AN ESTIMATE OF HOUSING DISCRIMINATION AGAINST SAME-SEX COUPLES

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Prepared for

U.S. Department of Housing and Urban Development
Office of Policy Development and Research

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June 2013

Acknowledgments

Many individuals contributed to this study. The work could not have been completed without the commitment and hard work of the primary research team members and various administrative and support staff. We thank the following members of the project team: Gregory M. Herek; Madeline Hoffman; Thomas Roth and David Paisley of Community Marketing; Robert Schwemm; Thomas Sexton; Gregory D. Squires; Bryan Tomlin; and Donald Kahl and John Baker of the Equal Rights Center, who also made contributions to the design of the project.

A panel of expert advisers made valuable contributions to the understanding of the housing issues faced by the lesbian, gay, bisexual, transgender community and of the e-mail testing approach. We express special thanks to Gregory M. Herek, Jim McCarthy, Robert Schwemm, and Gregory D. Squires; as well as Lee Badgett, Roger Doughty, Kate Kendall, Jerry Malitz, Justin Nelson, Terry Stone, and Laura Young.

We also thank Jennifer A. Stoloff, the project's Government Technical Representative from the U.S. Department of Housing and Urban Development, Office of Policy Development and Research, for providing significant guidance and support at all stages.

We offer special thanks to Louisa Elfman of M. Davis and Company, Inc., for managing the packaging of the report.

Disclaimer

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Executive Summary

This is the first large-scale, paired-testing study to assess housing discrimination against same-sex couples in metropolitan rental markets via advertisements on the Internet. The research is based on 6,833 e-mail correspondence tests conducted in 50 metropolitan markets across the United States from June through October 2011. For each correspondence test, two e-mails were sent to the housing provider, each inquiring about the availability of the unit advertised on the Internet. The only difference between the two e-mails was the sexual orientation of the couple making the inquiry. Two sets of correspondence tests were conducted, one assessing the treatment of gay male couples relative to heterosexual couples and one assessing the treatment of lesbian couples relative to heterosexual couples. This methodology provides the first direct evidence of discriminatory treatment of same-sex couples compared with the treatment of heterosexual couples when searching for rental housing advertised on the Internet in the United States.

The study finds that same-sex couples experience less favorable treatment than heterosexual couples in the online rental housing market. The primary form of adverse treatment is that same-sex couples receive significantly fewer responses to e-mail inquiries about advertised units than heterosexual couples. Study results in jurisdictions *with* state-level protections against housing discrimination on the basis of sexual orientation unexpectedly show slightly more adverse treatment of same-sex couples than results in jurisdictions *without* such protections. This study provides an important initial observation of discrimination based on sexual orientation at the threshold stage of the rental transaction and is a point of departure for future research on housing discrimination against same-sex couples.

Background

Federal fair housing laws, seeking to ensure equal access to housing, prohibit housing discrimination based on race, color, religion, national origin, sex, familial status, and disability. The Fair Housing Act, however, does not include sexual orientation or gender identity as protected classes. Although individual states and localities increasingly include sexual orientation and gender identity as protected classes, the fair housing laws of most states do not provide legal protections for the lesbian, gay, bisexual, and transgender (LGBT) community.

Although various studies have gathered information on prejudice and stigma against the LGBT community, little empirical research has examined housing discrimination based on sexual orientation. In community-based surveys conducted during the 1980s and 1990s with nonprobability samples, many lesbians and gay men reported that they had experienced some form of housing discrimination. In a statewide survey of lesbians and gay men by the Philadelphia Lesbian and Gay Task Force, between 9 and 16 percent of males (depending on race) and between 5 and 11 percent of females reported housing discrimination (Gross and Aurand, 1996). In a 2000 Kaiser Family Foundation survey, 11 percent of the lesbian, gay male, and bisexual respondents said they had personally experienced discrimination in renting an apartment or buying a home. Another 35 percent said they had not personally experienced such discrimination but knew someone who had (Kaiser Family Foundation, 2001). Using data from a nationally representative sample of lesbian, gay male, and bisexual adults, Herek (2009a) found that 3.8 percent of this population reports experiencing discrimination in the housing market at least once, with gay men experiencing the highest rate of housing discrimination (6.5 percent).

Data on perceptions can miss discriminatory actions that are unknown to prospective renters, however. Recently, three correspondence test studies examined potential adverse treatment of lesbian and gay male couples, relative to heterosexual couples: two in Sweden (Ahmed, Andersson, and Hammarstedt, 2008; Ahmed and Hammarstedt, 2009) and one in Canada (Lauster and Easterbrook, 2011). Ahmed and colleagues did not find evidence of adverse treatment against lesbians, but they did find significant differences between gay male couples and heterosexual couples, with gay male couples receiving fewer responses and invitations to contact the provider and inspect the unit. Regarding a "gross" measure of adverse treatment, Ahmed and Hammarstedt (2009) found that in 12.3 percent of the correspondence tests (not matched pairs), heterosexual couples were favored over gay male couples in getting an e-mail response; the net measure was 11.4 percent and was the only dimension of adverse treatment that was statistically significant. No disparities emerged in invitations to contact the provider or to a showing of the unit. Lauster and Easterbrook (2011) also found no disparity between lesbian and heterosexual couples but found that gay male couples are less likely than heterosexual couples to receive positive responses from housing providers. No correspondence tests, however, were previously conducted for these groups in the United States.

Objectives of the Research

The objective of this study is to develop the first national estimate of the level of housing discrimination based on sexual orientation; that is, discrimination against same-sex couples—men partnering with men and women partnering with women—at the initial stage of the rental housing transaction in the electronically advertised rental market. The study looks only at the issue of the sexual orientation of same-sex couples and not at other issues, such as gender identity.

The study has two unique features. First, it examines the experience and treatment of same-sex couples in their search for rental housing, a subject not previously observed on a national scale. Second, recognizing the increasing use of the Internet to search for housing, the study uses Internet advertising and matched-pair e-mails—the very threshold of the housing transaction—as the point of contact between the tester and the housing provider. The project also provides a novel, yet increasingly relevant, approach to a first look at barriers in the rental housing market for same-sex couples.

Hypotheses

Consistent with the findings of previous research outside the United States (for example, Ahmed, Andersson, and Hammarstedt, 2008; Ahmed and Hammarstedt, 2009; Lauster and Easterbrook, 2011), we expect that a disparity would exist in the response of housing providers to inquiries expressing interest in electronically advertised rental housing by heterosexual and same-sex couples. The main hypotheses for the study are that (1) same-sex couples will experience more adverse treatment than heterosexual couples, (2) gay male couples will experience a greater degree of adverse treatment than lesbian couples, and (3) same-sex couples will experience lower levels of adverse treatment in places with state-level housing discrimination laws inclusive of sexual orientation than in jurisdictions without such protections.

Methodology

The research adapts the well-established matched-pair testing methodology, which has been a hallmark of previous U.S. Department of Housing and Urban Development (HUD) housing discrimination studies (HDSs), for use in examining the electronically advertised rental housing market. A total of 6,833 matched-pair correspondence tests were completed via e-mail across 50 markets. Tests were divided between those examining discrimination against gay men (3,424 tests) and those examining discrimination against lesbians (3,409 tests), both relative to the treatment of heterosexual couples.

The primary objectives of the study were to obtain data that would produce (1) nationally representative estimates of various measures of housing discrimination against same-sex couples; (2) to the extent possible, estimates of these measures by whether a state had legislative protections against housing discrimination based on sexual orientation; and (3) to the extent possible, estimates of these measures by market size.

A total of 50 markets were randomly selected, proportional to population size (PPS), from among the 331 metropolitan statistical areas or primary metropolitan statistical areas, based on 2000 census definitions. The sampling elements were one-bedroom rental unit listings advertised on a national Internet listing site. This site was chosen as the universe from which to sample the electronic advertisements because the first contact between the prospective renter and the housing provider could always occur via e-mail; unlike other electronic search engines, the site does not require prospective renters to complete an online registration form asking for their phone numbers and current addresses; and because the format of the advertisements on the selected site and the nature of the contact between providers and prospective tenants is uniform throughout the country.

For a market to be included in the sample, it had to have complete coverage on the selected listing site throughout the metropolitan area being sampled. For example, for the Washington, D.C. market to be included in our sample, the range of advertised units had to be spread among different areas throughout the metropolitan area (for example, Fairfax County, Virginia; Prince George's County, Maryland; the District of Columbia; and so on). If the listing site did not completely cover a selected market, it was not included in the sampling frame, and another market was randomly selected using a PPS sampling approach. This procedure ensured a final sample of 50 markets with complete coverage.

Each correspondence test involved sending two e-mails to the housing provider, each inquiring about the availability of the electronically advertised unit. The only difference between the two e-mails was whether the couple was same sex or heterosexual. Unfavorable treatment was measured based on the housing provider's response to the e-mail, with the central focus being on whether each tester (1) received a response, (2) received more than one response, (3) was told the unit was available, (4) was told to contact the provider, and (5) was invited to inspect the unit.

Each correspondence test resulted in one of three potential outcomes: (1) the heterosexual couple is favored over the same-sex couple, (2) the same-sex couple is favored over the

heterosexual couple, or (3) both couples receive equivalent treatment (equally favored or disfavored). The most straightforward measure, the *gross measure*, is the percentage of tests in which the heterosexual couple is favored over the same-sex couple. Gross measures are considered upper bound estimates of discrimination. Differential treatment might occur for random reasons, as well as reasons that have nothing to do with actual discrimination. For example, the housing provider might simply have forgotten to reply to the same-sex couple, or perhaps the unit was truly already rented by the time the same-sex couple inquired about it. To produce lower bound estimates of discrimination, *net measures* are calculated, borrowing from the methodology of the 2000 Housing Discrimination Study (HDS2000). Net measures subtract the percentage of same-sex couples favored on a given outcome from the percentage of heterosexual couples favored. The true estimate of adverse treatment against same-sex couples probably lies between the upper and lower bound estimates.

This report presents results for the five key dimensions of treatment discussed previously and combines these dimensions to create a *composite measure* of treatment. In particular, the *consistency index*, adopted from HDS2000, reflects the extent to which one tester is consistently favored over the other in the treatment received from housing providers based on their inquiry e-mails. Tests are classified as "heterosexual favored" if the heterosexual couple received favorable treatment on at least one of the five dimensions and the same-sex couple (gay male or lesbian) received no favorable treatment. Tests are classified as "gay male or lesbian favored" if the same-sex couple received favorable treatment on at least one of the five dimensions and the heterosexual couple received no favorable treatment.

Findings

Same-sex couples are significantly less likely than heterosexual couples to get favorable responses to e-mail inquiries about electronically advertised rental housing. Comparing our gross measures of discrimination, heterosexual couples were favored over gay male couples in 15.9 percent of tests and over lesbian couples in 15.6 percent of tests (Table E-1).

The net measures indicate that heterosexual couples are significantly more likely than their gay male and lesbian counterparts to receive an initial e-mail response (Table E-2). At this preliminary stage of the rental housing transaction, barriers indicate a rejection of the tester based solely on the sexual orientation information provided in the e-mail rather than on any characteristics related to qualification for the housing, thus preventing basic access to rental units.

Key Findings

- Same-sex couples experience discrimination in the online rental housing market, relative to heterosexual couples (Figure E-1).
- Adverse treatment is found primarily in the form of same-sex couples receiving fewer responses to the e-mail inquiry than heterosexual couples.
- Overall, results in states with legislative protections show slightly more adverse treatment for gay men and lesbians than results in states without protections.
- Adverse treatment of same-sex couples is present in all metropolitan areas, but no clearcut pattern exists in the magnitude of adverse treatment by metropolitan market size.
- Lower bound measures of discrimination (net measures) reveal similar results, although the magnitude of the difference in treatment between heterosexual and same-sex couples is less (that is, 2.2 percent for the gay male-heterosexual tests; 1.3 percent for the lesbian-heterosexual tests) than for the gross measures and is only statistically significant in the gay male-heterosexual tests.

Table E-1. Tests Favoring Heterosexual Couples (gross measures)

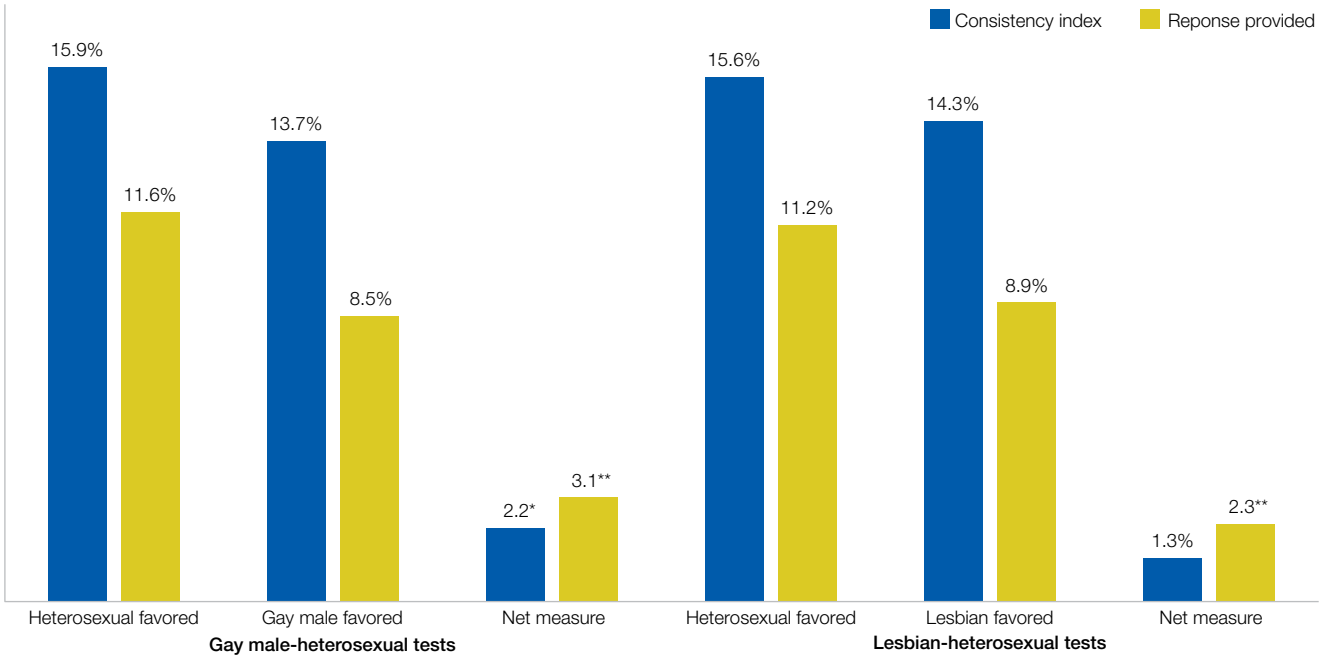
Gross Measures	Tests Favoring Heterosexual Couples Versus ...	
	Gay Male Couples (%)	Lesbian Couples (%)
Consistency index	15.9	15.6
Initial response provided	11.6	11.2

Table E-2. Tests Favoring Heterosexual Couples (net measures)

Net Measures	Tests Favoring Heterosexual Couples Versus ...	
	Gay Male Couples (%)	Lesbian Couples (%)
Consistency index	2.2*	1.3
Initial response provided	3.1**	2.3**

* $p \leq .05$. ** $p \leq .01$.

Figure E-1. National-Level Adverse Treatment Against Gay Male and Lesbian Couples, 2011



* Significant at the p ≤ .05 level. **Significant at the p ≤ .01 level.

Effect of Legislative Protections

In states *with* legislative protections against housing discrimination based on sexual orientation, heterosexual couples were consistently favored over gay male couples in 16.0 percent of tests and were favored over lesbian couples in 15.9 percent of tests. In states *without* such protections, however, heterosexual couples were favored over gay male and lesbian couples at rates that were 0.6 percentage points less than those in protected states (that is, 15.4 and 15.3 percent, respectively). Moreover, the net measure for gay male couples relative to heterosexual couples (3.1 percent) was statistically significant only in jurisdictions with state-level protections. Taken together, those results are surprising in that states with legislative protections prohibiting housing discrimination on the basis of sexual orientation do not show lower levels of adverse treatment. Several factors could account for this unexpected finding, including potentially low levels of enforcement, housing provider unfamiliarity with state-level protections, or the possibility that protections exist in states with the greatest need for them.

Effect of Metropolitan Market Size

When disaggregated by the size of metropolitan areas, the results of the paired tests continue to reveal that heterosexual couples were consistently favored over gay male and lesbian couples, although variation exists in the magnitude of the differences in treatment. These differences exhibit no clearcut pattern by metropolitan market size, however. The net measure is statistically significant only in gauging the treatment of gay male couples relative to heterosexual couples in the largest metropolitan areas.

Conclusions and Implications

The findings presented in this report provide evidence that discrimination exists against same-sex couples in the initial stages of the search for electronically advertised rental housing in metropolitan America. The study measured the response of housing providers regarding the sexual orientation of couples and did not examine other characteristics, such as gender identity. The adverse treatment of same-sex couples stems largely from the fact that housing providers are less likely to respond to same-sex couples than to heterosexual couples.

This study employed paired e-mail correspondence tests rather than in-person, paired tests, and it allowed for only one e-mail interaction with each housing provider. Because the observations are at the very threshold of the rental transaction, the estimates of discrimination presented here likely underestimate the extent to which heterosexual couples are favored over same-sex couples in the rental housing market. Nevertheless, the incidence of consistently favored treatment of heterosexual couples relative to gay male and lesbian couples (that is, 15.9 and 15.6 percent, respectively) is similar in magnitude to the incidence of

consistently favored treatment of White homeseekers relative to Black and Hispanic homeseekers (that is, 21.6 and 25.7 percent, respectively) found using in-person audits in HDS2000.

This study serves as the initial step toward future research on same-sex housing discrimination. Although its use of paired testing and its national scope are strengths, the study design is limited to e-mail tests of rental housing in metropolitan markets advertised by one source on the Internet. Moreover, the study captures the treatment of test e-mail inquiries by housing providers in response to only one e-mail sent by each tester, and it therefore does not consider what could happen to testers through additional contact (via additional followup e-mails, phone, or in-person communication). Thus, the testing conducted in this study is representative of the initial stage of the housing search by prospective renters in the metropolitan rental housing market.

The contribution of this study is to demonstrate that same-sex couples are less likely than heterosexual couples to gain access to the targeted rental unit. When same-sex couples do receive a response, however, the treatment by housing providers is, for the most part, equal—at least for a single e-mail interaction. This type of discrimination diverges somewhat from that which has been found between Whites and non-White minorities (Friedman, Squires, and Galvan, 2010). In large part, the disparity between Whites and non-White minorities in the initial access to housing units (that is, getting a response from providers) is less than the disparity observed in additional contact with providers (for example, getting more than one response or the potential to inspect the unit).

This first set of national findings on the discrimination against same-sex couples in the metropolitan rental housing market should serve as a point of departure for future research on same-sex housing discrimination. In-person testing would provide valuable, additional information on the experiences of same-sex couples in the rental market, and it would replicate the approach of other HDS research and track the real-life sequence of a rental housing search. A broader sample of advertised rental units, including other electronic media and print advertisements, could be used for in-person testing.

Future studies could employ e-mail or in-person audits to further examine differences in treatment between same-sex and heterosexual couples in states with and without legislative protections for sexual orientation or gender identity. Local jurisdictions' protections were not within the scope of this study, and examining the effect of such local protections on differential treatment could be very useful. In addition, this study looked at treatment based only on the sexual orientation of same-sex couples and not on gender identity or gender expression. This study does not explicitly capture treatment of transgender people or people who do not conform to stereotypical gender norms because it used the e-mail testing approach. Finally, future research could seek to obtain metropolitan-specific estimates of discrimination against same-sex couples. Perhaps this approach could shed light on the mixed findings of rental housing discrimination revealed across metropolitan areas in this study.

Introduction

This report presents the findings of the first large-scale, paired-testing study to measure treatment of same-sex couples in the electronically advertised rental housing market. The study, sponsored by the U.S. Department of Housing and Urban Development (HUD) and conducted by M. Davis and Company (MDAC), Inc., was developed to obtain a baseline national estimate of housing discrimination against same-sex couples at the initial stage of the search for rental housing. It builds on the well-established matched-pair testing method used in previous HUD housing discrimination studies (HDSs) examining racial and ethnic discrimination in the housing market. The in-person method was adapted to reflect the increased use of the Internet in the housing search. The results are based on 6,833 paired e-mail tests conducted in 50 metropolitan areas from June through October 2011.

This study examines the treatment of same-sex couples seeking rental housing, a subject not previously observed on a national scale. Although the federal Fair Housing Act does not include sexual orientation or gender identity among its protected classes, evidence suggests that discrimination on the basis of actual or perceived sexual orientation limits housing opportunities for gay men and lesbians. Studies of public perception and attitudes toward sexual minorities show prejudice and stigma against this community (Herek, 2009a, 2009b). Smaller scale testing projects and other studies, discussed in the following section, indicate that same-sex couples experience prejudice based on their sexual orientation and encounter discrimination in their search for housing. State and local jurisdictions are increasingly enacting legislation prohibiting discrimination on the basis of sexual orientation or gender identity. Based on the existing evidence of discrimination experienced by lesbian, gay, bisexual, and transgender (LGBT) people, HUD recently issued a final rule to ensure that its core programs are open to all eligible individuals and families, regardless of sexual orientation or gender identity.[1]

In addition, recognizing the increasing use of the Internet to search for housing, this study uses Internet advertising and matched-pair e-mails—the threshold of the housing transaction—as the point of contact between the tester and the housing provider. In each paired test, the housing provider received two e-mails inquiring into an advertised rental unit: one from a self-identified same-sex couple and one from a self-identified heterosexual couple.

Fair Housing Laws

The federal Fair Housing Act (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 on the basis of seven protected classes: race, color, religion, national origin, sex, familial status (the presence of children less than 18 years old, seeking custody of such people, or being pregnant), and disability. For example, housing providers are prohibited from considering these protected characteristics as the basis for rejecting or refusing to negotiate with individuals seeking housing or housing-related services, from misrepresenting or limiting housing opportunities based on these protected characteristics, or in setting different terms or conditions because of these protected characteristics.

Neither sexual orientation nor gender identity is a protected class under the federal Fair Housing Act, although some forms of such discrimination against LGBT people might be prohibited under currently protected classes: sex discrimination (for example, nonconformity with gender stereotypes), sexual harassment, or disability (such as a provider's perception that a gay applicant might have HIV/AIDS). An increasing number of states and local jurisdictions have enacted legislative protections against housing discrimination based on sexual orientation or gender identity. As of early 2012, 20 states and the District of Columbia have enacted legislation prohibiting housing discrimination based on sexual orientation or gender identity:[2]

California
Colorado
Connecticut
Delaware
(sexual orientation only)
Hawaii
Illinois
Iowa
Maine
Maryland
(sexual orientation only)
Massachusetts
Minnesota
Nevada
New Hampshire
(sexual orientation only)
New Jersey
New Mexico
New York
(sexual orientation only)
Oregon
Rhode Island
Vermont
Washington
Washington, D.C.
Wisconsin
(sexual orientation only)

[1] "Equal Access to Housing in HUD Programs Regardless of Sexual Orientation or Gender Identity." Final rule. *Federal Register* 77 (5662) February 3, 2012. Also available at http://portal.hud.gov/hudportal/documents/huddoc?id=12lgbtfinalrule.pdf.

[2] See HUD's Fair Housing Act LGBT web page at http://portal.hud.gov/hudportal/HUD?src=/program_offices/fair_housing_equal_opp/LGBT_Housing_Discrimination.

Several states and more than 240 local jurisdictions currently prohibit discrimination in employment and public accommodations on the basis of sexual orientation. Many of these local jurisdictions also prohibit discrimination in housing on the basis of sexual orientation, gender identity, or gender expression.

On February 3, 2012, HUD published its Final Rule, "Equal Access to Housing in HUD Programs Regardless of Sexual Orientation or Gender Identity," which prohibits making a determination of eligibility for HUD-assisted or HUD-insured housing on the basis of sexual orientation or gender identity. The rule applies to all HUD programs, including public housing, HUD-assisted or HUD-financed housing, and FHA-insured mortgage financing. The rule has four main provisions: It (1) requires providers assisted by HUD or insured by FHA to make housing available without regard to actual or perceived sexual orientation, gender identity, or marital status; (2) clarifies that the definitions of *family* and *household*, which are integral to determining who is eligible for HUD's core programs, includes people regardless of actual or perceived sexual orientation, gender identity, or marital status; (3) prohibits HUD-assisted and FHA-insured entities from inquiring about an applicant's or occupant's sexual orientation or gender identity for the purpose of determining eligibility or otherwise making housing available; and (4) prohibits FHA-approved lenders from basing eligibility determinations for FHA-insured loans on actual or perceived sexual orientation or gender identity.[3]

Although less than one-half of all states provide state-level protection against housing discrimination for LGBT people, the effect of this lack of legislation remains unknown. Although most information is anecdotal, some previous formal research studies, described in the following section, illuminate the issue of housing discrimination against LGBT people.

Paired Testing and Previous Housing Discrimination Studies

Testing is an investigative technique used to observe the practices of housing providers. Testers, who pose as individuals seeking housing, contact housing providers in a variety of ways to inquire about housing opportunities. The origins of paired testing as a method of studying housing discrimination and identifying differential treatment lie in fair housing enforcement, and testing was originally used to identify individual housing providers who were violating housing discrimination laws. HUD has used testing for more than 40 years to investigate discriminatory housing practices, because testing is a powerful tool for directly observing differences in the treatment that homeseekers experience. When paired testing is applied to large, representative samples and implemented with rigorous controls, it provides reliable estimates of the differences in treatment among different populations.

