)	(0.005)
Observations	19729	18281	19548	18462
Zip fixed effects	Yes	Yes	Yes	Yes
Month fixed effects	Yes	Yes	Yes	Yes
Note:				*p<0.05; **p<0.01; ***p<0.001

Figure 1: Staggered entry of Airbnb into New York City

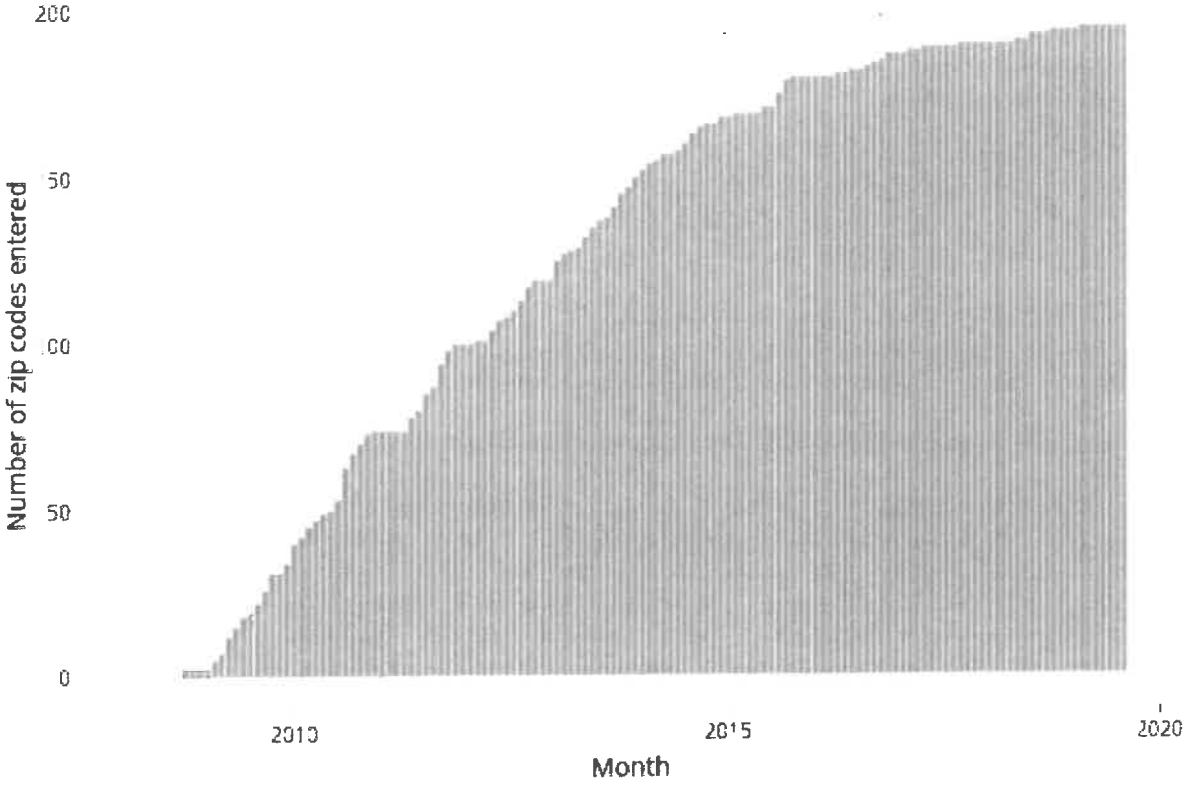

Figure 2: Presentation of the Effect of Airbnb Entry on Noise Complaints in Relative Time

