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Rental Market Discrimination against Same-Sex Couples: Evidence from an Email Correspondence Audit

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Abstract

I present the results of a randomized pair-email correspondence audit of 6,490 property owners in 94 U.S. cities to provide a nationally-representative estimate of the level of discrimination that same-sex couples experience when inquiring about rental housing. I find that same-sex male couples, especially non-White same-sex male couples, are less likely to receive a response to inquiries about rental units. I also find that same-sex male Black couples are subject to more subtle forms of discrimination than heterosexual Black couples. I also examine if state and local anti-discrimination laws covary with rates of housing discrimination against same-sex couples. While my results are not causal, I find that anti-discrimination laws have an ambiguous relationship with rates of discrimination faced by same-sex couples. State-level housing protections, for example, covary positively with response rates (state laws appear to correlate with less discrimination) for same-sex Black male couples. However, local-level laws covary negatively with response rates for same-sex Black male couples.

JEL No. J15, J18, R21

Keywords: LGBTQ Discrimination, Same-Sex Households, Housing Audits, State and Local Laws, Rental Market Discrimination.

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Introduction

As of 2017, it was legal for property owners to discriminate against lesbian, gay, bisexual, transgender, and queer (LGBTQ) individuals in 28 U.S. states.¹ Sexual orientation and gender identity are not protected classes under the U.S. Fair Housing Act of 1968, and no subsequent federal legislation has provided protections for the LGBTQ community.² While housing discrimination against the LGBTQ community has received limited attention from federal lawmakers or, until somewhat recently, scholars, it is a key concern within the LGBTQ community. In a 2015 survey of self-identified LGBTQ individuals, 73 percent of respondents were “strongly concerned” about housing discrimination by real estate agents, home sellers, property owners and/or neighbors (BHGRE and NAGLREP 2015). Most estimates of housing discrimination against LGBTQ-identified individuals came from survey studies (Kaiser 2000; Colin 2004; Herek 2009a, 2009b; Grant, Mottet, and Tanis 2011). These studies consistently find evidence that LGBTQ-identified individuals are discriminated against when searching for housing. However, these studies are also potentially non-representative, may suffer from non-response bias, and only capture blatant forms of discrimination (not more subtle forms of discrimination, such as non-response to housing inquiries or the quality of the property-owner responses).

¹ Defining what constitutes discrimination is not without controversy. See Yinger (1998) for a summary of the legal and scholarly definitions. This paper will take a broad definition of discrimination: any disparate treatment because of their membership to a particular group (e.g. race and/or sexual orientation) that I measured via differential response rates to inquiries for housing between same-sex couples and heterosexual couples.

² The Fair Housing Act, or Title VIII of the Civil Rights Act of 1968, prohibits discrimination in the sale, rental, and financing of housing or in other housing-related transactions because of race, color, religion, national origin, sex, familial status, and disability. In 2012, the Department of Housing and Urban Development (HUD) published its final “Equal Access to Housing in HUD Programs Regardless of Sexual Orientation and Gender Identity,” which prohibited making a determination of eligibility for HUD-assisted or HUD-insured housing on the basis of sexual orientation or gender identity. However, this is an agency rule and can be amended or revoked with a change in unilaterally within the executive branch.

Scholars have only recently begun to quantify the level of discrimination faced by the LGBTQ community. Friedman et al. (2013), Levy et al. (2017), and Murchie (2017), and Lauster and Easterbrook (2011) find that same-sex male couples do experience less favorable treatment relative to same-sex female couples and heterosexual couples. With the exception of two studies, research on same-sex discrimination do not provide a nationally-representative estimate of housing discrimination against same-sex couples. Friedman et al. (2013) and Murchie (2017), the two studies that do attempt to provide nationally-representative estimates of housing discrimination, have two limitations. These scholars audit property owners in the largest 20 to 50 municipalities, the vast majority of which have state or local (i.e. city-specific) housing protections for same-sex couples.³ Therefore, it is possible that these studies underestimate the level of housing discrimination faced by same-sex couples in localities without such protection. No study has empirically tested if state or local anti-discrimination laws for same-sex couples covary with high or low rates of discrimination. These scholars also only examine property-owner response rates to housing inquiries sent by same-sex couples, they do not test if property owners practice subtle discrimination. That is, do same-sex couples experience poorer treatment, such as more negative responses and longer wait times for a response, than their heterosexual peers?

In this paper, I explore these questions using data gathered from a paired-email correspondence field experiment. Between December 2016 and March 2017, I audited 6,490 randomly selected

³ Since Friedman and her team collected their data, public opinion towards LGBTQ equality, notably same-sex marriage, has become significantly more positive.³ Between 2011 and 2016, for example, the Pew Research Center reports that the percent of Americans who support same-sex marriage increased from 46 percent to 55 percent (an increase of 9 percentage points), while opposition to same-sex marriage declined by 8 percent (45 percent to 37 percent).

property owners⁴ in 94 cities who posted rental units on Craigslist.com⁵. I sent each property owner two emails—one containing a signal that this couple is a same-sex couple and the other containing a signal that this couple a heterosexual couple—to estimate the rate of discrimination against same-sex couples at the property-owner level. I find that same-sex male couples are approximately 5 percentage points less likely to receive an active response to their housing inquiry than is a heterosexual couple. These results vary significantly by race. Black same-sex male couples are the group least likely to receive a response—they are 5.6 percentage points less likely to receive a response rate than is a Black heterosexual couple, whereas a White same-sex male couple is approximately 4 percentage point less likely to receive a response than a White heterosexual couple. I then extend the existing literature on housing discrimination against same-sex couples in two ways. This is the first study to examine if property owners practice subtle discrimination—I find that property owners are more likely to use negative language (e.g. inquiring about evictions, mentioning fees, etc.) when responding to emails containing non-White names compared to emails containing White names. I find no evidence that property owners are taking more time responding (or sending shorter) to same-sex couples compared to heterosexual couples. This is also the first study to investigate if state and local anti-discrimination laws covary with higher or lower response rates of discrimination for same-sex couples by race. I find that Black same-sex couples are more likely to receive a response in localities within states with state-level protections, but they are less

⁴ Property owner is a generic term I used in this paper to refer to the property manager, the property owner, the “landlord,” or the real estate agent who publically posted the rental unit on Craigslist.com and is responding to the housing inquiries that I sent. Examining if property owners versus property managers are more or less likely to discriminate against same-sex couples is beyond the scope of this paper, but is a worthwhile topic for future studies to examine.

⁵ Craigslist is a major free local classified and forum website that is popular for jobs and housing searchers. There are 80 million unique classified ad posts (across all service types) each month and more than 60 million monthly users of Craigslist each month (50 billion page views / month). It is an extremely popular site for audit research, see: Hanson and Hawley (2011) and Murchie (2017).

likely to receive a response in localities with local-level protections. While same-sex Hispanic male couples are more likely to receive a response in localities with local-level protections compared to localities without any housing protections.

Anti-Discrimination Housing Laws in the United States

No federal law explicitly prohibits discrimination based on sexual orientation or gender identity. In 1974, Representatives Bella Abzug and Ed Koch introduced the Equality Act, which would have added sexual orientation to the protected classes specified in the Civil Rights Act of 1964. Congress did not pass the Act. In the 1990s, pro-LGBTQ rights legislators and activists focused primarily on prohibiting employment discrimination based on sexual orientation. Since 1994, the Employment Non-Discrimination Act (ENDA) has been regularly (though not consistently) introduced in Congress. However, Congress has consistently failed to pass ENDA, which would prohibit discrimination based on sexual orientation nationwide (HRCF 2016). Under the Obama Administration, the Department of Housing and Urban Development (HUD) posted a public statement that discrimination against an LGBTQ individual “may be covered by the Fair Housing Act if it is based on non-conformity with gender stereotypes.”⁶ As of 2017, HUD had an internal departmental policy that prohibited housing providers who received HUD or Federal Housing Authority funds from discriminating against a tenant based on sexual orientation (HUD 2017). However, in July 2017, the Trump Administration submitted an amicus brief in a private lawsuit in the Second Circuit Court of Appeals that argued the ban on sex discrimination in the Civil Rights Act of 1964 does not prohibit discrimination based on sexual orientation.⁷

⁶https://portal.hud.gov/hudportal/HUD?src=/program_offices/fair_housing_equal_opp/LGBT_Housing_Discrimi nation. Accessed: 1/9/2017. 77 Federal Registration. 5662, 5674 (Feb. 3, 2012)

⁷ The Seventh Circuit Court of Appeals ruled, in April 2017, that the Fair Housing Act’s ban on sex discrimination did apply to the case of two married plaintiffs, one of whom was transgender (see: *Smith & Smith v. Avanti*, 2017). However, this is not a national ruling and does not apply to same-sex couples.

With federal inaction, many states, counties, and local municipalities have begun to enact their own local anti-discrimination laws. As of 2016, 22 states and hundreds of local municipalities had comprehensive state-level anti-discrimination laws in place to protect same-sex couples in the housing market. Not all of these laws prohibit discrimination based on gender identity.⁸ To explore municipal-level protections, this study relies on the 2016 Human Rights Campaign (HRCF) Municipal Equality Index (MEI), which “examines the laws, policies, and services of municipalities and rates them on the basis of their inclusivity of LGBTQ people who live and work there” (HRCF 2016). This paper uses a subcategory of the MEI’s non-discrimination law section, which examines housing protections.⁹ The MEI codes for the presence of a law or ordinance at the state, county, and city level that prohibit discrimination against same-sex couples. These laws codify sexual orientation as a protected class in local housing law. This paper uses GPS coordinates on the audited properties in order to certify that they are located within a locality with LGBTQ protection or a locality without protection. For example, Tampa, Florida has a local LGBTQ non-discrimination ordinance, but the state of Florida and Hillsborough County, where Tampa is located, does not. In the Tampa rental market, any properties with GPS coordinates within the city of Tampa are included in the local protections category.