HUD funded three national studies using the methodology of matched-pair testing to measure the levels of housing discrimination based primarily on race and ethnicity.

In 1977, HUD's Housing Market Practices Survey (HMPS1977) employed the *auditor technique* to observe differential treatment of Black and White homeseekers. The Black and White auditors were both male or both female and had approximately the same level of education, income, occupation, and family characteristics. Each member of the audit team responded separately to advertisements that were randomly selected from major newspapers, and then they recorded their treatment on standardized forms. In HMPS1977 1,609 rental and 1,655 sales audits were conducted in 40 metropolitan areas during May and June of 1977. The results revealed significant differences between the Black and White audits. The white auditor was favored 50.4 percent of the time in the sales market and 45.7 percent of the time in the rental market. The black auditor was favored only 19.7 and 17.9 percent of the time, respectively.

HUD built on the HMPS1977 experience 10 years later by launching a second national audit study, the 1989 Housing Discrimination Study (HDS1989). This study involved 3,800 paired tests for discrimination against Black and Hispanic homeseekers. As in HMPS1977, both rental and sales markets were tested in a random sample of 25 major metropolitan areas. Black-White tests were conducted in 20 of these sites and Hispanic-non-Hispanic White tests were conducted in 13 sites. The HDS methodology also involved expanded sample sizes in 5 metropolitan areas, which supported in depth analysis of variations in patterns of discrimination within urban areas (Fix and Turner, 1998).

In HDS1989, Black renters faced a 10.7-percent chance of being excluded altogether from housing made available to comparable White renters and a 23.5-percent chance of learning about fewer apartments. Real estate brokers were also much more likely to offer financial advice to White than to Black customers.

In HUD's third national study, *Discrimination in Metropolitan Housing Markets* (HDS2000), the results were based on 4,600 paired tests conducted in 23 metropolitan areas nationwide during the summer and fall of 2000.

[3] http://portal.hud.gov/hudportal/documents/huddoc?id=12lgbtfinalrule.pdf.

HDS2000 Phase I was designed to provide updated national estimates of adverse treatment against Black and Hispanic homeseekers and to measure change in the incidence of differential treatment since 1989. In addition, Phase I provided estimates of adverse treatment against Black and Hispanic homeseekers in 20 individual metropolitan areas and exploratory estimates of adverse treatment against Asian (in 2 metropolitan areas) and Native American (in 1 metropolitan area) homeseekers. The basic testing protocols replicated those implemented in HDS1989. Random samples of advertised housing units were drawn weekly from major metropolitan newspapers, and testers visited the sampled offices to inquire about the availability of these advertised units. Both minority and White partners were assigned incomes, assets, and debt levels to make them equally qualified to buy or rent the advertised housing unit. Test partners were also assigned comparable family circumstances, job characteristics, education levels, and housing preferences. They visited sales or rental agents and systematically recorded the information and assistance they received about the advertised unit or similar units, including location, quality, condition, rent or sales price, and other terms and conditions. Test partners did not compare their experiences with one another or record any conclusions about differences in treatment; each simply reported the details of the treatment he or she experienced as an individual homeseeker.

As reported in the *Discrimination in Metropolitan Housing Markets: National Results from Phase I HDS 2000 Final Report* (HUD, 2002), researchers found that discrimination persisted in both rental and sales markets of large metropolitan areas nationwide but that its incidence had generally declined since 1989. African Americans still faced discrimination when they searched for rental housing in metropolitan markets nationwide. White renters were consistently favored over Black renters in 21.6 percent of the tests (the net measure, at 2.3 percent, was much lower). In particular, White renters were more likely to receive information about available housing units and had more opportunities to inspect available units. Discrimination against Black renters declined between 1989 and 2000 but was not eliminated. The overall incidence of consistent White-favored treatment dropped by 4.8 percentage points, from 26.4 percent in 1989 to 21.6 percent in 2000.

Hispanic renters nationwide also faced significant levels of discrimination. Non-Hispanic White renters were consistently favored in 25.7 percent of tests (the net measure was 6.1 percent). Specifically, non-Hispanic White renters were more likely to receive information about available housing and opportunities to inspect available units than were Hispanic renters. Discrimination against Hispanic renters appeared to have remained essentially unchanged since 1989, and Hispanic renters appeared to face a greater incidence of discrimination than Black renters.

Previous Research on Discrimination Against LGBT People

None of the previous HUD housing discrimination studies included observation of the differential treatment of homeseekers on the basis of sexual orientation, and little empirical research has focused on housing discrimination against the LGBT community.

In community-based surveys conducted during the 1980s and 1990s with nonprobability samples, many lesbians and gay men reported that they had experienced some form of housing discrimination. For example, in a statewide survey of Pennsylvania lesbians and gay men conducted by the Philadelphia Lesbian and Gay Task Force, housing discrimination was reported by between 9 and 16 percent of males (depending on race) and between 5 and 11 percent of females (Gross and Aurand, 1996).

In a 2000 Kaiser Family Foundation survey, 11 percent of the lesbian, gay, and bisexual respondents said they had personally experienced discrimination in renting an apartment or buying a home. Another 35 percent said they had not personally experienced such discrimination but knew someone else who had (Kaiser Family Foundation, 2001).

In a 2005 national survey of lesbian, gay male, and bisexual adults (Herek, 2009a), approximately 4 percent of respondents reported they had experienced some form of housing discrimination because of their sexual orientation. Such discrimination was more common among gay men (reported by 6.5 percent) and lesbians (5.1 percent) than among bisexual men (nearly 2 percent) and bisexual women (1.3 percent).

When interpreting these figures, it is important to remember that many lesbian, gay male, and bisexual people refrain from revealing their sexual orientation in a variety of social situations as a way of avoiding stigma (Herek, 2009b). For this reason, evaluating the prevalence of housing discrimination would be facilitated by knowledge of the extent to which sexual minority adults have concealed their sexual orientation from potential landlords and real estate agents.

A survey of more than 6,000 transgender people by the National Center for Transgender Equality and the National Gay and Lesbian Task Force Foundation (NCTE and NGLTFF, 2011) indicated significant levels of housing instability for

transgender people. Of the respondents, 26 percent reported having to find alternative places to sleep for short periods of time, 11 percent reported having been evicted, and 19 percent reported becoming homeless because of bias.

Although stigma and prejudice based on sexual orientation are widespread, and employment discrimination against LGBT individuals has been well documented, little empirical research has examined housing discrimination against the LGBT community in the United States. The only published studies on housing discrimination against gay men and lesbians were conducted in Sweden (Ahmed, Andersson, and Hammarstedt, 2008; Ahmed and Hammarstedt, 2009) and Canada (Lauster and Easterbrook, 2011). Ahmed and Hammarstedt (2009) e-mailed landlords who had advertised an available apartment on an Internet service comparable to the service used for this study. The e-mails were ostensibly sent by either a gay male couple or by an otherwise comparable heterosexual couple. The study found that the heterosexual couple was significantly more likely than the gay male couple to receive a response to the e-mail, to be asked to provide further information, and to be invited to an immediate showing of the apartment. Regarding a gross measure of adverse treatment, Ahmed and Hammarstedt (2009) found that heterosexual couples were favored over gay male couples in getting an e-mail response in 12.3 percent of the correspondence tests (not matched pairs); the net measure was 11.4 percentage points and was the only dimension of adverse treatment that was statistically significant. No disparities emerged in invitations to contact the provider or to a showing of the unit. Ahmed, Andersson, and Hammarstedt (2008) did not find comparable differences between the responses to a lesbian couple and a heterosexual couple. Lauster and Easterbrook (2011) also found no disparity between lesbian and heterosexual couples but found that gay male couples were less likely than heterosexual couples to receive positive responses from housing providers.

The Fair Housing Centers of Michigan, which comprises four local fair housing organizations, conducted a testing audit of housing discrimination based on sexual orientation (FHC of Michigan, 2007) that found disparate treatment in 32 out of 120 (27 percent) fair housing tests it conducted. Testers posing as gay male or lesbian homeseekers received unfavorable treatment regarding whether housing was available, the amount of rent, application fees, and levels of encouragement compared with the treatment of testers posing as heterosexual homeseekers. The gay male and lesbian testers also were subjected to offensive comments.

Research Design

The objective of this study is to develop the first national estimate of the level of housing discrimination against same-sex couples—that is, men partnering with men and women partnering with women—in the electronically advertised rental market.

Hypotheses

Given the findings of previous research (for example, Ahmed, Andersson, and Hammarstedt, 2008; Ahmed and Hammarstedt, 2009; Lauster and Easterbrook, 2011), we expect that a disparity will exist in the responses of housing providers to inquiries from heterosexual and from same-sex couples expressing interest in electronically advertised rental housing. The findings of Ahmed and his colleagues and of Lauster and Easterbrook suggest that disparities will be more prevalent between gay male and heterosexual couples than between lesbian and heterosexual couples. We expect that same-sex couples, and in particular gay male couples, will be less likely than heterosexual couples to receive responses from housing providers, invitations to contact providers, and invitations to inspect the advertised rental unit. We expect that states with legislative protections will have lower levels of discrimination against same-sex couples than those without protections because of the enforcement mechanism in place.

E-mail Approach

The way people search for housing has changed dramatically in the 21st century, with much of the housing search now taking place via the Internet. It is estimated that between 43 and 90 percent of renters consult the Internet to search for housing (Frank N. Magid Associates, Inc., 2005; Horrigan, 2008; Wagner, 2008). Housing in this segment of the market has not been scrutinized as carefully as housing advertised through newspapers or other printed media, however. Although fair housing advocates have brought attention to the discriminatory nature of the content of advertisements on electronic media, little research has brought a systematic focus to how housing providers actually treat prospective tenants at the initial stages of a housing search through e-mail inquiries.

A small but growing literature has begun to examine the treatment of protected groups in the online housing market via correspondence testing (for example, Ewens, Tomlin, and Wang, forthcoming; Friedman, Squires, and Galvan, 2010; Hogan and Berry, 2011). E-mails that are matched on all characteristics except those indicating the nature of the protected group (for example, race or ethnicity) are sent to housing providers inquiring about the availability of the unit. The only characteristic of the e-mail that varies is the text used to convey the nature of the protected class (for example, names traditionally associated with a particular racial or ethnic group).

The results of an online survey conducted by Community Marketing, Inc. (CMI) and MDAC in March 2010 demonstrated that, among a sample of 297 LGBT renters who had conducted a search for new housing in the previous 12 months, 63 percent used the Internet as a primary source in their search, whereas 18 percent used newspaper ads and articles (CMI and MDAC, 2010). The CMI/MDAC pulse study further indicated that 77 percent of the respondents who inquired about rental housing through the Internet used the listing site selected for this study. The other two most frequently cited websites had only about one-third as much usage, 27 and 25 percent.

Methodology

This study uses an e-mail, or correspondence, test methodology to gauge the level of discrimination against same-sex couples in the rental housing market, which has not previously been examined on a national scale in the United States. The researchers completed 6,833 tests via e-mail, divided between gay male couples (3,424 tests) and lesbian couples (3,409 tests).

In this study, the matched pairs were the e-mails sent to housing providers. Each correspondence test involved sending two e-mails to the housing provider, both inquiring about the availability of the advertised unit. Each inquiry was from a person in a committed relationship asking about an advertised one-bedroom apartment. E-mails from heterosexuals referred to a relationship partner as "husband" or "wife"; e-mails from gay men and lesbians referred to a relationship partner as "partner." Focus groups of gay men and lesbians indicated that the term "partner" was most frequently used to indicate a relationship. Moreover, in many states, same-sex marriage is not legally recognized; thus, the terms "husband" or "wife" for same-sex partners might be used unevenly across the country.

The text of the matched-pair e-mails contained similar language asking about the housing unit for rent. The only difference between the two e-mails was the sexual orientation of the tester making the inquiry. In the case of gay male couples, male names were used by the individual signing the e-mail and for the partner of that individual. In the case of lesbian couples, female names were used.

The Internet listing site used in this project was chosen as the universe from which to sample the electronic advertisements because the first contact between the prospective renter and the housing provider can always occur via e-mail. Several other electronic search engines require prospective renters to complete an online registration form asking for their phone numbers and current addresses, which would permit housing providers to contact prospective renters by phone rather than limit the contact to e-mail responses. The chosen site is also ideal because the format of the advertisements and the nature of the contact between providers and prospective tenants are uniform throughout the country.

Selecting Markets

The primary objective of the sampling plan was to obtain data that would (1) produce nationally representative metropolitan-market estimates of various measures of housing discrimination against same-sex couples; (2) to the extent possible, produce estimates of these measures by whether a state had legislative protections prohibiting housing discrimination on the basis of sexual orientation; and (3) to the extent possible, produce estimates of these measures for individual markets, by market size.

Random Sample of Markets

The sampling frame used a proportional-to-population-size (PPS) approach to randomly select 50 markets from among the 331 metropolitan statistical areas (MSAs) or primary metropolitan statistical areas (PMSAs), based on the 2000 census definitions. The selection of these areas permitted inclusion of larger and smaller markets for the sample, facilitating a more nationally representative sample.

Using information available in the 2005–2009 American Community Survey (ACS) 5-year estimates, we estimated the total population for each market by applying the county allocation to MSAs and PMSAs available in MABLE/Geocorr. The markets selected for inclusion in the sampling frame are those with a population of at least 100,000, which is sufficient to (1) ensure adequate coverage on the Internet listing service so that enough unique housing providers could be sampled and (2) support a systematic testing effort on same-sex couples. Selecting markets with populations of 100,000 or more substantially increases the likelihood of choosing an area with a sufficient number and percentage of same-sex couples to support the proposed number of tests.[4] Of the 331 MSAs,[5] 94 percent (312) had sufficient total populations to be eligible for inclusion in the sampling population.[6] The sampling process then selected markets with PPS sampling.

[4] The estimated number of same-sex households is highly correlated with estimated total population size ($r = 0.97$). The likelihood within each stratum of selecting a market with at least 250 same-sex households (based on 2005–2009 ACS 5-year estimates) is as follows: less than 100,000, 21 percent; 100,000 to 250,000, 69 percent; 250,000 or more, 100 percent.

[5] The analysis uses 2000 census definitions for MSAs and PMSAs. We estimate population and same-sex households using the 2007–2009 ACS 3-year estimates for county-level data aggregated to the MSA level.

[6] The analysis eliminates six MSAs and PMSAs in Puerto Rico from the sampling frame.

Sampling Strategy

Allocation of Tests Across Markets

In the first stage of the sampling procedure, we classified selected markets by stratum, which distinguishes markets by the size of the total population. We defined various strata based on population size: insufficient population to support a systematic testing effort (less than 100,000), *small* (100,000 to 249,999), *medium* (250,000 to 399,999), *medium-to-large* (400,000 to 749,999), *large* (750,000 to 1,499,999), *very large* (1,500,000 to 4,999,999), and *largest* (5,000,000 or more). The PPS sample yields a higher representation of larger markets, thus reducing concerns about sampling adequate numbers of unique housing providers and permitting within-market exploration of housing market discrimination against gay male and lesbian couples. Achieving the targeted number of tests in the *small* stratum was not possible in the relatively short study period (14 weeks) without duplicating providers and running the risk of detection. Given this difficulty, we collapsed the *small* and *medium* strata to create a *small-to-medium* stratum and renamed the *medium-to-large* stratum *medium*. The result was five strata for market size analysis.

In the second stage of the procedure, we sampled advertised rental units from online listings. After randomly selecting a market using the PPS approach, we identified whether the market was covered by the selected listing service. For a market to be included in the sample, it had to have complete coverage throughout the metropolitan area being sampled. For example, for the Washington, D.C. market to be included in our sample, the range of advertised units had to be in areas throughout the metropolitan area (for example, Fairfax County, Virginia; Prince George's County, Maryland; the District of Columbia; and so on) and not in only one of those jurisdictions. If the listing service did not cover all of a selected market, it was not included in the sampling frame, and another market was randomly selected using PPS sampling. This process ensured a final sample of 50 markets with complete coverage.

Table 1 shows the distribution of the sampled listings representing unique housing providers (landlords) across population size strata. The distribution of listings sampled generally conformed proportionally to population across strata. The goals for the size and composition of the sample were 9,100 tests across the 50 sampled markets, with the number of tests within a market divided between gay male couple-heterosexual couple matched-pair tests and lesbian couple-heterosexual couple matched-pair tests. Appendix A provides a table illustrating the distribution of the originally proposed 9,100 tests. Table 1 reflects the distribution of the actual sample of 6,833 tests.

We originally chose a target of 9,100 tests to ensure a reasonable margin of error—within 1 percentage point, at 95 percent confidence—for the national gross measure of discrimination against same-sex couples. Because we could not sample duplicate providers and the timeframe for conducting the testing was relatively short (14 weeks), we achieved 6,833 tests across the 50 sampled markets. We estimate the overall consistency measure for gay male-heterosexual tests and lesbian-heterosexual tests within 1.7 percentage points. Therefore, despite the difference between the originally proposed number of tests and the number of achieved tests, our estimates of differential treatment remain within a reasonable range.

One of the strategies of the data collection was to sample housing providers only once within each metropolitan area to minimize the chances that the provider would detect the testing in the study. The listing service used for this study contains multiple advertisements from the same housing providers. Some are easy to identify and others are not. For example, in housing markets where real estate agencies list available rental units, such agencies can post multiple ads by multiple agents within the same company. If those agents see similar e-mail messages for different available rental units, they might detect the testing, which could bias the results of the study.

To minimize the chances of detection, an automated scraping tool was used to *scrape*, or select, the ads from each of the 50

Table 1. Number of Paired Tests in Each Stratum

Population Size Stratum	Percent of Population[a] (%)	Matched-Pair Tests			
		Gay Male (N)	Lesbian (N)	Total (N)	Percent of Total Tests (%)
100,000 to 400,000 (small-to-medium)	15	124	122	246	4
400,000 to 750,000 (medium)	14	250	253	503	7
750,000 to 1,500,000 (large)	14	387	373	760	11
1,500,000 to 5,000,000 (very large)	39	1,763	1,761	3,524	52
5,000,000 or more (largest)	18	900	900	1,800	26
Total	100	3,424	3,409	6,833	100

[a] Based on the population residing in micropolitan or metropolitan markets with populations of at least 100,000. Less than 1 percent of all people reside in markets with populations of 100,000 or less.

markets. The *scraping tool* is an existing computer software program, modified to meet the needs of this study. On a given day, the tool created a partially complete entry for each ad by extracting some data from its page. The tool then filtered the information so that the sampling frame included only one-bedroom apartments for rent. The tool also used filters to exclude ads that did not provide the address, cross street, rent, or reply-to e-mail for the unit. These *scrape files* were loaded daily into a Microsoft Access database. Within a market, the Access database would then screen out any new advertisement for which the housing provider was already in the database (that is, contained a duplicate phone number, address, agent or owner name, e-mail address, and so on). Files that remained in the database were considered to be unique housing providers. These files were provided at random to test administrators, who then reviewed the partial data entry (correcting if necessary) and completed it with the information that the scraper was not designed to extract (for example, the kind of unit, presence of discriminatory statements, and so on). The test administrator would then submit the posting to the e-mail scheduling program. The Access database would run a second check for duplicate information on the newly completed posting entry and, if the entry was not from a duplicate landlord, the e-mail address associated with the posting entry would have a paired e-mail test scheduled. This selection process was continued until the targeted number of listings within each market for each stratum was reached. Listings within each stratum were divided equally between gay male-heterosexual tests and lesbian-heterosexual tests.

Post Sampling: Identify LGBT Protections

For each listing in the final sample, we determined whether the location for the listing is subject to state-level legislative protections against housing discrimination on the basis of sexual orientation. We classified listings for which the location of the housing unit is covered by such protections as "Legislatively Protected," while we classified other listings as "Not Legislatively Protected." Only state-level protections were determined; local jurisdiction protections were not identified.

Although the purpose of the study was to obtain statistically valid national estimates, sample sizes within subgroupings permitted statistically valid gross or net measures of housing discrimination against gay men and lesbians for three primary factors: (1) legislative protections (covered by protection for sexual orientation or not), (2) MSA population size stratum, and (3) individual markets for metropolitan areas with populations exceeding 5 million.

Selection of Housing Providers

After the 50 study areas were selected, the selection of housing providers or landlords commenced. This sampling was completed in two stages.

The first stage used an automated scraping tool or gather ads within each of the 50 study areas for one-bedroom apartments for rent. The tool took all the ads from a given regional website, screened them based on criteria provided, and stored the information from the ads in a searchable database. The software was programmed to navigate through the metropolitan areas listed in the sampling frame and save each newly added rental posting (advertising one-bedroom units) to a local server. This group of listings was then scraped to extract textual information contained within each posting. This scraping process involved two different kinds of extraction:

1. *Structured extraction* entails identifying textual information that is entered into categorized forms at the time of the posting's creation or generated by the website. Structured items are associated with tags the listing service creates upon generation and are therefore readily identified with simple programming techniques. Structured information includes items such as the address or cross streets of a listing, "Posting ID," and the date and time of the original posting.

2. *Unstructured extraction* entails identifying information that is not associated with predetermined tags but is likely to be in a posting. Phone numbers and e-mail addresses are often present in the body of the text generated by the poster. The program is cued to this information by the presence of "-" (dashes), "@" (at signs), and other patterns. These cues are not 100 percent accurate but, when used in conjunction with other known language patterns (that is, the number of digits associated with a telephone number), can yield high accuracy in the extraction of data from free-form text.

In the second stage, newly saved postings and the corresponding data that were scraped from these postings were provided daily. The data provided were from a query that was filtered to retain only one-bedroom units that had address or cross-street information. These queried datasets were loaded to the Audit-Level Database in Microsoft Access. These data did not constitute complete audit-level entries, but they were screened by the scraper tool for a minimum level of data to constitute a useable listing. Test administrators reviewed the scraped data against the original listing and completed the coding of the listing. These data were screened twice by the Access database for duplicate landlords (once before the test administrator's review and coding and once after).

For each study area, a new scrape file was loaded to the Access database from the Internet listing service each day (for 6 days of a given week). The sampling of landlords took place during a 14-week period to allow for a comprehensive representation of landlords and available one-bedroom rental units within each metropolitan area. Manual processing of Internet listings in Access took place 6 days a week, although scraping took place 7 days a week (two scrape files were loaded each Monday).

Conducting the E-mail Testing

Overview

After the markets to be sampled were selected and advertisements were scraped, postings from each of those markets were loaded to the database and matched-pair e-mail testing commenced. During the 14-week data collection period, from June through October 2011, postings processed in the audit-level database were randomly assigned to matched pairs of e-mails from gay male and heterosexual couples or from lesbian and heterosexual couples. The procedures in the following list were used in executing the tests and in collecting the resulting data to minimize the risk of detection by housing providers involved in the correspondence tests.

Procedures for Executing the E-mail Tests

1. Names. First names and e-mail accounts were created for the e-mails from prospective gay male, lesbian, and heterosexual renters. In addition, names were created for partners of the gay male and lesbian renters and for spouses of the heterosexual renters. Eight lists of names were created:

a. Heterosexual renters inquiring about the unit who are **female**.

b. Heterosexual renters inquiring about the unit who are **male**.

c. Heterosexual renters' husbands.

d. Heterosexual renters' wives.

e. Lesbian renters inquiring about the unit.

f. Lesbian renters' partners.

g. Gay male renters inquiring about the unit.

h. Gay male renters' partners.

The names appearing on these lists came from the Social Security Administration's website of popular baby girls' and boys' names.[7] The top 20 girls' names and the top 20 boys' names in the United States from 1970 through 1985 (between ages 25 and 40 at the time of the study; that is, individuals who were likely to be in the market for rental housing) were retrieved from this site. These boys' and girls' names were then consolidated into two master lists. The names on each of these master lists were then filtered to eliminate duplicates, gender-neutral names (for example, "Shannon"), and to include race-neutral names.

After the master lists of male and female first names were created, within each study area the two sets of 20 names (40 total names) were randomly divided into the eight conditions of a 2 (Gender) X 2 (Sexual Orientation) X 2 (e-mail sender/sender's partner) counterbalance. The result was eight lists of 5 names each, falling into the listed conditions, a through h, described in the preceding list. Appendix C provides the full list of male and female names.

2. E-mail Accounts. After the lists of names were completed, the e-mail addresses were developed. Each of the 20 names was randomly assigned to a Yahoo!, Hotmail, or Gmail e-mail address in each of the 50 study areas to create 1,000 unique e-mail addresses. Thus, in each study area, each name that was used to sign the e-mails from prospective renters had a unique e-mail account. We assigned an account that closely resembled the first name selected but made some modifications (for example, inserting numbers after the name) because of existing accounts. So, for example, the name "Jennifer" for heterosexual female renters could appear on the list for both the New York and Chicago metropolitan areas. Each of these Jennifers would be randomly assigned to a different e-mail account. For example, Jennifer in New York would have the e-mail account, jennifer312@gmail.com, but Jennifer in Chicago would be assigned jennifer65@yahoo.com. This one-time randomization of names to e-mail domains was critical to facilitating the tracking of e-mails that were sent to and received from housing providers.

3. Randomization. After the names were assigned to the e-mail domains on the four lists, tables were developed in the Access database to randomize each of the following necessary elements of all the tests to be conducted:

a. The names given to the testers in each test.

b. The names given to the partner referred to in each e-mail text. (Note: this one-time randomization meant that the names of the renter and partner/spouse were always paired together. This procedure made the inquiries more realistic and lessened the chances of detection.)

c. The e-mail subject line and text (including the greeting and closing). Appendix D reproduces the e-mail subject lines and text.

d. Which e-mail was sent first to the provider.

