EXTRA-JUDICIAL EVICTIONS AND CHANGING LANDLORD STRATEGIES IN RESPONSE TO THE EVICTION MORATORIUM

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ABSTRACT

Eviction moratoria were put in place in numerous jurisdictions to help reduce the public health crisis of the pandemic. The restrictions of pursuing formal, judicial evictions, some activists and policymakers worried, may have led to a change in landlord tactics in which they attempt to remove tenants through informal means. An assessment of whether landlords did, in fact, substitute extra-judicial evictions for the formal filings proscribed by moratoria, is hampered by the difficulties in measuring informal eviction actions. We rely on call data to a statewide tenants' support group in Minnesota to indirectly measure both formal and informal evictions in the Minneapolis-Saint Paul metropolitan area before, during, and after the statewide moratorium on evictions initiated in 2020. We find no evidence of a substitution effect. That is, although calls related to formal evictions declined during the moratorium, there was no commensurate rise in the incidence of calls related to informal evictions. The data indicate, however, that landlords continued to pursue formal evictions, though at a lower rate, throughout the moratorium, and that the rate of calls related to formal eviction filings post-moratorium was great enough to bring aggregate calls to a level that would have occurred in the absence of a moratorium. Landlords seeking to remove tenants seemed to have pursued, in effect, two strategies, ignoring the moratorium for a significant number of cases, and waiting out the moratorium in other cases, that together likely made a shift to informal evictions unnecessary.

INTRODUCTION

The COVID-19 pandemic created a critical housing situation for many lower-income households. Illness or the economic dislocations produced by the pandemic interrupted the earnings of millions. Renters especially were faced with the prospect of being forced from their homes through eviction if and when they fell behind on rent. Moreover, the potential for families to be homeless was seen additionally as a public health issue during a pandemic when increased exposure could readily lead to increasing infection and death rates. In this environment, local, state, and federal authorities responded by issuing eviction moratoria of different types and providing emergency rental assistance to keep families in their homes (Benfer et al. 2022).

The various forms of eviction moratoria were aimed at constraining landlords from pursuing formal eviction proceedings against tenants during this period of crisis. Previous research, however, has pointed to the importance of techniques of *informal eviction* utilized by landlords to force tenants from their housing (Hartman and Robinson 2003; Bucholtz 2021; Desmond et al. 2015). Informal eviction techniques include a range of landlord actions that are designed to push out a tenant but that do not include the formal filing of an eviction notice. Such landlord practices are difficult to track because, unlike formal evictions, there is no document trail. Previous research provides widely different estimates of how prevalent informal eviction actions are, from a fraction of formal evictions, to a magnitude five times greater than the rate of formal evictions. Regardless of the precise rate, researchers agree that informal evictions are an important part of the landlord tenant relationship, and that the pandemic restrictions on moratoriums did not, by definition, regulate the informal ways that landlords generate tenant move-outs. In this paper we examine tenant helpline calls to estimate the impact of the state of Minnesota's eviction moratorium on both formal and informal eviction activity.

The CARES Act halted eviction filings for nonpayment of rent in federally subsidized housing between March 27 and July 25, 2020 (116th U.S. Congress, 2020). Following the CARES Act, the federal Centers for Disease Control (CDC) issued a broader, national moratorium on September 1, 2020 (NLIHC, 2021a). Originally set to expire on December 31, Congress extended it for one month to January of 2021 and then President Biden extended it through July of that year. This moratorium protected tenants in most rental properties from eviction due to non-payment of rent (NLIHC, 2021a). The CDC moved to issue a new moratorium in August 2021, applicable only to counties with high COVID-19 transmission rates. However, the real estate industry challenged this order, and Courts overturned it later that same month (Shatz and Ramey, 2021).

The Governor of Minnesota issued an executive order in March of 2020 imposing an eviction moratorium that was more comprehensive than the federal ones (NLIHC, 2021b), suspending eviction filings for both non-payment of rent and lease violations. Exceptions applied only in cases where the tenant posed a serious safety threat to others or engaged in criminal activity (State of Minnesota, 2020). The Minnesota moratorium lasted from March 2020 through July of 2021, a period of 16 months. The Minnesota moratorium ended in phases. In July, evictions were allowed for lease violations but not for non-payment of rent. In August, landlords could evict tenants for non-payment of rent if the tenant was eligible for rental assistance but hadn't applied, or if tenants didn't provide needed information to process their application. In September, landlords could proceed with eviction actions even if the tenant had a pending rental assistance application, as long as the 15-day notice was given. The final eviction protections applied in cases of non-payment by eligible tenants with a pending COVID-19 emergency rental assistance application. Those protections expired June 1, 2022.