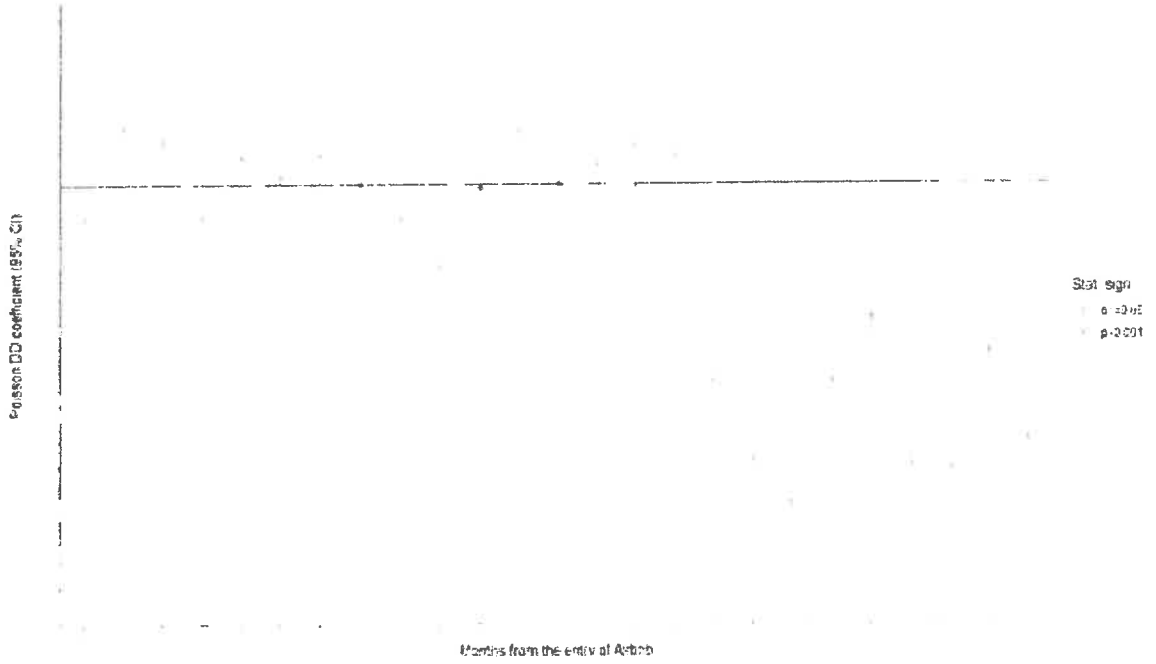

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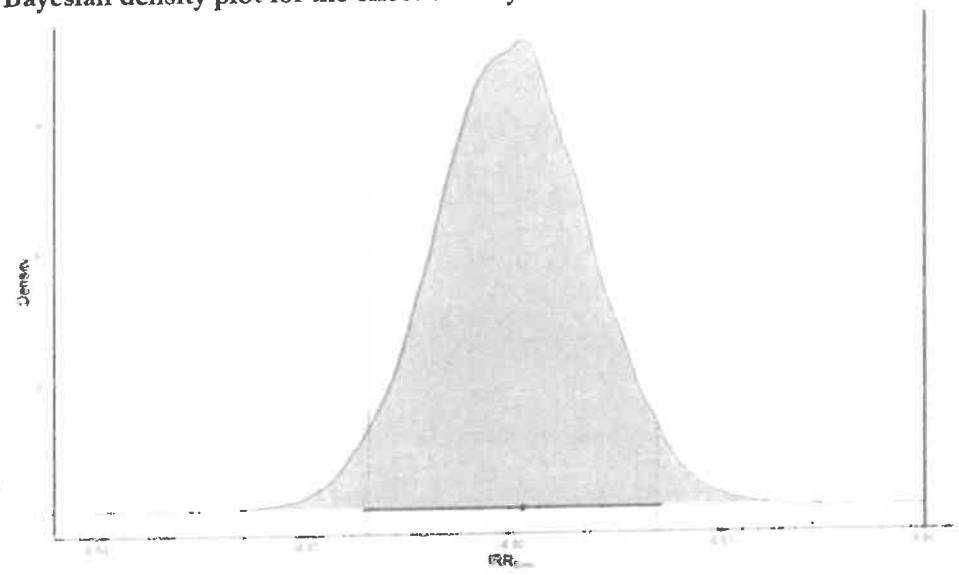
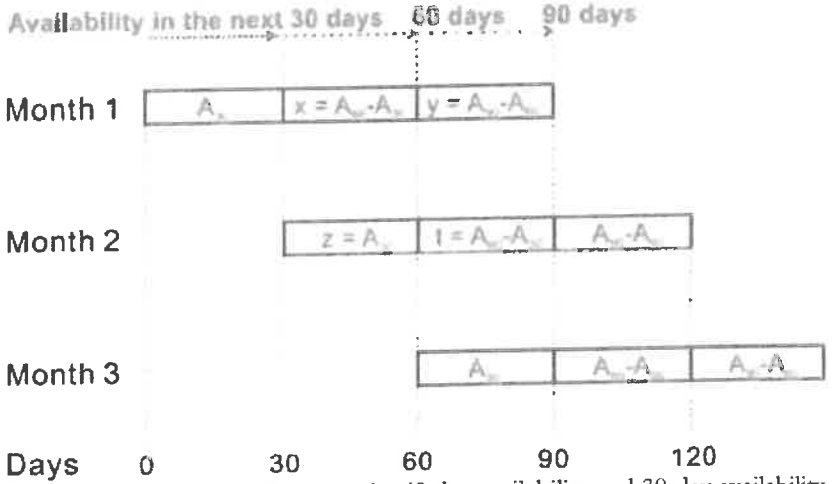
Figure 3: Bayesian density plot for the effect of entry from a thousand iterations in four MCM chains



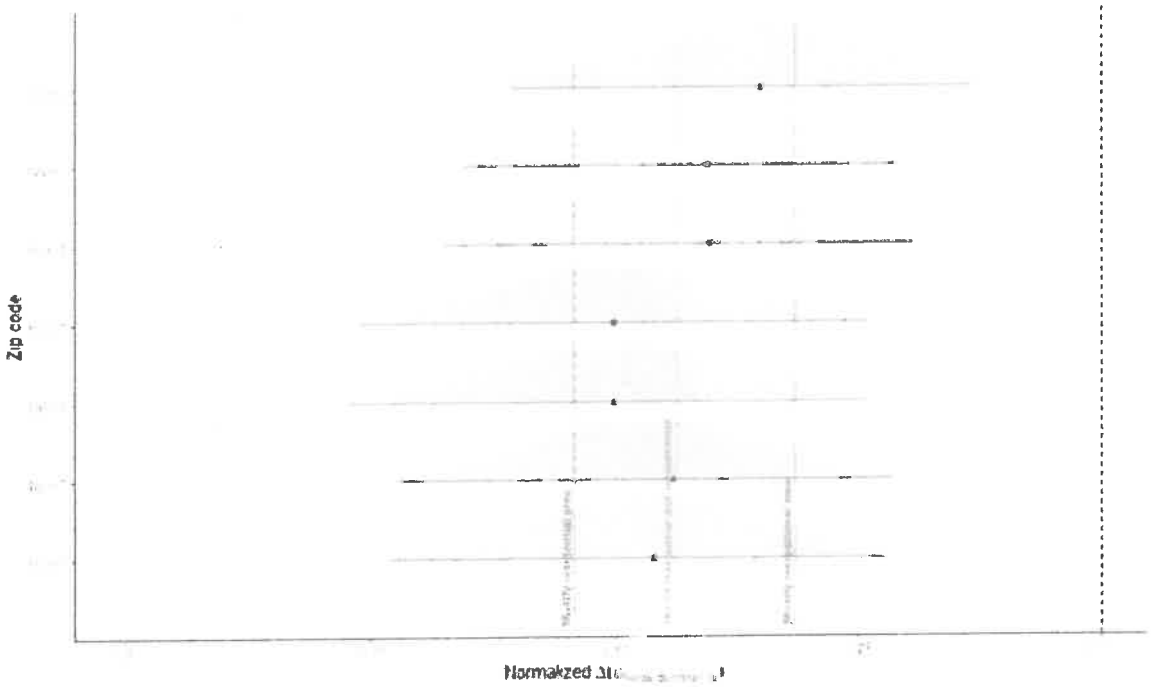
- The blue dashed lines show the 95% credible (percentile) interval for the estimated coefficient.
- The bold line on the x-axis shows the 95% highest posterior density interval with the mode marked.

Figure 4: Calculation of the occupancy metric for the moderation test



In the figure, "x" represents the difference between the 60-day availability and 30-day availability as measured in the first month. "z" represents the 30-day availability of the second month. Thus, the difference between "x" and "z" shows the number of days the property is booked for this property from Month 1 to Month 2 between the days 30 and 60 (the number of bookings in 30 days). Similarly, "y" represents the difference between the 90-day availability and 60-day availability as measured in the first month. "t" represents the difference between 60-day availability and 30-day availability as measured in the second month. Therefore, the difference between "y" and "t" shows the number of days the property is booked from Month 1 to Month 2 between the days 60 and 90. The total, (x-z)+(y-t), is the number of days the property is booked in 60 days.

Figure 5: Bayesian density plots for the change in noise from 2010 to 2011 for Manhattan zip codes



- The horizontal lines on the x-axes show 95% highest posterior density intervals with the modes.
- The vertical dashed lines show the means of the modes for three different groups of zip codes.

The Effect of Short Term Rentals on Neighborhood Nuisance Complaints Along the Central Coast

Do short-term rentals cause an increase in nuisance complaints in Central Coast cities?

A report prepared by the

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June 28, 2016

FINAL REPORT

Executive Summary

The purpose of this report is to present data-supported analysis and conclusions regarding the incidence of nuisance complaints for Short-Term Rentals (STRs) in cities and unincorporated areas along the Central Coast. This study addresses the specific question: Do short-term rentals cause an increase in nuisance complaints in Central Coast cities?

Nuisance complaints can be associated with safety issues for residential neighborhoods. Nuisance reporting includes noise, parking on front yards or setbacks, trash, suspicious activity, abandoned automobiles, and outside storage.

The areas that we evaluated for nuisances included the cities of San Luis Obispo, Santa Maria, Lompoc, Solvang, Goleta, Santa Barbara, Carpinteria, Ventura, Thousand Oaks, and the unincorporated areas of Santa Barbara County.

Nuisance report data for STRs are only collected in three cities along the Central Coast: Santa Barbara, Goleta, and Ventura. For Santa Barbara, the compiling of nuisance reported data for STRs began in 2006. For Goleta and Ventura, the compiling of nuisance reported data for STRs began in 2015.

For **STR residential homes**, the rate of nuisance reporting per year is as follows:

Area	Reporting Period	Nuisance Report Rate per Home
Santa Barbara City	01/06 – 05/16	0.00662
City of Goleta	02/15 – 05/16	0.00
City of Ventura	11/15 – 04/16	0.00

Nuisance report rates for all residential homes were compiled for the areas that maintain such records. These areas include the cities of Santa Barbara, Santa Maria, Thousand Oaks, and San Luis Obispo, and the unincorporated areas of Santa Barbara County.

For **ALL residential homes**, the rate of nuisance reporting per year is as follows:

Area	Reporting Period	Nuisance Report Rate per Home
City of Santa Barbara	01/06 – 05/16	0.00699
City of Santa Maria	03/97 – 03/16	0.065
Unincorporated Santa Barbara County		
Including Isla Vista	01/15 – 12/15	0.045
Excluding Isla Vista	01/15 – 12/15	0.014
Thousand Oaks	01/15 – 12/15	0.025
San Luis Obispo	01/15 – 12/15	0.019

The results above indicate that the nuisance report rates for STRs in Santa Barbara City, the City of Goleta, and the City of Ventura are substantially less than the nuisance report rate for all residential homes in Santa Maria, the unincorporated area of the County, Thousand Oaks, and San Luis Obispo.