[7] http://www.ssa.gov/oact/babynames/state/index.html.

The e-mail text was developed to vary such that the wording realistically conveyed to the housing provider that the person inquiring about the unit came from a heterosexual, gay male, or lesbian couple. The remaining text in the e-mail inquiries and in the subject lines, however, was designed not to differ in any other significant ways. This methodology was employed as another way to reduce the potential for detection if a housing provider was accidentally sampled more than once. Randomizing the order in which the heterosexual and the same-sex couple e-mails were sent decreased the likelihood that the treatment of these couples was because of the order in which the e-mails were received.

4. Preparing the e-mails to be sent. Using a "mail merge" feature, all the randomized elements were combined into the messages sent to the housing providers. The text of the e-mails was constructed based on the components created in steps 2 and 3.

5. Sending the e-mails. Test administrator staff sent the e-mail inquiries to the landlord of the identified housing unit. The inquiries were made 1 day after the posting of the advertisement. In addition, the staff left about a 2-hour gap between the times when the e-mails were sent to the provider from each of the two parties in the matched-pair test. This procedure reduced the likelihood that landlords or housing providers would suspect that they were being tested. Initially, the software utility package called "Letter Me Later" was used by staff to automate the process, but it was later discontinued, and an add-on for Access with the same function was used instead. This software enabled the staff to schedule the e-mails to be sent at particular times and ensured that the order in which landlords received inquiries was properly varied, with each e-mail having a 50-50 chance of being sent first.

Procedures for Coding the Data

The data coded for the project came from four sources: (1) the scraping tool, (2) items about the advertised unit or landlord that could not be gleaned from the scraping tool, (3) the process by which the correspondence test was conducted (the time of day the e-mail was sent, which couple sent their e-mail first, and so on), and (4) the response or nonresponse from the landlord. Also, the data gathered from sources 1 and 2 on the address of the unit were geocoded to the census tract level so that census data could be merged with the data collected in this study. Appendix E contains the complete data dictionary, and the following list presents each set of items in more detail.

1. The test administrator responsible for conducting the correspondence tests was also charged with coding the data for each test. The first set of data, on the housing unit and the landlord, came directly from the scraping tool. These data were included in an Access database for the geographic area in which the correspondence tests were conducted. Such data included the metropolitan area (area searched to find ad), subject line of the ad, posting ID, listing date, listing time, listing category (fee, no fee, by owner, "n/a"), monthly rent, size of largest image file (in number of pixels), site-specific e-mail (that is, reply-to e-mail), and information associated with the following Internet listing service tags (XXTAGS): "xstreet1" (that is, address or first cross street), "xstreet2" (that is, second cross street), "city," "state," "catsAreOK" (cats allowed), "dogsAreOK" (dogs allowed), "feedisclosure," and "company name."

2. The second set of data was coded based on other aspects of the advertisement or the landlord not directly available from the scraping tool: real estate or management company, agent name, name of owner, reference number, e-mail address (from body of text), phone numbers, street address, cross streets, city or town, ZIP code, state, additional unit information, broker fee, broker fee amount, application fee, security deposit, security deposit amount, other fee, other fee amount, rent discount offered, description of rent discount, lease in ad, lease term, equal opportunity statement, protected class restriction, links to external URLs, full text of listing, and the presence or absence of the following key words and phrases: "equal opportunity housing," "female," "senior," "section 8," "vacation," "per week," "weekly," "move in special," "immediately," and "before the first of the next month."

3. The test administrator coded data in the Access database about the process by which the correspondence tests were conducted. These data included the name of the prospective renters used in the test, the names of their spouses or partners, the sexual orientation depicted in the e-mail, the specific e-mail text, the subject line, the e-mail domain, the order in which the e-mails were sent (that is, whose e-mail was sent to the provider first), and the time and date when the e-mail was sent.

4. The final set of data that each test administrator coded into the Access database included the response that each test e-mail received (or did not receive) from the housing provider. After test administrators conducted the correspondence test, they coded the data from the housing provider responses

as they came into the prospective renters' e-mail inboxes during a 2-week period. The response was linked to the Access spreadsheet, and the content of the response was coded. The data collected on the responses included—

a. Whether each prospective renter received a response.

b. Whether they received more than one response.

c. Whether they were told the advertised unit is available.

d. Whether they were invited to inspect the unit.

e. Whether they were advised to call the housing provider.

f. Whether they were asked to provide additional information regarding their quality as an applicant (for example, their credit score or income).

g. Whether they were reminded about qualifications they must possess to rent the unit.

h. Whether they were given a reason for the unit not being available (if the unit was not available).

i. Whether they were sent an ambiguous sign of availability (for example, "The unit is technically available, but an application has been filled out and we're pretty sure it's going to go through").

j. Whether they were encouraged to look at a different unit owned by the same landlord (for example, "This unit actually isn't available, but I have another unit in the same building you might be interested in").

Data Analysis

The study provides national-level estimates of gross and net adverse treatment separately for gay male and lesbian couples, by legislative status (whether the advertised unit is in an area covered by state-level protections for gay men and lesbians) and by the size of metropolitan areas. The results provide margin-of-error estimates for the gross and net measures.

Each test consisted of an e-mail inquiry from the same-sex couple and the heterosexual control couple. Results from the e-mail tests were analyzed to determine whether the gay male or lesbian prospective renter was treated unfavorably relative to the control, heterosexual prospective renter. Previous studies of housing market discrimination showed that housing providers can respond in various ways, both favorable and unfavorable.

The study looked at five response outcomes, starting with whether the test e-mails received any response at all from the housing provider and continuing through increasing levels of contact and encouragement. More specifically, the outcomes included whether the test renter (1) received a response, (2) received more than one response, (3) was told the unit was available, (4) was invited to inspect the unit, and (5) was told to contact the provider. (Although 10 potential response variables were contemplated, only these 5 had sufficient responses to be included in the analysis.)

For each test, the response to the e-mail inquiry from each couple was categorized by whether the inquiry received a favorable response. We consider a favorable response to mean a response in which the tester received affirmative values on any of the five outcomes listed previously (for example, received a response and was told the unit was available).

Gross and Net Measures of Adverse Treatment

The *gross measure* of adverse treatment is the proportion of tests in which the heterosexual control couple's inquiry receives favorable treatment and the gay male or lesbian couple's inquiry receives unfavorable treatment during the housing transaction. Let Y_{ij} denote the audit outcome of favorable (Y = 1) or unfavorable (Y = 0) for test i for couple j (j = 0 if heterosexual [control] and j = 1 if gay male or lesbian for test i). Differential treatment that is unfavorable to the gay male or lesbian tester will occur when $Y_{i0} = 1$, $Y_{i1} = 0$. The gross measure of adverse treatment is expressed as:

$$\text{Gross Measure} = P[Yi0 = 1, Yi1 = 0].$$

We estimate the gross measure of adverse treatment at the national level for:

1. Gay male and lesbian couples.
2. State-level protections against housing discrimination based on sexual orientation.
   a. Markets with protections.
   b. Markets without protections.
3. Market size.
   a. Small-to-medium (100,000 ≤ population < 400,000).
   b. Medium (400,000 ≤ population < 750,000).
   c. Large (750,000 ≤ population < 1,500,000).
   d. Very large (1,500,000 ≤ population < 5,000,000).
   e. Largest (population ≥ 5,000,000).

We provide estimates of the gross measure and the associated margin of error at a 95-percent level of confidence. The estimated standard errors associated with the measures vary because of the differing sample sizes within each group. The corresponding margin of error is computed as:

$$\text{Margin of Error}_{\text{Gross}} = z_c \times \frac{\sigma}{\sqrt{n}},$$

where $\frac{\sigma}{\sqrt{n}}$ is the standard error and $z_c = 1.96$ at 95 percent confidence.

The gross measure of discrimination only estimates the likelihood that the control couple is favored relative to the gay male or lesbian couple and could overstate incidences of discrimination. In addition to the gross measure, we compute the *net measure* of discrimination, the difference in the proportion of tests in which the control couple's (that is, the heterosexual couple's) inquiry receives a favorable outcome relative to the same-sex couple's inquiry and the proportion of tests in which the same-sex couple's inquiry is favored over the control couple's inquiry. The net measure of adverse treatment is expressed as:

$$\text{Net Measure} = P[Y_{i0} = 1, Y_{i1} = 0] - P[Y_{i0} = 0, Y_{i1} = 1].$$

Whereas the gross measure represents a test of one proportion, the net measure represents a test of differences in proportions; thus, the standard error and resulting margin of error estimates differ.

The margin of error estimate for the net measure is represented as:

$$\text{Margin of Error}_{\text{Gross}} = z_c \times \sigma_{\hat{p}_2 - \hat{p}_2},$$

where $z_c = 1.96$ at 95 percent confidence and $\sigma_{\hat{p}_2 - \hat{p}_2}$ represents the standard error of the difference in the proportions and is expressed as:

$$\sqrt{\frac{P[Y_{i0} = 1, Y_{i1} = 0] \times 1 - P[Y_{i0} = 1, Y_{i1} = 0]}{n_1} + \frac{P[Y_{i0} = 0, Y_{i1} = 1] \times 1 - P[Y_{i0} = 0, Y_{i1} = 1]}{n_2}}.$$

For a matched-pair test, the number of tests for heterosexual and same-sex couples are equal (that is, $n_1 = n_2 = n$).

The overall objective of the study was to estimate gross measures of adverse treatment of same-sex couples. We also calculate *composite measures* of housing discrimination against gay male and lesbian prospective renters. Similar to previous HDS studies, we estimate *consistency measures*, which reflect the extent to which one tester is consistently favored over the other in the treatment received from housing providers based on their inquiries. Tests are classified as "heterosexual favored" on the consistency index if the heterosexual couple received favorable treatment on at least one of the five outcomes measures and the corresponding same-sex couple received no favorable treatment. Tests are classified as "gay male favored" or "lesbian favored" if the same-sex couple received favorable treatment on at least one of the five outcomes and the heterosexual couple received no favorable treatment. Each of these consistency measures represents the gross measures. The net measure of the consistency index is calculated by taking the difference between the heterosexual-favored index and the gay male-favored or lesbian-favored index.

Findings

This section presents the findings from the data analysis, focusing on the gross and net measures of discrimination and on the consistency indexes. First, we present the national-level estimates of the adverse treatment of gay male and lesbian couples, relative to heterosexual couples. We then calculate estimates of adverse treatment by legislative status (whether the advertised unit is in an area covered by state-level protections against housing discrimination on the basis of sexual orientation) and the size of the metropolitan area in which the unit is advertised. The data were gathered from June through October 2011. For the five dependent variables of interest, each correspondence test could result in one of four outcomes: (1) both testers received equivalent responses, (2) neither tester is favored, (3) the heterosexual couple is favored, or (4) the gay male or lesbian couple is favored. As discussed in the previous section, the gross measure of adverse treatment refers to when the correspondence test favors heterosexual couples. The net measure takes the difference between the proportion of tests favoring the heterosexual couple and the proportion of tests favoring the gay male or lesbian couple. The consistency index is a summary measure of the treatment of heterosexual couples relative to gay male and lesbian couples on all five variables.

Table 2 presents the variables of interest and their definitions.

Table 2. Outcome Variables

Variable	Definition
(1) Response provided	Whether each prospective renter received a response.
(2) More than one response	Whether they received more than one response.
(3) Available	Whether they were told the advertised unit was available.
(4) Inspect	Whether they were invited to inspect the unit.
(5) Contact	Whether they were advised to call the housing provider.

National-Level Estimates of Discrimination

Treatment of Gay Male Couples as Compared With Heterosexual Couples

Table 3 presents the outcomes of the e-mail correspondence tests between gay male and heterosexual couples at the national level.

Table 3 shows that, in 49.3 percent of the e-mail correspondence tests between heterosexual and gay male couples (column 1), both couples received a response from the housing provider. In 30.6 percent of the tests (column 2), neither the heterosexual couple nor the gay male couple received a response from the housing provider. Thus, in 79.9 percent of the correspondence tests, heterosexual and gay male couples received equal treatment.

On the gross and net measures of adverse treatment in terms of the "response provided" variable (columns 3, 4, and 5), heterosexual couples were significantly more likely than gay male couples to get a response from housing providers. In 11.6 percent of the correspondence tests, only the heterosexual couple received a response from housing providers compared with the 8.5 percent of tests in which only the gay male couple received a response. The net measure (3.1 percent) was statistically significant.

On the other four variables (that is, whether the tester received more than one response, was told the unit was available, was invited to inspect the unit, and was told to contact the provider), the results in columns 3 and 4 of Table 3 demonstrate that, except for the "contact" variable, a slightly greater share of tests favored heterosexual couples over gay male couples. The net measures in column 5, however, show that none of the differences on these four variables is statistically significant.

Table 3. National-Level Gay Male-Heterosexual Tests

Outcome	Percent Tester Favored					
	Both (%)	None (%)	Heterosexual (%)	Gay Male (%)	Net Measure (%)	N
(1) Response provided	49.3	30.6	11.6	8.5	3.1**	3,424
(2) More than one response	6.1	88.8	2.6	2.6	0.0	1,681
(3) Available	71.9	22.0	3.5	2.6	0.9	1,681
(4) Inspect	66.9	24.1	4.7	4.3	0.4	1,681
(5) Contact	49.4	39.0	5.7	6.0	– 0.3	1,681
(6) Consistency index	NA	NA	15.9	13.7	2.2*	3,424

NA = not applicable.

* $p \leq .05$. ** $p \leq .01$.

Note: The results are weighted to normalize the population levels. Unweighted results are substantially the same and are available upon request.

The consistency index in the last row of Table 3 mirrors the findings for each of the five outcomes analyzed separately. In 15.9 percent of the correspondence tests, the heterosexual couple was favored on at least one of the five outcomes and the gay male couple was favored on none of the outcomes. In 13.7 percent of the tests, the gay male couple was favored on at least one of the five outcomes and the heterosexual couple was favored on none of the outcomes. The difference between the two indexes, or net measure (column 5), is statistically significant.

In sum, the results of the correspondence tests between heterosexual and gay male couples demonstrate that the most consistent form of adverse treatment against gay male couples is the lack of an initial e-mail response from housing providers. Gay male couples were significantly less likely than heterosexual couples to receive a response from the housing provider, a result that suggests discriminatory barriers at the very threshold of the rental housing search. No significant difference emerged between gay male and heterosexual couples regarding the other four variables, which gauge different aspects of the interaction that take place deeper into the search for rental housing.

Treatment of Lesbian Couples as Compared With Heterosexual Couples

Table 4 presents the outcomes of our e-mail correspondence tests between lesbian and heterosexual couples at the national level. The pattern of results is similar to that of the correspondence tests between gay male and heterosexual couples. Table 4 shows that, in 49.4 percent of the tests (column 1), both couples received a response from the housing provider. In 30.5 percent of the tests (column 2), neither the heterosexual couple nor the lesbian couple received a response from the housing provider. Thus, in 79.9 percent of the correspondence tests, heterosexual and lesbian couples received equal treatment.

On the gross and net measures of adverse treatment in terms of the "response provided" variable (columns 3, 4, and 5), heterosexual couples clearly were significantly more likely than lesbian couples to get a response from housing providers, although the magnitude of the difference was slightly less than in the tests between heterosexual and gay male couples. In 11.2 percent of the correspondence tests, only the heterosexual couple received a response from housing providers compared with the 8.9 percent of tests in which only the lesbian couple received a response. The net measure (2.3 percent) was statistically significant but of less magnitude than the net measure on the same variable in the gay male-heterosexual tests.

On the other four variables of interest, the results in columns 3 and 4 of Table 4 show that, by contrast to the gay male-heterosexual tests, the lesbian couples were favored in a slightly greater share of the tests than the heterosexual couple. The net measures in column 5 show that the "contact" variable is significant in the negative direction, indicating that the lesbian couple receives favorable treatment compared with that of the heterosexual couple. Although this result is unexpected, the magnitude is quite small (1.6 percent). On the other hand, the result for the variable "more than one response" is in the expected direction, with heterosexual couples significantly more likely to be favored than lesbian couples. With respect to the consistency measures in the last row of Table 4, in 15.6 percent of the correspondence tests, the heterosexual couple was favored on at least one of the five outcomes and the lesbian couple was favored on none of the outcomes. In 14.3 percent of the tests, the lesbian couple was favored on at least one of the five outcomes and the heterosexual couple was favored on none of the outcomes. The difference between the two indexes (column 5) is not statistically significant.

In sum, the results of the correspondence tests between heterosexual and lesbian couples reveal that the most prevalent form of adverse treatment against lesbian couples is not getting an e-mail response from housing providers as often as heterosexual couples. Lesbian couples were significantly less likely than heterosexual couples to receive a response from the housing provider, a result that, as for gay male couples,

Table 4. National-Level Lesbian-Heterosexual Tests

Outcome	Percent Tester Favored					
	Both (%)	None (%)	Heterosexual (%)	Lesbian (%)	Net Measure (%)	N
(1) Response provided	49.4	30.5	11.2	8.9	2.3**	3,409
(2) More than one response	7.3	86.2	4.1	2.4	1.7**	1,679
(3) Available	71.7	21.3	3.4	3.6	– 0.2	1,679
(4) Inspect	67.3	24.5	3.6	4.7	– 1.1	1,679
(5) Contact	49.0	41.3	4.1	5.7	– 1.6*	1,679
(6) Consistency index	NA	NA	15.6	14.3	1.3	3,409

NA = not applicable.

* $p \leq .05$. ** $p \leq .01$.

Note: The results are weighted to normalize the population levels. Unweighted results are substantially the same and are available upon request.

suggests discriminatory barriers at the threshold of the rental housing search. Although lesbian couples are also significantly less likely to have received more than one response from the housing provider, they are significantly more likely to be advised to contact the housing provider. This mixed pattern is worthy of further investigation.

Estimates of Discrimination by Legislative Jurisdiction

Effect of Legislative Protections for Gay Male Couples

Table 5 presents the outcomes of our e-mail correspondence tests between gay male and heterosexual couples, disaggregated by whether the advertised unit was in a state with legislative protections against housing discrimination based on sexual orientation. The results in the table present the gross and net measures and the consistency indexes. The level of equal treatment is about the same as that shown in Table 3.

On the gross and net measures of adverse treatment in terms of the "response provided" variable (the first row of Table 5), legislative protections appear to do little to change the overall pattern of results found in Table 3. In states both with and without protections for sexual orientation, heterosexual couples were significantly more likely than gay male couples to get a response from housing providers. In protected states, in 11.6 percent of the correspondence tests, only the heterosexual couple received a response from housing providers compared with the 8.3 percent of tests in which only the gay male couple received a response. The net measure (3.2 percent) was statistically significant. In unprotected states, in 11.5 percent of the tests, only the heterosexual couple received a response from housing providers, compared to 8.3 percent of tests in which only the gay male couple received a response. The net measure (3.2 percent) was statistically significant.

On the other four variables of interest, the results in Table 5 indicate that, in states with protections, a slightly greater share of tests favored heterosexual couples over gay male couples. The net measures for Legislatively Protected, however, show that none of the differences on these four variables is statistically significant. In unprotected states, a slightly greater share of tests favored heterosexual couples over gay male couples on the variables "available" and "inspect." On the variables "more than one response" and "contact," however, a slightly greater share of tests favored gay male couples over heterosexual couples. The net measures for Not Legislatively Protected show that none of these differences is statistically significant.

The results for the consistency indexes in the last row of Table 5 illustrate a negative effect of legislative protections. In 16.0 percent of the Legislatively Protected correspondence tests, the heterosexual couple was favored on at least one of the five outcomes and the gay male couple was favored on none of the outcomes. In 12.9 percent of the tests, the gay male couple was favored on at least one of the five outcomes and the heterosexual couple was favored on none of the outcomes. The difference between the two indexes, or net measure (column 4), is statistically significant. The Not Legislatively Protected columns in Table 5, however, reveal that the net measure (1.6 percent) is not statistically significant in states with no state-level protections against housing discrimination based on sexual orientation. The slightly greater prevalence of gay male-favored treatment on the "more than one response" and "contact" variables likely accounts for the lack of significance of the net measure in unprotected states.

The results of the correspondence tests between heterosexual and gay male couples, disaggregated by legislative protections, demonstrate that adverse treatment against gay male couples, regardless of legislative jurisdiction, consists of whether they received an initial e-mail response from housing providers. Legislative protections appear not to confer an advantage to gay male couples by protecting them from adverse treatment in this respect. Several factors could account for this unexpected

Table 5. Gay Male-Heterosexual Tests by State Protection

Outcome	Percent Tester Favored							
	Legislatively Protected				Not Legislatively Protected			
	Heterosexual (%)	Gay Male (%)	Net Measure (%)	N	Heterosexual (%)	Gay Male (%)	Net Measure (%)	N
(1) Response provided	11.6	8.3	3.2**	1,548	11.5	8.3	3.2**	1,876
(2) More than one response	2.7	2.6	0.1	780	2.8	2.9	– 0.1	901
(3) Available	3.6	2.6	1.0	780	3.4	2.6	0.9	901
(4) Inspect	4.1	3.6	0.5	780	5.4	4.4	1.0	901
(5) Contact	6.0	5.6	0.4	780	4.9	4.1	– 1.2	901
(6) Consistency index	16.0	12.9	3.1**	1,548	15.4	13.9	1.6	1,876

** $p \leq .01$.

finding, including potentially low levels of enforcement, housing provider unfamiliarity with state-level protections, or that protections exist in states with the greatest need for them.

Effect of Legislative Protections for Lesbian Couples

Table 6 presents the outcomes of our e-mail correspondence tests between lesbian and heterosexual couples, disaggregated by whether the advertised unit was in a state with legislative protections against housing discrimination based on sexual orientation. The results in the table present the gross and net measures and the consistency indexes. The level of equal treatment is about the same as that shown in Table 4.

On the gross and net measures of adverse treatment in terms of the "response provided" variable (the first row of Table 6), legislative protections appear to affect the overall pattern of results found in Table 4. In protected states, the percentage of tests favoring heterosexual couples (10.8) and those favoring lesbian couples (9.2) exhibit no difference in terms of receiving a response from housing providers. The net measure (1.7 percent) is not statistically significant. In unprotected states, however, heterosexual couples were significantly more likely than lesbian couples to get a response from housing providers. In unprotected states, in 11.3 percent of the correspondence tests, only the heterosexual couple received a response from housing providers compared with the 9.1 percent of tests in which only the lesbian couple received a response. The net measure (2.3 percent) was statistically significant.

Another pattern in Table 6 that diverges from the pattern at the national level of analysis is that, in unprotected states, a slightly greater share of the correspondence tests favored heterosexual couples over lesbian couples in terms of receiving more than one response from housing providers. In 3.9 percent of the Not Legislatively Protected correspondence tests, only the heterosexual couple received more than one response from housing providers compared with the 1.8 percent of tests in which only the lesbian couple received more than one response. The net measure (2.1 percent) is statistically significant. In protected states, the net measure for "received more than one response" is not significant.

On the other three variables of interest, the results in Table 6 show no statistically significant differences. In states with protections, a slightly greater share of tests favor heterosexual couples over lesbian couples on the variables "available," "inspect," and "contact." The net measures for Legislatively Protected, however, reveal that none of the differences on these three variables is statistically significant. In unprotected states, a slightly greater share of tests favor lesbian couples over heterosexual couples on the variables "available," "inspect," and "contact." The net measures for Not Legislatively Protected show that none of these differences is statistically significant, however.

By contrast to the results for "response provided" and "more than one response" examined individually, the results for the consistency indexes in the last row of Table 6 show no effect of legislative protections. In 15.9 percent of the Legislatively Protected correspondence tests, the heterosexual couple was favored on at least one of the five outcomes and the lesbian couple was favored on none of the outcomes. In 14.5 percent of the tests, the lesbian couple was favored on at least one of the five outcomes and the heterosexual couple was favored on none of the outcomes. The difference between the two indexes, or net measure, is not statistically significant in protected or unprotected states. In sum, the results of the correspondence tests between heterosexual and lesbian couples, disaggregated by legislative protections, reveal that adverse treatment against lesbian couples, in terms of getting an initial e-mail response from housing providers and getting more than one response, is more prevalent in states without legislative protections. Unlike the case with gay male couples, legislative protections do appear to confer some advantages to lesbian couples in preventing them from experiencing adverse treatment, consistent with our hypothesis.

Table 6. Lesbian-Heterosexual Tests by State Protection

Outcome	Percent Tester Favored							
	Legislatively Protected				Not Legislatively Protected			
	Heterosexual (%)	Lesbian (%)	Net Measure (%)	N	Heterosexual (%)	Lesbian (%)	Net Measure (%)	N
(1) Response provided	10.8	9.2	1.7	1,558	11.3	9.1	2.3*	1,851
(2) More than one response	3.6	3.5	0.1	796	3.9	1.8	2.1**	883
(3) Available	4.0	3.6	0.4	796	3.2	3.7	– 0.6	883
(4) Inspect	4.5	4.3	0.3	796	3.6	4.3	– 0.7	883
(5) Contact	5.3	4.4	0.9	796	4.2	6.2	– 2.0	883
(6) Consistency index	15.9	14.5	1.4	1,558	15.3	14.1	1.2	1,851

* $p \leq .05$. ** $p \leq .01$.