Eviction moratoria did much to alleviate the concerns of tenants and their advocates that families would be thrust out of their homes during the pandemic. At the same time, however, reports of landlords filing evictions whenever possible[1] and making faulty claims to evict tenants (see, e.g., Morgenson 2020; Nesterak, 2020; Strickler, 2022; U.S. House of Representatives, 2022) were an ongoing concern. Moreover, evidence suggested that landlords were resorting to other means to move renters out of units, that instead of pursuing formal eviction proceedings through the Courts, landlords were pushing out renters through other *extra-judicial, or informal* means. Minnesota's Attorney General's Office received 400 complaints regarding these tactics within the first two months of the moratorium (Evans, 2020). The study of informal evictions, however, is extremely difficult because of the lack of administrative paper trail and the lack of such research has been an ongoing obstacle to designing comprehensive public policies related to forced displacement (Hartman and Robinson 2003; Hepburn 2024). This study assesses how the eviction moratorium affected the rate at which tenants reported concerns about formal and informal evictions across the Minneapolis-Saint Paul region of Minnesota.

LITERATURE REVIEW

Landlords can force tenants out in two ways: formally through the court system, or informally outside of court (Desmond, 2016). Formal evictions are multi-stage legal proceedings. Landlords first file an eviction case with the court, followed by a hearing on the case. If the court rules in the landlord's favor, they issue an eviction judgment allowing law enforcement to remove the tenant. Informal evictions, on the other hand, occur when a landlord pressures a tenant to leave

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[1] States adopted and interpreted the federal moratoria differently (Benfer et al. 2022), which allowed landlords to file evictions in some locations. For instance, Tennessee allowed eviction filings to proceed during the CDC moratorium, while Georgia permitted cases to reach judgment but delayed enforcement until the moratorium was lifted. In Minnesota, eviction filings were not allowed.

without going to court. Landlords use tactics like issuing notices to vacate, changing locks, shutting off utilities, neglecting property maintenance to make the tenant's life difficult and forcing them to move (Du, 2023; Kelly, 2022; Penzenstadler and Salman, 2020; Sledge, 2020; Super, 2011). Formal and informal eviction processes are not mutually exclusive and can happen simultaneously. Evidence suggests that, during the Covid-19 eviction moratorium, some landlords resorted to informal eviction strategies as the formal eviction path was banned (Penzenstadler and Salman, 2020; Sledge, 2020).

Research on evictions has expanded significantly over the past 10 years, reflecting both the prevalence of eviction in the lives of lower-income renters, and the impact that it has not just on housing stability but on multiple dimensions of well-being (see, e.g., Hoke and Boen, 2021; Gottlieb and Moose, 2018; Desmond and Kimbro, 2015). Estimates of the prevalence of eviction vary depending on data used and measurement technique, but all empirical evidence points to eviction as a significant factor inducing forced relocation for a large percentage of renters (see e.g., Lundberg and Donnelly 2019; Bucholtz 2021; Gromis and Desmond 2021). Gromis et al (2022) calculate that landlords filed for eviction more than 3.6 million times a year on average between 2000 and 2018. There is some evidence the fewer evictions cases were filed in the first year of the pandemic (Hepburn et al. 2021), though, as noted, there were high-profile cases of large landlords who kept filing evictions when the moratorium was in place (Morgenson, 2020; Strickler, 2022; U.S. House of Representatives, 2022).