Furthermore, the nuisance report rate for STRs in Santa Barbara City is slightly lower than the rate for all residential properties in the City.

Consequently, the findings of this study strongly suggest that the presence of STRs do not result in heightened nuisance issues in Central Coast residential neighborhoods. Moreover, the presence of STRs may actually reduce the rate of nuisance complaints; possibly because of the type of occupant that utilizes STRs.

Nuisance Reports for Short-Term Rental Properties

In a separate report, we concluded that STR properties are principally single-family detached homes.[1] Consequently, they would largely be located in residential neighborhoods around the County of Santa Barbara.

The question of safety was originally raised in a report by the Los Angeles Alliance for a New Economy.[2] In the report, the authors write about numerous complaints made to Neighborhood Councils by neighbors over actions by tourists staying in AirBnB rentals. "These complaints include unfamiliar cars blocking driveways, late night parties on formerly quiet streets, and concerns about child safety in an environment with fewer familiar eyes on the street."[3]

For this study, we reviewed nuisance reports for 6 cities and found that the cities of Goleta, Santa Barbara and Ventura monitor these reports for homes designated as STRs. No such designation exists in Santa Maria, Lompoc, Carpinteria, or the unincorporated areas of Santa Barbara County.

The fact that the majority of cities have not deemed it necessary to establish a zoning designation for homes being used as STRs (for the purpose of monitoring complaints and/or safety issues) is evidence that they generally are not considered safety threats in neighborhoods.

In the City of Goleta, there have been no reports or complaints filed regarding short-term rentals since the monitoring started in February 2015. Our contact at the City of Goleta was Vyto Adomaitis, Director, Neighborhood Services and Public Safety.

In the City of Ventura, the monitoring of STR homes commenced in November 2015. We spoke to Noelle Sorensen, the administrator in the City of STRs. She indicated that no nuisance reports had been received regarding STRs in the 5-month period between the inception of the program and April 1, 2016.

However, in the City of Santa Barbara, there is a zoning designation for homes that rent short term, and this designation has been in effect for approximately 10 years.

In a report to the City Council, staff wrote the following:

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[1] "The Effect of Short Term Rentals on the Supply of Housing in Santa Barbara City and County," a report prepared by the California Economic Forecast, May 12, 2015.
[2] AirBnB, rising rent, and the housing crisis in Los Angeles, http://www.laane.org/wp-content/uploads/2015/03/AirBnB-Final.pdf
[3] *ibid.*, page 21

> The City has seen a slight rise in complaints about vacation rentals, and the majority involve cases where the entire housing unit is being rented out as a vacation rental. The City has received very few complaints to date where a single room is rented out and the primary occupant remains on the property. Vacation rental complaints are extremely challenging enforcement cases, as the activity is not necessarily easily observed from the street or visible to the public. Since 2004, over 60 complaints regarding vacation rentals have been received. Zoning staff has been able to verify noncompliance and successfully abate most of those cases. The remaining cases were closed due to lack of evidence to confirm a violation. Currently, there are seven vacation rental complaints under investigation by zoning enforcement staff.[4]

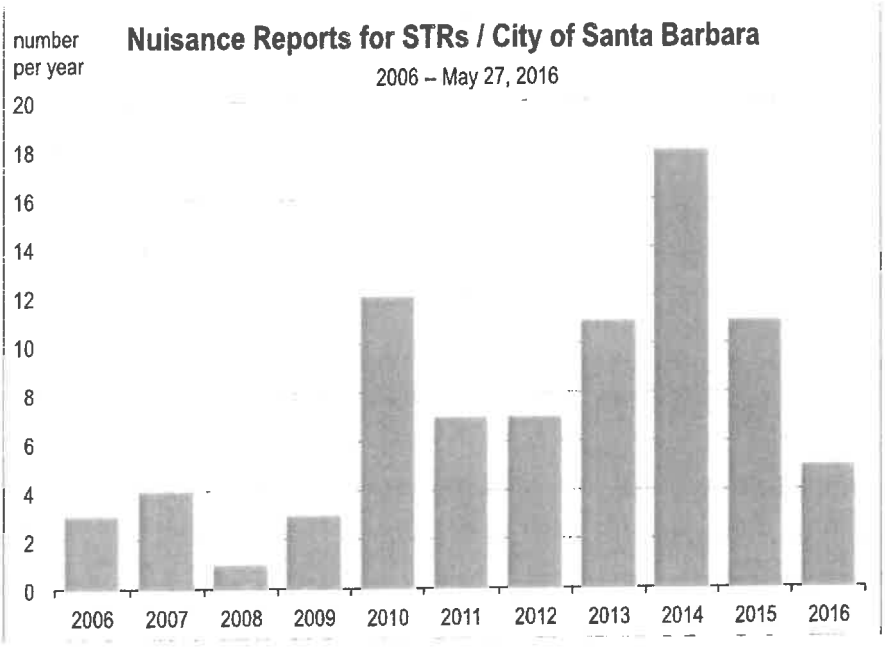
We requested and were able to obtain nuisance report information from the Code Enforcement Department of the City of Santa Barbara, annually from 2006 through May of 2016.[5] For this 10 ½ year period, there were a total of 82 nuisance complaints:

2006	3
2007	4
2008	1
2009	3
2010	12
2011	7
2012	7
2013	11
2014	18
2015	11
2016	5

Source: Andrew Perez, Code Enforcement Officer, City of Santa Barbara

[4] City of Santa Barbara Staff Report to the City Council; Subject: the Council Direction on Short-Term Vacation Rental Regulations, June 23, 2015, pages 5 and 6.

[5] The data was provided by Andrew Perez on May 27, 2016. (805) 564-5470 x4559. The reports for 2016 were year-to-date.



82 nuisance reports over a 10.42 year period produces an average of 7.9 nuisance complaints coming from STRs per year.

There are 1,193 STRs operating in the City of Santa Barbara as of 2015[6] and 7.9 nuisance reports per year on average. The rate of STR nuisance reports in the City of Santa Barbara for STRs is therefore:

7.9 reports per year / 1,193 STRs = 0.00662 nuisance reports per STR per year.

Nuisance Reports for ALL Residential Properties

Nuisance and/or noise complaint data for ALL residential properties is available for the City of Santa Maria, the unincorporated areas of Santa Barbara County, the City of San Luis Obispo, the City of Thousand Oaks, and the City of Santa Barbara.