Theory of Housing Discrimination

A robust literature has developed exploring the causes of housing discrimination. Gary Becker (1973) put forth the first economic theory of racial discrimination in which a prejudiced dominant group

⁸ The states that do prohibit discrimination based on gender identity are California, Colorado, Connecticut, Delaware, Hawaii, Illinois, Iowa, Maine, Maryland, Massachusetts, Nevada, New Hampshire, New Jersey, New Mexico, New York, Oregon, Rhode Island, Utah, Vermont, Washington, and Wisconsin.

⁹ The MEI assigns a numerical value to a municipality’s housing protections: 0 points for no protections, 5 points for prohibiting housing discrimination based on sexual orientation, and 10 points for prohibiting discrimination based on both gender identity and sexual orientation-129 of the 186 municipalities analyzed by the HRCF have housing protections. Fourteen municipalities (11 percent) prohibit discrimination only based on sexual orientation and the remaining 115 prohibit discrimination based on both sexual orientation and gender identity.

discriminates against a non-dominant group. In this taste-based model, the prejudicial agent pays an economic penalty (in the form of lower rents or more risky tenants) for their prejudice against the minority community. However, in rental markets where there is high rental demand and a pool of highly-qualified rental seekers, it is unlikely that a prejudicial agent will suffer any economic penalty (assuming there is no social or legal penalty to their discrimination). In this instance, property owners will engage in cherry-picking—seeking high-quality tenants that conform to their socio-economic and demographic preferences. In an email-audit study, the prejudiced property owner or property managers is most likely to exercise their prejudice by simply not responding to a housing inquiry from a qualified same-sex couple (Murchie 2017). A prejudiced property owner may also provide fewer or lower quality housing services or options, such as not showing a same-sex couple additional units or providing them with information about available units. A property owner may also steer a minority or same-sex couple to particular neighborhoods (e.g. gay ghetto or neighborhood) due to a prejudiced belief of where that couple should reside (Glaster 1990; Ross and Turner 2005).

Gordon Allport (1954) presents a theory of discrimination in which increased social contact between a dominant and minority group, especially social interactions between members of the two groups who are equal in status and working towards common goals, will reduce negative stereotypes and improve inter-group interactions.¹⁰ Assuming that increased interactions with same-sex couples and or LGBTQ-identified individuals would reduce prejudicial behavior, it is essential that LGBTQ-identified individuals or same-sex couples present as members of the LGBTQ community and not pass as heterosexuals. There may be greater social (e.g. social ostracism, threats of physical violence) or economic penalties (loss or denial of housing, or loss of employment) for presenting as LGBTQ or as a

¹⁰ For work on this contact hypothesis, see Lee et al. (2015), Ellison and Powers (1994), and Sigelman and Welch (1994).

same-sex couple (as opposed to same-sex roommates) in localities and states without legal protections for same-sex couples. According to the contact hypothesis, it is more likely that a property owner will be less discriminatory in localities with state or local housing protections because this agent is more likely to know (and/or rent to) a same-sex couple (or LGBTQ individuals) compared to a property owner in an unprotected locality where the penalties for presenting as a same-sex couple are higher.

Yinger (1995) posits an alternative cause of discrimination—a non-prejudiced property owner may be cognizant of the prejudicial opinions of their customer base. A property owner may worry that their customer base is opposed to living (in the same neighborhood or apartment complex) near a same-sex couple. They are therefore concerned that renting to a same-sex couple will affect the rent level and occupancy rate of any other units the property owner possesses or manages. However, in localities or states with local housing protections for same-sex couples, a property owner should be less concerned about customer-base prejudice. If it is true that local laws reflect the preferences of the local community, then the local customer base in communities that have enacted local or state-level protections should be proponents of (or at least indifferent to) housing protections for same-sex couples, and therefore indifferent to living near same-sex couples.

Property owners may also use race, ethnicity, or sexual orientation as a signal for unobservable characteristics that correlate with market interactions (Ross and Turner 2005, Yinger 1995, Phelps 1972). If there is a perception among property owners that same-sex couples are a greater housing risk than heterosexual couples, then property owners may respond less frequently to them. Researchers have found that gay male workers earn between 10 to 30 percentage points less than their equally-qualified heterosexual peers and employers are more likely to discriminate against openly gay candidates in the

hiring process (Tilcsik 2011, Badgett, Lau, Ho and Sears 2007, Badgett 1995).¹¹ If property owners believe that same-sex couples are more likely to lose their job due to discrimination and thus be less likely to pay their rent, then they may be less likely to respond to a housing inquiry from a same-sex couple or be more stringent when setting rent and lease agreements. Property owners may also harbor discriminatory opinions about sexual orientation as it relates to drug use or HIV/AIDS status (Grossman 1991). As I discuss below, eight property owners explicitly expressed an unwillingness to house individuals with HIV/AIDS. HUD explicitly includes HIV/AIDS as a disability protected under the FHA, rendering such discrimination illegal.

Using Audits to Estimate Discrimination against Same-Sex Couples

Since the 1950s, activists and advocates have used audit studies to test for racial discrimination against minorities in U.S. housing markets.¹² While the primary focus of these studies was to evaluate if property owners were complying with Fair Housing Laws, scholars have used audits as a research tool to explore discrimination against protected (and unprotected) communities (Turner and James 2015; Oh and Yinger 2015). Until recently, most of these studies examined discrimination in the labor market, mortgage market, owner-occupied housing markets, or locality-specific rental markets using in-person or résumé/paper-based audits, as well as underwriting data (Yinger and Ross 2002). In-person audit studies involve pairs of trained confederates who pose as prospective housing applicants. These confederates are trained to act similarly and interact with property owners in similar ways with the only difference between individuals (or couples) is that one individual (or couple) belongs to the protected class under

11 For other studies examining compensation and sexual orientation, see: Klawitter (2011), Antecol, Jong, and Steinberger (2008); Berg and Lien (2002); Allegretto and Arthur (2001), Klawitter and Flatt (1998)

¹² Ross and Yinger (2002) offer a comprehensive overview of discrimination in the mortgage markets and Oh and Yinger (2015) for a recent summary of paired testing in the housing market more broadly. An excellent resource on the current state of housing discrimination audit studies is the 2015 edition of *Cityscapes* (volume 17(3)).

examination (Yinger 1986, 1995; Ondrich, Stricker, and Yinger 1998, 1999; Zhao 2005).¹³ Levy et al. (2017) used an in-person audit in three metropolitan areas - Washington, D.C., Dallas, Ft. Worth, TX, and Los Angeles, CA—to test if property owners discriminate against same-sex couples and transgender individuals. They find that same-sex male couples and transgender couples are discriminated against. While in-person audits provide richer insights into property-owner behavior, they are expensive to conduct. These studies require trained confederates who must visit numerous sites in order to generate a sufficient sample size. Moreover, the internal validity of an in-person audit study requires that pairs of confederates behave and present themselves more-or-less identically across property owners, as even subtle differences in behavior could potentially bias a study's results (Heckman 1998).

Increasingly, researchers have used low-cost email correspondence audits to test for discrimination in the housing market. Email audits have evolved into two distinct designs. In a randomized single-email audit, the researcher randomly selects a property owner who receives a single email containing a signal (e.g. a gendered and/or racialized name) that the fictitious emailer belongs to a protected class or minority group. Other property owners are randomly selected to receive an email from a fictitious emailer containing information to signal that the emailer belongs to a dominant group. While these emails vary in their language and syntax in order to prevent detection, the primary difference between the emails is the race and/or gender (or another protected class) signal in the email. In a matched-pair email-correspondence audit design, a property owner receives two emails—one from a protected class and another from a majority-group individual. This audit design reduces the number of property owners that the researcher must contact in order to have sufficient power to detect an effect. It

¹³ Scholars have also used paper-based correspondence housing (and résumés) audits, see Bertrand and Mullainathan (2004).

also allows the researcher to control for all property-owner and unit observables and unobservables (via property-owner fixed effects). Scholars compare overall response rates between groups and assert that any difference in response rates between members of the protected class and the majority group is evidence of discrimination.

While most audit studies examine federally protected communities in the U.S. labor or housing markets, a small literature has examined housing and labor market discrimination against the LGBTQ community and same-sex couples in both the United States and abroad ¹⁴. Small-scale in-person audits in Michigan found evidence of adverse treatment of same-sex couples when searching or applying for housing (Michigan Fair Housing Centers 2007). Ahmed, Andersson, and Hammarstedt (2008) and Ahmed and Hammarstedt (2009) examined rental market discrimination against same-sex male couples in Sweden using an email correspondence field experiment. Lauster and Easterbrook (2011) conducted a small-scale, email-correspondence audit in Vancouver, Canada. They found that that same-sex male couples and single parents suffered from discrimination. In the United States, Friedman et al. (2013) employed an email-correspondence audit to examine the top fifty metropolitan statistical areas in the United States, whereas Murchie (2017) used a single-email correspondence audit design to examine the relationship between race, religious identity, and sexual orientation and response rates. Both studies in the U.S. found evidence of discrimination against same-sex men. Murchie found that non-White same-sex male couples suffered significant discrimination while searching for housing.