Estimates of Discrimination by Metropolitan Market Size

Table 7 presents the outcomes of our e-mail correspondence tests between gay male and heterosexual couples, disaggregated by five categories of metropolitan area based on the total population: (1) small to medium (100,000 to 399,999), (2) medium (400,000 to 749,999), (3) large (750,000 to 1,499,999), (4) very large (1,500,000 to 4,999,999), and (5) largest (5,000,000 or more). For the sake of brevity, the results in the table focus on the net measures and consistency indexes.

Table 7 presents no clear-cut pattern in the effect of metropolitan market size on the net measures of adverse treatment of gay male couples relative to heterosexual couples. The results for the "response provided" variable appear to indicate that a greater share of tests favored heterosexual couples over gay male couples. Only the net measure for the largest stratum (6.0 percent) is statistically significant, however (see column 5).

In the very large stratum, a slightly greater share of tests favored heterosexual couples over gay male couples on the variables "available" and "inspect." The net difference measures in column 4 (1.7 and 1.9 percent, respectively) are statistically significant. None of the net measures in the other categories of metropolitan market size for the other four variables is statistically significant.

The results for the consistency indexes in the last row of Table 7 also do not reveal any clear-cut pattern of adverse treatment. Only in the case of the largest stratum is the net measure (4.9 percent) statistically significant. The greater prevalence of heterosexual-favored treatment on the "response provided" variable in that stratum likely accounts for the significance of the net measure for the consistency index.

In sum, the results of the correspondence tests between heterosexual and gay male couples, disaggregated by metropolitan market size, reveal that the effect of metropolitan market size on adverse treatment is not straightforward. In the largest stratum, consistent with the national-level results, the adverse treatment of gay male couples existed in the form of not getting an e-mail response (the results are insignificant for the other market sizes). In the very large stratum, heterosexual couples were significantly more likely than gay male couples to be told that the unit was available (that is, the difference is 1.7 percentage points) and to be invited to inspect the unit (that is, the difference is 1.9 percentage points).

Table 8 presents the outcomes of our e-mail correspondence tests between lesbian and heterosexual couples, disaggregated by categories of metropolitan market size. Like the results for the gay male-heterosexual correspondence tests, the results in Table 8 reveal no clear-cut pattern in the effect of metropolitan market size on the net measures of adverse treatment of lesbian couples, relative to heterosexual couples. The results for the "response provided" variable (the first row in Table 8) appear to indicate that a greater share of tests favored heterosexual couples over lesbian couples. Only the net measure for the small-to-medium stratum (8.2 percent) is statistically significant, however (see column 1).

On the other four variables of interest, the results in Table 8 show that, in the large stratum, a slightly greater share of tests favored heterosexual couples over lesbian couples on the variable "more than one response." The net measure for this variable reveals that the difference (4.5 percentage points) is statistically significant. Contrary to our expectations, within the same metropolitan market size category, the results show that a slightly greater share of tests favored lesbian couples over heterosexual couples on the variable "contact." The net measure (-5.1 percent) for this variable is statistically significant. None of the net measures in the other categories of metropolitan market size for the other four variables is statistically significant.

Consistent with the results disaggregated by legislative protections, the results for the consistency indexes in the last row of Table 8 show that none of the net measures are statistically significant. Taken together, the results of the correspondence tests between heterosexual and lesbian couples, disaggregated by metropolitan market size, reveal that the effect of metropolitan market size on adverse treatment is not straightforward.

Table 7. Gay Male-Heterosexual Net Measures by Metropolitan Market Size

Outcome	Net Measure (%)				
	Small-to-Medium (100,000–400,000)	Medium (400,000–750,000)	Large (750,000–1.5 million)	Very Large (1.5–5 million)	Largest (5+ million)
(1) Response provided	4.0	1.2	3.9	1.9	6.0**
(2) More than one response	3.1	0.8	– 1.1	– 0.8	1.4
(3) Available	– 3.1	0.8	1.6	1.7*	– 0.2
(4) Inspect	– 1.6	0.8	– 1.6	1.9*	– 0.2
(5) Contact	– 7.8	3.0	0.5	– 0.1	– 1.6
(6) Consistency index	0.0	2.8	2.3	1.0	4.9**
Total audits/audits in which both testers received response	124/64	250/133	387/182	1,763/877	900/425

* $p \leq .05$. ** $p \leq .01$.

Table 8. Lesbian-Heterosexual Net Measures by Metropolitan Market Size

Outcome	Net Measure (%)				
	Small-to-Medium (100,000–400,000)	Medium (400,000–750,000)	Large (750,000–1.5 million)	Very Large (1.5–5 million)	Largest (5+ million)
(1) Response provided	8.2*	2.8	2.7	1.2	2.2
(2) More than one response	5.4	2.1	4.5*	0.7	– 0.2
(3) Available	1.8	1.4	– 2.3	0.0	– 0.2
(4) Inspect	3.6	– 5.7	– 2.8	– 0.5	2.6
(5) Contact	– 5.4	– 3.6	– 5.1*	0.0	1.4
(6) Consistency index	8.2	0.8	0.3	0.8	2.0
Total audits/audits in which both testers received response	122/56	253/140	373/177	1,761/880	900/426

* $p \leq .05$.

Conclusions and Implications

This is the first national-scale, paired-testing study to assess rental housing discrimination against same-sex couples in metropolitan rental markets that selects properties via Internet advertising. In addition, the study calculates estimates of adverse treatment by state-level protections and by the size of metropolitan areas.

From June through October 2011, same-sex couples experienced significant levels of adverse treatment relative to comparable heterosexual couples when they responded to electronically advertised rental housing in metropolitan rental housing markets nationwide. Our gross estimates of discrimination, which reflect the extent to which heterosexual couples were consistently favored over gay male or lesbian couples, are 15.9 and 15.6 percent, respectively. These estimates from 2011, which are based on e-mail correspondence tests, are comparable to, but lower in magnitude than, the incidence of consistently White-favored treatment, relative to Black and Hispanic homeseekers, found through in-person audits in HDS2000 (that is, 21.6 and 25.7 percent, respectively). The net measures (or lower bound estimates of discrimination) reported in this study, as based on the consistency indexes, are 2.2 percent (gay male-heterosexual tests) and 1.3 percent (lesbian-heterosexual tests), and only the former is statistically significant. Although the magnitude of the level of discrimination reflected by the net measure is considerably lower than that conveyed by the gross measure, it is nearly the same as the net measure reflecting the treatment of White prospective renters relative to Black prospective renters in HDS2000 (that is, 2.3 percent, not statistically significant).

Discrimination against gay men and lesbians appears to take a relatively consistent form in the rental housing market. Adverse treatment of same-sex couples stems largely from the lower likelihood that housing providers will respond to their initial e-mail compared with the greater likelihood that heterosexual couples will receive a response. Given that this study employed the use of paired correspondence tests rather than in-person, paired tests, and given that it allowed for only one e-mail interaction between each tester and the housing provider, the estimates of discrimination presented here could underestimate the extent to which heterosexual couples are favored over same-sex couples in the rental housing market. In addition, relatively few tests were conducted in smaller metropolitan areas, where some researchers hypothesize that more discrimination occurs. Nevertheless, it is helpful to know that the results of this study are reasonably consistent with the results from HDS2000, which examined racial and ethnic disparities in access to rental housing and conducted in-person tests rather than e-mail correspondence tests.

Disaggregating the results by state-level legislative protections reveals some findings that run contrary to our main expectation. The results of the correspondence tests between heterosexual and gay male couples show that adverse treatment against male couples in the form of getting an initial e-mail response from housing providers exists in states with and without legislative protections. Legislative protections for sexual orientation appear not to confer an immediate advantage to gay male couples in whether they experience adverse treatment. By contrast, for lesbian couples, the results imply that adverse treatment in the form of whether an e-mail response was received from housing providers and in whether more than one response was received is more apparent in states without legislative protections. Unlike what the results suggest for gay male couples, legislative protections do appear to confer a slight advantage to lesbian couples in preventing them from experiencing adverse treatment, a finding that is consistent with expectations. It could be that places with legislative protections have higher levels of discrimination against same-sex couples than those without protections. It is possible that a historically higher level of discrimination in such places necessitated the protections. Such protections take time to work, and it is possible that disparities could be higher in places with protections because of this adjustment period, given the recent passage of many of the protections.

The results of the correspondence tests between heterosexual and same-sex couples, disaggregated by metropolitan market size, are not straightforward for either gay male or lesbian couples. Consistent with the national-level results, we find some adverse treatment of gay male and lesbian couples regarding their getting an initial e-mail response. For gay male couples, the adverse treatment exists only in the very large stratum of markets. For lesbians, it exists only in the small-to-medium stratum. It is not clear what accounts for this pattern of results.

Although its use of paired testing via correspondence tests and its national scope are strengths, the study design is limited to tests of rental housing that is in metropolitan markets and advertised by one source on the Internet. Moreover, it captures the treatment of testers by housing providers in response to

only one e-mail sent by each tester and, therefore, does not consider what could happen to testers through additional contacts with the housing provider (via additional followup e-mails, by phone, or in person). Thus, the testing conducted in this study is representative of only the initial stage of the housing search process.

The contribution of this study is that it demonstrates that same-sex couples are significantly less likely than heterosexual couples to be able to access the targeted rental unit. When same-sex couples do receive a response, however, their treatment by housing providers relative to that of heterosexual couples is roughly equivalent. This type of discrimination is somewhat divergent from that which has been found between White and non-White renters. In large part, the disparity between White and non-White applicants is less in terms of receiving a response from providers or initial access to the unit than it is in terms of subsequent potential contact with providers (for example, more than one response or the potential to inspect the unit).

Recommendations for Further Study

Because these data are the first national-scale findings about discrimination against same-sex couples in the metropolitan rental housing market, the study serves as a point of departure for future research on same-sex housing discrimination. Future research should conduct further testing, including e-mail and in-person testing, and look at a variety of specific aspects of disparate treatment that were beyond the scope of this project.

This study provides an initial look at how same-sex couples are treated relative to heterosexual couples at the threshold of the rental housing search—the initial e-mail contact. It sampled only rental housing advertised on one Internet listing service. Because of the limited universe of available rental properties and the single initial contact, this study possibly underestimates the extent to which same-sex couples face discrimination in the rental housing market compared with the treatment of heterosexual couples. The study was conducted via e-mail correspondence tests, and the e-mails contained information to ensure that the housing provider knew if the couple seeking housing was of the same sex or heterosexual. In-person audits might, however, yield higher levels of discrimination against same-sex couples because providers would observe visual cues that would unequivocally establish the sexual orientation of the homeseekers and could result in discriminatory actions.

Other areas for future inquiry include a deeper look at the next steps in the rental process, through follow-up e-mail communication to confirm interest in the unit and, more importantly, to request an appointment; telephone contacts to confirm an appointment; and in-person visits to housing providers by testers. In-person testing would provide valuable, additional information on the experiences of same-sex couples in the rental market, replicate the approach of other HDS research, and track the real-life sequence of a rental housing search. A broader sample of advertised rental units, including other electronic media and print advertisements, could be used for in-person testing.

In addition, future studies should employ e-mail or in-person audits to further examine differences in treatment of same-sex and heterosexual couples in states with and without legislative protections for sexual orientation or gender identity. Local jurisdiction protections were not within the scope of this study, and examining their effect on differential treatment could be very useful. In addition, this study looked only at treatment based on sexual orientation and not at treatment based on gender identity or gender expression, so it did not capture other forms of discrimination that LGBT people might experience.

Finally, future research should seek to obtain metropolitan area-specific estimates of discrimination against same-sex couples. Perhaps this approach could shed light on the mixed findings observed across metropolitan areas in this study.

Technical Appendixes

Appendix A. Distribution of Population and Sample Characteristics Across Proposed Population Stratum

Population Size Stratum	Population Characteristics (%)			Sample Characteristics (%)		
	Percent of Total MSA/PMSA	Percent of Population	Percent of Same-Sex Households	Market Within Stratum Percent of Sample	Total Target Number of Paired Tests Within Stratum	Percent of Total Target Number of Paired Tests Within Stratum
Less than 100,000	5.7	0.7	0.6	0.0	—	0.0
100,000 to 250,000	37.8	8.6	7.4	5.9	180	2.0
250,000 to 400,000	14.8	6.4	5.9	11.8	720	7.9
400,000 to 750,000	18.7	13.6	12.2	21.6	1,364	15.0
750,000 to 1,500,000	9.7	14.1	13.4	13.7	1,400	15.4
1,500,000 to 5,000,000	11.5	38.6	41.6	35.3	3,636	40.0
5,000,000 or more	1.8	18.0	18.9	11.8	1,800	19.8
Total	100	100	100	100	9,100	100

MSA = metropolitan statistical area. PMSA = primary metropolitan statistical area.

Appendix B. Weighted Results and Standard Errors

Weighted	Computed S.E.						Gross Measure			Net Measure			
Label in Word File	Test Type	Number of Paired Tests	Percent Hetero-sexual Favored	Percent Same-Sex Favored	Net Measure	N	S.E.	MOE [95%]	MOE [90%]	S.E.	MOE [95%]	MOE [90%]	p-Value (2-Tailed t Test)
(1) Response provided	Lesbian-heterosexual	3,409	11.2	8.9	2.3	6,818	0.004	0.007	0.006	0.007	0.014	0.012	0.002**
	Gay male-heterosexual	3,424	11.6	8.5	3.1	6,848	0.004	0.008	0.006	0.007	0.014	0.012	0.000**
(2) More than one response	Lesbian-heterosexual	1,679	4.1	2.4	1.7	3,358	0.003	0.007	0.006	0.006	0.012	0.010	0.005**
	Gay male-heterosexual	1,681	2.6	2.6	0.0	3,362	0.003	0.005	0.005	0.005	0.011	0.009	1.000
(3) Available	Lesbian-heterosexual	1,679	3.4	3.6	– 0.2	3,358	0.003	0.006	0.005	0.006	0.012	0.010	0.753
	Gay male-heterosexual	1,681	3.5	2.6	0.9	3,362	0.003	0.006	0.005	0.006	0.012	0.010	0.129
(4) Inspect	Lesbian-heterosexual	1,679	3.6	4.7	– 1.1	3,358	0.003	0.006	0.005	0.007	0.013	0.011	0.110
	Gay male-heterosexual	1,681	4.7	4.3	0.4	3,362	0.004	0.007	0.006	0.007	0.014	0.012	0.576
(5) Contact	Lesbian-heterosexual	1,679	4.1	5.7	– 1.6	3,358	0.003	0.007	0.006	0.007	0.015	0.012	0.032*
	Gay male-heterosexual	1,681	5.7	6.0	– 0.3	3,362	0.004	0.008	0.007	0.008	0.016	0.013	0.711
(6) Consistency index	Lesbian-heterosexual	3,409	15.6	14.3	1.3	6,818	0.004	0.009	0.007	0.009	0.017	0.014	0.132
	Gay male-heterosexual	3,424	15.9	13.7	2.2	6,848	0.004	0.009	0.007	0.009	0.017	0.014	0.010*

MOE = margin of error. S.E. = standard error.

* $p \leq .05$. ** $p \leq .01$.

Appendix C. List of Tester Names

Male	Female	Male	Female	Male	Female	Male	Female
Adam	Amanda	James	Danielle	Kevin	Kimberly	Steven	Rachel
Andrew	Amber	Jason	Dawn	Mark	Laura	Thomas	Rebecca
Anthony	Amy	Jeffrey	Elizabeth	Matthew	Lauren	Timothy	Sarah
Brandon	Angela	Jeremy	Heather	Michael	Lisa	William	Stephanie
Brian	Ashley	John	Jamie	Nicholas	Mary		Susan
Christopher	Brittany	Jonathan	Jennifer	Richard	Megan		Tammy
Daniel	Christina	Joseph	Jessica	Robert	Melissa		Tiffany
David	Christine	Joshua	Julie	Ryan	Michelle		Tina
Eric	Crystal	Justin	Karen	Scott	Nicole		

Appendix D. E-mail Text and Subject Lines (1 of 3)

	Format 1	Format 2	Format 3
E-mail 1	Hello. I saw your 1 br apt ad on [WEBSITE] at <specify address>. My <relationship identifier>, <partner name>, and I are looking for a place that matches this description. Is it available and, if so, can we see it? Thanks, <sender name>	Hello. I saw your 1 br apt ad on [WEBSITE] at <specify address>. My <relationship identifier>, <partner name>, and I are looking for a place that matches this description. Is it available and, if so, can we see it? Thanks, <sender name>	Hello. I saw your 1 br apt ad on [WEBSITE] at <specify address>. My <relationship identifier>, <partner name>, and I are looking for a place that matches this description. Is it available and, if so, can we see it? Thanks, <sender name>
E-mail 2	Hi, My <relationship identifier>, <partner name>, and I are very interested in your 1br apt (located at <specify address>). Could you let us know if it is still available and when a convenient time to view it would be? Thank you. <sender name>	Hi, My <relationship identifier>, <partner name>, and I are very interested in your 1br apt (located at <specify address>). Could you let us know if it is still available and when a convenient time to view it would be? Thank you. <sender name>	Hi, My <relationship identifier>, <partner name>, and I are very interested in your 1br apt (located at <specify address>). Could you let us know if it is still available and when a convenient time to view it would be? Thank you. <sender name>
E-mail 3	Hello. I am interested in your 1 br apt on <specify address> for me and my <relationship identifier>, <partner name>. Is it available? Is there a time we could come by and see it? Thank you. <sender name>	Hello. I am interested in your 1 br apt on <specify address> for me and my <relationship identifier>, <partner name>. Is it available? Is there a time we could come by and see it? Thank you. <sender name>	Hello. I am interested in your 1 br apt on <specify address> for me and my <relationship identifier>, <partner name>. Is it available? Is there a time we could come by and see it? Thank you. <sender name>
E-mail 4	Hello. Your apartment (<specify address>) seems to be what my <relationship identifier>, <partner name>, and I had in mind. Is it still available? We'd like to come by and view the apartment; could you contact me with an available time to do so? Thanks, <sender name>	Hello. Your apartment (<specify address>) seems to be what my <relationship identifier>, <partner name>, and I had in mind. Is it still available? We'd like to come by and view the apartment; could you contact me with an available time to do so? Thanks, <sender name>	Hello. Your apartment (<specify address>) seems to be what my <relationship identifier>, <partner name>, and I had in mind. Is it still available? We'd like to come by and view the apartment; could you contact me with an available time to do so? Thanks, <sender name>
E-mail 5	Hello, My <relationship identifier>, <partner name>, and I are writing in response to your listing for the 1 bedroom apartment located at <specify address>. Is it available? May we come and see it? Thank you for your time, <sender name>.	Hello, My <relationship identifier>, <partner name>, and I are writing in response to your listing for the 1 bedroom apartment located at <specify address>. Is it available? May we come and see it? Thank you for your time, <sender name>.	Hello, My <relationship identifier>, <partner name>, and I are writing in response to your listing for the 1 bedroom apartment located at <specify address>. Is it available? May we come and see it? Thank you for your time, <sender name>.

Appendix D. E-mail Text and Subject Lines (2 of 3)

	Format 1	Format 2	Format 3
E-mail 6	Hello, I just saw your ad on [website] for the apartment at <specify address> and I am definitely interested. Is it still available? Is there a time that my <relationship identifier>, <partner name> and I can stop by and look it over? Thank you for your help, <sender name>	Hello, I just saw your ad on [website] for the apartment at <specify address> and I am definitely interested. Is it still available? Is there a time that my <relationship identifier>, <partner name> and I can stop by and look it over? Thank you for your help, <sender name>	Hello, I just saw your ad on [website] for the apartment at <specify address> and I am definitely interested. Is it still available? Is there a time that my <relationship identifier>, <partner name> and I can stop by and look it over? Thank you for your help, <sender name>
E-mail 7	Hi. My <relationship identifier>, <partner name>, and I would like to set an appt. to see your apartment (at <specify address>). Is this particular apartment still available? If it is, can you tell me when you would be available to show it? Thanks, <sender name>	Hi. My <relationship identifier>, <partner name>, and I would like to set an appt. to see your apartment (at <specify address>). Is this particular apartment still available? If it is, can you tell me when you would be available to show it? Thanks, <sender name>	Hi. My <relationship identifier>, <partner name>, and I would like to set an appt. to see your apartment (at <specify address>). Is this particular apartment still available? If it is, can you tell me when you would be available to show it? Thanks, <sender name>
E-mail 8	I saw your ad for a 1Br apartment on [website] located at <specify address>. Is this apartment still available? My <relationship identifier>, <partner name>, and I would like to set a time to see it. Can you tell me what hours you would be available so we can schedule a visit? I can be reached at this return email. Thanks, <sender name>	I saw your ad for a 1Br apartment on [website] located at <specify address>. Is this apartment still available? My <relationship identifier>, <partner name>, and I would like to set a time to see it. Can you tell me what hours you would be available so we can schedule a visit? I can be reached at this return email. Thanks, <sender name>	I saw your ad for a 1Br apartment on [website] located at <specify address>. Is this apartment still available? My <relationship identifier>, <partner name>, and I would like to set a time to see it. Can you tell me what hours you would be available so we can schedule a visit? I can be reached at this return email. Thanks, <sender name>
E-mail 9	Hello, My <relationship identifier>, <partner name>, and I are interested in the one bedroom apartment that you currently have for rent at <specify address>. Is it still available and is there a specific time we could check it out? Please contact me at this email address. Thank you in advance, <sender name>	Hello, My <relationship identifier>, <partner name>, and I are interested in the one bedroom apartment that you currently have for rent at <specify address>. Is it still available and is there a specific time we could check it out? Please contact me at this email address. Thank you in advance, <sender name>	Hello, My <relationship identifier>, <partner name>, and I are interested in the one bedroom apartment that you currently have for rent at <specify address>. Is it still available and is there a specific time we could check it out? Please contact me at this email address. Thank you in advance, <sender name>
E-mail 10	Hi. My <relationship identifier>, <partner name>, and I would like to see the apartment on <specify address>. I realize places go fast; is this apartment still available? When would be a good time for us to meet to see it? Please reply to this email address as soon as possible. Thank you for your time, <sender name>	Hi. My <relationship identifier>, <partner name>, and I would like to see the apartment on <specify address>. I realize places go fast; is this apartment still available? When would be a good time for us to meet to see it? Please reply to this email address as soon as possible. Thank you for your time, <sender name>	Hi. My <relationship identifier>, <partner name>, and I would like to see the apartment on <specify address>. I realize places go fast; is this apartment still available? When would be a good time for us to meet to see it? Please reply to this email address as soon as possible. Thank you for your time, <sender name>
E-mail 11	Hello, My <relationship identifier>, <partner name>, and I would like set up a time to see the place you advertised on <specify address>. We were wondering, is this apartment still available? Also, is there any particular time that works best for a showing? Please let me know when you might be able to show us the apartment. Best regards, <sender name>	Hello, My <relationship identifier>, <partner name>, and I would like set up a time to see the place you advertised on <specify address>. We were wondering, is this apartment still available? Also, is there any particular time that works best for a showing? Please let me know when you might be able to show us the apartment. Best regards, <sender name>	Hello, My <relationship identifier>, <partner name>, and I would like set up a time to see the place you advertised on <specify address>. We were wondering, is this apartment still available? Also, is there any particular time that works best for a showing? Please let me know when you might be able to show us the apartment. Best regards, <sender name>

Appendix D. E-mail Text and Subject Lines (3 of 3)

	Format 1	Format 2	Format 3
E-mail 12	I saw your [website] ad for the 1 bedroom located at <specify address> and would like to make an appointment for my <relationship identifier>, <partner name> and I to come by and see the apartment. Could you let us know whether or not it is still available and if it is, what time(s) work best for you to show it to us? Thank you for your time, <sender name>	I saw your [website] ad for the 1 bedroom located at <specify address> and would like to make an appointment for my <relationship identifier>, <partner name> and I to come by and see the apartment. Could you let us know whether or not it is still available and if it is, what time(s) work best for you to show it to us? Thank you for your time, <sender name>	I saw your [website] ad for the 1 bedroom located at <specify address> and would like to make an appointment for my <relationship identifier>, <partner name> and I to come by and see the apartment. Could you let us know whether or not it is still available and if it is, what time(s) work best for you to show it to us? Thank you for your time, <sender name>

Subject Line

1 One bedroom apartment
2 Apartment for rent
3 Unit for rent
4 [Website] - 1br apartment
5 [Website] Rental
6 Unit availability
7 Apartment posted on [website]
8 [website] apartment posting
9 Inquiry about your apartment
10 Saw your [Website] Apartment ad
11 In response to your [website] listing

Appendix E. Data Dictionary

Var#	Variable Name	Variable Description	Variable Details	Value Labels	Frequencies
1	AuditID	Audit ID	Number assigned for the audit		
2	strata	Metro Size Strata		1 = small (100,000 to 249,999) 2 = medium (250,000 to 3999,999) 3 = medium-to-large (400,000 to 749,999) 4 = large (750,000 to 1,499,999) 5 = very large (1,500,000 to 4,999,999) 6 = largest (5,000,000 or more)	
3	GeoState	State	State in which housing inquiry occurred	State Postal Codes	

strata	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	110	1.61	110	1.61
2	136	1.99	246	3.60
3	503	7.36	749	10.96
4	760	11.12	1,509	22.08
5	3,524	51.57	5,033	73.66
6	1,800	26.34	6,833	100.00