Nuisance and/or noise complaint data for ALL residential properties was not available for the cities of Goleta and Ventura until only recently. For Lompoc, Solvang or Carpinteria, no complaint data on nuisance issues could be acquired because databases do not exist for non-STR properties in these jurisdictions. For the City of Santa Barbara nuisance report

[6] See: TXP, Inc., "The Local Economic Impact of Short Term Rentals in Santa Barbara, CA," Fall 2015, and page 7 of our first report entitled: "The Effect of Short Term Rentals on the Supply of Housing in Santa Barbara City and County," *op. cit.*

data for all residential properties was obtained annually for the 2006 though June 2016 period.[7]

City of Santa Barbara

The report data for the City of Santa Barbara originate in 2006 and are available annually through May of 2016. Total residential nuisance complaints per year are as follows:

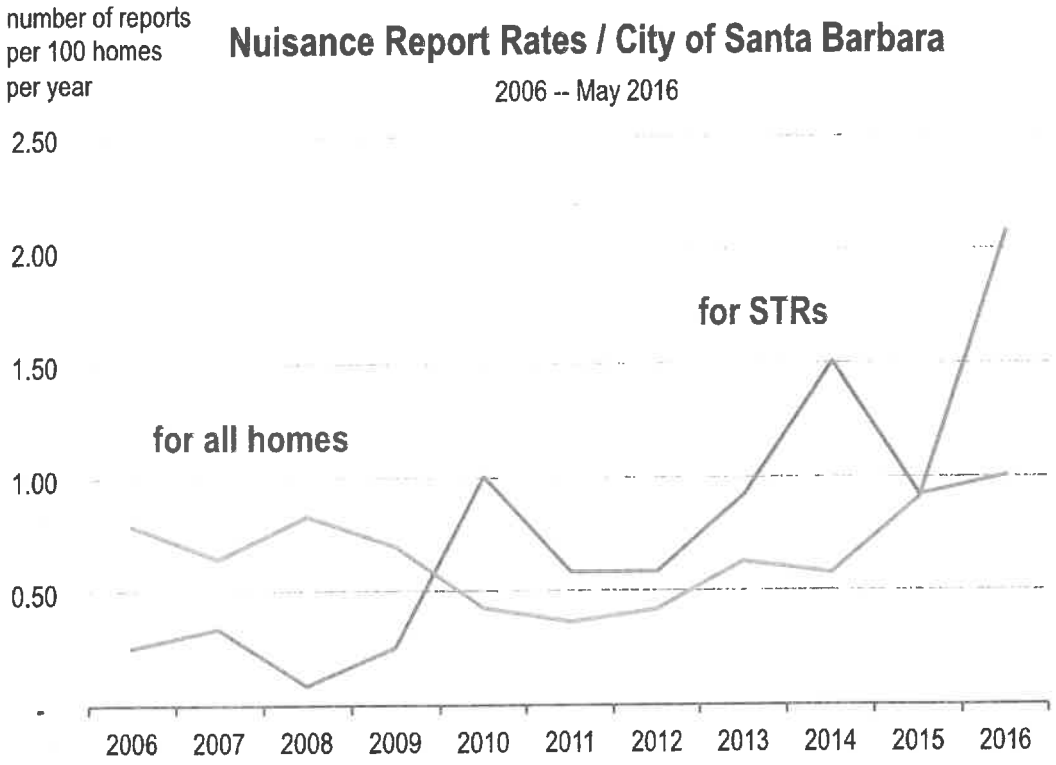
2006	278
2007	228
2008	294
2009	247
2010	151
2011	130
2012	151
2013	228
2014	210
2015	329
2016	378

Annual information on the occupied housing stock for the City of Santa Barbara was obtained from the Department of Finance, Report E-5 for all years since 2006. Consequently, a nuisance report rate for all residential properties could be computed each year.

For 2016, the annual rate was adjusted to account for the partial year-to date- in which total nuisance complaints have been received. There have been an extraordinary number of complaints during the first 6 months of 2016 for all residential properties in the City. The nuisance report rate was 0.0208 per home, or 2.08 per 100 homes.

The annual average over the entire 2006 to 2016 period was 0.00699 complaints per home (or 0.761 complaints per 100 homes).[8] A chart of the nuisance rate for STRs and All Residential Homes in Santa Barbara is presented here:

[7] This information was received from Andrew Perez in Code Enforcement on June 27, 2016.
[8] See Appendix A.



The nuisance report rates over time for STRs versus All Homes are very close. The rate for STRs was the lower rate from 2006 to 2009. The rate for All Homes was lower between 2010 and 2014. The rates were even in 2015. The rate for All Homes is substantially higher this year.

City of Santa Maria

The reports for the City of Santa Maria span 19 years and pertain to all properties. The total for the March 1997 to March 2016 period shows 38,131 complaints. Many of these complaints would not be the type associated with a short term rental, such as not having a temporary use permit, business sales without permits, keeping of roosters, living in recreational vehicles, legal recordings, conducting business in a residential neighborhood, or vector issues. If these are omitted, the total shrinks to 33,373, an average of 1,756 per year.

There are 27,185 occupied residential units in the City of Santa Maria. The average number of occupied housing units over the 19-year period was 26,936. Consequently, the rate of relevant nuisance reports is:

1,756 / 26,936 = 0.065 per home per year.

Unincorporated Areas of Santa Barbara County

For the unincorporated area of Santa Barbara County, we obtained the following information on noise complaints:

Unincorporated Area	2014	2015
Santa Barbara	152	174
Santa Maria	261	210
Lompoc	69	55
Santa Ynez	51	67
Isla Vista	1,353	1,476
Montecito/Summerland Area	91	68
Totals	1,977	2,050

Total residential units that are occupied in the unincorporated area of the County sum to 45,992.[9]

For 2015, the noise complaint rate was:

2,050 / 45,992 = 0.0446 complaints per home

The rate is clearly skewed upward, by Isla Vista.

If Isla Vista is removed from the rate determination for the unincorporated area noise complaint rate, the rate declines to:

574 complaints / 40,828 occupied housing units[10] = 0.0140 per home

San Luis Obispo and Thousand Oaks

We obtained information on nuisance reports in 2015 for Thousand Oaks and San Luis Obispo. The nuisance report rate for each was:

[9] The housing stock information is from Table 2 of Report E-5 City/County Population and Housing Estimates 1/1/2015, from the Department of Finance, Population Research Unit.
[10] There are 5,164 occupied housing units in Isla Vista. If these are removed from the total occupied housing units in the unincorporated area of Santa Barbara County (45,982), the total is reduced to 40,828. See http://islavista.areaconnect.com/statistics.htm

	Nuisance Report Rate per Home
San Luis Obispo	0.0252
Thousand Oaks	0.0193

Calculations for these rates: see Appendix A

Conclusion

One of the principal efforts to monitor the nuisance and/or safety issues associated with STRs in residential neighborhoods is to determine how many complaints are filed by neighbors for disturbances coming from STR homes.

Nuisance Reports for Short Term Rental Properties

An average of 7.9 nuisance complaints per year for STR properties in the City of Santa Barbara were received over a 10.42 year period, ending May 2016. The rate of complaints per STR home is 0.0066 per year.

Zero nuisance complaints have been recorded for STR properties in the City of Goleta since monitoring commenced in February 2015. Zero nuisance complaints have been recorded for STR properties in the City of Ventura since monitoring commenced in November 2015.

Nuisance Reports for ALL Residential Properties

Nuisance and/or noise complaint data for ALL residential properties is available for the City of Santa Maria, the Unincorporated Areas of Santa Barbara County, the City of San Luis Obispo, the City of Thousand Oaks, and the City of Santa Barbara.

Nuisance and/or noise complaint data for ALL residential properties was not available for the cities of Goleta or Ventura until just recently. Complaint data is entirely unavailable for Lompoc, Solvang or Carpinteria because databases do not exist-for non-STR properties.

The nuisance report rates for STRs in Santa Barbara, Goleta, and Ventura are substantially less than the nuisance report rate for all residential homes in the cities for which data could be obtained. For the City of Santa Barbara, the two rates were approximately the same, but slightly lower for STRs over the entire 2006-2016 period of examination.

Consequently, the findings of this study strongly suggest that the presence of STRs do not result in heightened nuisance issues in Central Coast residential neighborhoods. Moreover, the presence of STRs may actually reduce the rate of nuisance complaints in residential neighborhoods.[11]

[11] See Appendix B

Appendix A / Methodology and Calculations

A number of cities in the central coast were contacted to obtain reports on residential nuisances. For the central coast, the cities of Santa Barbara, Goleta, Carpinteria, Santa Maria, Ventura, Solvang, Thousand Oaks, Lompoc, and San Luis Obispo were contacted. We requested reports of the number of nuisance calls made on residential properties over time.