¹⁴ See Carpusor and Loges (2006) and Murchie (2017). Hanson and Hawley (2011) used a matched-pair email audit to estimate discrimination in the rental housing market and test various hypotheses regarding discrimination. Scholars have used variation in immigrants status and socioeconomic background to examine if property owners respond more positively to inquiries sent from higher-wealth minorities and/or more educated minorities (Ahmed, Andersson, and Hammarstedt 2008; Bosch, Carnero, and Farré 2010). Scholars have also looked at discrimination based on age (see Neumark, Burn, and Button 2015), discrimination in the sharing economy (Edelman, Luca, and Svirsky 2017), and the interaction between perceived race and education and discrimination (Gaddis 2015).

Research Questions

To build on the existing literature, I examine three primary research questions in this paper.

- (1) Do property owners discriminate against same-sex couples in the United States? I include a larger number of cities, as well as more cities without any housing protections, than prior research do property owners.
- (2) Do property owners subtly discriminate against same-sex couples? Do property owners demand more information from same-sex couples? Do they send more terse or rude emails? Do they take longer to respond or send shorter emails?
- (3) Do state and/or local anti-discrimination laws covary with response rates? State and local adoption of anti-discrimination laws is clearly endogenous, but I do examine the conditional correlation between the presence of these laws and discrimination rates for same-sex couples.

Experimental Design

This study explicitly examines the market impact of discrimination based on sexual orientation. I examine if a property owner who post rental units on Craigslist discriminate against self-identified gay (two male) or lesbian (two female) couples. When identifying property owners to audit, I do not include property owners seeking roommates, property owners seeking in-house tenants to live in the same house as them, or providers of short-term rental units (e.g. hostels, Airbnb, etc.). While Fair Housing Laws prohibit racially discriminatory advertisements for housing, owner-occupied housing in a building with fewer than four units are exempt from the federal Fair Housing Act and many state and local-level laws.¹⁵ I conducted a paired-audit email correspondence design because, for several of my models, it allows for

¹⁵ U.S. Department of Housing and Urban Development, “Fair Housing Information for Housing Providers,” https://portal.hud.gov/hudportal/HUD?src=/program_offices/fair_housing_equal_opp/HousingProviders (Accessed: 11/4/2016)

the use of property-owner fixed effects and provides improved precision for a given sample size. While the risk of detection is higher with a paired audit study than a single-email audit design, I included 94 cities in this study and thus I did not send a preponderance of inquiries within any one single rental market. I audited property owners in cities that fall within three major protection categories/legal regimes: cities with state-level sexual orientation housing protections, cities with municipal or county-level sexual orientation housing protections, and cities with no housing protections for same-sex couples.

Using a web-scraper program, I randomly collected each property owner's phone number (if provided), their contact emails, as well as all the self-provided structural characteristics of the unit (e.g. size, how many bedrooms, etc.), the rent, and the address (street address and longitudinal and latitudinal coordinates) for posts from randomly selected cities' Craigslist websites (from the list of 94 on a daily basis). If a property owner worked for a larger rental agency, I also recorded the name of this organization and the rental agent. To prevent a property owner (or property management company) from being audited twice and thus increase the risk of detection, I did not use any scraped posts that contained the same phone number, rental organization/property management company's name, posting id (unique to each post), name of the rental/real estate agent, street address, and/or longitudinal-latitudinal coordinates as a previously collected/contacted post. I did not use an online post if it did not have an email address or longitudinal-latitudinal coordinates, which prevented me from either contacting the property owner or confirming its location.

Once I collected each property owner's information, I randomly assigned property owners to a sexual orientation category for their first email. If the sexual orientation was gay male or lesbian, the second sexual orientation category was mechanically heterosexual. This order the emails were sent to property owners was randomized. If the first sexual orientation category was heterosexual, then the second category was randomly selected between lesbian or gay male. If the unit's rent was at or below

150 percent of HUD's County-level Fair Market Rent (FMR) for 2016, I classified the post as low-income/low-class. To limit the risk of detection, I sent out four different emails types. Two versions of a high-class email, which were sent to landlords with units 150 percent above the FMR price, and two versions of low-class emails. A high-class email contains formal greetings and complete sentences. See version A of the high-class email below:

Example of High-Class Email:

Dear sir/madam,

[My Husband] NAME and I are interested in the rental unit you posted on Craigslist, is it still available? We both have good rental histories and references. We are happy to send a copy of a recent credit report.

Regards,

[First name]

The low-class email contained broken and informal syntax. This email structure signals that the emailer has less education, less income, would be interested in a lower cost rental unit, and, possibly, is younger.

Example of Low-Class Email:

Hi! [My Wife] NAME, saw your post CL and were interested in the apartment. Were both employed and can afford the apartment. We do you need to know about us. Let us know! Thanks!

[First Name #1] & [First Name #2]

I randomly assigned the first email to be either version A or B, the second version followed mechanically from this random assignment. I also randomly selected emails to contain an income value rounded to the nearest \$1000.¹⁶ To limit the risk of detection, socioeconomic status is not randomly assigned to the

¹⁶ This income measurer adds additional variation to the email sent to further reduce detection. This income was randomly generated to make the fictitious applicant's annual salary (rounded to the nearest \$1000) between 25 percent and 45 percent of the posted annual rent (the stated monthly rent multiplied by twelve). I test if property

property owner. I randomly assigned each property owner a race for each email. Following Murchie (2017), this study uses stereotypical Black and Hispanic names that are generally unique to each racial group. The names used in this study are listed in table 1.

[Table 1 Here]

I randomly assigned names in combinations (two-male, two-female, and male-female) to emails. If the email was randomly selected to be a Black same-sex male couple, I randomly selected either Leroy, Jamal, or Darnell, and then, from the remaining two, I randomly selected the second name. I also randomly select the member of the couple who is explicitly contacting the property owner and referencing their partner. For each heterosexual couple, for instance, I random select if the email is being sent by the man or the woman.

Audit Execution/Data Gathering

I conducted an initial pilot of 300 property owners in New York City, Houston, Miami, Chicago, and Los Angeles in November 2016 to evaluate if property owners were responding at substantively different, and statistically different rates to the two different within-class email versions. That is, did email A for the high-class email convey something different than email B, which prompts property owners to respond more to email version B? The average response rate for the high-class email types was 60 percent for version A and 62 percent for version B. For low-class emails, the average response rates for version A and B was 53 percent and 54 percent, respectively. These differences are not statistically significantly different from one another.

owners discriminate less against same-sex couples that provided income information. While providing additional information does improve response rates for all racial-sexual orientation groups, these differences were not statistically significant. It is possible (and even likely) that property owners do not put much credence in self-reported income values.

I conducted the full audit between December 2016 and March 2017. During these months, I anonymously emailed 6,490 unique property owners from 94 cities in 46 states.¹⁷ Of the 94 localities, 66 cities (70.2 percent) have state or local anti-discrimination laws prohibiting housing discrimination against same-sex couples, while 28 cities (29.8 percent) did not have such protections. The localities audited are geographically disperse - 15.8 percent of the localities are located in the Northeast, 35 percent are located in the South, 25.4 percent are located in the Midwest, and 23.8 percent are located in the West. Figure 1 provides a visual representation of the audited cities. Almost all of the localities without housing protections are located in the South and all localities audited in the Northeast have local or state-level protections.

[Figure I Here]

Discrimination by Sexual Orientation

My main measure of discrimination is whether a property owner expressed an active interest in a couple's inquiry. I thus excluded any responses received within one minute of an inquiry being sent by both the same-sex and heterosexual couples, and/or emails that contained the exact same wording. This indicates that there is an automatic reply system/bot set-up at this particular apartment site. In the regression output, the dependent variable is binary and adopts one if the property owner, not an automatic-email program or bot, responded to an inquiry, zero otherwise. Table II reports the mean callback rate by sexual orientation and race where mean callback rate is the number of active positive responses received for each sexual-orientation (or sexual-orientation-race group) divided by the number of inquiries sent for each group.

¹⁷ As an additional precaution, I used nine different email accounts to contact property owners. I did not contact any property owner with the same two email accounts. However, Craigslist uses anonymized email links that generally prevent end-users from seeing one another's emails.

[Table II Here]

The top panel reports response rates by sexual orientation regardless of race. Consistent with prior work, same-sex couples are less likely to receive a response compared to opposite-sex couples. Proceeding down the bottom three panels, same-sex male couples, regardless of race, receive fewer responses compared to both opposite-sex couples and same-sex female couples. White heterosexual men receive 4 percentage points fewer responses, whereas Black same-sex couples and Hispanic same-sex couples both receive 6 percentage points fewer responses regardless of the legal regime (the top left quadrants of the table). The next three columns of the top row breaks down response rates by legal regime (i.e. state-level protections, local-level protections, or no protections). An interesting pattern emerges for same-sex male couples. Same-sex men in localities with state-level protections are 4 percentage points less likely to receive a response compared to heterosexual couples in those localities, but same-sex male couples are 7 percentage points and 6 percentage points less likely to receive a response in localities with local level protections and no protections, respectively. There is some evidence that same-sex female couples are also discriminated against compared to heterosexual couples. Across all legal regimes, same-sex female couples were 2 percentage points less likely to receive a response than heterosexual couples. The bottom three panels explore heterogeneous effects by race that are also more formally explored below. Consistent with prior literature, non-White couples are less likely to receive a response rate. Overall, both Black and Hispanic same-sex couples are 6 percentage points less likely to receive a response compared to Black and Hispanic heterosexual couples whereas White same-sex couples are 4 percentage points less likely to receive a response compared to White heterosexual couples. Consistent with prior audit scholarship, non-White couples (i.e., emails containing non-White names) are less likely to receive a response compared to White couples. White couples, regardless of

sexual orientation, are 7 and 4 percentage points more likely, compared to Black and Hispanic couples respectively, to receive a response to their housing inquiry.