GeoState	Frequency	Percent	Cumulative Frequency	Cumulative Percent
AZ	228	3.34	228	3.34
CA	885	12.95	1,113	16.29
CO	228	3.34	1,341	19.63
CT	6	0.09	1,347	19.71
DC	99	1.45	1,446	21.16
FL	356	5.21	1,802	26.37
GA	356	5.21	2,158	31.58
ID	6	0.09	2,164	31.67
IL	334	4.89	2,498	36.56
IN	12	0.18	2,510	36.73
KY	81	1.19	2,591	37.92
MA	83	1.21	2,674	39.13
MD	87	1.27	2,761	40.41
MI	305	4.46	3,066	44.87
MN	223	3.26	3,289	48.13
MO	286	4.19	3,575	52.32
NC	105	1.54	3,680	53.86
NM	103	1.51	3,783	55.36
NY	475	6.95	4,258	62.32
OH	270	3.95	4,528	66.27
OK	20	0.29	4,548	66.56
PA	633	9.26	5,181	75.82
RI	1	0.01	5,182	75.84
SC	36	0.53	5,218	76.36
TN	154	2.25	5,372	78.62
TX	660	9.66	6,032	88.28
UT	105	1.54	6,137	89.81
VA	114	1.67	6,251	91.48
WA	345	5.05	6,596	96.53
WI	237	3.47	6,833	100.00

Var#	Variable Name	Variable Description	Variable Details	Value Labels	Frequencies
4	WrongMSAFlag	Check for correct MSAs		0 = pass 1 = flag	

WrongMSAFlag	Frequency	Percent	Cumulative Frequency	Cumulative Percent
0	6,829	99.94	6,829	99.94
1	4	0.06	6,833	100

Var#	Variable Name	Variable Description	Variable Details	Value Labels
5	Protected	Property in State with Same Sex Protection		0 = Unprotected 1 = Protected

Protected	Frequency	Percent	Cumulative Frequency	Cumulative Percent
0	3,727	54.54	3,727	54.54
1	3,106	45.46	6,833	100

Var#	Variable Name	Variable Description	Variable Details	Value Labels
6	Protect_Type	Type of Same-sex Protection		0 = No Protection 1 = States prohibiting housing discrimination based on sexual orientation and gender identity 2 = States prohibiting housing discriminatino based on sexual orientation

Protect_Type	Frequency	Percent	Cumulative Frequency	Cumulative Percent
0	3,727	54.54	3,727	54.54
1	2,224	32.55	5,951	87.09
2	882	12.91	6,833	100

Var#	Variable Name	Variable Description	Variable Details	Value Labels
7	metro_aud	Metro (MSA)		List of MSAs sampled

Metro_aud	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Albuquerque, NM MSA	103	1.51	103	1.51
Asheville, NC MSA	58	0.85	161	2.36
Atlanta, GA MSA	300	4.39	461	6.75
Austin-San Marcos, TX MSA	132	1.93	593	8.68
Binghamton, NY MSA	47	0.69	640	9.37
Buffalo-Niagara Falls, NY MSA	134	1.96	774	11.33
Chicago, IL PMSA	300	4.39	1,074	15.72
Columbia, SC MSA	13	0.19	1,087	15.91
Columbus, OH MSA	180	2.63	1,267	18.54
Dallas, TX PMSA	205	3	1,472	21.54
Dayton-Springfield, OH MSA	89	1.3	1,561	22.85
Denver, CO PMSA	228	3.34	1,789	26.18
Detroit, MI PMSA	228	3.34	2,017	29.52
Fayetteville, NC MSA	18	0.26	2,035	29.78
Fort Myers-Cape Coral, FL MSA	86	1.26	2,121	31.04
Grand Rapids-Muskegon-Holland, MI MSA	77	1.13	2,198	32.17
Greenville-Spartenburg-Anderson, SC MSA	23	0.34	2,221	32.5
Harrisburg-Lebanon-Carlisle, PA MSA	72	1.05	2,293	33.56
Houston, TX PMSA	227	3.32	2,520	36.88
Jacksonville, FL MSA	42	0.61	2,562	37.49
Los Angeles-Long Beach, CA PMSA	300	4.39	2,862	41.88
Louisville, KY-IN MSA	89	1.3	2,951	43.19
McAllen-Edinburg-Mission, TX MSA	13	0.19	2,964	43.38
Milwaukee-Waukesha, WI PMSA	228	3.34	3,192	46.71
Minneapolis-St. Paul, MN-WI MSA	225	3.29	3,417	50.01
Modesto, CA MSA	42	0.61	3,459	50.62

Var#	Variable Name	Variable Description	Variable Details	Value Labels	Frequencies
7	metro_aud (continued)	Metro (MSA)		List of MSAs sampled	

Metro_aud	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Nashville, TN MSA	153	2.24	3,612	52.86
New York, NY PMSA	300	4.39	3,912	57.25
Oklahoma City, OK MSA	20	0.29	3,932	57.54
Orange County, CA PMSA	86	1.26	4,018	58.8
Philadelphia, PA-NJ PMSA	300	4.39	4,318	63.19
Phoenix-Mesa, AZ MSA	228	3.34	4,546	66.53
Pittsburgh, PA MSA	228	3.34	4,774	69.87
Racine, WI PMSA	5	0.07	4,779	69.94
Raleigh-Durham-Chapel Hill, NC MSA	30	0.44	4,809	70.38
Rockford, IL MSA	36	0.53	4,845	70.91
Sacramento, CA PMSA	228	3.34	5,073	74.24
Salt Lake City-Ogden, UT MSA	105	1.54	5,178	75.78
San Antonio, TX MSA	85	1.24	5,263	77.02
San Francisco, CA PMSA	228	3.34	5,491	80.36
Savannah, GA MSA	56	0.82	5,547	81.18
Scranton--Wilkes-Barre--Hazleton, PA MSA	5	0.07	5,552	81.25
Seattle-Bellevue-Everett, WA PMSA	227	3.32	5,779	84.57
Spokane, WA MSA	124	1.81	5,903	86.39
Springfield, MO MSA	62	0.91	5,965	87.3
St. Louis, MO-IL MSA	228	3.34	6,193	90.63
Tampa-St. Petersburg-Clearwater, FL MSA	228	3.34	6,421	93.97
Washington, DC-MD-VA-WV PMSA	300	4.39	6,721	98.36
Worcester, MA-CT PMSA	84	1.23	6,805	99.59
York, PA MSA	28	0.41	6,833	100

Var#	Variable Name	Variable Description	Variable Details	Value Labels
8	jurisdiction_aud	Jurisdiction		List of Jurisdictions sampled (TBD)
9	x_city	Name of City listing was posted in.		List of Cities sampled

X_City	Frequency	Percent	Cumulative Frequency	Cumulative Percent
albuquerque	103	1.51	103	1.51
asheville	58	0.85	161	2.36
atlanta	300	4.39	461	6.75
austin	116	1.7	577	8.44
binghamton	47	0.69	624	9.13
buffalo	134	1.96	758	11.09
chicago	300	4.39	1,058	15.48
columbia	13	0.19	1,071	15.67
columbus	180	2.63	1,251	18.31
dallas	205	3	1,456	21.31
dayton	89	1.3	1,545	22.61
denver	228	3.34	1,773	25.95
detroit	228	3.34	2,001	29.28
fayetteville	18	0.26	2,019	29.55
fortmyers	86	1.26	2,105	30.81

Var#	Variable Name	Variable Description	Variable Details	Value Labels	Frequencies				
9	x_city (continued)	Name of City listing was posted in.		List of Cities sampled	X_City	Frequency	Percent	Cumulative Frequency	Cumulative Percent
					grandrapids	51	0.75	2,156	31.55
					greenville	23	0.34	2,179	31.89
					harrisburg	72	1.05	2,251	32.94
					holland	6	0.09	2,257	33.03
					houston	227	3.32	2,484	36.35
					jacksonville	42	0.61	2,526	36.97
					losangeles	300	4.39	2,826	41.36
					louisville	89	1.3	2,915	42.66
					mcallen	13	0.19	2,928	42.85
					milwaukee	228	3.34	3,156	46.19
					minneapolis	225	3.29	3,381	49.48
					modesto	42	0.61	3,423	50.1
					muskegon	20	0.29	3,443	50.39
					nashville	153	2.24	3,596	52.63
					newyork	300	4.39	3,896	57.02
					ogden	5	0.07	3,901	57.09
					oklahomacity	20	0.29	3,921	57.38
					orangecounty	86	1.26	4,007	58.64
					philadelphia	300	4.39	4,307	63.03
					phoenix	228	3.34	4,535	66.37
					pittsburgh	228	3.34	4,763	69.71
					racine	5	0.07	4,768	69.78
					raleigh	30	0.44	4,798	70.22
					rockford	36	0.53	4,834	70.74
					sacramento	228	3.34	5,062	74.08
					saltlakecity	100	1.46	5,162	75.55
					sanantonio	85	1.24	5,247	76.79
					sanmarcos	16	0.23	5,263	77.02
					savannah	56	0.82	5,319	77.84
					scranton	5	0.07	5,324	77.92
					seattle	227	3.32	5,551	81.24
					sfbay	228	3.34	5,779	84.57
					spokane	124	1.81	5,903	86.39
					springfield	62	0.91	5,965	87.3
					stlouis	228	3.34	6193	90.63
					tampa	228	3.34	6,421	93.97
					washingtondc	300	4.39	6,721	98.36
					worcester	84	1.23	6,805	99.59
					york	28	0.41	6,833	100
10	postid	Posting ID	Identification number assigned to every ad						

Var#	Variable Name	Variable Description	Variable Details	Value Labels	Frequencies
11	monthad	Month ad appeared		1 = January 2 = February 3 = March 4 = April 5 = May 6 = June 7 = July 8 = August 9 = September 10 = October 11 = November 12 = December	
12	datead	Date ad appeared	List actual date (e.g., 1 for 1st, 12 for 12th)	Dates of the Month	

monthad	Frequency	Percent	Cumulative Frequency	Cumulative Percent
6	418	6.12	418	6.12
7	3,340	48.88	3,758	55
8	1,664	24.35	5,422	79.35
9	1,411	20.65	6,833	100

datead	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	172	2.52	172	2.52
2	32	0.47	204	2.99
4	149	2.18	353	5.17
5	299	4.38	652	9.54
6	311	4.55	963	14.09
7	245	3.59	1,208	17.68
8	381	5.58	1,589	23.25
9	205	3	1,794	26.25
10	334	4.89	2,128	31.14
11	315	4.61	2,443	35.75
12	355	5.2	2,798	40.95
13	285	4.17	3,083	45.12
14	251	3.67	3,334	48.79
15	217	3.18	3,551	51.97
16	104	1.52	3,655	53.49
17	144	2.11	3,799	55.6
18	330	4.83	4,129	60.43
19	179	2.62	4,308	63.05
20	318	4.65	4,626	67.7
21	268	3.92	4,894	71.62
22	230	3.37	5,124	74.99
23	177	2.59	5,301	77.58
24	197	2.88	5,498	80.46
25	238	3.48	5,736	83.95
26	246	3.6	5,982	87.55
27	95	1.39	6,077	88.94
28	73	1.07	6,150	90
29	333	4.87	6,483	94.88
30	291	4.26	6,774	99.14
31	59	0.86	6,833	100

Var#	Variable Name	Variable Description	Variable Details	Value Labels	Frequencies
13	dayad	Weekday ad appeared		1 = Sunday 2 = Monday 3 = Tuesday 4 = Wednesday 5 = Thursday 6 = Friday 7 = Saturday	
14	timead	Time ad posted	am/pm time		
15	monthEDT	Month ad appeared (in EDT time)		1 = January 2 = February 3 = March 4 = April 5 = May 6 = June 7 = July 8 = August 9 = September 10 = October 11 = November 12 = December	
16	dateEDT	Date ad appeared (in EDT time)	List actual date (e.g., 1 for 1st, 12 for 12th)	Dates of the Month	

dayad	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	713	10.43	713	10.43
2	1,284	18.79	1,997	29.23
3	1,278	18.7	3,275	47.93
4	1,288	18.85	4,563	66.78
5	1,150	16.83	5,713	83.61
6	949	13.89	6,662	97.5
7	171	2.5	6,833	100

monthEDT	Frequency	Percent	Cumulative Frequency	Cumulative Percent
6	418	6.12	418	6.12
7	3,340	48.88	3,758	55
8	1,664	24.35	5,422	79.35
9	1,411	20.65	6,833	100

dateEDT	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	172	2.52	172	2.52
2	32	0.47	204	2.99
4	149	2.18	353	5.17
5	299	4.38	652	9.54
6	310	4.54	962	14.08
7	245	3.59	1,207	17.66
8	382	5.59	1,589	23.25
9	205	3	1,794	26.25
10	334	4.89	2,128	31.14
11	315	4.61	2,443	35.75
12	355	5.2	2,798	40.95
13	285	4.17	3,083	45.12
14	251	3.67	3,334	48.79
15	217	3.18	3,551	51.97
16	104	1.52	3,655	53.49
17	144	2.11	3,799	55.6
18	330	4.83	4,129	60.43
19	179	2.62	4,308	63.05
20	318	4.65	4,626	67.7
21	268	3.92	4,894	71.62
22	230	3.37	5,124	74.99
23	177	2.59	5,301	77.58
24	197	2.88	5,498	80.46
25	237	3.47	5,735	83.93

Var#	Variable Name	Variable Description	Variable Details	Value Labels	Frequencies				
16	dateEDT (continued)	Date ad appeared (in EDT time)	List actual date (e.g., 1 for 1st, 12 for 12th)	Dates of the Month	dateEDT	Frequency	Percent	Cumulative Frequency	Cumulative Percent
					26	246	3.6	5,981	87.53
					27	96	1.4	6,077	88.94
					28	72	1.05	6,,149	89.99
					29	331	4.84	6480	94.83
					30	294	4.3	6,774	99.14
					31	59	0.86	6,833	100
17	TimeEDT	Time ad posted (in EDT time)	am/pm time						
18	listcat	Apartment listing category (for Boston and others like Boston – may not be applicable if no sites in our sample have this)		1 = fee 2 = no fee 3 = by owner 4 = NA	listcat	Frequency	Percent	Cumulative Frequency	Cumulative Percent
					1	86	1.26	86	1.26
					2	20	0.29	106	1.55
					3	194	2.84	300	4.39
					4	6533	95.61	6833	100
19	company	Name of real estate/ management company in ad		1 = yes 2 = no	Company	Frequency	Percent	Cumulative Frequency	Cumulative Percent
					1	2962	43.35	2962	43.35
					2	3871	56.65	6833	100
20	agent	Agent name in ad		1 = yes 2 = no	agent	Frequency	Percent	Cumulative Frequency	Cumulative Percent
					1	1904	27.86	1904	27.86
					2	4929	72.14	6833	100
21	ownoprov	Name of owner or other provider in ad		1 = yes 2 = no	ownoprov	Frequency	Percent	Cumulative Frequency	Cumulative Percent
					1	1148	16.8	1148	16.8
					2	5685	83.2	6833	100
22	company1	Name of real estate/ management company/ apartment complex	List name	– 9 = NA					
23	company2	Name of real estate/ management company/ apartment complex	List name	– 9 = NA					
24	company3	Name of real estate/ management company/ apartment complex	List name	– 9 = NA					
25	agentname1	Name of agent (1) in real estate/management company	List name	– 9 = NA					
26	agentname2	Name of agent (2) in real estate/management company	List name	– 9 = NA					
27	agentname3	Name of agent (3) in real estate/management company	List name	– 9 = NA					
28	ownoprovname1	Name of owner or other provider (1)	List name	– 9 = NA					

Var#	Variable Name	Variable Description	Variable Details	Value Labels	Frequencies
29	ownoprovname2	Name of owner or other provider (2)	List name	– 9 = NA	
30	ownoprovname3	Name of owner or other provider (3)	List name	– 9 = NA	
31	refnum	Reference number	Reference number given by housing provider in ad	– 9 = NA	
32	emailc	Craigslist given email address	Record email address		
33	email2	Email address in body of text	Record email address	– 9 = NA	
34	email3	Other email address given	Record email address	– 9 = NA	
35	email4	Other email address given	Record email address	– 9 = NA	
36	phoneno1	Phone number (1)	List number with area code	(999)999–9999 = NA	
37	phoneno2	Phone number (2)	List number with area code	(999)999–9999 = NA	
38	phoneno3	Phone number (3)	List number with area code	(999)999–9999 = NA	
39	phoneno4	Phone number (4)	List number with area code	(999)999–9999 = NA	
40	unitst	Street address of unit	List address of unit, including house number		
41	housing_apt_#	Additional address information such as apartment number		– 9 = NA	
42	crosssts	Cross streets of unit	List cross streets at which unit is approximately located		
43	city	City/town	List name of city/town in which unit is located	– 9 = NA	
44	geo_oth	Other Geographic Information		– 9 = NA	
45	state	State	List name of state in which unit is located	1 = AL 2 = AK 3 = AZ 4 = AR 5 = CA 6 = CO 7 = CT 8 = DC	

state	Frequency	Percent	Cumulative Frequency	Cumulative Percent
– 9	3,530	51.66	3,530	51.66
3	141	2.06	3,671	53.72
4	2	0.03	3,673	53.75
5	339	4.96	4,012	58.72
6	204	2.99	4,216	61.7
7	1	0.01	4,217	61.72
8	76	1.11	4,293	62.83

Var#	Variable Name	Variable Description	Variable Details	Value Labels
45	state (continued)	State	List name of state in which unit is located	9 = DE 10 = FL 11 = GA 12 = HI 13 = ID 14 = IL 15 = IN 16 = IA 17 = KS 18 = KY 19 = LA 20 = ME 21 = MD 22 = MA 23 = MI 24 = MN 25 = MS 26 = MO 27 = MT 28 = NE 29 = NV 30 = NH 31 = NJ 32 = NM 33 = NY 34 = NC 35 = ND 36 = OH 37 = OK 38 = OR 39 = PA 40 = RI 41 = SC 42 = SD 43 = TN 44 = TX 45 = UT 46 = VT 47 = VA 48 = WA 49 = WV 50 = WI 51 = WY
46	zipcode_aud	Zip code	List first 5 digits of zip code in which unit is located	99999 = NA

Frequencies

state	Frequency	Percent	Cumulative Frequency	Cumulative Percent
9	12	0.18	4,305	63
10	218	3.19	4,523	66.19
11	243	3.56	4,766	69.75
12	1	0.01	4,767	69.76
14	285	4.17	5,052	73.94
15	3	0.04	5,055	73.98
18	14	0.2	5,069	74.18
20	1	0.01	5,070	74.2
21	67	0.98	5,137	75.18
22	61	0.89	5,198	76.07
23	118	1.73	5,316	77.8
24	160	2.34	5,476	80.14
26	86	1.26	5,562	81.4
27	1	0.01	5,563	81.41
28	1	0.01	5,564	81.43
32	23	0.34	5,587	81.76
33	289	4.23	5,876	85.99
34	64	0.94	5,940	86.93
36	92	1.35	6,032	88.28
37	10	0.15	6,042	88.42
38	1	0.01	6,043	88.44
39	158	2.31	6,201	90.75
40	1	0.01	6,202	90.77
41	21	0.31	6,223	91.07
42	1	0.01	6,224	91.09
43	61	0.89	6,285	91.98
44	249	3.64	6,534	95.62
45	26	0.38	6,560	96
46	1	0.01	6,561	96.02
47	95	1.39	6,656	97.41
48	112	1.64	6,768	99.05
50	55	0.8	6,823	99.85
51	10	0.15	6,833	100

Var#	Variable Name	Variable Description	Variable Details	Value Labels	Frequencies
47	zipcodesuff_aud	Zip code optional suffix	List last 4 digits of zip code in which unit is located IF PROVIDED	9999 = NA	
48	jurisdictionsize_aud	Size of Metropolitan Area			
49	legislation_aud	Same-Sex discrimination protecting unit in listing?			
50	unitdes	Unit facility		1 = in large apartment building (10 + units) 2 = in small apartment building (4-9 units) 3 = in triplex (3 units) 4 = in duplex (2 units) 5 = apartment, but size of building unknown 6 = single family, detached house 7 = recreational vehicle 8 = high rise 9 = don't know	
51	unitdes1	Additional unit info		1 = condominium 2 = townhouse 3 = in-law unit 4 = loft 5 = Basement 6 = Other (specify after ;) 7 = No additional information 8 = Studio/Efficiency	
52	unitdes1_oth	Other Response for unitdes1		– 9 = NA	
53	seniorhsg	Unit in senior housing community		1 = yes 2 = no	
54	cats	Whether cats allowed		1 = yes 2 = no – 9 = NA	
55	dogs	Whether dogs allowed		1 = yes 2 = no – 9 = NA	

unitdes	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	161	2.36	161	2.36
2	184	2.69	345	5.05
3	61	0.89	406	5.94
4	181	2.65	587	8.59
5	5,353	78.34	5,940	86.93
6	128	1.87	6,068	88.8
7	15	0.22	6,083	89.02
8	61	0.89	6,144	89.92
9	689	10.08	6,833	100

unitdes1	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	438	6.41	438	6.41
2	62	0.91	500	7.32
3	11	0.16	511	7.48
4	137	2	648	9.48
5	65	0.95	713	10.43
6	293	4.29	1,006	14.72
7	5,727	83.81	6,733	98.54
8	100	1.46	6,833	100

seniorhsg	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	104	1.52	104	1.52
2	6,729	98.48	6,833	100

cats	Frequency	Percent	Cumulative Frequency	Cumulative Percent
– 9	1,641	24.02	1,641	24.02
1	4,009	58.67	5,650	82.69
2	1,183	17.31	6,833	100

dogs	Frequency	Percent	Cumulative Frequency	Cumulative Percent
– 9	2,292	33.54	2,292	33.54
1	3,117	45.62	5,409	79.16
2	1,424	20.84	6,833	100

Var#	Variable Name	Variable Description	Variable Details	Value Labels	Frequencies				
56	rent	Monthly rent	Dollar amount of monthly rent listed in ad for given unit	– 9 = NA		Mean	Std Dev	Minimum	Maximum
					rent	871.1152942	561.3193183	89	6,000
57	rentrangeUL	Monthly Rent Upper Limit	Upper limit of a rent range	– 9 = NA		Mean	Std Dev	Minimum	Maximum
					rentrangeUL	896.8296915	660.0781003	195	7747
58	bfee	Broker fee		1 = broker fee required as stated in ad 2 = broker fee NOT required as stated in ad”	bfee	Frequency	Percent	Cumulative Frequency	Cumulative Percent
					1	98	1.43	98	1.43
					2	6,735	98.57	6,833	100
59	bfeeamt	Broker fee amount	record amount of broker fee listed	– 9 = NA					
60	appfeead	Application fee in ad		1 = yes, mentioned 2 = no, NOT mentioned	appfeead	Frequency	Percent	Cumulative Frequency	Cumulative Percent
					1	802	11.74	802	11.74
					2	6,031	88.26	6,833	100
61	secdepositad	Security deposit in ad		1 = yes, mentioned 2 = no, NOT mentioned	secdepositad	Frequency	Percent	Cumulative Frequency	Cumulative Percent
					1	2,625	38.42	2,625	38.42
					2	4,208	61.58	6,833	100
62	secdepamtad	Security deposit amount in ad	Record security deposit amount	– 9 = NA					
63	credchk	Credit check mentioned		1 = yes, mentioned 2 = no, NOT mentioned	credchk	Frequency	Percent	Cumulative Frequency	Cumulative Percent
					1	651	9.53	651	9.53
					2	6,182	90.47	6,833	100
64	credchkfee	Credit Check Fee Mentioned		1 = yes, mentioned 2 = no, NOT mentioned	credchkfee	Frequency	Percent	Cumulative Frequency	Cumulative Percent
					1	232	35.64	232	35.64
					2	419	64.36	651	100
					Frequency Missing = 6,182				
65	credchkfeeamt	Credit Check Fee Amount	record amount of credit check fee listed	– 9 = NA		Mean	Std Dev	Minimum	Maximum
					credchkfeeamt	69.7095745	207.2339406	0	2,700
66	fee	Other fee		1 = yes, mentioned 2 = no, NOT mentioned	fee	Frequency	Percent	Cumulative Frequency	Cumulative Percent
					1	706	10.33	706	10.33
					2	6,127	89.67	6,833	100
67	rentdiscount	Rent discount offered in ad		1 = yes, offered 2 = no, NOT offered	rentdiscount	Frequency	Percent	Cumulative Frequency	Cumulative Percent
					1	1,140	16.68	1,140	16.68
					2	5,693	83.32	6,833	100
68	lease	Lease in ad		1 = yes, mentioned 2 = no, NOT mentioned	lease	Frequency	Percent	Cumulative Frequency	Cumulative Percent
					1	1,703	24.92	1,703	24.92
					2	5,130	75.08	6,833	100
69	leaseterm	Lease term	record actual lease term (in months)	Accepts range, (XX-XX), – 9 = NA					

Var#	Variable Name	Variable Description	Variable Details	Value Labels	Frequencies
70	eqopp	Equal Opportunity statement present in ad		1 = yes 2 = no	

eqopp	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	1,118	16.36	1,118	16.36
2	5,715	83.64	6,833	100

Var#	Variable Name	Variable Description	Variable Details	Value Labels	Frequencies
71	eqoppsymb	Equal Opportunity symbol present in ad		1 = yes 2 = no	

eqoppsymb	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	1,184	17.33	1,184	17.33
2	5,649	82.67	6,833	100