However, not every city maintained data on nuisance reports and virtually no cities maintained information that was separate between STR classified houses and non-STR classified homes. The cities of Santa Barbara and Goleta were the only two cities in our sample that tracked nuisance reports separately for STR classified properties and non-STR classified properties.

In fact, some cities, such as Lompoc, had no information on nuisance reports whatsoever. Furthermore, Solvang, Ventura, and Carpinteria reported that even though they have a Code Enforcement Division, they do not track the number of nuisance reports received over time, nor do they have any record of the current number of nuisance reports.

Below is a table that presents our city contacts:

Location	Contact(s)
Santa Barbara City	Andrew Perez
City of Goleta	Vyto Adomaitis
Carpinteria	Silvia Echeverria
Santa Maria	Ezekial Moran
Santa Barbara County - Uninc.	Jessica Metzger
Ventura	Noelle Sorensen
Solvang	805 - 688 - 5575 (Name Not Given)
Thousand Oaks	Geoff Ware
San Luis Obispo	805 - 781 - 7311 (Name Not Given)

Following receipt of the nuisance reported information from the cities, a ratio of nuisance reports per occupied housing unit was created by city for each year. The ratio was scaled per 100 homes.

San Luis Obispo

Year	Housing Stock	DAC Reports	Reports per 100 Homes
2006	17867	1217	6.81
2007	17906	1286	7.18
2008	18022	1364	7.57
2009	18083	1148	6.35
2010	17,711	785	4.43
2011	17,720	639	3.61
2012	17,720	544	3.07
2013	17629	515	2.92
2014	17679	549	3.11
2015	17752	448	2.52

Average for 2006 to 2015 4.76

Thousand Oaks

Year	Housing Stock	Reports	Reports per 100 Homes
2011	45913	879	1.91
2012	46278	1039	2.25
2013	46723	743	1.59
2014	46914	1327	2.83
2015	47095	907	1.93

Average for 2011 to 2015 2.10

Santa Maria

Year	Housing Stock	Reports per year	Reports per 100 Homes
1997 - 2015 Cumulative	26936	1756	6.52

Santa Barbara Unincorporated Cumulative

Year	Housing Stock	Reports	Reports per 100 Homes
2014	45751	1977	4.32
2015	45992	2050	4.46

Average for 2014-2015 4.39

City of Santa Barbara

The total number of nuisance reports for STR properties in the City of Santa Barbara is 82 between January 2006 and May 2016. The average per year is therefore 82 / 10.42 years = 7.9. Total STR housing stock has been estimated at 1,193 in the City of Santa Barbara. The rate is therefore:

7.9 / 1,193 = 0.00662 per home

Year	Number of STRs	Reports for STR	Reports per 100 STR Homes	adjusted
2006	1,193	3	0.25	0.25
2007	1,193	4	0.34	0.34
2008	1,193	1	0.08	0.08
2009	1,193	3	0.25	0.25
2010	1,193	12	1.01	1.01
2011	1,193	7	0.59	0.59
2012	1,193	7	0.59	0.59
2013	1,193	11	0.92	0.92
2014	1,193	18	1.51	1.51
2015	1,193	11	0.92	0.92
2016	1,193	5	0.42	1.01
Average rate for the 2006 to 2016 period			0.625	0.0662

Year	Housing Stock	Total Reports	Reports per 100 Homes	adjusted
2006	35,168	278	0.79	0.79
2007	35,270	228	0.65	0.65
2008	35,372	294	0.83	0.83
2009	35,413	247	0.70	0.70
2010	35,449	151	0.43	0.43
2011	35,633	130	0.36	0.36
2012	35,793	151	0.42	0.42
2013	36,154	228	0.63	0.63
2014	36,250	210	0.58	0.58
2015	36,337	329	0.91	0.91
2016	36,383	378	1.04	2.08
Average rate for the 2006 to 2016 period			0.667	0.0699

The adjusted column adjusted the rate for the full calendar year;
only 2016 has been adjusted, based on reports for the first 5 months of 2016

Source: Andrew Perez City of Santa Barbara

For all residential properties in the City, the total number of nuisance complaints over the 10.5 year period (January 2006 through June 2016) was 2,624. The average per year is:

2,624 / 10.5 years = 249.9 per year

The average annual occupied housing stock in the City of Santa Barbara over the 2006 to 2016 time period was 35,747 homes. The nuisance rate is therefore:

249.9 / 35,747 = 0.006991 per home

Appendix B

STRs may actually reduce the rate of nuisance complaints in residential neighborhoods

Because of the type of home (and therefore the type of occupant) that typically engages in STR activity, this conclusion should intuitively follow. A survey that was conducted of 319 STR homeowners indicated that the value of the median home was $2.6 million.[12]

Occupants of these types of properties are more likely to be older and more affluent than the typical homeowner in Santa Barbara. More affluent and older users of STRs are going to be less likely to create nuisances in City neighborhoods.

[12] *op.cit.*, "The Effect of Short Term Rentals on the Supply of Housing in Santa Barbara City and County," a report prepared by the California Economic Forecast, May 12, 2015. See page 13

EXHIBIT D

Permit Center
210 Lottie Street, Bellingham, WA 98225
Phone: (360) 778-8300 Fax: (360) 778-8301 TTY: 711 (WA Relay)
Email: permits@cob.org Web: www.cob.org/permits

Pre-Application Conference Request

See Pre-Application Conference informational packet for complete submittal requirements and instructions for scheduling a pre-application conference.

Property Information

Site Address
(use block range if unassigned) 3108 Birchwood Avenue

Parcel Number(s) 380223 382483

Legal Description(s) BENNETT HILL LOT 37 BLK 1-EXC COAL DEPOSITS

Neighborhood, Area # Birchwood, Area 1

Zoning Single Family Residential

Project Information

Description of work Single family residence, driveway and associated utilities as well utility stubs for future lots.

Is this conference: ☐**Required** ☒**Voluntary**

Please select reason for conference (check all that apply)

☐Preliminary Plat (10 or more lots);
☐General binding site plans;
☐Planned development and institutional site plans;
☐Shoreline substantial development permits, conditional uses and variances;
☐Design review (excluding Type I);
☐Co-housing;
☐Conditional use (excluding bed-and-breakfast and single family residential uses that do not exceed the thresholds for building and grading applications as listed below);
☐Rezones and site specific comprehensive plan amendments;
☐Institutional master plans (including essential public facilities reviewed under the IMP process);
☐Critical area permit (excluding Type I);
☐Demonstration housing;
☐Preliminary short plat requiring a critical area permit;
☒Building or grading applications for projects that include any of the following situations:
- ☐Required land use permits have not been completed;
- ☐Required SEPA environmental review has not been completed;
- ☒Over 5000 sq. ft. of new or replaced impervious surface;
- ☐Disturbance of more than 1 acre of land;
- ☐Public street or public utility construction, or
- ☐Construction of more than 1 primary building on a lot or any building that is 4 stories or more;

☐Any project that the Planning Director determines to be similar in nature to those listed above.