Race is a particularly important factor in evictions. Desmond and Schollenberg (2015), for example, show that eviction rates are higher for Latino and Black tenants compared to white tenants (2021). Robinson and Steil (2020) find that eviction filings are more likely in neighborhoods with a higher share of Black renters, and lower average educational attainment (see

also Teresa and Howell 2021; Hepburn et al. 2020; Teresa 2018; Nelson et al. 2021; Harrison et al. 2021 on the importance of race at the neighborhood level). Tenant protections can reduce the incidence of evictions (Gromis et al. 2022) but are ineffective in reducing the racial disparities that characterize evictions (Merritt and Farnworth 2021). The COVID-19 pandemic's Emergency Rental Assistance (ERA) program aimed to help low-income renters avoid eviction for nonpayment (Reina et al., 2021). While quantitative studies haven't shown a clear reduction in eviction filings linked to ERA (Collinson et al., 2024), qualitative evidence suggests it helped some renters avoid eviction (NLIHC et al., 2023).

Eviction rates also vary by type of landlord. Several studies have shown that larger, corporate landlords file more evictions on a per unit basis than other landlords (Gomory 2022; Immergluck et al. 2019; Decker 2021; Leung et al 2021). Raymond et al. (2018) report that corporate evictions in single-family rentals in Atlanta are spatially concentrated and reflect a strategy that is at least partially based on neighborhood characteristics. Seymour (2022) studied the Las Vegas metropolitan area and found higher eviction rates for extended-stay apartments, a pattern that intensified during the pandemic.

Evictions serve a range of objectives for landlords. Some engage in serial evictions - repeated filings against the same tenants - as a means of rent and fee collection (Leung et al. 2020). Interviews with more than 100 landlords (Garboden and Rosen, 2019), for example, revealed that landlords frequently attempt to avoid costly court proceedings necessary to force evictions and rely instead on "the serial threat of eviction" through repeated filings to produce the tenant behavior they desire. Using rent arrearages to redefine renters as debtors, landlords take advantage of public policies around debt and debt collection to discipline renters and establish a power imbalance. A debt-based strategy also increases the power imbalance between landlords and

tenants and provides a legal pretext to remove tenants for any reason, reducing the likelihood that tenants will exercise their legal rights regarding housing quality or terms of occupancy. Serial evictions illustrate the sometimes porous boundary between formal and informal evictions. When landlords establish the serial threat of eviction they are creating the conditions for successful informal eviction (Garboden and Rosen, 2019).

Landlords also resort to a series of other actions, short of a formal eviction filing, designed to produce tenant turnover. Referred to as informal or extra-judicial evictions, these actions take place outside of the formal court process. Research on the prevalence of informal eviction is hindered, however, by the lack of agreement about which types of landlord behavior can be regarded as intending to displace tenants, and even where there is agreement, a lack of systematic data on those behaviors. Nevertheless, the research that exists on informal eviction indicates that it is a significant factor in tenant turnover and displacement (Desmond 2012; Bucholtz 2021) and might be as much as twice as prevalent as formal evictions (Desmond and Schollenberger 2015). AHS data from 2017 indicate that informal evictions accounted for 72 percent of forced moves among renters though Gromis and Desmond (2021) regard this as a likely overestimation of the phenomenon. Earlier research by Desmond and Shollenberger (2015) put the ratio at two to one, informal to formal. Collyer and Bussmann-Copp (2019) estimated the opposite - two formal evictions for every informal one, while Aiken et al. (2022) estimated a roughly equal prevalence of the two. The range in estimates is likely due to different data sources and variation in tenant-landlord regulations across housing markets that prohibit or sanction certain landlord actions.

While the difficulty in directly measuring informal eviction and the variance in the estimated prevalence of the phenomenon suggest caution regarding approximating precise levels, it is clear that informal eviction is an important phenomenon resulting in the forced relocation of

many tenants. Our understanding of tenant displacement and our ability to design public policy to address the problems associated with it, are incomplete without a better understanding of informal evictions (Hepburn 2024). If informal evictions are in fact a significant option for many landlords, then controls (moratoria) on formal evictions, as were imposed in the first year of the COVID-19 pandemic, must be seen as only a partial solution to the problem of tenant displacement. A research question worth examining is whether landlords come to rely upon informal evictions at a greater rate when their reliance on formal eviction is constrained by public policy. It is that question which we address in this research.

DATA AND METHODS

Our research site is the Minneapolis-Saint Paul metropolitan area where a statewide eviction moratorium was established by the Governor on March 23, 2020. This Executive Order remained in force until a phase out began in August of 2021, a period of 17 months. We track the prevalence of formal and informal eviction before, during, and after the moratorium period to test the hypothesis that landlords shifted to informal eviction methods during the moratorium when their ability to pursue formal evictions was constrained.