Var#	Variable Name	Variable Description	Variable Details	Value Labels	Frequencies
72	protectclass1	Protected class restriction in advertisement	record discriminatory ad language	– 9 = NA	
73	protectclass2	Protected class restriction in advertisement	record discriminatory ad language	– 9 = NA	
74	protectclass3	Protected class restriction in advertisement	record discriminatory ad language	– 9 = NA	
75	imagesize	Size of largest image (in pixels)	size (in pixels) of largest image in listing		
76	TesterOrient	Sexual Orientation of Sender of Email (i.e. Tester)		S = Straight G = Gay L = Lesbian	

TesterOrient	Frequency	Percent	Cumulative Frequency	Cumulative Percent
G	3,424	25.05	3,424	25.05
L	3,409	24.95	6,833	50
S	6,833	50	13,666	100

Var#	Variable Name	Variable Description	Variable Details	Value Labels	Frequencies
77	SenderGender	Gender of Sender		M = Male F = Female	

SenderGender	Frequency	Percent	Cumulative Frequency	Cumulative Percent
F	6,818	49.89	6,818	49.89
M	6,848	50.11	13,666	100

Var#	Variable Name	Variable Description	Variable Details	Value Labels	Frequencies
78	Contact TimeRecode	Recode of Contact Time			
79	TesterOrder Recode	Tester Order Recode		1 = first tester 2 = second tester	

TesterOrderRecode	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	6,833	50	6,833	50
2	6,833	50	13,666	100

Var#	Variable Name	Variable Description	Variable Details	Value Labels	Frequencies
80	ID	Original ID in Tester Table Database	Number assigned for the audit		
81	TesterID	testerID	Tester ID of tester who created the entry in the tester database		
82	metro_test	Metro (MSA)		List of MSAs sampled	

metro_test	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Albuquerque, NM MSA	206	1.51	206	1.51
Asheville, NC MSA	116	0.85	322	2.36
Atlanta, GA MSA	600	4.39	922	6.75
Austin-San Marcos, TX MSA	264	1.93	1,186	8.68
Binghamton, NY MSA	94	0.69	1,280	9.37

Var#	Variable Name	Variable Description	Variable Details	Value Labels
82	metro_test (continued)	Metro (MSA)		List of MSAs sampled

Frequencies

metro_test	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Buffalo-Niagara Falls, NY MSA	268	1.96	1,548	11.33
Chicago, IL PMSA	600	4.39	2,148	15.72
Columbia, SC MSA	26	0.19	2,174	15.91
Columbus, OH MSA	360	2.63	2,534	18.54
Dallas, TX PMSA	410	3	2,944	21.54
Dayton-Springfield, OH MSA	178	1.3	3,122	22.85
Denver, CO PMSA	456	3.34	3,578	26.18
Detroit, MI PMSA	456	3.34	4,034	29.52
Fayetteville, NC MSA	36	0.26	4,070	29.78
Fort Myers-Cape Coral, FL MSA	172	1.26	4,242	31.04
Grand Rapids-Muskegon-Holland, MI MSA	154	1.13	4,396	32.17
Greenville-Spartenburg-Anderson, SC MSA	46	0.34	4,442	32.5
Harrisburg-Lebanon-Carlisle, PA MSA	144	1.05	4,586	33.56
Houston, TX PMSA	454	3.32	5,040	36.88
Jacksonville, FL MSA	84	0.61	5,124	37.49
Los Angeles-Long Beach, CA PMSA	600	4.39	5,724	41.88
Louisville, KY-IN MSA	178	1.3	5,902	43.19
McAllen-Edinburg-Mission, TX MSA	26	0.19	5,928	43.38
Milwaukee-Waukesha, WI PMSA	456	3.34	6,384	46.71
Minneapolis-St. Paul, MN-WI MSA	450	3.29	6,834	50.01
Modesto, CA MSA	84	0.61	6,918	50.62
Nashville, TN MSA	306	2.24	7,224	52.86
New York, NY PMSA	600	4.39	7,824	57.25
Oklahoma City, OK MSA	40	0.29	7,864	57.54
Orange County, CA PMSA	172	1.26	8,036	58.8
Philadelphia, PA-NJ PMSA	600	4.39	8,636	63.19
Phoenix-Mesa, AZ MSA	456	3.34	9,092	66.53
Pittsburgh, PA MSA	456	3.34	9,548	69.87
Racine, WI PMSA	10	0.07	9,558	69.94
Raleigh-Durham-Chapel Hill, NC MSA	60	0.44	9,618	70.38
Rockford, IL MSA	72	0.53	9,690	70.91
Sacramento, CA PMSA	456	3.34	10,146	74.24
Salt Lake City-Ogden, UT MSA	210	1.54	10,356	75.78
San Antonio, TX MSA	170	1.24	10,526	77.02
San Francisco, CA PMSA	456	3.34	10,982	80.36
Savannah, GA MSA	112	0.82	11,094	81.18
Scranton--Wilkes-Barre--Hazleton, PA MSA	10	0.07	11,104	81.25
Seattle-Bellevue-Everett, WA PMSA	454	3.32	11,558	84.57
Spokane, WA MSA	248	1.81	11,806	86.39
Springfield, MO MSA	124	0.91	11,930	87.3

Var#	Variable Name	Variable Description	Variable Details	Value Labels	Frequencies				
82	metro_test (continued)	Metro (MSA)		List of MSAs sampled	metro_test	Frequency	Percent	Cumulative Frequency	Cumulative Percent
					St. Louis, MO-IL MSA	456	3.34	12,386	90.63
					Tampa-St. Petersburg-Clearwater, FL MSA	456	3.34	12,842	93.97
					Washington, DC-MD-VA-WV PMSA	600	4.39	13,442	98.36
					Worcester, MA-CT PMSA	168	1.23	13,610	99.59
					York, PA MSA	56	0.41	13,666	100
83	jurisdiction_test	Jurisdiction		List of jurisdictions sampled (TBD)					
84	testorder	Order of test		1 = first tester 2 = second tester	testorder	Frequency	Percent	Cumulative Frequency	Cumulative Percent
					1	6,833	50	6,833	50
					2	6,833	50	13,666	100
85	emailername1	Name of tester 1st contact	list name or assign numeric code to names						
86	partnername1	Name of partner in email	list name or assign numeric code to names						
87	contactdate1	Date of 1st contact	List actual date (e.g., 1 for 1st, 12 for 12th)	Dates of the Month	Contactdate1	Frequency	Percent	Cumulative Frequency	Cumulative Percent
					1	749	5.48	749	5.48
					2	457	3.34	1,206	8.82
					3	272	1.99	1,478	10.82
					4	90	0.66	1,568	11.47
					5	229	1.68	1,797	13.15
					6	449	3.29	2,246	16.43
					7	533	3.9	2,779	20.34
					8	516	3.78	3,295	24.11
					9	473	3.46	3,768	27.57
					10	215	1.57	3,983	29.15
					11	628	4.6	4,611	33.74
					12	769	5.63	5,380	39.37
					13	730	5.34	6,110	44.71
					14	515	3.77	6,625	48.48
					15	708	5.18	7,333	53.66
					16	474	3.47	7,807	57.13
					17	223	1.63	8,030	58.76
					18	410	3	8,440	61.76
					19	445	3.26	8,885	65.02
					20	453	3.31	9,338	68.33
					21	641	4.69	9,979	73.02
					22	390	2.85	10,369	75.87
					23	541	3.96	10,910	79.83
					24	393	2.88	11,303	82.71
					25	442	3.23	11,745	85.94
					26	496	3.63	12,241	89.57

Var#	Variable Name	Variable Description	Variable Details	Value Labels	Frequencies				
87	contactdate1 (continued)	Date of 1st contact	List actual date (e.g., 1 for 1st, 12 for 12th)	Dates of the Month	Contactdate1	Frequency	Percent	Cumulative Frequency	Cumulative Percent
					27	314	2.3	12,555	91.87
					28	169	1.24	12,724	93.11
					29	487	3.56	13,211	96.67
					30	383	2.8	13,594	99.47
					31	72	0.53	13,666	100
88	contactday1	Weekday of 1st contact		1 = Sunday 2 = Monday 3 = Tuesday 4 = Wednesday 5 = Thursday 6 = Friday 7 = Saturday	Contactday1	Frequency	Percent	Cumulative Frequency	Cumulative Percent
					1	1,175	8.6	1,175	8.6
					2	1,334	9.76	2,509	18.36
					3	1,364	9.98	3,873	28.34
					4	1,982	14.5	5,855	42.84
					5	2,625	19.21	8,480	62.05
					6	2,869	20.99	11,349	83.05
					7	2,317	16.95	13,666	100
89	contactmonth1	Month of 1st contact		1 = January 2 = February 3 = March 4 = April 5 = May 6 = June 7 = July 8 = August 9 = September 10 = October 11 = November 12 = December	Contactday1	Frequency	Percent	Cumulative Frequency	Cumulative Percent
					6	208	1.52	208	1.52
					7	7,111	52.03	7,319	53.56
					8	3,257	23.83	10,576	77.39
					9	2,961	21.67	13,537	99.06
					10	129	0.94	13,666	100
90	contacttime1	Time of 1st contact	Put in standard time						
91	numresp	Number of responses (in 2-week window)		1–20	numresp	Frequency	Percent	Cumulative Frequency	Cumulative Percent
					0	5,576	40.8	5,576	40.8
					1	7,349	53.78	12,925	94.58
					2	622	4.55	13,547	99.13
					3	91	0.67	13,638	99.8
					4	18	0.13	13,656	99.93
					5	8	0.06	13,664	99.99
					7	2	0.01	13,666	100
92	response1	First response		1 = yes, received a response 2 = out of office response 3 = undeliverable message response 4 = automated response 5 = scam response – 9 = NA	response1	Frequency	Percent	Cumulative Frequency	Cumulative Percent
					1	7,355	90.91	7,355	90.91
					2	49	0.61	7,404	91.52
					3	512	6.33	7,916	97.85
					4	172	2.13	8,088	99.98
					5	2	0.02	8,090	100
					Frequency Missing = 5,576				

Var#	Variable Name	Variable Description	Variable Details	Value Labels	Frequencies				
93	respdate1	Date of first response	List actual date (e.g., 1 for 1st, 12 for 12th)	1–31, – 9 = NA	respdate1	Frequency	Percent	Cumulative Frequency	Cumulative Percent
					1	345	4.26	345	4.26
					2	247	3.05	592	7.32
					3	171	2.11	763	9.43
					4	59	0.73	822	10.16
					5	163	2.01	985	12.18
					6	254	3.14	1,239	15.32
					7	344	4.25	1,583	19.57
					8	306	3.78	1,889	23.35
					9	195	2.41	2,084	25.76
					10	114	1.41	2,198	27.17
					11	358	4.43	2,556	31.59
					12	427	5.28	2,983	36.87
					13	424	5.24	3,407	42.11
					14	292	3.61	3,699	45.72
					15	481	5.95	4,180	51.67
					16	332	4.1	4,512	55.77
					17	134	1.66	4,646	57.43
					18	268	3.31	4,914	60.74
					19	264	3.26	5,178	64
					20	265	3.28	5,443	67.28
					21	343	4.24	5,786	71.52
					22	283	3.5	6,069	75.02
					23	288	3.56	6,357	78.58
					24	176	2.18	6,533	80.75
					25	293	3.62	6,826	84.38
					26	365	4.51	7,191	88.89
					27	232	2.87	7,423	91.76
					28	117	1.45	7,540	93.2
					29	337	4.17	7,877	97.37
					30	173	2.14	8,050	99.51
					31	40	0.49	8,090	100
					Frequency Missing = 5,576				
94	respday1	Weekday of first response		1 = Sunday 2 = Monday 3 = Tuesday 4 = Wednesday 5 = Thursday 6 = Friday 7 = Saturday	respday1	Frequency	Percent	Cumulative Frequency	Cumulative Percent
					1	640	7.91	640	7.91
					2	1,186	14.66	1,826	22.57
					3	939	11.61	2,765	34.18
					4	1,186	14.66	3,951	48.84
					5	1,489	18.41	5,440	67.24
					6	1,608	19.88	7,048	87.12
					7	1,042	12.88	8,090	100
					Frequency Missing = 5,576				

Var#	Variable Name	Variable Description	Variable Details	Value Labels	Frequencies
95	respmonth1	Month of first response		1 = January 2 = February 3 = March 4 = April 5 = May 6 = June 7 = July 8 = August 9 = September 10 = October 11 = November 12 = December – 9 = NA	
96	resptime1	Time of first response	Put in Standard Time, XX:XX AM/PM	– 9 = NA	
97	respnmeinemail1	Housing provider's name in the "From" line	Record housing provider's name	– 9 = NA	
98	respprovoth-name1	Housing provider's name in body of email	Record housing provider's name	– 9 = NA	
99	response2	Second response		1 = yes, received a second response 2 = automated response 3 = scam response – 9 = NA	
100	respdate2	Date of second response	List actual date (e.g., 1 for 1st, 12 for 12th)	1–31, – 9 = NA	

respmonth1	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	1	0.01	1	0.01
5	1	0.01	2	0.02
6	57	0.7	59	0.73
7	4,122	50.95	4,181	51.68
8	1,912	23.63	6,093	75.32
9	1,893	23.4	7,986	98.71
10	103	1.27	8,089	99.99
12	1	0.01	8,090	100
Frequency Missing = 5,576				

resptime1	Mean	Std Dev	Minimum	Maximum
	11:02:24 PM	18:57	12:00:00 AM	12:00:00 AM

response2	Frequency	Percent	Cumulative Frequency	Cumulative Percent
– 9	2	0.27	2	0.27
1	718	96.9	720	97.17
2	20	2.7	740	99.87
3	1	0.13	741	100
Frequency Missing = 12,925				

respdate2	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	31	4.18	31	4.18
2	13	1.75	44	5.94
3	18	2.43	62	8.37
4	18	2.43	80	10.8
5	11	1.48	91	12.28
6	21	2.83	112	15.11
7	21	2.83	133	17.95
8	16	2.16	149	20.11
9	20	2.7	169	22.81
10	15	2.02	184	24.83
11	17	2.29	201	27.13
12	25	3.37	226	30.5
13	33	4.45	259	34.95
14	39	5.26	298	40.22
15	37	4.99	335	45.21
16	38	5.13	373	50.34
17	15	2.02	388	52.36
18	21	2.83	409	55.2
19	18	2.43	427	57.62

Var#	Variable Name	Variable Description	Variable Details	Value Labels	Frequencies
100	respdate2 (continued)	Date of second response	List actual date (e.g., 1 for 1st, 12 for 12th)	1–31, – 9 = NA	

respdate2	Frequency	Percent	Cumulative Frequency	Cumulative Percent
20	32	4.32	459	61.94
21	33	4.45	492	66.4
22	26	3.51	518	69.91
23	36	4.86	554	74.76
24	25	3.37	579	78.14
25	26	3.51	605	81.65
26	24	3.24	629	84.89
27	30	4.05	659	88.93
28	33	4.45	692	93.39
29	21	2.83	713	96.22
30	22	2.97	735	99.19
31	6	0.81	741	100
Frequency Missing = 12,925				

Var#	Variable Name	Variable Description	Variable Details	Value Labels
101	respday2	Weekday of second response		1 = Sunday 2 = Monday 3 = Tuesday 4 = Wednesday 5 = Thursday 6 = Friday 7 = Saturday

respday2	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	86	11.61	86	11.61
2	111	14.98	197	26.59
3	82	11.07	279	37.65
4	121	16.33	400	53.98
5	110	14.84	510	68.83
6	127	17.14	637	85.96
7	104	14.04	741	100
Frequency Missing = 12,925				

Var#	Variable Name	Variable Description	Variable Details	Value Labels
102	respmonth2	Month of second response		1 = January 2 = February 3 = March 4 = April 5 = May 6 = June 7 = July 8 = August 9 = September 10 = October 11 = November 12 = December – 9 = NA

respmonth2	Frequency	Percent	Cumulative Frequency	Cumulative Percent
6	1	0.13	1	0.13
7	359	48.45	360	48.58
8	162	21.86	522	70.45
9	187	25.24	709	95.68
10	32	4.32	741	100
Frequency Missing = 12,925				

Var#	Variable Name	Variable Description	Variable Details	Value Labels
103	resptime2	Time of second response	Put in Standard Time, XX:XX AM/PM	– 9 = NA

resptime2	Mean	Std Dev	Minimum	Maximum
	10:19:12 AM	9:07	12:00:00 AM	12:00:00 AM

Var#	Variable Name	Variable Description	Variable Details	Value Labels
104	respnmeinemail2	Housing provider's name in the "From" line	Record housing provider's name	– 9 = NA
105	respprovoth-name2	Housing provider's name in body of email	Record housing provider's name	– 9 = NA

Var#	Variable Name	Variable Description	Variable Details	Value Labels	Frequencies				
106	response3	Third response		1 = yes, received a second response 2 = automated response 3 = scam response – 9 = NA	response3	Frequency	Percent	Cumulative Frequency	Cumulative Percent
					1	108	90.76	108	90.76
					2	11	9.24	119	100
					Frequency Missing = 13,547				
107	respdate3	Date of third response	List actual date (e.g., 1 for 1st, 12 for 12th)	1-31, – 9=NA	respdate3	Frequency	Percent	Cumulative Frequency	Cumulative Percent
					1	1	0.84	1	0.84
					3	6	5.04	7	5.88
					4	2	1.68	9	7.56
					5	5	4.2	14	11.76
					6	1	0.84	15	12.61
					7	2	1.68	17	14.29
					8	4	3.36	21	17.65
					9	2	1.68	23	19.33
					10	1	0.84	24	20.17
					11	2	1.68	26	21.85
					12	1	0.84	27	22.69
					13	4	3.36	31	26.05
					14	2	1.68	33	27.73
					15	5	4.2	38	31.93
					16	6	5.04	44	36.97
					17	2	1.68	46	38.66
					18	7	5.88	53	44.54
					19	4	3.36	57	47.9
					20	10	8.4	67	56.3
					21	5	4.2	72	60.5
					22	2	1.68	74	62.18
					23	4	3.36	78	65.55
					24	6	5.04	84	70.59
					25	5	4.2	89	74.79
					26	7	5.88	96	80.67
					27	3	2.52	99	83.19
					28	7	5.88	106	89.08
					29	4	3.36	110	92.44
					30	3	2.52	113	94.96
					31	6	5.04	119	100
					Frequency Missing = 13,547				
108	respday3	Weekday of third response		1 = Sunday 2 = Monday 3 = Tuesday 4 = Wednesday 5 = Thursday 6 = Friday 7 = Saturday	respday3	Frequency	Percent	Cumulative Frequency	Cumulative Percent
					1	9	7.56	9	7.56
					2	23	19.33	32	26.89
					3	15	12.61	47	39.5
					4	22	18.49	69	57.98
					5	18	15.13	87	73.11
					6	15	12.61	102	85.71
					7	17	14.29	119	100
					Frequency Missing = 13,547				

Var#	Variable Name	Variable Description	Variable Details	Value Labels	Frequencies
109	respmonth3	Month of third response		1 = January 2 = February 3 = March 4 = April 5 = May 6 = June 7 = July 8 = August 9 = September 10 = October 11 = November 12 = December – 9 = NA	
110	resptime3	Time of third response	Put in Standard Time, XX:XX AM/PM	– 9 = NA	
111	respnmeinemail3	Housing provider's name in the "From" line	Record housing provider's name	– 9 = NA	
112	respemail3	Housing provider's email address in the "From" line	Record housing provider's email address	– 9 = NA	
113	respprovoth-name3	Housing provider's name in body of email	Record housing provider's name	– 9 = NA	
114	available1	Availability		1 = unit available 2 = unit not available 3 = housing provider not sure about availability – 9 = NA	
115	availdate1	Date of availability	List actual date (e.g., 1 for 1st, 12 for 12th)	1–31, – 9 = NA	

respmonth3

respmonth3	Frequency	Percent	Cumulative Frequency	Cumulative Percent
7	51	42.86	51	42.86
8	30	25.21	81	68.07
9	28	23.53	109	91.6
10	10	8.4	119	100
Frequency Missing = 13,547				

resptime3

resptime3	Mean	Std Dev	Minimum	Maximum
	4:19:12 PM	4:33	12:00:00 AM	12:00:00 AM

available1

available1	Frequency	Percent	Cumulative Frequency	Cumulative Percent
– 9	1,113	13.76	1,113	13.76
1	6,123	75.69	7,236	89.44
2	706	8.73	7,942	98.17
3	148	1.83	8,090	100
Frequency Missing = 5,576				

availdate1

availdate1	Frequency	Percent	Cumulative Frequency	Cumulative Percent
– 9	5816	94.99	5816	94.99
1	157	2.56	5973	97.55
2	14	0.23	5987	97.78
3	3	0.05	5990	97.83
4	5	0.08	5995	97.91
5	13	0.21	6008	98.12
6	3	0.05	6011	98.17
7	5	0.08	6016	98.25
8	12	0.2	6028	98.45
9	3	0.05	6031	98.5
10	19	0.31	6050	98.81
12	3	0.05	6053	98.86
13	1	0.02	6054	98.87
14	1	0.02	6055	98.89
15	20	0.33	6075	99.22
17	4	0.07	6079	99.28

Var#	Variable Name	Variable Description	Variable Details	Value Labels	Frequencies
115	availdate1 (continued)	Date of availability	List actual date (e.g., 1 for 1st, 12 for 12th)	1–31, – 9 = NA	

availdate1	Frequency	Percent	Cumulative Frequency	Cumulative Percent
19	5	0.08	6084	99.36
20	4	0.07	6088	99.43
21	3	0.05	6091	99.48
22	4	0.07	6095	99.54
23	6	0.1	6101	99.64
24	1	0.02	6102	99.66
25	4	0.07	6106	99.72
26	4	0.07	6110	99.79
28	1	0.02	6111	99.8
29	4	0.07	6115	99.87
30	2	0.03	6117	99.9
31	6	0.1	6123	100
Frequency Missing = 7,543				

Var#	Variable Name	Variable Description	Variable Details	Value Labels
116	availASAP1	avalabile as soon as possible?		1 = yes, mentioned 2 = no, NOT mentioned

availASAP1	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	162	2.65	162	2.65
2	5,961	97.35	6,123	100
Frequency Missing = 7,543				

Var#	Variable Name	Variable Description	Variable Details	Value Labels
117	availmonth1	Month of availability		1 = January 2 = February 3 = March 4 = April 5 = May 6 = June 7 = July 8 = August 9 = September 10 = October 11 = November 12 = December – 9 = NA

availmonth1	Frequency	Percent	Cumulative Frequency	Cumulative Percent
– 9	5,688	92.9	5,688	92.9
1	4	0.07	5,692	92.96
2	13	0.21	5,705	93.17
7	40	0.65	5,745	93.83
8	120	1.96	5,865	95.79
9	146	2.38	6,011	98.17
10	95	1.55	6,106	99.72
11	16	0.26	6,122	99.98
12	1	0.02	6,123	100
Frequency Missing = 7,543				

Var#	Variable Name	Variable Description	Variable Details	Value Labels
118	availsoon1	Another unit available soon		1 = provider indicated another unit will become available soon 2 = provider did NOT indicate another unit will become available soon

availsoon1	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	284	3.52	284	3.52
2	7,794	96.48	8,078	100
Frequency Missing = 5,588				

Var#	Variable Name	Variable Description	Variable Details	Value Labels
119	inspection1	Inspection		1 = invited to inspect 2 = NOT invited to inspect

Inspection1	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	5,811	71.83	5,811	71.83
2	2,279	28.17	8,090	100
Frequency Missing = 5,576				

Var#	Variable Name	Variable Description	Variable Details	Value Labels	Frequencies				
120	inspecttime1	Timeframe given to inspect unit		1 = anytime 2 = specify time provided (after ;) 3 = no timeframe given	Inspecttime1	Frequency	Percent	Cumulative Frequency	Cumulative Percent
					1	165	2.84	165	2.84
					2	3,397	58.46	3,562	61.3
					3	2,249	38.7	5,811	100
					Frequency Missing = 7,855				
121	contprov1	Contact provider		1 = advised to contact housing provider 2 = NOT advised to contact housing provider	contprov1	Frequency	Percent	Cumulative Frequency	Cumulative Percent
					1	4,333	53.56	4,333	53.56
					2	3,757	46.44	8,090	100
					Frequency Missing = 5,576				
122	rphone1	Phone number given in response		1 = yes 2 = no	rphone1	Frequency	Percent	Cumulative Frequency	Cumulative Percent
					1	5,517	68.2	5,517	68.2
					2	2,573	31.8	8,090	100
					Frequency Missing = 5,576				
123	rphonenum1	record phone number		(999)999–9999 = NA					
124	resprent1	Monthly rent in response		1 = yes, mentioned 2 = no, NOT mentioned	resprent1	Frequency	Percent	Cumulative Frequency	Cumulative Percent
					1	575	7.11	575	7.11
					2	7,515	92.89	8,090	100
					Frequency Missing = 5,576				
125	rentamt1r1	Rent amount in response		– 9 = NA	rentamt1r1	Mean	Std Dev	Minimum	Maximum
						863.22471	499.9101911	358	3,800
126	rentamt2r1	2nd Rent amount in response		– 9 = NA	rentamt2r1	Mean	Std Dev	Minimum	Maximum
						959.1266376	551.8941837	400	4,000
127	rentamt3r1	3rd Rent amount in response		– 9 = NA	rentamt3r1	Mean	Std Dev	Minimum	Maximum
						817.3478261	362.6475385	450	1,547
128	respbfee1	Broker fee in e-mail		1 = broker fee mentioned by provider 2 = broker fee NOT mentioned by provider	respbfee1	Frequency	Percent	Cumulative Frequency	Cumulative Percent
					1	12	0.15	12	0.15
					2	807,8	99.85	8,090	100
					Frequency Missing = 5,576				
129	respbfeeamt1	Amount of broker fee		– 9 = NA	respbfeeamt1	Mean	Std Dev	Minimum	Maximum
						.	.	.	.
130	appfee1	Application fee in response		1 = yes, mentioned 2 = no, NOT mentioned	appfee1	Frequency	Percent	Cumulative Frequency	Cumulative Percent
					1	197	2.44	197	2.44
					2	7,893	97.56	8,090	100
					Frequency Missing = 5,576				
131	appfeeamt1	Application fee amount		– 9 = NA	appfeeamt1	Mean	Std Dev	Minimum	Maximum
						37.7289017	52.4416151	0	545
132	secdeposit1	Security deposit in response		1 = yes, mentioned 2 = no, NOT mentioned	secdeposit1	Frequency	Percent	Cumulative Frequency	Cumulative Percent
					1	164	2.03	164	2.03
					2	7,926	97.97	8,090	100
					Frequency Missing = 5,576				
133	secdepamt1	Security deposit amount		– 9 = NA	secdepamt1	Mean	Std Dev	Minimum	Maximum
						310.4032258	381.8625177	0	2,800