These purely descriptive results from the top row highlight two important insights that are explored more formally below. The differential response rates between the three different legal regimes provide some preliminary evidence that the adoption of local housing laws is endogenous. Localities that adopted local housing protection have the lowest response rates for same-sex male couples (but the heterosexual-same-sex female couple response differential as other legal regimes). These results rule out the possibility that the adoption of a local housing protection is arguably exogenous, and thus any estimate examining the relationship between response rates and a locality's legal regime should not be viewed as the causal effect of the legal protection. It is simply the conditional correlation between the legal regime and housing inquiry response rates for same-sex couples. Second, there is only weak evidence that housing protections covary with response rates and the direction of the relationship is ambiguous. State-level laws appear to provide some protection for same-sex male couples (especially for Black same-sex male couples, see panel 3) compared to localities without any housing protections. Same-sex male couples are 4 percentage points less likely to receive a response in localities with state-level protections, but 6 percentage points less likely to receive a response in localities with no protections. But local protections appear to offer very little protection (except for Hispanic same-sex male couples, see panel 4). Same-sex male couples, compared to their heterosexual peers, are 7 percentage points less likely to receive a response to their housing inquiry in localities with local-level protections.

To control for property-owner observables, I use a linear probability model (LPM) with property-owner fixed-effects to estimate the level of discrimination faced by individuals stratified on race and sexual orientation. I use an LPM model for ease of interpretation (the coefficients can be directly

interpreted as probabilities), to benefit from the increased precision of an LPM estimator as opposed to a nonlinear estimator, and because the data are generated from a completely randomized experiment with a binary outcome. The data generating process largely ensures that there will be no predicted probability outside of the required $[0, 1]$ range. Upon review, none of the LPM models used in this paper produced a predicted probability that exceeded 1. I do check my LPM results using a probit model—none of the results are substantively different and are available upon request.

$$y_{ilcs} = \beta_0 + \beta_1 \text{SameSex}_i + \beta_2 \text{Inc}_i + \lambda_l + \varepsilon_{ilcs}, \quad (\text{Eq. 1})$$

In equation [1], y_{ilcs} is a dummy variable that adopts the value 1 if emailer i receives a reply to their inquiry about the posted rental unit from property owner l . In this case, property owner is synonymous with the rental units. SameSex_i adopts the value 1 if the email conveys that the inquiring couple is a same-sex couple. Inc_i is a control variable that equals one if the emailer contained a randomly generated income measure, zero otherwise. Equation [1] includes property-owner fixed effects, synonymous with property-unit fixed effects, denoted by λ_l . The identifying variation for equation [1] is thus within-unit responses to paired-emails, in which the only difference between responses is the sexual orientation of emailers. I cluster the standard errors at the property-unit level. If there is no discrimination (i.e. no differential response rates between the two groups), then β_1 will be equal to zero. Any non-zero value can be understood as the within-landlord differential response rates (measured in percentage points) based on sexual orientation. A negative coefficient implies that same-sex couples are less likely to receive a response compared to heterosexual couples, whereas a positive coefficient indicates that the same-sex couple is receiving preferential treatment. Table III presents the result of equation [1] stratified on sexual orientation and race.

[Table III Here]

Column [1] of panel one pools all same-sex male couples together regardless of race. The comparison group is heterosexual couples. Same-sex male couples were 4.6 percentage points less likely to receive a response than were heterosexual couples. Stratifying on race, the remaining terms reflect the pattern seen above in table III. White male couples were approximately 4 percentage points less likely to receive a response compared to White heterosexual couples. This disparity was higher (and more statistically significant) for non-White same-sex couples. Same-sex Black and Hispanic couples were 5.6 and 5.2 percentage points less likely to receive a response from a property owner, respectively, compared to their same-race heterosexual counterparts. For all same-sex male couples, I can reject the null hypotheses that these results are random. Consistent with Friedman et al. (2013) and Levy et al. (2017), these results further provide evidence that same-sex male couples face discrimination in the U.S. rental markets. Columns [5] through [8] in the second panel of table III report the results of Equation [1] stratified on sexual orientation for same-sex female couples. Consistent with the results in table II, property owners responded to same-sex female couples less frequently than to heterosexual couples; however, none of these results are statistically significantly different from zero.

Subtle Discrimination against Same-Sex Couples

Prejudicial property owners who do not want to rent to a same-sex couple may, nonetheless, respond to a same-sex couple so as not to appear to be discriminatory. However, such a property owner may subtly discriminate against a same-sex couple in an attempt to dissuade them from viewing the property or further contacting the property owner by taking a longer time to respond to their email, sending a less polite email, or an email containing less information.

Following the methodology employed by Hanson, Hawley, and Taylor (2011), I examine if property owners respond with less positive language or more negative language to same-sex couples

compared to heterosexual couples. Hanson, Hawley, and Taylor (2011) find that property owners are more likely to use positive language and write longer emails to housing inquiries containing White names than African American names. Using a modified version of Hanson, Hawley, and Taylor's list of search terms, I perform keyword searches for both positive and negative language of the email texts for all landlords who responded to a housing inquiry. This analysis is restricted to the active responses used in the analysis above. Table IV contains a breakdown of the positive and negative search terms used to analyze property owner responses. Positive language includes positive descriptors of the unit, words that indicate a willingness to show other or additional units, providing contact information, or emails containing polite language. Negative language is coded as any references to fees, employment history, background or rental history, or eviction history.

[Table IV Here]

Table V presents the within-race results of these keyword searches for sexual orientation. Differential response rates between same-sex couples and heterosexual couple responses are tested using the McNemar paired difference-in-proportions test. As shown in columns [4] and [10] of table V, property owners do not respond differentially between same-sex White or Hispanic couples. However, as shown in column [7], when responding to same-sex Black couples, property owners were 2.4 percentage points less likely to describe the unit or the unit's neighborhood positively or to respond using polite language and/or salutations compared to heterosexual Black couples.

[Table V Here]

Property owners were also less likely to offer to show any additional units or to schedule an appointment to view the unit. While White and Hispanic same-sex couples were also less likely to receive a response compared to heterosexual White and Hispanic couples, respectively, none of these differences were statistically significant. If these results were pooled and compared across race regardless of sexual

orientation, there are clear patterns of racial discrimination against non-White couples. I present the results of this analysis in Table VI. Black couples are less likely to receive emails containing positive descriptions of the unit, less likely to be offered to view the unit or schedule an appointment, and were less likely to receive emails containing polite language or contact information. Black couples were also more likely to receive emails with information about fees and, compared to White couples, Black couples were almost 30 percent more likely to be asked about their eviction histories. While Black couples were also less likely to be offered to view other units or asked about their employment histories than White couples, the differences are too small to be rejected as non-random. Hispanic couples are also less likely to receive emails containing positive descriptors of the unit, contact information, or offers to schedule an interview. They are 8 percentage points more likely than White couples to be asked about fees (13 percentage points for Black couples) and approximately 12 percentage points more likely than White couples to be asked about their eviction histories. These results are consistent with those of Hanson, Hawley, and Taylor (2011).

[Table VI Here]

Next, do property owners take longer to respond to same-sex couples or do they send emails with fewer words? While property owners do take longer to respond and send shorter emails to same-sex male and female couples, these difference are statistically significantly different from zero. These results are presented in table VI. The magnitude of these results are also not substantively different between same-sex couples and heterosexual couples. It took property owners between 10 and 20 additional minutes to respond to same-same female couples, and 20 and 30 minutes to respond to same-sex male couples. It does not appear that property owners are attempting to discourage potential same-sex applicants by taking longer to respond to their emails. While no property owner responded using any pejorative, derogatory, racial, or homophobic language, eight landlords in five Southern states (seven

different cities) did explicitly mention that they will not house anyone with HIV/AIDS. HUD classifies HIV/AIDS as a disability, and individuals with disabilities (and thus HIV/AIDS) are protected under the Federal Fair Housing Act. Each of the inquiries that were received this response contained names to signal they inquiring couple was a Black, same-sex male couple. This is anecdotal evidence that property owners (at least these eight property owners) associated either being gay or being a Black gay couple with HIV/AIDS (a form of statistical discrimination).

Do State and Local Laws Covary with Higher Response Rates

Lastly, I examine the correlation between state and local laws, respectively, and response rates. Table II provides some evidence that property owners operating under different legal regimes respond at differential rates, I formally examine if anti-discrimination laws correlated with lower rates of discrimination using the following mode:

$$y_{ilcs} = \beta_0 + \beta_1 \text{SameSex}_i + \beta_2 \text{Law}_{cs} + \beta_3 (\text{SameSex}_i * \text{Law}_{cs}) + \gamma \mathbf{X} + \phi_s + \varepsilon_{ilcs}, \quad (\text{Eq. 2})$$

The terms y_{ilcs} and SameSex_i are defined in equation [1]. The indicator variable Law_{cs} adopts unity if the locality c in state s where the rental unit is located has a local or state anti-discrimination law (Law_{cs}), and zero if the rental unit is located in a locality where there are no anti-discrimination protections. I coded localities in states that also have state-level housing protections who also have local-level housing protections as only having state-level housing protections. I run this model separately by legal regime and race. The coefficients of interest are the interaction between the same-sex indicator variable and the legal regime variable (captured by β_3). I include state fixed-effects (ϕ_s) and a vector of unit-level characteristics and controls related to audit execution (\mathbf{X}).