Quantifying informal evictions is difficult because of the lack of administrative data. In this research we study the phenomenon indirectly by measuring the call volume to a tenant support organization and tracking the rate at which tenants call with concerns about formal and informal evictions.

HOME Line[2] is a nonprofit statewide tenant advocacy organization in Minnesota and operates a toll-free tenant hotline. Each call received by HOME Line is coded by staff members according to the issue or issues raised by the caller (tenant). By tracking the volume of calls across

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[2] The authors would like to thank HOME Line for making their data available for this analysis.

issues and over time, we can assess whether the COVID-19 moratorium changed the frequency with which tenants were concerned about formal and informal evictions. We utilize HOME Line call data in the Minneapolis-St. Paul metropolitan area from 2014 through the end of 2022 in this analysis.

Formal And Informal Eviction Calls

HOME Line uses more than 50 different codes to categorize calls. Some calls, such as those about infestations or energy assistance, pets, and privacy reflect tenant concerns that are not about potential displacement and/or eviction. One of the codes used by HOME Line staff is "eviction." This code is used when the caller indicates that they are facing a formal eviction proceeding, thus calls coded eviction were used as our measure of formal eviction. After consultation with HOME Line staff, we divided the rest of the calls into two categories – informal eviction, and other. The following six call categories were coded as informal eviction calls: (1) retaliation; (2) lockout; (3) improper notice; (4) non-renewal of lease; (5) notice to vacate; (6) security deposit.[3]

The codes "notice to vacate" and "security deposit" were categories that HOME Line staff indicated *sometimes* contained tenant concerns that were displacement related. In the estimation of HOME Line staff, for example, "security deposit" calls were for the most part *not* about informal eviction, but that a non-trivial percentage of them was in fact, triggered by a displacement action on the part of the landlord and the tenant's concern about being able to get back her/his deposit. The "notice to vacate" category, through December 31, 2020, contained both tenant notices to

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[3] Among the 100,634 calls received by HOME Line between 2014 and 2022, 1.8% were related to retaliation, 1.2% to lockouts, 0.3% to improper notices, 1.0% to non-renewals of leases, 10.1% to notices to vacate, and 9.2% to security deposit issues. A single call can have multiple codes; for example, a call might be related to both retaliation and lockouts.

landlords about their intent to vacate, and landlord notices to tenants to vacate the property. Beginning in 2021, HOME Line separated the two into different coding categories.

To estimate the proportion of "security deposit" and "notice to vacate" calls that were related to informal evictions, we selected and analyzed a random sample of calls in those two categories. Two hundred "security deposit" calls over the entire time period of our study and two hundred "notice to vacate" calls from January 1, 2014, through December 31, 2020, were examined. Full case notes were reviewed to determine which of these calls were about informal eviction actions on the part of the landlord.

The analysis indicated that 9% of security deposit calls were related to informal eviction actions. We applied that percentage as a weight to each security deposit call over the full period of the study. The analysis also showed that from 2014 through the end of 2020, 65% of the "notice to vacate" calls were about landlord-initiated notices. Thus, this percentage was applied to these calls from 2014 through the end of 2020. From January 1, 2021, landlord notice to vacate was a separate coded category for HOME Line and thus 100% of those calls were counted as informal eviction calls.

Limits Of Call Data

We use data on tenant calls about eviction (formal and informal) as a proxy measure. However, as with 311 calls (White and Trump, 2018; Wheeler, 2018), these data are likely influenced by factors such as neighborhood conditions, people's awareness of the hotline, and their propensity to call when they experience a problem. Call data will overstate the prevalence of eviction actions if tenants are misinformed about their landlords actions or are misinterpreting behavior of their landlords when they call. It is possible that some of the calls are made by tenants who are not, in fact, facing an eviction action, formal or informal, despite their understanding of

the situation. It is also possible that some renters call numerous times for one landlord-initiated eviction attempt, potentially inflating the data.

On the other hand, there are reasons to expect that the tenant hotline calls underestimate the prevalence of formal and informal eviction actions either because some percentage of tenants simply do not seek assistance or are unaware of the existence of the hotline. We lack additional information that could help determine the degree to which calls overstate or understate conditions faced by tenants, or whether this bias changes over time. Despite these limitations, the continuous, detailed, and geographically linked nature of call data offers a unique perspective on informal evictions.