Number of people that you will have attending the meeting: 2

Building Information, If applicable

☒ **Residential, # of Dwelling Units** 1 single family home as well as 3 future homes (4 total)

☐ **Commercial** ☐ **Other Use Type**

Occupancy Classification(s) Residential **Construction Type**

Building Height (if new/increased) **# of Stories**

Basement? ☐ Yes ☒ No **If yes, is it finished?** ☐Yes ☐ No

Floor Area Existing 0 New 1200 Area affected, if remodel

Fire sprinkler? ☐ Yes, existing ☐ Yes, proposed ☒ No **If yes, is it** ☐ Voluntary ☐ Required

Fire alarm? ☐ Yes, existing ☐ Yes, proposed ☒ No **If yes, is it** ☐ Voluntary ☐ Required

Sewer ☐ Existing ☒ New ☐ N/A **Septic** ☐ Existing ☐ New ☒ N/A **Water** ☐ Existing ☒ New

People Information complete as many entries as necessary to **indicate all responsible parties**: owner, applicant, contractor, design professional, engineer, tenant, etc.

Check all that apply ☒ Applicant* ☒ Owner ☐ Contractor ☐ Other

Name Patrick Sutton Company

Mailing Address 1017 Liberty Street

City Bellingham State WA Zip Code 98225

Phone 512-417-5903 Email designer0529@suttondesign.com

Check all that apply ☐ Applicant* ☐ Owner ☐ Contractor ☒ Other Engineer

Name Miles McEathron Company Freeland and Associates

Mailing Address 2500 Elm Street, Suite 1

City Bellingham State WA Zip Code 98225

Phone 360-746-9849 Email mmceathron@freelandengineering.com

Check all that apply ☐ Applicant* ☐ Owner ☐ Contractor ☐ Other

Name Company

Mailing Address

City State Zip Code

Phone Email

I hereby acknowledge I have read this application and state the information is correct, and agree to comply with all City ordinances and State laws regulating activities covered by this application. I understand that this form is being submitted electronically and my typed name on the signature line will qualify as my signature for purposes of the above certification.

Signature *Miles McEathron* **Date** 03-12-2024

Printed Name Miles McEathron

City and State where this application is signed Bellingham, WA

Freeland and Associates, Inc.

2500 Elm Street, Suite 1
Bellingham, Washington
360.650.1408

March 12, 2024

City of Bellingham
Permit Center
104 E. Magnolia St, Suite 109
Bellingham, WA 98225

Attention: City Reviewers

Subject: **3108 Birchwood Avenue (TPN 380223 382483)**
Pre-Application Conference Request

To Whom it May Concern:

A single-family development is proposed at 3108 Birchwood Avenue in Bellingham, Washington (TPN 380223 382483). The site is situated in Area 1 of the Birchwood Neighborhood and designated Residential Single.

The project includes construction of one single-family residence, driveway, parking, and associated utilities. Access to the site will be provided from Birchwood Avenue using a new driveway along the east property line. As part of this project the owner is incorporating infrastructure for a future subdivision to create 4 single family lots. Utility stubs serving future lots are proposed as part of this project. The proposed driveway will be a shared drive for 3 lots and the existing gravel driveway will serve the 4th lot.

The following questions are included:

- Please confirm there are no frontage improvements
- Please confirm whether any of the residences will need to be sprinkled
- The proposed driveway is 12 feet wide, less than 300 feet long with no fire turnaround. We are assuming this is acceptable as fire access as it will serve two residences (one proposed and one future residence). Another future residence will utilize this same shared driveway but will be within 150' of Birchwood Avenue. A fourth residence will have its own driveway.
- Please confirm two driveways in the future condition will be acceptable

- Please confirm the water, sewer, and drainage stubs for future lots are acceptable to be installed with the current proposed project for a single-family residence on one lot.

Please feel free to contact us if you have any questions.

Sincerely,
Freeland and Associates, Inc.

Miles McEathron, P.E.

CC: Patrick Sutton

Freeland and Associates, Inc.

2500 Elm Street, Suite 1
Bellingham, Washington
360.650.1408

March 12, 2024

City of Bellingham
Department of Public Works
104 E. Magnolia St, Suite 109
Bellingham, WA 98225

Attention: City Reviewer

Subject: **3108 Birchwood Avenue (TPN 380223 382483)**
Preliminary Stormwater Design

To Whom it May Concern:

A single-family development is proposed at 3108 Birchwood Avenue in Bellingham, Washington (TPN 380223 382483). The site is situated in Area 1 of the Birchwood Neighborhood and designated Residential Single. This letter serves as a preliminary drainage proposal.

The subject property is approximately 0.56 acres in size and forms a rectangular shape. The site is currently vacant except for an existing gravel drive along the west side of the property and a concrete slab in the northeast corner. Remaining areas of the parcel are vegetated with trees, shrubs, and grasses. Topography on the property is sloped down from north to south with approximately 16 feet of elevation change. The property is bordered by residential properties to the north, east, and west. Birchwood Avenue abuts the south side of the parcel. Surrounding land uses include single-family homes.

The project includes construction of one single-family residence, driveway, parking, and associated utilities. Access to the site will be provided from Birchwood Avenue using a new driveway along the east property line. As part of this project the owner is incorporating infrastructure for a future subdivision to create 4 single family lots. Utility stubs serving future lots are proposed as part of this project. The proposed driveway will be a shared drive for 3 lots and the existing gravel driveway will serve the 4th lot.

The proposed development will add more than 5,000 square feet of impervious surface and will be subject to Minimum Requirements #1 though #9 as outlined in the city of Bellingham Municipal Code section 15.42.060. Stormwater detention will not be triggered because the project will not exceed 10,000 sf of new impervious surface area for the full build out of four lots. Stormwater treatment is also not expected to be triggered because there will be less than 5,000 sf of new pollution generating impervious surface area for the full build out of four lots. Stormwater will be collected and discharged directly into the municipal storm system.

Please feel free to contact me if you have any questions about these observations.

Sincerely,
Freeland and Associates, Inc.

Miles McEathron, P.E.

CC: Patrick Sutton

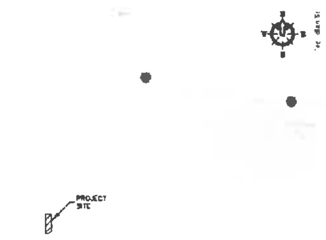
Encl: Vicinity Map
Aerial Photograph of Site
Preliminary Site Plan