Equation [2] is also a linear probability model, the results do not substantively change if a probit model is used. The coefficient β_3 captures property owners' differential response rates to same-sex inquiries in localities with state-level housing protections, compared to same-sex inquires in localities without housing protections. Again, because localities adopt these anti-discrimination laws in a non-random way, this coefficient only captures the conditional correlation between differential response rates to same-sex inquires and each jurisdiction's legal regime. Table VII provides the results from equation [2] run only for localities with state housing protections, run separately for same-sex male and female couples by race:

[Table VII Here]

The top panel of table VII provides the results of equation [2] for same-sex male couples by pooled (Column [1]) and then stratified on race (columns [2] through [4]). The coefficient of interest is (Protections * Same Sex couples). For same-sex men pooled, same-sex White male couples, and same-sex Hispanic male couples, these coefficients are positive, which imply that same-sex couples in localities in states with state-level protections may receive more responses compared to same-sex couples in localities without any protections. However, none of these coefficients are statistically different from zero. Same-sex Black male couples are 2.7 percentage points more likely to receive a response than same-sex Black male couples in localities without any protections. The bottom panel of table VII presents the results for same-sex female couples. These results are consistent with the baseline response rates presented in table II. State-level laws do not appear to offer any protection to same-sex Black female couples. Granted, this correlation was not statistically significant. State laws do not appear to offer any protection for same-sex female couples.

Table VIII presents the result of equation [2] where Law_{CS} equals one if the localities that have enacted a local anti-discrimination law.

[Table VIII Here]

Beginning with the top panel, there appears to be no overall correlation between the response rate in localities with local-housing protections and those with no protections for same-sex male couples. However, once stratified by race, same-sex Black male couples in localities with local housing protections are 2.5 percentage points *less* likely to receive a response than same-sex Black male couples in localities without such protections. Conversely, same-sex Hispanic male couples are 2.6 percentage points *more* likely to receive a response in localities with local protections than in localities without such protection. Both of these results are statistically significant at the 10 percent level. None of the correlations for same-sex female couples can be rejected as non-random.

Testing for Audit Detection:

The primary risk of paired-audit research is that property owners may detect an audit is being conducted. If they do, property owners are likely to alter their behavior as a result. A property owner could respond to the first email and then, having found similarities with the first email in the second email, they may not respond to the second email. Alternatively, if a property owner becomes aware of the audit, they may respond to both emails when, in the absence of being aware of the audit, they would have only responded to one of the emails. The effect is ambiguous—if the landlord reviews their emails from the most recent emails to the oldest emails, they will read the second email first (it will appear first in their email) and then read the first email. However, there is no evidence that property owners responded differently to the first and second emails—there were no statistically different rates of response between the first and last email.

Limitations of the Design

This paper only examines discrimination at the very beginning of the housing selection process (Yinger 1995). Even if a property owner responds to a housing inquiry, and respond positively, it does not mean that they will sign a lease with a same-sex couple. A property owner may treat a same-sex couple less favorable than a heterosexual couple when setting terms and conditions. To my knowledge, no study has examined if there is discrimination in the later stages of the housing process. All scholarship on same-sex couples/LGBTQ individuals and housing discrimination has largely focused on the rental markets, and there is a need for scholars to examine same-sex discrimination in the owner-occupied and mortgage/housing-credit markets.

Given the sampling frame for this audit is Craigslist, the external validity of this study is limited to the extent that the distribution of property owners and rental stock on Craigslist is comparable to the distribution of rental stock and property owners in each locality more broadly. While Craigslist is a popular site for rental housing (for both property owners and renters), it is possible that there may be systematic differences in the property owners who post to Craigslist or the rental stock posted on Craigslist and average property owner/rental unit in each specific locality.¹⁸ One potential sub-class of property owners that this study is not generalizable to are property owners that do not post their rental properties online but serve specific neighborhoods in cities and expect in-person phone calls from prospective tenants. These property owners house low-wealth individuals who may not regularly use the

¹⁸ Craigslist is popular for audit studies given the website flexibility and the ability to automatically scraping property owner information; however, future research needs to explore other platforms and economies (e.g., the sharing economy) to confirm or reject the finding that discrimination against same-sex couples (notably, same-sex male couples) is systematic throughout the U.S. rental market.

internet (or have access to the internet) to explore other housing options. No components of this study are generalizable to this population of property owners.¹⁹

The results of my study are also limited to married same-sex couples. One alternative explanation for the rates of discrimination found against same-sex men is that landlords are opposed to same-sex male couples or opposed to housing two adult men. One potential future study is to examine if same-sex male couples (that disclose they are married, partnered, or dating) are less likely to receive a response to their housing inquiry compared to two heterosexual male roommates. Future research should also vary relationship language, e.g. “boyfriend/girlfriend” versus “husband/wife,” to determine if property owners are more (or less) averse to housing married same-sex couples as opposed to same-sex couples that are dating. Presumably, property owners prefer married couples because these two individuals are less likely to separate than two individuals who are simply dating. As a result, it is possible that dating, but not married, same-sex male and female couples will face higher rates of discrimination than married same-sex male and female couples.

Discussion and Policy Implications

Using a unique dataset compiled through a rigorous field experiment, I find that same-sex couples, especially male same-sex couples and minority same-sex couples, face higher barriers to access rental housing access in the United States. Compared to heterosexual couples, male same-sex couples are less likely to receive a response to their rental inquiry. Same-sex female couples, on average, receive fewer responses than same-sex couples but, conditional on property-owner characteristics, these lower rates of response were not statistically different from zero. Moreover, I find that property owners practice some forms of subtle discrimination against same-sex Black male couples compared to Black

¹⁹ See Matt Desmond’s *Evicted: Poverty and Profit in the American City* (2017) for an ethnographic perspective on low-wealth rental-property seekers.

heterosexual couples, and they are subtly prejudicial against Black and Hispanic couples, compared to White couples, regardless of sexual orientation. State anti-discrimination laws did not correlate with higher response rates for same-sex couples with the exception of Black same-sex male couples. Local levels laws paradoxically correlated with lower responses (more discrimination) for Black male couples but higher responses (lower discrimination) for Hispanic male couples.

The results of this study raise questions as to whether codified local anti-discrimination ordinances are effective at lessening or eliminating discrimination. Anti-discrimination laws, especially at the state-level, do not appear to correlate with less discrimination for all same-sex couples. This paper, like most housing audits, highlight a social phenomenon long known to scholars, activists, and lawmakers—outlawing discrimination does not prevent discrimination. This was true for discrimination based on race, and it remains true for discrimination based on sexual orientation. The ability to access a wide area of housing matters—barring individuals, couples, and families from housing and neighborhoods can have adverse ripple effects throughout their lives. Limiting someone’s housing options can affect the types of communities where they can live, the schools and public services they can access, and numerous other dimensions of their lives. As the number, visibility, and mobility of same-sex couples increase, it is imperative that scholars and activists examine existing barriers to access for same-sex couples in localities outside of the largest metropolitan areas. It is also important that scholars and activists begin to explore if traditional ways of preventing discrimination, such as codified laws, are effective at preventing discrimination or if alternative anti-discriminatory strategies need to be developed.

The results of this paper also highlight that there is no monolithic experience for same-sex couples in the U.S. rental markets. Non-White same-sex couples contend with the same racial discrimination faced by their non-White heterosexual peers. This study partly quantifies the intersectionality of race and sexual orientation that results in higher rates of discrimination for certain

racial-sexual orientation groups, such as Black same-sex couples, compared with other groups. Black same-sex couples faced higher rates of subtle discrimination compared to their Black heterosexual counterparts, and higher rates of discrimination compared to their White and Hispanic same-sex peers. Future empirical research needs to explore differential experiences faced by the different racial, ethnic, and gender minorities that fall under the umbrella of the LGBTQ community. Any public policy aimed to assist the LGBTQ community—be it to prevent housing or employment discrimination, or provide access to medical care or LGBTQ-friendly aging services—needs to be cognizant of the non-monolithic nature of this community.

Work Cited:

Ahmed, A., and M. Hammarstedt. 2009. Detecting Discrimination against Homosexuals: Evidence from a Field Experiment on the Internet. *Economica*, 76(303), 588-597.

Ahmed, A., L. Andersson, and M. Hammarstedt. 2008. Are Lesbians Discriminated against in the Rental Housing Market? Evidence from a Correspondence Testing Experiment. *Journal of Housing Economics*, 17(3), 234-238.

– 2010. Can Discrimination in the Housing Market Be Reduced by Increasing the Information about the Applicants? *Land Economics* 86 (1), 79 - 90.

Albelda, Randy and M.V Lee Badgett, Alyssa Schneebaum, and Gary Gates. 2009. Poverty in the Lesbian, Gay, and Bisexual Community. *The Williams Institute*. UCLA: The Williams Institute. Retrieved from: <http://escholarship.org/uc/item/2509p8r5>

Allport, Gordon. 1954. *The Nature of Prejudice*. Cambridge, MA: Addison-Wesley.

Allegretto, S. and M. Arthur. 2001. An Empirical Analysis of Homosexual/Heterosexual Male Earnings Differentials: Unmarried and Unequal? *Industrial & Labor Relations Review*, 54(3), 631-646.