Var#	Variable Name	Variable Description	Variable Details	Value Labels	Frequencies				
134	credchk1	Credit check mentioned in response		1 = yes, mentioned 2 = no, NOT mentioned	**credchk1**	**Frequency**	**Percent**	**Cumulative Frequency**	**Cumulative Percent**
					1	125	1.55	125	1.55
					2	7,965	98.45	8,090	100
					Frequency Missing = 5,576				
135	credchkfee1	Credit check fee mentioned in response		1 = yes, mentioned 2 = no, NOT mentioned	**credchkfee1**	**Frequency**	**Percent**	**Cumulative Frequency**	**Cumulative Percent**
					1	10	8	10	8
					2	115	92	125	100
					Frequency Missing = 13,541				
136	credchkfeeamt1	credit check fee amount in response		– 9 = NA	**credchkfeeamt1**	**Mean**	**Std Dev**	**Minimum**	**Maximum**
						33.5	15.6436	10	65
137	respfee1	Other fee in e-mail		1 = yes, mentioned 2 = no, NOT mentioned	**respfee1**	**Frequency**	**Percent**	**Cumulative Frequency**	**Cumulative Percent**
					1	112	1.38	112	1.38
					2	7,978	98.62	8,090	100
					Frequency Missing = 5,576				
138	respfeeamt1	Amount of other fee		– 9 = NA	**respfeeamt1**	**Mean**	**Std Dev**	**Minimum**	**Maximum**
						154.2989691	120.7887416	0	500
139	rentdiscount1	Rent discount offered in response		1 = yes, offered 2 = no, NOT offered	**rentdiscount1**	**Frequency**	**Percent**	**Cumulative Frequency**	**Cumulative Percent**
					1	179	2.21	179	2.21
					2	7,911	97.79	8,090	100
					Frequency Missing = 5,576				
140	lease1	Lease in response		1 = yes, a lease 2 = no, NO lease	**lease1**	**Frequency**	**Percent**	**Cumulative Frequency**	**Cumulative Percent**
					1	139	1.72	139	1.72
					2	7,951	98.28	8,090	100
					Frequency Missing = 5,576				
141	leaseterm1	Lease term		Accepts range, (XX–XX), – 9 = NA					
142	areaamen1	Area amenities mentioned in response		1 = yes, mentioned 2 = no, NOT mentioned	**areaamen1**	**Frequency**	**Percent**	**Cumulative Frequency**	**Cumulative Percent**
					1	209	2.58	209	2.58
					2	7,881	97.42	8,090	100
					Frequency Missing = 5,576				
143	areaamentyp1a	Amenities – schools		1 = yes, schools/good schools mentioned 2 = no, schools/good schools NOT mentioned	**areaamentyp1a**	**Frequency**	**Percent**	**Cumulative Frequency**	**Cumulative Percent**
					1	31	14.83	31	14.83
					2	178	85.17	209	100
					Frequency Missing = 13457				
144	areaamentyp1b	Amenities – transportation		1 = yes, transportation mentioned 2 = no, transportation NOT mentioned	**areaamentyp1b**	**Frequency**	**Percent**	**Cumulative Frequency**	**Cumulative Percent**
					1	97	46.41	97	46.41
					2	112	53.59	209	100
					Frequency Missing = 13,457				

Var#	Variable Name	Variable Description	Variable Details	Value Labels	Frequencies				
145	areaamentyp1c	Amenities – shopping		1 = yes, shopping mentioned 2 = no, shopping NOT mentioned	areaamentyp1c	Frequency	Percent	Cumulative Frequency	Cumulative Percent
					1	162	77.51	162	77.51
					2	47	22.49	209	100
					Frequency Missing = 13,457				
146	areaamentyp1d	Amenities – recreation (e.g. restaurants, parks, museums, etc.)		1 = yes, recreation mentioned 2 = no, recreation NOT mentioned	areaamentyp1d	Frequency	Percent	Cumulative Frequency	Cumulative Percent
					1	149	71.29	149	71.29
					2	60	28.71	209	100
					Frequency Missing = 13,457				
147	areaamentyp1e	Amenities – jobs		1 = yes, jobs mentioned 2 = no, jobs NOT mentioned	areaamentyp1e	Frequency	Percent	Cumulative Frequency	Cumulative Percent
					1	15	7.18	15	7.18
					2	194	92.82	209	100
					Frequency Missing = 13,457				
148	areaamentyp1f	Amenities – other		1 = yes, other mentioned 2 = no, other NOT mentioned	areaamentyp1f	Frequency	Percent	Cumulative Frequency	Cumulative Percent
					1	117	55.98	117	55.98
					2	92	44.02	209	100
					Frequency Missing = 13,457				
149	buildamen1	Building amenities mentioned in response (e.g., laundry facilities, WIFI, garage)		1=yes, mentioned 2=no, NOT mentioned	buildamen1	Frequency	Percent	Cumulative Frequency	Cumulative Percent
					1	432	5.34	432	5.34
					2	7,658	94.66	8,090	100
					Frequency Missing = 5,576				
150	raddress1	Address of unit given in response		1 = yes 2 = no	raddress1	Frequency	Percent	Cumulative Frequency	Cumulative Percent
					1	735	9.09	735	9.09
					2	7,355	90.91	8,090	100
					Frequency Missing = 5,576				
151	attachment1	E-mail attachment present		1 = yes 2 = no	attachment1	Frequency	Percent	Cumulative Frequency	Cumulative Percent
					1	254	3.14	254	3.14
					2	7,836	96.86	8,090	100
					Frequency Missing = 5,576				
152	forward1	Offer to forward email or email forwarded to others besides contact person		1 = yes 2 = no	forward1	Frequency	Percent	Cumulative Frequency	Cumulative Percent
					1	71	0.88	71	0.88
					2	8,019	99.12	8,090	100
					Frequency Missing = 5,576				
153	resp1quest1	Employment status		1 = yes, asked 2 = no, NOT asked	resp1quest1	Frequency	Percent	Cumulative Frequency	Cumulative Percent
					1	68	0.84	68	0.84
					2	8,022	99.16	8,090	100
					Frequency Missing = 5,576				
154	resp1quest2	Relationship status (e.g., married, divorced, partnered)		1 = yes, asked 2 = no, NOT asked	resp1quest2	Frequency	Percent	Cumulative Frequency	Cumulative Percent
					1	2	0.02	2	0.02
					2	8,088	99.98	8,090	100
					Frequency Missing = 5,576				

Var#	Variable Name	Variable Description	Variable Details	Value Labels	Frequencies				
155	resp1quest3	Presence of children		1 = yes, asked 2 = no, NOT asked	resp1quest3	Frequency	Percent	Cumulative Frequency	Cumulative Percent
					1	1	0.01	1	0.01
					2	8,089	99.99	8,090	100
					Frequency Missing = 5,576				
156	resp1quest4	Reason for moving		1 = yes, asked 2 = no, NOT asked	resp1quest4	Frequency	Percent	Cumulative Frequency	Cumulative Percent
					1	6	0.07	6	0.07
					2	8,084	99.93	8,090	100
					Frequency Missing = 5,576				
157	resp1quest5	Current residence		1 = yes, asked 2 = no, NOT asked	resp1quest5	Frequency	Percent	Cumulative Frequency	Cumulative Percent
					1	23	0.28	23	0.28
					2	8,067	99.72	8,090	100
					Frequency Missing = 5,576				
158	resp1quest6	Credit check		1 = yes, asked 2 = no, NOT asked	resp1quest6	Frequency	Percent	Cumulative Frequency	Cumulative Percent
					1	79	0.98	79	0.98
					2	8,011	99.02	8,090	100
					Frequency Missing = 5,576				
159	resp1quest7	Background check		1 = yes, asked 2 = no, NOT asked	resp1quest7	Frequency	Percent	Cumulative Frequency	Cumulative Percent
					1	54	0.67	54	0.67
					2	8,036	99.33	8,090	100
					Frequency Missing = 5,576				
160	resp1quest8	Whether application required before inspection		1 = yes, asked 2 = no, NOT asked	resp1quest8	Frequency	Percent	Cumulative Frequency	Cumulative Percent
					1	60	0.74	60	0.74
					2	8,030	99.26	8,090	100
					Frequency Missing = 5,576				
161	resp1quest9	Social Security number		1 = yes, asked 2 = no, NOT asked	resp1quest9	Frequency	Percent	Cumulative Frequency	Cumulative Percent
					1	8	0.1	8	0.1
					2	8,082	99.9	8,090	100
					Frequency Missing = 5,576				
162	resp1quest10	Income level		1 = yes, asked 2 = no, NOT asked	resp1quest10	Frequency	Percent	Cumulative Frequency	Cumulative Percent
					1	72	0.89	72	0.89
					2	8,018	99.11	8,090	100
					Frequency Missing = 5,576				
163	resp1quest11	Who is the unit for		1 = yes, asked 2 = no, NOT asked	resp1quest11	Frequency	Percent	Cumulative Frequency	Cumulative Percent
					1	54	0.67	54	0.67
					2	8,036	99.33	8,090	100
					Frequency Missing = 5,576				
164	resp1quest12	When are you looking to move		1 = yes, asked 2 = no, NOT asked	resp1quest12	Frequency	Percent	Cumulative Frequency	Cumulative Percent
					1	477	5.9	477	5.9
					2	7,613	94.1	8,090	100
					Frequency Missing = 5,576				

Var#	Variable Name	Variable Description	Variable Details	Value Labels	Frequencies				
165	resp1quest13	Do you have any pets		1 = yes, asked 2 = no, NOT asked	**resp1quest13**	**Frequency**	**Percent**	**Cumulative Frequency**	**Cumulative Percent**
					1	162	2	162	2
					2	7,928	98	8,090	100
					Frequency Missing = 5,576				
166	resp1quest14	Are you still interested		1 = yes, asked 2 = no, NOT asked	**resp1quest14**	**Frequency**	**Percent**	**Cumulative Frequency**	**Cumulative Percent**
					1	53	0.66	53	0.66
					2	8,037	99.34	8,090	100
					Frequency Missing = 5,576				
167	legalstatus1	Whether legal or illegal immigrant		1 = yes, asked 2 = no, NOT asked	**legalstatus1**	**Frequency**	**Percent**	**Cumulative Frequency**	**Cumulative Percent**
					1	3	0.04	3	0.04
					2	8,087	99.96	8,090	100
					Frequency Missing = 5,576				
168	cphone1	Tester's phone number		1 = yes, asked 2 = no, NOT asked	**cphone1**	**Frequency**	**Percent**	**Cumulative Frequency**	**Cumulative Percent**
					1	291	3.6	291	3.6
					2	7,799	96.4	8,090	100
					Frequency Missing = 5,576				
169	sexorient1	Tester's sexual orientation		1 = yes, asked 2 = no, NOT asked	**sexorient1**	**Frequency**	**Percent**	**Cumulative Frequency**	**Cumulative Percent**
					1	4	0.05	4	0.05
					2	8,086	99.95	8,090	100
					Frequency Missing = 5,576				
170	addunits1	Additional units		1 = informed of additional units 2 = NOT informed of additional units – 9 = NA	**addunits1**	**Frequency**	**Percent**	**Cumulative Frequency**	**Cumulative Percent**
					– 9	895	11.06	895	11.06
					1	999	12.35	1,894	23.41
					2	6,196	76.59	8,090	100
					Frequency Missing = 5576				
171	addunitaddress1	Additional unit address	list address information including house number and street address	– 9 = NA					
172	addunitcity1	Additional unit city/town	list city/town	– 9 = NA					
173	addunitst1	Additional unit state	list state	1 = AL 2 = AK 3 = AZ 4 = AR 5 = CA 6 = CO 7 = CT 8 = DC 9 = DE 10 = FL 11 = GA	**addunits1**	**Frequency**	**Percent**	**Cumulative Frequency**	**Cumulative Percent**
					– 9	885	88.59	885	88.59
					2	1	0.1	886	88.69
					3	13	1.3	899	89.99
					5	12	1.2	911	91.19
					6	12	1.2	923	92.39
					9	1	0.1	924	92.49
					10	9	0.9	933	93.39
					11	9	0.9	942	94.29
					21	1	0.1	943	94.39

Var#	Variable Name	Variable Description	Variable Details	Value Labels	Frequencies
173	addunitst1 (continued)	Additional unit state	list state	12 = HI 13 = ID 14 = IL 15 = IN 16 = IA 17 = KS 18 = KY 19 = LA 20 = ME 21 = MD 22 = MA 23 = MI 24 = MN 25 = MS 26 = MO 27 = MT 28 = NE 29 = NV 30 = NH 31 = NJ 32 = NM 33 = NY 34 = NC 35 = ND 36 = OH 37 = OK 38 = OR 39 = PA 40 = RI 41 = SC 42 = SD 43 = TN 44 = TX 45 = UT 46 = VT 47 = VA 48 = WA 49 = WV 50 = WI 51 = WY – 9 = NA	
174	addunitzip1	Additional unit Zip code	List first 5 digits of zip code in which unit is located		

addunits1	Frequency	Percent	Cumulative Frequency	Cumulative Percent
23	5	0.5	948	94.89
24	2	0.2	950	95.1
26	3	0.3	953	95.4
32	2	0.2	955	95.6
33	11	1.1	966	96.7
34	3	0.3	969	97
35	1	0.1	970	97.1
37	2	0.2	972	97.3
41	3	0.3	975	97.6
44	15	1.5	990	99.1
45	2	0.2	992	99.3
48	7	0.7	999	100
Frequency Missing = 12,667				

Var#	Variable Name	Variable Description	Variable Details	Value Labels	Frequencies
175	addunitzipsuff1	Additional unit Zip code optional suffix	List last 4 digits of zip code in which unit is located IF PROVIDED		
176	available2	Availability			

available2	Frequency	Percent	Cumulative Frequency	Cumulative Percent
– 9	189	25.51	189	25.51
1	513	69.23	702	94.74
2	36	4.86	738	99.6
3	3	0.4	741	100
Frequency Missing = 12,925				

177	availdate2	Date of availability	List actual date (e.g., 1 for 1st, 12 for 12th)	

availdate2	Frequency	Percent	Cumulative Frequency	Cumulative Percent
– 9	492	95.91	492	95.91
1	9	1.75	501	97.66
2	2	0.39	503	98.05
7	2	0.39	505	98.44
19	1	0.19	506	98.64
20	3	0.58	509	99.22
21	3	0.58	512	99.81
23	1	0.19	513	100
Frequency Missing = 13,153				

178	availASAP2	avalabile as soon as possible?		

availASAP2	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	12	2.34	12	2.34
2	501	97.66	513	100
Frequency Missing = 13,153				

179	availmonth2	Month of availability	1 = January 2 = February 3 = March 4 = April 5 = May 6 = June 7 = July 8 = August 9 = September 10 = October 11 = November 12 = December – 9 = NA

availmonth2	Frequency	Percent	Cumulative Frequency	Cumulative Percent
– 9	483	94.15	483	94.15
2	2	0.39	485	94.54
7	8	1.56	493	96.1
8	5	0.97	498	97.08
9	10	1.95	508	99.03
10	4	0.78	512	99.81
11	1	0.19	513	100
Frequency Missing = 13,153				

180	availsoon2	Another unit available soon	1 = provider indicated another unit will become available soon 2 = provider did NOT indicate another unit will become available soon

availsoon2	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	17	2.29	17	2.29
2	724	97.71	741	100
Frequency Missing = 12,925				

Var#	Variable Name	Variable Description	Variable Details	Value Labels	Frequencies				
181	inspection2	Inspection		1 = invited to inspect 2 = NOT invited to inspect	inspection2	Frequency	Percent	Cumulative Frequency	Cumulative Percent
					1	508	68.56	508	68.56
					2	233	31.44	741	100
					Frequency Missing = 12,925				
182	inspecttime2	Timeframe given to inspect unit		1 = anytime 2 = specify time provided (after ;) 3 = no timeframe given	inspecttime2	Frequency	Percent	Cumulative Frequency	Cumulative Percent
					1	16	3.15	16	3.15
					2	281	55.31	297	58.46
					3	211	41.54	508	100
					Frequency Missing = 13,158				
183	contprov2	Contact provider		1 = advised to contact housing provider 2 = NOT advised to contact housing provider	contprov2	Frequency	Percent	Cumulative Frequency	Cumulative Percent
					1	363	48.99	363	48.99
					2	378	51.01	741	100
					Frequency Missing = 12,925				
184	rphone2	Phone number given in response		1 = yes 2 = no	rphone2	Frequency	Percent	Cumulative Frequency	Cumulative Percent
					1	487	65.72	487	65.72
					2	254	34.28	741	100
					Frequency Missing = 12,925				
185	rphonenum2	record phone number		(999)999–9999 = NA					
186	resprent2	Monthly rent in response		1 = yes, mentioned 2 = no, NOT mentioned	resprent2	Frequency	Percent	Cumulative Frequency	Cumulative Percent
					1	46	6.21	46	6.21
					2	695	93.79	741	100
					Frequency Missing = 12,925				
187	rentamt1r2	Rent amount in response		– 9 = NA	rentamt1r2	Mean	Std Dev	Minimum	Maximum
						1088.83	916.5512001	389	5,353
188	rentamt2r2	2nd Rent amount in response		– 9 = NA	rentamt2r2	Mean	Std Dev	Minimum	Maximum
						858.2727273	467.6620769	434	2,135
189	rentamt3r2	3rd Rent amount in response		– 9 = NA	rentamt3r2	Mean	Std Dev	Minimum	Maximum
						837	265.8721497	649	1,025
190	respbfee2	Broker fee in e-mail		1 = broker fee mentioned by provider 2 = broker fee NOT mentioned by provider	resprent2	Frequency	Percent	Cumulative Frequency	Cumulative Percent
					1	2	0.27	2	0.27
					2	739	99.73	741	100
					Frequency Missing = 12,925				
191	respbfeeamt2	Amount of broker fee		– 9 = NA	respbfeeamt2	Mean	Std Dev	Minimum	Maximum
						.	.	.	.
192	appfee2	Application fee in response		1 = yes, mentioned 2 = no, NOT mentioned	resprent2	Frequency	Percent	Cumulative Frequency	Cumulative Percent
					1	13	1.75	13	1.75
					2	728	98.25	741	100
					Frequency Missing = 12,925				
193	appfeeamt2	Application fee amount		– 9 = NA	appfeeamt2	Mean	Std Dev	Minimum	Maximum
						23.8888889	25.5902542	0	75

Var#	Variable Name	Variable Description	Variable Details	Value Labels	Frequencies				
194	secdeposit2	Security deposit in response		1 = yes, mentioned 2 = no, NOT mentioned	secdeposit2	Frequency	Percent	Cumulative Frequency	Cumulative Percent
					1	8	1.08	8	1.08
					2	733	98.92	741	100
					Frequency Missing = 12925				
195	secdepamt2	Security deposit amount		– 9 = NA	secdepamt2	Mean	Std Dev	Minimum	Maximum
						248.8333333	233.5664074	87.5	550
196	credchk2	Credit check mentioned in response		1 = yes, mentioned 2 = no, NOT mentioned	credchk2	Frequency	Percent	Cumulative Frequency	Cumulative Percent
					1	3	0.4	3	0.4
					2	738	99.6	741	100
					Frequency Missing = 12,925				
197	credchkfee2	Credit check fee mentioned in response		1 = yes, mentioned 2 = no, NOT mentioned	credchkfee2	Frequency	Percent	Cumulative Frequency	Cumulative Percent
					2	3	100	3	100
					Frequency Missing = 13,663				
198	credchkfeeamt2	credit check fee amount in response		– 9 = NA	credchkfeeamt2	Mean	Std Dev	Minimum	Maximum
						.	.	.	.
199	respfee2	Other fee in e-mail		1 = yes, mentioned 2 = no, NOT mentioned	respfee2	Frequency	Percent	Cumulative Frequency	Cumulative Percent
					1	5	0.67	5	0.67
					2	736	99.33	741	100
					Frequency Missing = 12,925				
200	respfeeamt2	Amount of other fee		– 9 = NA	respfeeamt2	Mean	Std Dev	Minimum	Maximum
						190	149.3318452	20	300
201	rentdiscount2	Rent discount offered in response		1 = yes, offered 2 = no, NOT offered	rentdiscount2	Frequency	Percent	Cumulative Frequency	Cumulative Percent
					1	22	2.97	22	2.97
					2	719	97.03	741	100
					Frequency Missing = 12,925				
202	rentdisdesc2	Description of rent discount		– 9 = NA					
203	lease2	Lease in response		1 = yes, a lease 2 = no, NO lease	lease2	Frequency	Percent	Cumulative Frequency	Cumulative Percent
					1	11	1.48	11	1.48
					2	730	98.52	741	100
					Frequency Missing = 12,925				
204	leaseterm2	Lease term		Accepts range, (XX–XX), – 9 = NA					
205	areaamen2	Area amenities mentioned in response		1 = yes, mentioned 2 = no, NOT mentioned	areaamen2	Frequency	Percent	Cumulative Frequency	Cumulative Percent
					1	22	2.97	22	2.97
					2	719	97.03	741	100
					Frequency Missing = 12,925				
206	areaamentyp2a	Amenities – schools		1 = yes, schools/good schools mentioned 2 = no, schools/good schools NOT mentioned	areaamentyp2a	Frequency	Percent	Cumulative Frequency	Cumulative Percent
					1	4	18.18	4	18.18
					2	18	81.82	22	100
					Frequency Missing = 13,644				

Var#	Variable Name	Variable Description	Variable Details	Value Labels	Frequencies				
207	areaamentyp2b	Amenities – transportation		1 = yes, transportation mentioned 2 = no, transportation NOT mentioned	areaamentyp2b	Frequency	Percent	Cumulative Frequency	Cumulative Percent
					1	13	59.09	13	59.09
					2	9	40.91	22	100
					Frequency Missing = 13,644				
208	areaamentyp2c	Amenities – shopping		1 = yes, shopping mentioned 2 = no, shopping NOT mentioned	areaamentyp2c	Frequency	Percent	Cumulative Frequency	Cumulative Percent
					1	12	54.55	12	54.55
					2	10	45.45	22	100
					Frequency Missing = 13,644				
209	areaamentyp2d	"Amenities – recreation (e.g. restaurants, parks, museums, etc.)"		1 = yes, recreation mentioned 2 = no, recreation NOT mentioned	areaamentyp2d	Frequency	Percent	Cumulative Frequency	Cumulative Percent
					1	14	63.64	14	63.64
					2	8	36.36	22	100
					Frequency Missing = 13,644				
210	areaamentyp2e	Amenities – jobs		1 = yes, jobs mentioned 2 = no, jobs NOT mentioned	areaamentyp2e	Frequency	Percent	Cumulative Frequency	Cumulative Percent
					1	2	9.09	2	9.09
					2	20	90.91	22	100
					Frequency Missing = 13,644				
211	areaamentyp2f	Amenities – other		1 = yes, other mentioned 2 = no, other NOT mentioned	areaamentyp2f	Frequency	Percent	Cumulative Frequency	Cumulative Percent
					1	10	45.45	10	45.45
					2	12	54.55	22	100
					Frequency Missing = 13,644				
212	buildamen2	Building amenities mentioned in response (e.g., laundry facilities, WIFI, garage)		1 = yes, mentioned 2 = no, NOT mentioned	buildamen2	Frequency	Percent	Cumulative Frequency	Cumulative Percent
					1	34	4.59	34	4.59
					2	707	95.41	741	100
					Frequency Missing = 12,925				
213	raddress2	Address of unit given in response		1 = yes 2 = no	raddress2	Frequency	Percent	Cumulative Frequency	Cumulative Percent
					1	86	11.61	86	11.61
					2	655	88.39	741	100
					Frequency Missing = 12,925				
214	attachment2	E-mail attachment present		1 = yes 2 = no	attachment2	Frequency	Percent	Cumulative Frequency	Cumulative Percent
					1	33	4.45	33	4.45
					2	708	95.55	741	100
					Frequency Missing = 12,925				
215	forward2	Offer to forward email or email forwarded to others besides contact person		1 = yes 2 = no	forward2	Frequency	Percent	Cumulative Frequency	Cumulative Percent
					1	10	1.35	10	1.35
					2	731	98.65	741	100
					Frequency Missing = 12,925				
216	resp2quest1	Employment status		1 = yes, asked 2 = no, NOT asked	resp2quest1	Frequency	Percent	Cumulative Frequency	Cumulative Percent
					2	741	100	741	100
					Frequency Missing = 12,925				