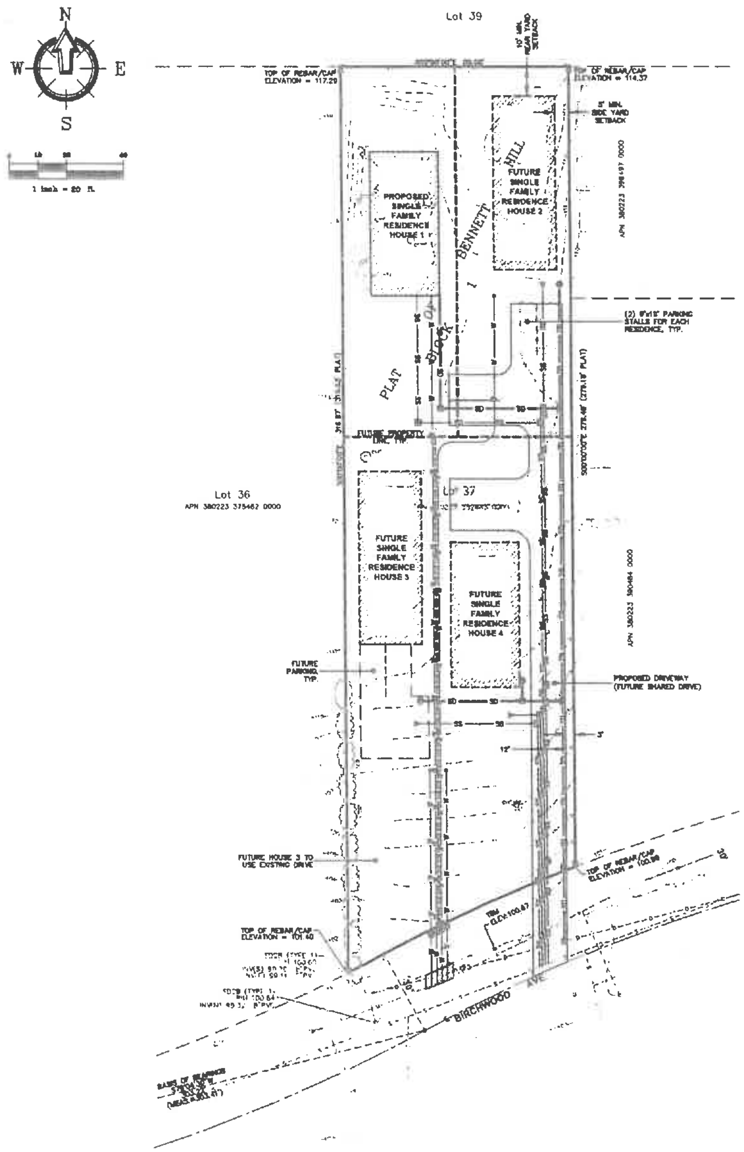
Vicinity Map

Aerial Photograph of Site

Preliminary Site Plan

VICINITY MAP





SURVEYOR'S NOTES

1) BASIS OF BEARINGS: HELD S78°04'30"W 303.22' (MEAS. 303.41') BETWEEN 2" BRASS DISK SURFACE MONUMENTS FOUND, AS SHOWN HEREON AND ACCORDING TO THE PLAT OF BENNETT HILL, AS RECORDED IN VOLUME 7 OF PLATS, PAGES 38 & 39, RECORDS OF WHATCOM COUNTY, WASHINGTON

2) THIS SURVEY WAS PERFORMED ON FEBRUARY 20 (BNDY.) AND ON SEPTEMBER 15 (TOPO.), 2023. ALL MONUMENTS SHOWN HEREON WERE VISITED DURING THE COURSE OF THIS SURVEY, UNLESS OTHERWISE NOTED.

3) ANGULAR AND LINEAR MEASUREMENTS WERE PERFORMED USING A 2-SECOND GEOMAXIO TOTAL STATION WITH RT4 DATA COLLECTOR

4) PROCEDURES USED IN THIS SURVEY MEET OR EXCEED STANDARDS SET FORTH BY W.A.C. 332-130-090

5) THIS SURVEY WAS COMPLETED WITHOUT THE BENEFIT OF A CURRENT TITLE REPORT AND DOES NOT PURPORT TO SHOW ANY OR ALL EASEMENTS, COVENANTS, RESTRICTIONS AND/OR AGREEMENTS THAT A CURRENT TITLE REPORT MIGHT REVEAL

6) IN ACCORDANCE WITH THE REVISED CODE OF WASHINGTON, 58.09 AND WASHINGTON ADMINISTRATIVE CODE 332-130, THIS RECORD OF SURVEY MAY DEPICT OCCUPATIONAL INDICATORS. THESE INDICATORS MAY REPRESENT A POTENTIAL FOR CLAIMS OF UNWRITTEN TITLE. THIS SURVEY DOES NOT RESOLVE ANY OF THE LEGAL OWNERSHIP ISSUES THAT MAY ARISE FROM UNWRITTEN TITLE CLAIMS.

LEGAL DESCRIPTION

(PER Q.C.D. AFN 2023-0301173)
LOT 37, BLOCK 1, PLAT OF BENNETT HILL, ACCORDING TO THE PLAT THEREOF, RECORDED IN VOLUME 7 OF PLATS, PAGES 38 AND 39, RECORDS OF WHATCOM COUNTY, WASHINGTON

ELEVATION DATUM

ASSUMED ELEVATION 100.00 ON TOP OF MAG NAIL/FLASHER NEAR SOUTH EDGE OF PAVEMENT OPPOSITE #3117 BIRCHWOOD AVE.

SURVEY STATEMENTS

1. PURPOSE: DESIGN
2. CONTOURS WERE DERIVED FROM DIRECT FIELD OBSERVATIONS
3. THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS.
4. THIS MAP DOES NOT PURPORT TO SHOW UNDERGROUND UTILITIES

PROJECT NOTES

CURRENT PROPOSAL
USE: SINGLE FAMILY RESIDENTIAL
LOTS: 1
PROPOSED ROOF AREA: 1,200 SF (1 RESIDENCE)
PROPOSED DRIVEWAY AREA: 3,700 SF
EXISTING GRAVEL DRIVE TO REMAIN: 1,021 SF
PROPOSED PARKING: 2 STALLS

FULL BUILD OUT (FUTURE CONDITION)
USE: SINGLE FAMILY RESIDENTIAL
LOTS: 4
PROPOSED ROOF AREA: 5,040 SF (4 RESIDENCES)
PROPOSED DRIVEWAY AREA: 4,312 SF
EXISTING GRAVEL DRIVE TO REMAIN: 968 SF
PROPOSED PARKING: 8 STALLS (2 STALLS PER LOT)

LEGEND

- = FOUND 2" BRASS DISK SURFACE MONUMENT
- = SET MAG. NAIL/FLASHER
- = EXISTING STORM DRAIN CATCH BASIN (TYPE I)
- = PROPOSED STORM DRAIN SERVICE STUB
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- = EXISTING GAS MAIN
- = EXISTING WATER LINE
- W — = PROPOSED WATER LINE
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- SS — = PROPOSED SANITARY SEWER LINE
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- 10 — = EXISTING CONTOUR (INDEX)
- = EXISTING CONTOUR (NORMAL)
- = PROPOSED IMPERVIOUS DRIVEWAY

FREELAND & ASSOCIATES

REV	DATE:	DESCRIPTION:	BY:

CLIENT:
PATRICK SUTTON
1017 LIBERTY STREET
BELLINGHAM, WA 98225

CALL BEFORE YOU DIG
FOR BURIED UTILITY LOCATIONS
1-800-424-5555

PROJECT LOCATION:
3108 BIRCHWOOD AVENUE
3108 BIRCHWOOD AVENUE
BELLINGHAM, WA 98225

DRAWING #: 24050SP1.DWG
DRAWN BY: MPM
DESIGNED BY: MPM
CHECKED BY: HAF

SHEET CONTENTS:
PRELIMINARY SITE PLAN

JOB #: 24050
DATE: 03-12-2024
SHEET: **PS1**

Freeland and Associates, Inc.

2500 Elm Street, Suite 1
Bellingham, Washington
360.650.1408

March 12, 2024

City of Bellingham
Permit Center
104 E. Magnolia St, Suite 109
Bellingham, WA 98225

Attention: City Reviewers

Subject: **3108 Birchwood Avenue (TPN 380223 382483)**
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Sincerely,
Freeland and Associates, Inc.

Miles McEathron, P.E.

CC: Patrick Sutton

Freeland and Associates, Inc.