Antecol, Heather, Anneke Jong, and Michael Steinberger. 2008. The Sexual Orientation Wage Gap: The Role of Occupational Sorting and Human Capital. *Industrial and Labor Relations Review*. 61(4): 518-543.

Becker, Gary S. 1973. *The Economics of Discrimination*. Chicago, IL: University of Chicago Press.

Berg, Nathan and Donald Lien. 2002. Measuring the Effect of Sexual Orientation on Income: Evidence of Discrimination. *Contemporary Economic Policy*. 20(4): 394-414.

Bertrand, Marianne, and Sendhil Mullainathan. 2004. Are Emily and Greg More Employable Than Lakisha and Jamal? A Field Experiment on Labor Market Discrimination. *American Economic Review* 94(4).

Better Homes and Gardens Real Estate (BHGRE) and National Association of Gay and Lesbian Real Estate Professional (NAGLREP). 2015. *LGBT Home Buyer and Seller Survey*. Accessed: 2/6/2017. <http://naglrep.com/lgbtsurvey/>

Bosch, M., A. Carnero, and L. Farré. 2010. Information and Discrimination in the Rental Housing Market: Evidence from a Field Experiment. *Regional Science and Urban Economics*, 40 (1): 11-19.

Carpusor, G. Adrian, and William E. Loges. 2006. Rental discrimination and ethnicity in Names. *Journal of Applied Social Psychology*, 36(4), 934.

Colin, Roddrick. 2004. *The Extent of Sexual Orientation Discrimination in Topeka, KS*. Topeka, KS: National Gay and Lesbian Task Force Policy Institute.

Edelman, B., M. Luca, and D. Svirsky. 2017. Racial discrimination in the Sharing Economy: Evidence from a field experiment. *American Economic Journal: Applied Economics*, 9(2), 1-22.

Ellison, Christopher G. and Daniel A. Powers. 1994. The Contact Hypothesis and Racial Attitudes among Black Americans. *Social Science Quarterly* 75: 385-400.

Friedman, Samantha and Angela Reynolds, Susan Scovill, Florence R. Brassier, Ron Campbell, and McKenzie Ballou. 2013. An Estimate of Housing Discrimination against Same-Sex Couples.

Gaddis, M. Michael. 2015. Discrimination in the Credential Society: An Audit Study of Race and College Selectivity in the Labor Market. *Social Forces* 93(4): 1451-1479.

Galster, G. (1990). Racial steering by real estate agents: Mechanisms and motives. *The Review of Black Political Economy*, 19(1), 39-63.

Grant, Jaime M., Lisa A. Mottet, and Justin Tanis. 2011. *Injustice at Every Turn: A Report of the National Transgender Discrimination Survey*. Washington, DC: National Center for Transgender Equality and National Gay and Lesbian Task Force.

Grossman, A.H. 1991. Gay men and HIV/AIDS: Understanding the Double Stigma. *The Journal of the Association of Nurses in AIDS Care: JANAC*. 2(4): 28-32.

Hanson, A. and Z. Hawley. 2011. Do Property owner discriminate in the Rental Housing Market? Evidence from an Internet Field Experiment in US Cities. *Journal of Urban Economics*, 70(2), 99-114.

Hanson, A., Z. Hawley, Z., and A. Taylor. 2011. Subtle Discrimination in the Rental Housing Market: Evidence from E-Mail Correspondence with Property owner. *Journal of Housing Economics*, 20(4), 276-284.

Heckman, James. 1998. Detecting Discrimination. *The Journal of Economic Perspectives*. 12(2), 101-116.

Herek, Gregory M. 2009a. Sexual Stigma and Sexual Prejudice in the United States: A Conceptual Framework. In *Contemporary Perspectives on Lesbian, Gay, and Bisexual Identities*. pp. 65-111. (New York, New York: Springer)

Herek, Gregory M. 2009b. Hate Crimes and Stigma-Related Experiences among Sexual Minority Adults in the United States: Prevalence Estimates from a National Probability Sample, *Journal of Interpersonal Violence* 24 (1): 54-74.

Human Rights Campaign Foundation (HRCF). 2016. *Municipal Equality Index: A Nationwide Evaluation of Municipal Law*. <https://www.hrc.org/mei>

Kaiser Foundation. 2000. A Report on the Experiences of Lesbians, Gays and Bisexuals in American and the Public's Views on Issues and Policies Related to Sexual Orientation. Accessed: 10/4/2016. http://www.lgbtdata.com/uploads/1/0/8/8/10884149/ds020_kssso_report.pdf

Klawitter, M. 2011. Multilevel Analysis of the Effects of Antidiscrimination Policies on Earnings by Sexual Orientation. *Journal of Policy Analysis and Management*, 30(2), 334-358.

Klawitter, M. and V. Flatt. 1998. The Effects of State and Local Antidiscrimination Policies on Earnings for Gays and Lesbians. *Journal of Policy Analysis and Management*, 17(4), 658-686.

Lauster, N. and A. Easterbrook. 2011. "No Room for New Families? A Field Experiment Measuring Rental Discrimination against Same-Sex Couples and Single Parents." *Social Problems*, 58(3), 389-409.

Levy, Diane K., Doug Wissoker, Claudia L. Aranda, Brent Howell, Rob Pitingolo, Sarale Sewell, and Rob Santos. 2017. A Paired-Testing Pilot Study of Housing Discrimination against Same-Sex Couples and Transgender Individuals. *The Urban Institute*. <https://www.urban.org/research/publication/paired-testing-pilot-study-housing-discrimination-against-same-sex-couples-and-transgender-individuals>

Lee Badgett, M.V, 1995. The Wage Effects of Sexual Orientation Discrimination. *Industrial and Labor Relations Review*. 48(4): 726-739.

Lee Badgett, M.V, 2003. *Money, Myth, and Change: The Economic Lives of Lesbian and Gay Men*. Chicago, IL: Chicago University Press.

Lee Badgett, M.V., Holning Lau, Brad Sears, and Deborah Ho. 2007. Bias in the Workplace: Consistent Evidence of Sexual Orientation and Gender Identity Discrimination. *The Williams Institute*. UCLA: The Williams Institute. Retrieved from: <https://cloudfront.escholarship.org/dist/prd/content/qt5h3731xr/qt5h3731xr.pdf?t=lnq17l>

Lee, Barrett A., Glenn Firebaugh, John Iceland, Stephen A. Matthews, S. Michael Gaddis, and Raj Ghoshal. 2015. "Arab American Housing Discrimination, Ethnic Competition, and the Contact Hypothesis." *The ANNALS of the American Academy of Political and Social Science*. 660(1): 282-299.

Desmond, Matthew. *Evicted: Poverty and Profit in the American City*. 2017.

Michigan's Fair Housing Centers. 2007. Sexual Orientation and Housing Discrimination in Michigan. Retrieved: August 10th, 2017 http://www.fhcmichigan.org/images/Arcus_web1.pdf

Murchie, Judson. 2017. Race or Protected Class?: Evidence from an Randomized Filed Experiment of Online Posts for Rental Housing. *Working Paper*.

Neumark, David, Ian Burn, and Patrick Button. 2015. *Is it Harder for Older Workers to Find Jobs? New and Improved Evidence from a Field Experiment*. Cambridge, MA: National Bureau of Economic Research

Ondrich, J., A. Stricker, and J. Yinger. 1998. Do Real Estate Brokers Choose to Discriminate? Evidence from the 1989 Housing Discrimination Study. *Southern Economic Journal*. 64 (4): 880-901.

— 1999. Do Property owner Discriminate? The Incidence and Causes of Racial Discrimination in Rental Housing Markets. *Journal of Housing Economics* 8 (3): 185-204.

- Phelps, E S. The Statistical Theory of Racism and Sexism. *American Economic Review*, 62, 659-61.
- Ross, S.L and M.A. Turner. 2005. Housing Discrimination in Metropolitan America: Explaining changes between 1989 and 200. *Social Problems* 52: 152-180.
- Ross, S., and J. Yinger. 2002. *The Color of Credit: Mortgage Discrimination, Research Methodology, and Fair-Lending Enforcement*. (Cambridge, Mass.: MIT Press).
- Sigelman, Lee and Susan Welch. 1993. The Contact Hypothesis Revised: Black-White Interactions and Positive Racial Attitudes. *Social Forces* 71: 781-795.
- Smith, Tonya and Joseph Smith v. Deepika Avanti. 2017. Civil Action Number 16-cv-00091-RM-MJW. U.S. Federal Court for the District of Colorado.
- Tilcsik, András. 2011. "Pride and Prejudice: Employment Discrimination against Openly Gay Men in the United States." *American Journal of Sociology*. 117(2): 586-626.
- Turner, M. A., and J. James. 2015. Discrimination as an Object of Measurement. *Cityscape: A Journal of Policy Development and Research*, 17(3).
- United States Department of Housing and Urban Development (HUD). 2013. *An Estimate of Housing Discrimination Against Same-Sex Couples*. Office of Policy Development and Research. https://www.huduser.gov/portal/Publications/pdf/Hsg_Disc_against_SameSexCp ls_v3.pdf
- United States Department of Housing and Urban Development (HUD). 2012. 77 Federal Registration. 5662, 5674 (Feb. 3, 2012). https://portal.hud.gov/hudportal/HUD?src=/program_offices/fair_housing_equal_opp/LGBT_Housing_Discrimination. Accessed: 1/9/2017
- Yinger, John. 1986. Measuring Racial Discrimination with Fair Housing Audits: Caught in the Act. *American Economic Review*, 76 (5), 881-893.
- 1995. *Closed Doors, Opportunity Los: The Continuing Costs of Housing Discrimination*. (New York: Russell Sage Foundation).
 - 1998. "Evidence on Discrimination in Consumer Markets." *Journal of Economic Perspectives*. 12.2: 23-40.
- Oh, S. J., and J. Yinger. 2015. What Have We Learned from Paired Testing in Housing Markets?. *Cityscape: A Journal of Policy Development and Research*, 17(3), 15.
- Zhao, Bo. 2005. "Does the Number of Houses a Broker Shows Depend on the Homeseeker's Race?" *Journal of Urban Economics*. 57 (1): 128-147.