It is also the case that some portion of calls that were coded as "formal eviction" by HOME Line staff were about threatened eviction and not an actual filing. Landlords may threaten a tenant with eviction for many reasons. One set of reasons would be to change the tenant's behavior, to either encourage payment of an overdue rent or to correct a lease violation. In these cases there is no immediate intention to force the tenant out; on the contrary they are aimed at correcting conditions so that the tenant may continue occupancy. However, another potential reason to threaten eviction is to encourage the tenant to move immediately to avoid having a formal eviction on the record. This type of eviction threat is best understood as another form of informal eviction and means that at least some calls we count as formal eviction calls in our database are about informal eviction actions.

It is possible to examine the extent to which tenant calls reflect landlord behavior related to formal evictions. We do so by regressing monthly eviction filings on monthly formal eviction calls to assess the degree to which calls track actual eviction events The results, presented in the Appendix Table A1, indicate that calls about formal eviction are a significant predictor of eviction

filings from 2019 through 2021, with a Pseudo R² value of 0.677. The data show a strong relationship between tenant calls about formal eviction and actual eviction filings. Thus, we are confident in the utility of the call data as a proxy for actual landlord behavior.

Demographic Data

The call data include information on the caller's race, gender, income, household size, and zip code. We geocoded the zip codes of callers to determine whether they were from Minneapolis or Saint Paul (central city zip codes), or elsewhere in the metropolitan area (suburban zip codes). Because the overlap between zip code boundaries and the metropolitan area is not perfect, we coded zip codes as part of the metropolitan area if most of the area of the zip code area was within the seven-county boundary. Similarly, a zip-code was coded as being in the central cities if most of its area was inside the boundaries of Minneapolis or Saint Paul.

To incorporate demographic information on areas where the callers reside, we merged the call records with 2019 American Community Survey (ACS) 5-year data at the zip code level. In the analysis to follow, we examine whether landlord strategies, as reflected in the calls tenants made to HOME Line, varied by the race of the renter and by neighborhood characteristics

Baseline Call Volume

To analyze if landlords substitute informal evictions for formal ones when facing policy restrictions on formal evictions, we need a baseline for comparison. While HOME Line call data (2014-2019) offers a general pre-pandemic picture of eviction calls (formal and informal), in January 2019, HOME Line began proactively contacting renters facing eviction as part of a new initiative, producing a significant discontinuity in the pre-pandemic trend. Therefore, we only compare eviction call volume during and after the pandemic to calls received in 2019.

Counterfactual Estimate Of Calls In The Absence Of The Moratoria

To assess the effectiveness of the pandemic eviction moratorium in reducing formal eviction filings, we created a counterfactual scenario. We assumed the average monthly number of eviction calls during and after the moratorium remained consistent with the historical average from the pre-moratorium period—i.e., the year of 2019. By comparing this counterfactual scenario to the actual number of calls received, we can estimate the number of eviction calls prevented by the moratorium. The counterfactual estimate did not account for potential demographic shifts that might influence eviction prevalence. We address these potential changes through regression analysis, which is detailed in the following section.

Regression Analysis

At the community level, we hypothesize that the COVID-19 eviction moratorium, when formal eviction filings were constrained, resulted in fewer renter calls regarding formal eviction concerns. Thus, *H1: Calls about formal evictions declined significantly when the moratorium was introduced.* Our second hypothesis suggests that the constraining effect of the moratorium was temporary and disappeared when the moratorium ended. Thus, *H2: Calls about formal evictions increased significantly after the end of the moratorium.* Our third hypothesis is about whether landlords relied more heavily on informal eviction actions during the moratorium when their options related to formal evictions were constrained. That is, we check for whether landlords substituted informal eviction actions for the formal filings that were precluded by the moratorium. Thus, we test *H3: Calls about informal evictions increased with the introduction of the eviction moratorium.*