2500 Elm Street, Suite 1
Bellingham, Washington
360.650.1408

March 12, 2024

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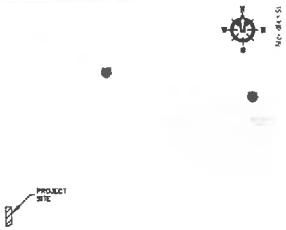

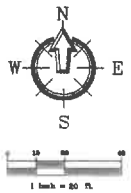

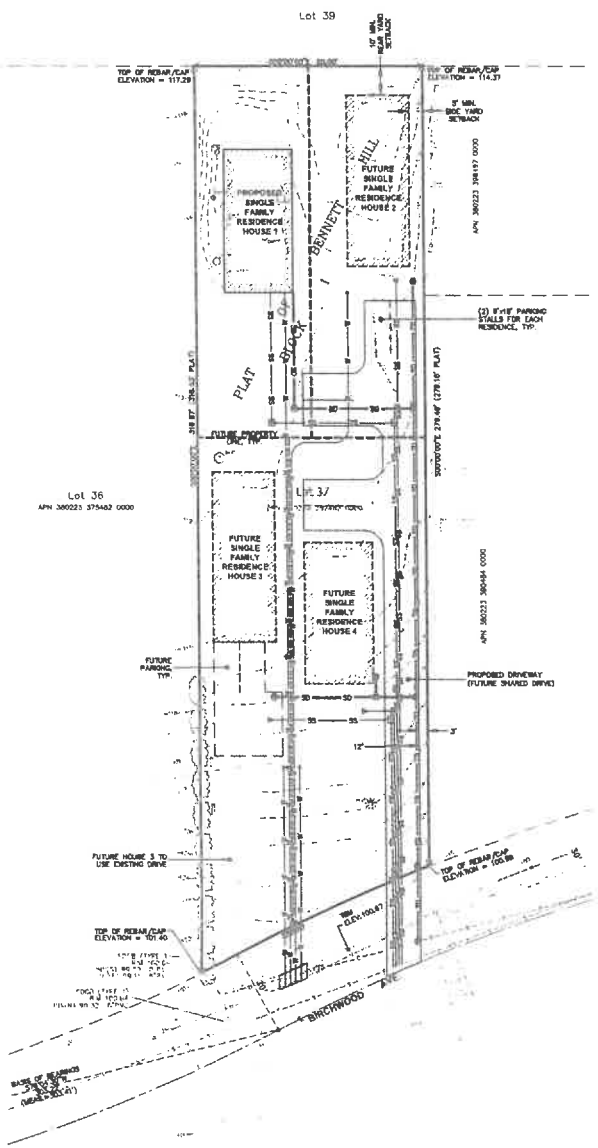

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LEGAL DESCRIPTION

(PER O.R.D. AFN 2023-0301731)
LOT 37, BLOCK 1, PLAT OF BENNETT HILL, ACCORDING TO THE PLAT THEREOF, RECORDED IN VOLUME 7 OF PLATS, PAGES 38 AND 39, RECORDS OF WHATCOM COUNTY, WASHINGTON

ELEVATION DATUM

ASSUMED ELEVATION 100.00 ON TOP OF MAG NAIL/FLASHER NEAR SOUTH EDGE OF PAVEMENT OPPOSITE #3117 BIRCHWOOD AVE.

SURVEY STATEMENTS

1. PURPOSE: OPINION
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3. THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS.
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PROJECT NOTES

CURRENT PROPOSAL
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LOTS: 1
PROPOSED ROOF AREA: 1,200 SF (1 RESIDENCE)
PROPOSED DRIVEWAY AREA: 3,780 SF
EXISTING GRAVEL DRIVE TO REMAIN: 1,024 SF
PROPOSED PARKING: 2 STALLS

FULL BUILD OUT (FUTURE CONDITION)
USE: SINGLE FAMILY RESIDENTIAL
LOTS: 4
PROPOSED ROOF AREA: 5,040 SF (4 RESIDENCES)
PROPOSED DRIVEWAY AREA: 4,310 SF
EXISTING GRAVEL DRIVE TO REMAIN: 986 SF
PROPOSED PARKING: 8 STALLS (2 STALLS PER LOT)

LEGEND

- ⊙ = FOUND 3" BRASS DISK SURFACE MONUMENT
- ▲ = SET MAG NAIL/FLASHER
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- ◀ = PROPOSED SANITARY SEWER SERVICE STUB
- ⊞ = PROPOSED SEWER CLEANOUT
- = EXISTING WATER METER BOX
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- = PROPOSED STORM DRAIN LINE
- = EXISTING WOOD FENCE
- = EXISTING CONTOUR (INDEX)
- = EXISTING CONTOUR (NORMAL)
- = PROPOSED IMPERVIOUS DRIVEWAY

FREELAND & ASSOCIATES

REV.	DATE	DESCRIPTION	BY

CLIENT: PATRICK SUTTON, 101 BERRY STREET, BELLINGHAM, WA 98225

CALL BEFORE YOU DIG FOR BURIED UTILITY LOCATIONS 1-800-424-5555

PROJECT LOCATION: 3108 BIRCHWOOD AVENUE, 3108 BIRCHWOOD AVENUE, BELLINGHAM, WA 98225

DRAWING #: 24050SP1.DWG | DRAWN BY: MPM | DESIGNED BY: MPM | CHECKED BY: MAF

SHEET CONTENTS: PRELIMINARY SITE PLAN

JOB #: 24050 | DATE: 03-12-2024

SHEET: PS1

EXHIBIT E

Hello Neighbor,

We are reaching out to you because the variance notification you received from the City does not explain why a variance is necessary for us to rent out our accessory dwelling (ADU) for short terms.

The City already allows an ADU to be rented out for short terms up to 95 days annually – but only if it's *attached* to the main house. Our ADU lies just *behind* our main house. We did not want to build a large main house, which would have been out of scale on Liberty Street and harder for us to live in as we age. **The only reason we need a variance is that the ADU is 25 feet away from the house and not hanging off the back.**

We use the ADU as an extension of our home, so in effect we occupy it most of the year (as the City requires). We simply want to rent it out when we are not using it.

If you have any questions, please don't hesitate to contact us.

Best Regards,
Kathryn and Patrick Sutton

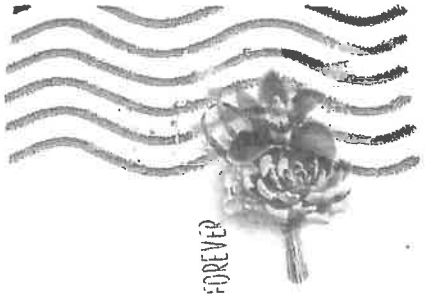
1017 Liberty St.
512.492.5245

I do not object to your STR request via the C.O.B. I only request that you ask your guest to respect the "lack of parking" along Liberty St & be aware of current residents needs to enable them to park close to their home, ie Rich & Jean; Dianne, etc...

Brian

Sutton
1017 Liberty St.
Bellingham, WA 98225

SEATTLE WA 980
8 MAR 2024 PM 7 L



Brian Benjamin
1018 Liberty St.
Bellingham, WA 98225

→ Kathryn & Patrick

98225-563518

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BEFORE THE HEARING EXAMINER
FOR THE CITY OF BELLINGHAM

In the Matter of VAR2024-00001 1017 LIBERTY STREET – SUTTON VARIANCE FROM SHORT-TERM RENTAL ORDINANCE	NO. HE-24-PL-_____ **DECLARATION OF SERVICE** Hearing Examiner Sharon A. Rice

I declare under penalty of perjury under the laws of the State of Washington that the following is true and correct:

I am a U.S. citizen residing in the State of Washington at 1017 Liberty Street, Bellingham, WA 98225. I am over 18 years of age and competent to make this Declaration.

On April 17, 2024, I served a true and correct copy of this Declaration of Service and the Sutton Prehearing Brief upon the following:

- City of Bellingham, via email on Julie Steele, jasteele@cob.org, and Emy Scherrer, erscherrer@cob.org, City of Bellingham.
- Hearing Examiner, City of Bellingham, via email on Kristina J. Bowker, kbowker@cob.org.

Respectfully submitted,
/s/ J. Patrick Sutton
J. Patrick Sutton
Washington Bar No. 60024
1017 Liberty Street
Bellingham, WA 98225
Tel. (512) 417-5903
jpatricksutton@ jpatricksuttonlaw.com