Figure 1:

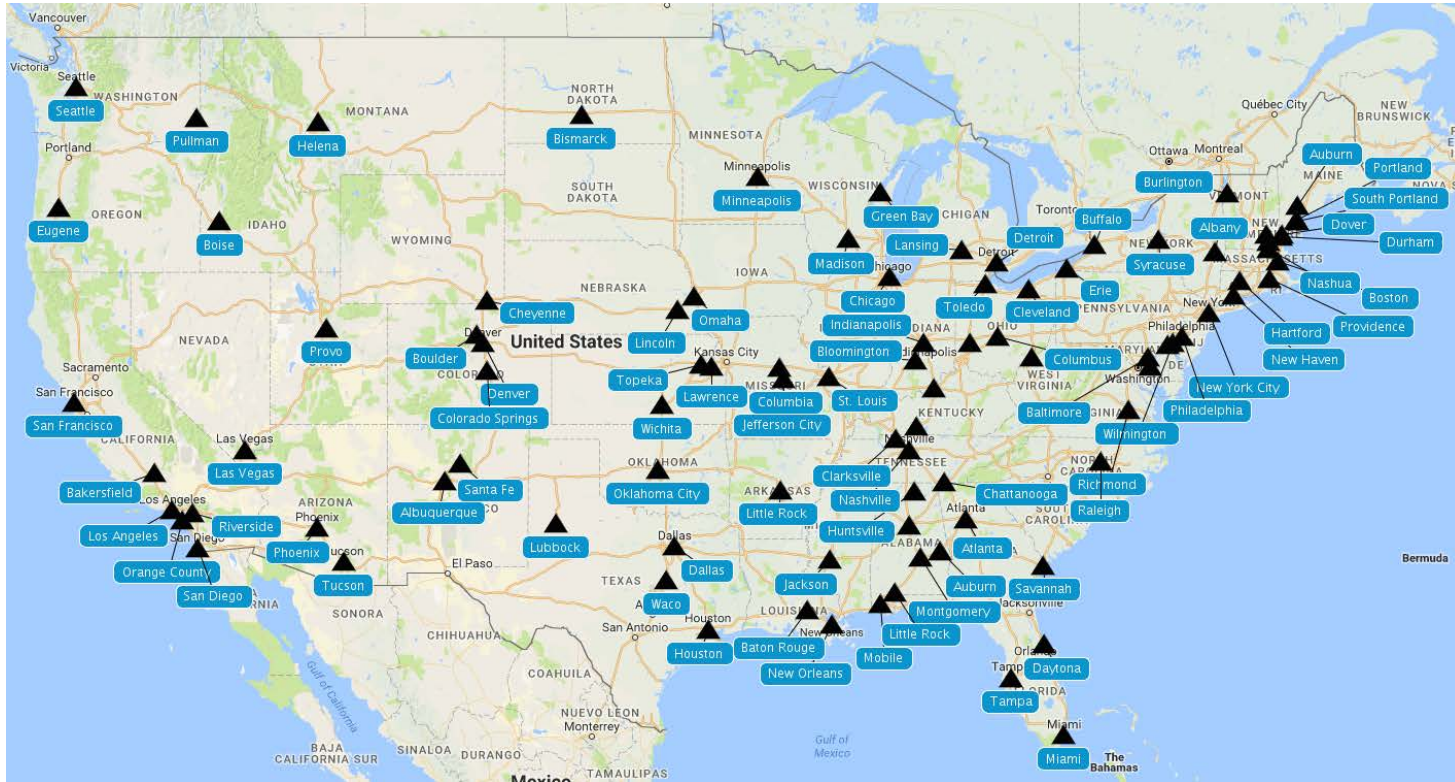


Table I: Names Used in the Audit

Names By Race	Men	Women
White	Brian Robert Eric	Jennifer Sarah Denise
Black	Leroy Jamal Darnell	Michelle Akeelah Jada
Hispanic	Santiago Alejandro Mateo	Sofia Isabella Gabriella

Table II: Baseline Response Rate by Sexual Orientation and Race

	Overall (O)	State (S)	Local (L)	No Protections
	Rate	Rate	Rate	Rate
All Races				
Heterosexual	40%	40%	40%	41%
Gay	35%	36%	33%	35%
Lesbian	38%	38%	38%	39%
White	42%	45%	40%	42%
Heterosexual	44%	44%	42%	44%
Gay	40%	42%	38%	39%
Lesbian	42%	42%	42%	42%
Black	35%	35%	34%	37%
Heterosexual	37%	36%	37%	39%
Gay	31%	32%	29%	32%
Lesbian	35%	35%	35%	37%
Hispanic	38%	41%	38%	38%
Heterosexual	40%	41%	40%	41%
Gay	34%	35%	34%	34%
Lesbian	38%	39%	36%	38%

Notes: Baseline rates are calculated by dividing the number of active responses received by each race-sexual orientation group by the number of inquiries sent by each group.

Table III: Response Rates with Property-Owner Fixed-Effects

Columns	[1]	[2]	[3]	[4]
	Same-Sex Male All Races	Same-Sex White Male	Same-Sex Black Male	Same-Sex Hispanic Male
Sexual Orientation	-0.046** (0.020)	-0.039** (0.017)	-0.056*** (0.013)	-0.052*** (0.014)
Obs	9,760	3,168	3,196	3,396
Columns	[5]	[7]	[6]	[8]
	Same-Sex Female All Races	Same-Sex White Female	Same-Sex Black Female	Same-Sex Hispanic Female
Sexual Orientation	-0.021 (0.021)	-0.011 (0.016)	-0.015 (0.016)	-0.014 (0.016)
Obs	9,706	3,230	3,146	3,330
Robust standard errors in parentheses. All models include property-owner fixed effects and standard errors are clustered at the property-owner level.				
*** p<0.01, ** p<0.05, * p<0.1				

Table IV: Keyword groupings used for email text searches

Positive Language					
Positive Descriptors:	New, new	Clean, clean	Quite, quite	Nice, nice	Good, good
Offer to Show Other Units:	Another, another	Second, second	Several, several		
Offer to Schedule Viewing	View, view	Tour, tour	Show, show	Stop/come by, stop/come by	Appointment, appointment
Contact Information	@	Numerical Values [0-9]*	Email, email	Contact, contact	Application, application, Apply, apply
Greetings / Polite Language	Thanks, thanks	Thank you, Thank You	Please call	Sincerely	
Negative Language					
Fees	Application fee**, Application Fee**	Deposit, deposit	\$		
Employment	Employed, employed	Employment, employment	Employer, employer	Pay stub**, pay stub**, paystub	
Background / Rental History	Crime, crime, Criminal, criminal	Verification, verify	SSN, ssn	References, references	
Eviction History	Eviction, eviction	Evicted, evicted	Court, court		

*This was confirmed visually by the author to be a phone number and coded appropriately

**This was confirmed visually by the author to be a two-word phrase and coded appropriately

Table V: Property Owner Response Differences in Email Content

	White Couples				African American Couples			Hispanic Couples		
	Present in None	Heterosexual-Only	Same Sex-Only	$H_0 = R_W^{SS} - R_W^H = 0$	Heterosexual-Only	Same Sex-Only	$H_0 = R_{AA}^{SS} - R_{AA}^H = 0$	Heterosexual-Only	Same Sex-Only	$H_0 = R_H^{SS} - R_H^H = 0$
Positive										
Positive Descriptive	85.8%	11.9%	10.7%	1.1%	9.3%	6.9%	2.4%	9.2%	7.2%	2.0%
	4280	[84]	[76]	<i>p-value</i> = 0.527	[66]	[49]	<i>p-value</i> = 0.012**	[65]	[51]	<i>p-value</i> = 0.194
Other Units	95.0%	10.4%	8.4%	2.0%	9.6%	8.8%	0.8%	8.8%	8.0%	0.8%
	4738	[26]	[21]	<i>p-value</i> = 0.532	[24]	[22]	<i>p-value</i> = .075*	[22]	[20]	<i>p-value</i> = 0.758
View Unit / Schedule Appointment	71.7%	12.2%	11.0%	1.2%	9.6%	8.6%	1.1%	9.1%	8.7%	0.4%
	3574	[173]	[156]	<i>p-value</i> = 0.349	[136]	[121]	<i>p-value</i> = .008***	[128]	[123]	<i>p-value</i> = 0.752
Contact Information	66.9%	12.2%	11.8%	0.4%	9.8%	9.6%	0.2%	10.1%	9.0%	1.2%
	3340	[201]	[195]	<i>p-value</i> = 0.763	[162]	[158]	<i>p-value</i> = 0.136	[167]	[148]	<i>p-value</i> = 0.284
Greetings / Polite Language	43.0%	10.8%	9.9%	0.9%	9.7%	9.0%	0.7%	10.1%	9.0%	1.1%
	2144	[308]	[281]	<i>p-value</i> = 0.266	[277]	[256]	<i>p-value</i> = .001***	[286]	[255]	<i>p-value</i> = 0.182
Negative										
Fees	92.0%	6.3%	5.8%	0.5%	11.8%	13.3%	1.5%	8.8%	9.3%	0.5%
	4590	[25]	[23]	<i>p-value</i> = 0.773	[47]	[53]	<i>p-value</i> = 0.549	[35]	[37]	<i>p-value</i> = 0.815
Employment	91.6%	1.9%	2.9%	1.0%	5.0%	4.3%	0.7%	3.6%	4.1%	0.5%
	4570	[8]	[12]	<i>p-value</i> = 0.371	[21]	[18]	<i>p-value</i> = 0.631	[15]	[17]	<i>p-value</i> = 0.724
Background / History	95.0%	4.8%	5.6%	0.8%	8.4%	10.4%	2.0%	5.6%	5.2%	0.4%
	4738	[12]	[14]	<i>p-value</i> = 0.695	[21]	[26]	<i>p-value</i> = 0.406	[14]	[13]	<i>p-value</i> = 0.847
Eviction	96.1%	4.6%	5.1%	0.5%	10.8%	14.9%	4.1%	7.7%	7.2%	0.5%
	4794	[9]	[10]	<i>p-value</i> = 0.513	[21]	[29]	<i>p-value</i> = 0.258	[15]	[14]	<i>p-value</i> = 0.852