Var#	Variable Name	Variable Description	Variable Details	Value Labels	Frequencies				
217	resp2quest2	Relationship status (e.g., married, divorced, partnered)		1 = yes, asked 2 = no, NOT asked	resp2quest2	Frequency	Percent	Cumulative Frequency	Cumulative Percent
					2	741	100	741	100
					Frequency Missing = 12,925				
218	resp2quest3	Presence of children		1 = yes, asked 2 = no, NOT asked	resp2quest3	Frequency	Percent	Cumulative Frequency	Cumulative Percent
					2	741	100	741	100
					Frequency Missing = 12,925				
219	resp2quest4	Reason for moving		1 = yes, asked 2 = no, NOT asked	resp2quest4	Frequency	Percent	Cumulative Frequency	Cumulative Percent
					2	741	100	741	100
					Frequency Missing = 12,925				
220	resp2quest5	Current residence		1 = yes, asked 2 = no, NOT asked	resp2quest5	Frequency	Percent	Cumulative Frequency	Cumulative Percent
					2	741	100	741	100
					Frequency Missing = 12925				
221	resp2quest6	Credit check		1 = yes, asked 2 = no, NOT asked	resp2quest6	Frequency	Percent	Cumulative Frequency	Cumulative Percent
					2	741	100	741	100
					Frequency Missing = 12,925				
222	resp2quest7	Background check		1 = yes, asked 2 = no, NOT asked	resp2quest7	Frequency	Percent	Cumulative Frequency	Cumulative Percent
					2	741	100	741	100
					Frequency Missing = 12,925				
223	resp2quest8	Whether application required before inspection		1 = yes, asked 2 = no, NOT asked	resp2quest8	Frequency	Percent	Cumulative Frequency	Cumulative Percent
					1	3	0.4	3	0.4
					2	738	99.6	741	100
					Frequency Missing = 12,925				
224	resp2quest9	Social Security number		1 = yes, asked 2 = no, NOT asked	resp2quest9	Frequency	Percent	Cumulative Frequency	Cumulative Percent
					2	741	100	741	100
					Frequency Missing = 12,925				
225	resp2quest10	Income level		1 = yes, asked 2 = no, NOT asked	resp2quest10	Frequency	Percent	Cumulative Frequency	Cumulative Percent
					2	741	100	741	100
					Frequency Missing = 12,925				
226	resp2quest11	Who is the unit for		1 = yes, asked 2 = no, NOT asked	resp2quest11	Frequency	Percent	Cumulative Frequency	Cumulative Percent
					1	2	0.27	2	0.27
					2	739	99.73	741	100
					Frequency Missing = 12,925				
227	resp2quest12	When are you looking to move		1 = yes, asked 2 = no, NOT asked	resp2quest12	Frequency	Percent	Cumulative Frequency	Cumulative Percent
					1	16	2.16	16	2.16
					2	725	97.84	741	100
					Frequency Missing = 12,925				

Var#	Variable Name	Variable Description	Variable Details	Value Labels	Frequencies				
228	resp2quest13	Do you have any pets		1 = yes, asked 2 = no, NOT asked	resp2quest13	Frequency	Percent	Cumulative Frequency	Cumulative Percent
					1	10	1.35	10	1.35
					2	731	98.65	741	100
					Frequency Missing = 12,925				
229	resp2quest14	Are you still interested		1 = yes, asked 2 = no, NOT asked	resp2quest14	Frequency	Percent	Cumulative Frequency	Cumulative Percent
					1	137	18.49	137	18.49
					2	604	81.51	741	100
					Frequency Missing = 12,925				
230	legalstatus2	Whether legal or illegal immigrant		1 = yes, asked 2 = no, NOT asked	legalstatus2	Frequency	Percent	Cumulative Frequency	Cumulative Percent
					2	741	100	741	100
					Frequency Missing = 12,925				
231	cphone2	Tester's phone number		1 = yes, asked 2 = no, NOT asked	cphone2	Frequency	Percent	Cumulative Frequency	Cumulative Percent
					1	25	3.37	25	3.37
					2	716	96.63	741	100
					Frequency Missing = 12,925				
232	sexorient2	Tester's sexual orientation		1 = yes, asked 2 = no, NOT asked	sexorient2	Frequency	Percent	Cumulative Frequency	Cumulative Percent
					1	1	0.13	1	0.13
					2	740	99.87	741	100
					Frequency Missing = 12,925				
233	addunits2	Additional units		1 = informed of additional units 2 = NOT informed of additional units – 9 = NA	addunits2	Frequency	Percent	Cumulative Frequency	Cumulative Percent
					– 9	91	12.28	91	12.28
					1	58	7.83	149	20.11
					2	592	79.89	741	100
					Frequency Missing = 12,925				
234	addunitaddress2	Additional unit address	list address information including house number and street address	– 9 = NA					
235	addunitcity2	Additional unit city/town	list city/town	– 9 = NA					
236	addunitst2	Additional unit state	list state	1 = AL 2 = AK 3 = AZ 4 = AR 5 = CA 6 = CO 7 = CT 8 = DC 9 = DE 10 = FL 11 = GA 12 = HI	addunitst2	Frequency	Percent	Cumulative Frequency	Cumulative Percent
					– 9	48	82.76	48	82.76
					3	2	3.45	50	86.21
					33	4	6.9	54	93.1
					44	4	6.9	58	100

Var#	Variable Name	Variable Description	Variable Details	Value Labels	Frequencies				
236	addunitst2 (continued)	Additional unit state	list state	13 = ID 14 = IL 15 = IN 16 = IA 17 = KS 18 = KY 19 = LA 20 = ME 21 = MD 22 = MA 23 = MI 24 = MN 25 = MS 26 = MO 27 = MT 28 = NE 29 = NV 30 = NH 31 = NJ 32 = NM 33 = NY 34 = NC 35 = ND 36 = OH 37 = OK 38 = OR 39 = PA 40 = RI 41 = SC 42 = SD 43 = TN 44 = TX 45 = UT 46 = VT 47 = VA 48 = WA 49 = WV 50 = WI 51 = WY – 9 = NA	addunitst2	Frequency	Percent	Cumulative Frequency	Cumulative Percent
					Frequency Missing = 13,608				
237	addunitzip2	Additional unit Zip code	List first 5 digits of zip code in which unit is located	99999 = NA					
238	addunitzipsuff2	Additional unit Zip code optional suffix	List last 4 digits of zip code in which unit is located IF PROVIDED	9999 = NA					

Var#	Variable Name	Variable Description	Variable Details	Value Labels	Frequencies
239	available3	Availability		1 = unit available 2 = unit not available 3 = housing provider not sure about availability – 9 = NA	

available3	Frequency	Percent	Cumulative Frequency	Cumulative Percent
– 9	46	38.66	46	38.66
1	66	55.46	112	94.12
2	7	5.88	119	100
Frequency Missing = 13547				

240	availdate3	Date of availability	List actual date (e.g., 1 for 1st, 12 for 12th)	1–31, – 9 = NA

availdate3	Frequency	Percent	Cumulative Frequency	Cumulative Percent
– 9	65	98.48	65	98.48
21	1	1.52	66	100
Frequency Missing = 13,600				

241	availASAP3	avalabile as soon as possible?		1 = yes, mentioned 2 = no, NOT mentioned

availASAP3	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	5	7.58	5	7.58
2	61	92.42	66	100
Frequency Missing = 13,600				

242	availmonth3	Month of availability		1 = January 2 = February 3 = March 4 = April 5 = May 6 = June 7 = July 8 = August 9 = September 10 = October 11 = November 12 = December – 9 = NA

availmonth3	Frequency	Percent	Cumulative Frequency	Cumulative Percent
– 9	65	98.48	65	98.48
10	1	1.52	66	100
Frequency Missing = 13,600				

243	availsoon3	Another unit available soon		1 = provider indicated another unit will become available soon 2 = provider did NOT indicate another unit will become available soon

availsoon3	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	3	2.52	3	2.52
2	116	97.48	119	100
Frequency Missing = 13,547				

244	inspection3	Inspection		1 = invited to inspect 2 = NOT invited to inspect

inspection3	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	59	49.58	59	49.58
2	60	50.42	119	100
Frequency Missing = 13,547				

245	inspecttime3	Timeframe given to inspect unit		1 = anytime 2 = specify time provided (after ;) 3 = no timeframe given

inspecttime3	Frequency	Percent	Cumulative Frequency	Cumulative Percent
2	34	57.63	34	57.63
3	25	42.37	59	100
Frequency Missing = 13,607				

Var#	Variable Name	Variable Description	Variable Details	Value Labels	Frequencies				
246	contprov3	Contact provider		1 = advised to contact housing provider 2 = NOT advised to contact housing provider	contprov3	Frequency	Percent	Cumulative Frequency	Cumulative Percent
					1	57	47.9	57	47.9
					2	62	52.1	119	100
					Frequency Missing = 13,547				
247	rphone3	Phone number given in response		1 = yes 2 = no	rphone3	Frequency	Percent	Cumulative Frequency	Cumulative Percent
					1	75	63.03	75	63.03
					2	44	36.97	119	100
					Frequency Missing = 13547				
248	rphonenum3	record phone number		(999)999–9999 = NA					
249	resprent3	Monthly rent in response		1 = yes, mentioned 2 = no, NOT mentioned	resprent3	Frequency	Percent	Cumulative Frequency	Cumulative Percent
					1	9	7.56	9	7.56
					2	110	92.44	119	100
					Frequency Missing = 13,547				
250	rentamt1r3	Rent amount in response		– 9 = NA	rentamt1r3	Mean	Std Dev	Minimum	Maximum
						1076.78	424.3079005	720	1895
251	rentamt2r3	2nd Rent amount in response		– 9 = NA	rentamt2r3	Mean	Std Dev	Minimum	Maximum
						2344	0	2344	2344
252	rentamt3r3	3rd Rent amount in response		– 9 = NA	rentamt3r3	Mean	Std Dev	Minimum	Maximum
						.	.	.	.
253	respbfee3	Broker fee in e-mail		1 = broker fee mentioned by provider 2 = broker fee NOT mentioned by provider	respbfee3	Frequency	Percent	Cumulative Frequency	Cumulative Percent
					2	119	100	119	100
					Frequency Missing = 13,547				
254	respbfeeamt3	Amount of broker fee		– 9 = NA	respbfeeamt3	Mean	Std Dev	Minimum	Maximum
						.	.	.	.
255	appfee3	Application fee in response		1 = yes, mentioned 2 = no, NOT mentioned	appfee3	Frequency	Percent	Cumulative Frequency	Cumulative Percent
					1	5	4.2	5	4.2
					2	114	95.8	119	100
					Frequency Missing = 13,547				
256	appfeeamt3	Application fee amount		– 9 = NA	appfeeamt3	Mean	Std Dev	Minimum	Maximum
						28.3333333	40.7226391	0	75
257	secdeposit3	Security deposit in response		1 = yes, mentioned 2 = no, NOT mentioned	appfee3	Frequency	Percent	Cumulative Frequency	Cumulative Percent
					1	4	3.36	4	3.36
					2	115	96.64	119	100
					Frequency Missing = 13,547				
258	secdepamt3	Security deposit amount		– 9 = NA	secdepamt3	Mean	Std Dev	Minimum	Maximum
						237.25	411.1572084	0	850
259	credchk3	Credit check mentioned in response		1 = yes, mentioned 2 = no, NOT mentioned	credchk3	Frequency	Percent	Cumulative Frequency	Cumulative Percent
					1	2	1.68	2	1.68
					2	117	98.32	119	100
					Frequency Missing = 13,547				

Var#	Variable Name	Variable Description	Variable Details	Value Labels	Frequencies				
260	credchkfee3	Credit check fee mentioned in response		1 = yes, mentioned 2 = no, NOT mentioned	credchk3	Frequency	Percent	Cumulative Frequency	Cumulative Percent
					2	2	100	2	100
					Frequency Missing = 13,664				
261	credchkfeeamt3	credit check fee amount in response		– 9 = NA	credchkfeeamt3	Mean	Std Dev	Minimum	Maximum
						.	.	.	.
262	respfee3	Other fee in e-mail		1 = yes, mentioned 2 = no, NOT mentioned	respfee3	Frequency	Percent	Cumulative Frequency	Cumulative Percent
					1	2	1.68	2	1.68
					2	117	98.32	119	100
					Frequency Missing = 13,547				
263	respfeeamt3	Amount of other fee		– 9 = NA	respfeeamt3	Mean	Std Dev	Minimum	Maximum
						99	0	99	99
264	rentdiscount3	Rent discount offered in response		1 = yes, mentioned 2 = no, NOT mentioned	rentdiscount3	Frequency	Percent	Cumulative Frequency	Cumulative Percent
					1	1	0.84	1	0.84
					2	118	99.16	119	100
					Frequency Missing = 13,547				
265	rentdisdesc3	Description of rent discount		– 9 = NA					
266	lease3	Lease in response		1 = yes, a lease 2 = no, NO lease	lease3	Frequency	Percent	Cumulative Frequency	Cumulative Percent
					1	3	2.52	3	2.52
					2	116	97.48	119	100
					Frequency Missing = 13,547				
267	leaseterm3	Lease term		Accepts range, (XX–XX), – 9 = NA					
268	areaamen3	Area amenities mentioned in response		1 = yes, mentioned 2 = no, NOT mentioned	areaamen3	Frequency	Percent	Cumulative Frequency	Cumulative Percent
					1	5	4.2	5	4.2
					2	114	95.8	119	100
					Frequency Missing = 13,547				
269	areaamentyp3a	Amenities – schools		1 = yes, schools/good schools mentioned 2 = no, schools/good schools NOT mentioned	areaamentyp3a	Frequency	Percent	Cumulative Frequency	Cumulative Percent
					1	1	20	1	20
					2	4	80	5	100
					Frequency Missing = 13,661				
270	areaamentyp3b	Amenities – transportation		1 = yes, transportation mentioned 2 = no, transportation NOT mentioned	areaamentyp3b	Frequency	Percent	Cumulative Frequency	Cumulative Percent
					1	4	80	4	80
					2	1	20	5	100
					Frequency Missing = 13,661				
271	areaamentyp3c	Amenities – shopping		1 = yes, shopping mentioned 2 = no, shopping NOT mentioned	areaamentyp3c	Frequency	Percent	Cumulative Frequency	Cumulative Percent
					1	4	80	4	80
					2	1	20	5	100
					Frequency Missing = 13,661				

Var#	Variable Name	Variable Description	Variable Details	Value Labels	Frequencies				
272	areaamentyp3d	Amenities – recreation (e.g. restaurants, parks, museums, etc.)		1 = yes, recreation mentioned 2 = no, recreation NOT mentioned	areaamentyp3d	Frequency	Percent	Cumulative Frequency	Cumulative Percent
					1	4	80	4	80
					2	1	20	5	100
					Frequency Missing = 13,661				
273	areaamentyp3e	Amenities – jobs		1 = yes, jobs mentioned 2 = no, jobs NOT mentioned	areaamentyp3e	Frequency	Percent	Cumulative Frequency	Cumulative Percent
					2	5	100	5	100
					Frequency Missing = 13,661				
274	areaamentyp3f	Amenities – other		1 = yes, other mentioned 2 = no, other NOT mentioned	areaamentyp3f	Frequency	Percent	Cumulative Frequency	Cumulative Percent
					2	5	100	5	100
					Frequency Missing = 13,661				
275	buildamen3	Building amenities mentioned in response (e.g., laundry facilities, WIFI, garage)		1 = yes, mentioned 2 = no, NOT mentioned	buildamen3	Frequency	Percent	Cumulative Frequency	Cumulative Percent
					1	13	10.92	13	10.92
					2	106	89.08	119	100
					Frequency Missing = 13,547				
276	raddress3	Address of unit given in response		1 = yes 2 = no	raddress3	Frequency	Percent	Cumulative Frequency	Cumulative Percent
					1	18	15.13	18	15.13
					2	101	84.87	119	100
					Frequency Missing = 13,547				
277	attachment3	E-mail attachment present		1 = yes 2 = no	attachment3	Frequency	Percent	Cumulative Frequency	Cumulative Percent
					1	10	8.4	10	8.4
					2	109	91.6	119	100
					Frequency Missing = 13,547				
278	forward3	Offer to forward email or email forwarded to others besides contact person		1 = yes 2 = no	forward3	Frequency	Percent	Cumulative Frequency	Cumulative Percent
					1	1	0.84	1	0.84
					2	118	99.16	119	100
					Frequency Missing = 13,547				
279	resp3quest1	Employment status		1 = yes, asked 2 = no, NOT asked	resp3quest1	Frequency	Percent	Cumulative Frequency	Cumulative Percent
					2	119	100	119	100
					Frequency Missing = 13,547				
280	resp3quest2	Relationship status (e.g., married, divorced, partnered)		1 = yes, asked 2 = no, NOT asked	resp3quest2	Frequency	Percent	Cumulative Frequency	Cumulative Percent
					2	119	100	119	100
					Frequency Missing = 13,547				
281	resp3quest3	Presence of children		1 = yes, asked 2 = no, NOT asked	resp3quest3	Frequency	Percent	Cumulative Frequency	Cumulative Percent
					2	119	100	119	100
					Frequency Missing = 13,547				
282	resp3quest4	Reason for moving		1 = yes, asked 2 = no, NOT asked	resp3quest4	Frequency	Percent	Cumulative Frequency	Cumulative Percent
					2	119	100	119	100
					Frequency Missing = 13,547				

Var#	Variable Name	Variable Description	Variable Details	Value Labels	Frequencies				
283	resp3quest5	Current residence		1 = yes, asked 2 = no, NOT asked	**resp3quest5**	**Frequency**	**Percent**	**Cumulative Frequency**	**Cumulative Percent**
					2	119	100	119	100
					Frequency Missing = 13,547				
284	resp3quest6	Credit check		1 = yes, asked 2 = no, NOT asked	**resp3quest6**	**Frequency**	**Percent**	**Cumulative Frequency**	**Cumulative Percent**
					2	119	100	119	100
					Frequency Missing = 13,547				
285	resp3quest7	Background check		1 = yes, asked 2 = no, NOT asked	**resp3quest7**	**Frequency**	**Percent**	**Cumulative Frequency**	**Cumulative Percent**
					2	119	100	119	100
					Frequency Missing = 13,547				
286	resp3quest8	Whether application required before inspection		1 = yes, asked 2 = no, NOT asked	**resp3quest8**	**Frequency**	**Percent**	**Cumulative Frequency**	**Cumulative Percent**
					1	1	0.84	1	0.84
					2	118	99.16	119	100
					Frequency Missing = 13,547				
287	resp3quest9	Social Security number		1 = yes, asked 2 = no, NOT asked	**resp3quest9**	**Frequency**	**Percent**	**Cumulative Frequency**	**Cumulative Percent**
					2	119	100	119	100
					Frequency Missing = 13,547				
288	resp3quest10	Income level		1 = yes, asked 2 = no, NOT asked	**resp3quest10**	**Frequency**	**Percent**	**Cumulative Frequency**	**Cumulative Percent**
					2	119	100	119	100
					Frequency Missing = 13,547				
289	resp3quest11	Who is the unit for		1 = yes, asked 2 = no, NOT asked	**resp3quest11**	**Frequency**	**Percent**	**Cumulative Frequency**	**Cumulative Percent**
					1	1	0.84	1	0.84
					2	118	99.16	119	100
					Frequency Missing = 13,547				
290	resp3quest12	When are you looking to move		1 = yes, asked 2 = no, NOT asked	**resp3quest112**	**Frequency**	**Percent**	**Cumulative Frequency**	**Cumulative Percent**
					1	1	0.84	1	0.84
					2	118	99.16	119	100
					Frequency Missing = 13,547				
291	resp3quest13	Do you have any pets		1 = yes, asked 2 = no, NOT asked	**resp3quest113**	**Frequency**	**Percent**	**Cumulative Frequency**	**Cumulative Percent**
					1	1	0.84	1	0.84
					2	118	99.16	119	100
					Frequency Missing = 13,547				
292	resp3quest14	Are you still interested		1 = yes, asked 2 = no, NOT asked	**resp3quest114**	**Frequency**	**Percent**	**Cumulative Frequency**	**Cumulative Percent**
					1	35	29.41	35	29.41
					2	84	70.59	119	100
					Frequency Missing = 13,547				
293	legalstatus3	Whether legal or illegal immigrant		1 = yes, asked 2 = no, NOT asked	**legalstatus3**	**Frequency**	**Percent**	**Cumulative Frequency**	**Cumulative Percent**
					2	119	100	119	100
					Frequency Missing = 13,547				

Var#	Variable Name	Variable Description	Variable Details	Value Labels	Frequencies
294	cphone3	Tester's phone number		1 = yes, asked 2 = no, NOT asked	

cphone3	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	1	0.84	1	0.84
2	118	99.16	119	100
Frequency Missing = 13,547				

Var#	Variable Name	Variable Description	Variable Details	Value Labels	Frequencies
295	sexorient3	Tester's sexual orientation		1 = yes, asked 2 = no, NOT asked	

sexorient3	Frequency	Percent	Cumulative Frequency	Cumulative Percent
2	119	100	119	100
Frequency Missing = 13,547				

Var#	Variable Name	Variable Description	Variable Details	Value Labels	Frequencies
296	addunits3	Additional units		1 = informed of additional units 2 = NOT informed of additional units – 9 = NA	

addunits3	Frequency	Percent	Cumulative Frequency	Cumulative Percent
– 9	19	15.97	19	15.97
1	12	10.08	31	26.05
2	88	73.95	119	100
Frequency Missing = 13547				

Var#	Variable Name	Variable Description	Variable Details	Value Labels	Frequencies
297	addunitaddress3	Additional unit address	list address information including house number and street address	– 9 = NA	
298	addunitcity3	Additional unit city/town	list city/town	– 9 = NA	
299	addunitst3	Additional unit state	list state	1 = AL 2 = AK 3 = AZ 4 = AR 5 = CA 6 = CO 7 = CT 8 = DC 9 = DE 10 = FL 11 = GA 12 = HI 13 = ID 14 = IL 15 = IN 16 = IA 17 = KS 18 = KY 19 = LA 20 = ME 21 = MD 22 = MA 23 = MI 24 = MN 25 = MS 26 = MO 27 = MT 28 = NE	

addunitst3	Frequency	Percent	Cumulative Frequency	Cumulative Percent
– 9	9	75	9	75
44	3	25	12	100

Var#	Variable Name	Variable Description	Variable Details	Value Labels	Frequencies				
299	addunitst3 (continued)	Additional unit state	list state	29 = NV 30 = NH 31 = NJ 32 = NM 33 = NY 34 = NC 35 = ND 36 = OH 37 = OK 38 = OR 39 = PA 40 = RI 41 = SC 42 = SD 43 = TN 44 = TX 45 = UT 46 = VT 47 = VA 48 = WA 49 = WV 50 = WI 51 = WY – 9 = NA	addunitst3	Frequency	Percent	Cumulative Frequency	Cumulative Percent
					Frequency Missing = 13,654				
300	addunitzip3	Additional unit Zip code	List first 5 digits of zip code in which unit is located	99999 = NA					
301	addunitzipsuff3	Additional unit Zip code optional suffix	List last 4 digits of zip code in which unit is located IF PROVIDED	9999 = NA					
302	respdum	Recode of respnum (binary)	if respnum > 0 then respdum = 1, otherwise 0.	0 = No Response 1 = One or more Responses	respdum	Frequency	Percent	Cumulative Frequency	Cumulative Percent
					0	5576	40.8	5576	40.8
					1	8090	59.2	13666	100
303	mt1resp	Recode of respnum, (2+ responses)	if respnum > = 2 then respdum = 1, otherwise 0.	0 = Less than 2 Responses 1 = 2 or More Responses	mt1resp	Frequency	Percent	Cumulative Frequency	Cumulative Percent
					0	12925	94.58	12925	94.58
					1	741	5.42	13666	100
304	inspectdum	Recode of inspection1	if inspection1 = 1 then inspectdum = 1, otherwise 0.	0 = Inspection mentioned in first response 1 = Inspection mentioned in 1st response	inspectdum	Frequency	Percent	Cumulative Frequency	Cumulative Percent
					0	7855	57.48	7855	57.48
					1	5811	42.52	13666	100
305	contprdum	Recode of contprov1	if contprov1 = 1 then contprdum = 1, otherwise 0.	0 = Not asked to Contact the provider in first reseponse 1 = Asked to Contact the provider in first response	contprdum	Frequency	Percent	Cumulative Frequency	Cumulative Percent
					0	9333	68.29	9333	68.29
					1	4333	31.71	13666	100

Var#	Variable Name	Variable Description	Variable Details	Value Labels	Frequencies
306	avail1dum	Recode of available1	if available1 = 1 then avail1dum = 1, otherwise 0.	0 = Unit NOT available in first response 1 = Unit available in first response	
307	stratanew	Recode of Strata		1 = small/medium (100,000 to to 3999,999) 2 = medium-to-large (400,000 to 749,999) 3 = large (750,000 to 1,499,999) 4 = very large (1,500,000 to 4,999,999) 5 = largets (5,000,000 or more)	

avail1dum	Frequency	Percent	Cumulative Frequency	Cumulative Percent
0	7543	55.2	7543	55.2
1	6123	44.8	13666	100

stratanew	Frequency	Percent	Cumulative Frequency	Cumulative Percent
1	492	3.6	492	3.6
2	1006	7.36	1498	10.96
3	1520	11.12	3018	22.08
4	7048	51.57	10066	73.66
5	3600	26.34	13666	100

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June 2013