Notes: The Analysis is restricted to emails with substantive responses. The number of landlords is in []. P-values are from the McNemar paired difference in proportions tests. This test is designed for differences in proportions of responses for paired subjects where the test-statistics is $\chi^2 = (N \text{ responses for Group 1} - N \text{ responses for Groups 2})^2 / (N \text{ responses for Group 1} + N \text{ responses for Groups 2})$. The test statistics follows a chi-squared distribution. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Table VI: Content Analysis within Same-Sex Emails

	Same-Sex Compared to Heterosexual Couples			Within-Race Responses				
	Heterosexual Total	Same-Sex Total	$H_0 = R_{Total}^{SS} - R_{Total}^H = 0$	White	Black	Hispanic	$H_0 = R_{White}^{Total} - R_{Black}^{Total} = 0$	$H_0 = R_{White}^{Total} - R_{Hispanic}^{Total} = 0$
Positive Descriptive	30.4%	24.9%	5.5%	39.3%	30.1%	30.6%	9.2%	8.6%
	[215]	[176]	$p\text{-value} = .049^{**}$	278	213	217	$p\text{-value} = 0.003^{***}$	$p\text{-value} = .006^{***}$
Other Units	28.8%	25.2%	3.6%	35.2%	33.6%	31.6%	1.6%	3.6%
	[72]	[63]	$p\text{-value} = 0.439$	88	84	79	$p\text{-value} = 0.763$	$p\text{-value} = 0.486$
View Unit / Schedule Appointment	30.9%	28.3%	2.6%	39.3%	31.1%	29.6%	8.2%	9.8%
	[437]	[400]	$p\text{-value} = 0.201$	556	440	418	$p\text{-value} = 0.001^{***}$	$p\text{-value} = 0.001^{***}$
Contact Information	32.2%	30.4%	1.8%	38%	31%	31%	7.5%	7.7%
	[530]	[501]	$p\text{-value} = 0.366$	633	510	506	$p\text{-value} = 0.001^{***}$	$p\text{-value} = 0.001^{***}$
Polite Language	30.6%	27.8%	2.8%	34.9%	32.3%	32.8%	2.6%	2.1%
	[871]	[792]	$p\text{-value} = .053^*$	[993]	[920]	[932]	$p\text{-value} = .095^*$	$p\text{-value} = 0.164$
Negative								
Fees	26.9%	28.4%	1.5%	26.4%	39.4%	34.4%	13.1%	8.0%
	[107]	[113]	$p\text{-value} = 0.686$	[105]	[157]	[137]	$p\text{-value} = 0.002^{***}$	$p\text{-value} = .040^{**}$
Employment	10.5%	11.2%	0.7%	31.3%	35.2%	33.7%	3.8%	2.4%
	[44]	[47]	$p\text{-value} = 0.753$	[131]	[147]	[141]	$p\text{-value} = 0.337$	$p\text{-value} = 0.544$
Background / History	18.8%	21.2%	2.4%	26.8%	46.0%	27.2%	19.2%	0.4%
	[47]	[53]	$p\text{-value} = 0.549$	[67]	[115]	[68]	$p\text{-value} = 0.001^{***}$	$p\text{-value} = 0.931$
Eviction	23.1%	27.2%	4.1%	19%	50%	31%	31.3%	11.8%
	[45]	[53]	$p\text{-value} = 0.419$	[37]	[98]	[60]	$p\text{-value} = 0.001^{***}$	$p\text{-value} = .020^{**}$

Notes: The Analysis is restricted to emails with substantive responses. The number of landlords is in []. P-values are from the McNemar paired difference in proportions tests. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Table VII: Time to Response at the Email-Level

Times Elapse	Heterosexual	Same-Sex Male Couples	Difference in Means Heterosexual v. Same- Sex Males	Same-Sex Female Couples	Difference in Means Heterosexual v. Same- Sex Female
White	6:46 (22:12)	7:14 (22:16)	0:28 $p = .5655$	7:05 (21:49)	0:19 $p = 0.7604$
African American	6:55 (23:10)	7:23 (24:23)	0:28 $p = .5911$	7:16 (23:01)	0:21 $p = 0.7702$
Hispanic	7:02 (22:51)	7:41 (22:43)	0:39 $p = .4347$	7:26 (22:57)	0:24 $p = 0.7196$
Email Level: Word Count					
White	27.06 (61.23)	24.03 (54.11)	3.03 $p = .3736$	25.61 (58.67)	1.45 $p = 0.6084$
African American	24.19 (55.64)	23.51 (55.51)	0.68 $p = .8330$	24.61 (56.61)	0.42 $p = 0.8852$
Hispanic	25.52 (57.22)	24.16 (58.45)	1.36 $p = .7526$	24.06 (58.12)	1.46 $p = 0.6028$

Notes: In the first panel, the rows 1, 3, and 5 express average time elapsed between when an inquiry is sent and when a landlord reply is received reported in (H:MM) format. These analysis only include emails in which a substantive reply is made. Standard Deviations are reported in (). P-Values in column 3 and 5 in panel 1 report the results of a difference in means z-test. In panel 2, rows 1, 3, and 5 report average word count for emails sent from White, African American, and Hispanic names, respectively. Columns 3 and 5 report the p-values of a standard difference in means z test.

Table VIII: Relationship between State Housing Protections and Response Rates

Table VII: State-Level Protections	(1)	(2)	(3)	(4)
	Same-Sex Male	Same-Sex Male White	Same-Sex Male Black	Same-Sex Male Hispanic
Sexual Orientation	-0.040** (0.016)	-0.021 (0.014)	-0.042*** (0.016)	-0.054*** (0.017)
Legal Protections	-0.011 (0.015)	0.028* (0.016)	-0.018 (0.017)	-0.014 (0.017)
Sexual Orientation * Legal Protections	0.010 (0.011)	0.016 (0.013)	0.027* (0.014)	0.017 (0.014)
Observations	4,360	1,404	1,438	1,518
	(5)	(6)	(7)	(8)
	Same-Sex Female	Same-Sex White Female	Same-Sex Black Female	Same-Sex Hispanic Female
Sexual Orientation	0.017 (0.016)	-0.010 (0.013)	-0.009 (0.017)	-0.016 (0.015)
Legal Protections	-0.010 (0.014)	0.010 (0.016)	-0.013 (0.016)	-0.013 (0.015)
Sexual Orientation * Legal Protections	0.001 (0.017)	0.001 (0.017)	-0.019 (0.017)	0.012 (0.016)
Observations	4,290	1,440	1,418	1,432

Notes: Robust standard errors in parentheses. All models include state fixed-effects and the following unit-level controls: # of Bedrooms, # of baths, Square feet, and Annualized Monthly Rent. *** p<0.01, ** p<0.05, * p<0.1

Table IX: Relationship between Local Housing Protections and Response Rates

	(1) Same-Sex Male	(2) Same-Sex Male White	(3) Same-Sex Male Black	(4) Same-Sex Male Hispanic
Sexual Orientation	-0.061*** (0.016)	-0.052*** (0.016)	-0.071*** (0.017)	-0.062*** (0.018)
Legal Protections	-0.009 (0.015)	-0.019 (0.016)	-0.025 (0.017)	0.008 (0.017)
Sexual Orientation * Legal Protections	-0.011 (0.017)	0.006 (0.013)	-0.021* (0.012)	0.022* (0.013)
Observations	3,994	1,238	1,298	1,458
	(5) Same-Sex Female	(6) Same-Sex White Female	(7) Same-Sex Black Female	(8) Same-Sex Hispanic Female
Sexual Orientation	-0.021 (0.014)	-0.011 (0.016)	-0.021 (0.018)	-0.031* (0.016)
Legal Protections	-0.012 (0.017)	-0.018 (0.015)	-0.024 (0.015)	0.002 (0.016)
Sexual Orientation * Legal Protections	-0.008 (0.016)	-0.004 (0.016)	-0.018 (0.015)	-0.016 (0.017)
Observations	3,928	1,368	1,206	1,354

Notes: Robust standard errors in parentheses. All models include state fixed-effects and the following unit-level controls: # of Bedrooms, # of baths, Square feet, and Annualized Monthly Rent. *** p<0.01, ** p<0.05, * p<0.1