To test the impact of the eviction moratorium on calls about formal and informal evictions, we employ a Negative Binomial regression model. This method has been used in other studies analyzing eviction filing counts as the dependent variable, particularly when the dependent

variable is right-skewed and censored at zero (Goodspeed et al., 2021; Leung et al., 2021; Preston & Reina, 2021). The Negative Binomial model is well-suited for handling overdispersion in the observed count of eviction calls. The general form for this model is as follows:

$$Y_i = \beta_0 + \beta_1 M_i + \beta X_i + \varepsilon_i \tag{1}$$

Where Y_i is the number of calls about formal / informal eviction in a zip-code-quarter i. M_i is a categorical variable that captures the policy period the call is in (pre-moratorium, during-moratorium, and post-moratorium). X_i is a vector of covariates including predominantly White zip code, median household income, zip code renter households, suburb zip code, and quarter fixed effects. Our level of analysis for this model is the zip code. We limit our analysis to zip codes with at least 100 renter households to reduce noise and obtain more reliable results. The Twin Cities metro area comprises 138 unique ZIP codes meeting this criterion. We classified zip codes as predominantly White if the population was more than 50% non-Hispanic White. The quarter fixed effects control for seasonal variation in landlords' eviction actions. For descriptive statistics of the variables, see Appendix Table A2. The results are reported in Average Marginal Effects (AMEs), which are easier to interpret than the log-linear coefficients of a Negative Binomial regression model. AMEs translate these effects into the original scale of the dependent variable, making it more intuitive to understand the change in the expected count of the outcome variable for a one-unit change in the predictor.

We also conduct an analysis of race-specific call volumes. Given the higher risk of eviction experienced by Black tenants, we examine whether the moratorium had race-specific impacts on tenant call volume. We hypothesize that HOME Line callers' concerns shifted from formal eviction to other issues during the state eviction moratorium, and that shift was greater for Black callers. Thus, *H4: When the moratorium was in place, the decline in formal eviction calls was*

greater for Black callers compared to White callers. We also test *H5: When the moratorium was in place, the increase in informal eviction calls was greater for Black callers compared to White callers*.

To test the whether the impact of eviction moratorium differs by the race of the renter, we employ a Negative Binomial regression model. The general form of the model is:

$$Z_i = \beta_0 + \beta_1 M_i + \beta X_i + \varepsilon_i \tag{2}$$

Where Z_i is the race-specific call volumes for White, Black, and Other-Race callers in a zip-code-quarter i. M_i is a categorical variable that shows the policy period the call is in (pre-moratorium, during-moratorium, and post-moratorium). X_i is a vector of covariates, including predominantly White zip code, median household income, zip code renter households, suburb zip code, and quarter fixed effects (Refer to Appendix Tables A3 to A5 for descriptive statistics of the variables). For the race-specific call models, we limit our analysis to zip codes with at least 100 renter households of the specified race. In the Twin Cities metro area, 137 zip codes have at least 100 White renter households, 89 zip codes have at least 100 Black renter households, and 97 zip codes have at least 100 renter households of other races. The race-specific models are estimated simultaneously to allow the comparison of AMEs.

For regression analyses, we restrict our study period to four years, 2019 through 2022. We do this because HOME Line initiated an eviction prevention program in 2019 that significantly increased the rate at which it received eviction-related calls. This program continued through 2022.

RESULTS

Home Line Calls

From 2014 through 2022, HOME Line received an average of 11,182 calls per year from tenants in the Minneapolis-St. Paul metropolitan area (see Table 1). This ranged from a low of

9,413 calls in 2017 to a high of 15,703 in 2022. Several important patterns emerge from this table. First, over the entire time period, informal eviction calls came in at a rate of 56% that of formal eviction. This is at the low end of estimates of informal evictions made by other researchers. The second pattern in the data is that 2022 saw a significant increase in the volume of calls placed to HOME Line from 11,599 to 15,703 (an increase of 35%).

[insert table 1 here]

Third, there are two moments in this timeline when the number of calls about formal evictions spike. The first is in 2019 when eviction calls change from being around 20% of all calls, to being 28%. Eviction calls jumped from 2,050 in 2018 to 3,312 in 2019, a 62% increase. This initial spike coincides with the initiation of HOME Line's eviction prevention programming and suggests that the organization's enhanced outreach on the issue of eviction worked in terms of generating greater call volume. The second spike in eviction calls in 2022, after the end of the moratorium, is even more dramatic than the 2019 increase – from 2,359 to 5,247, a 122% increase.

It is important to note that while the moratorium did produce a decline in eviction calls, it did not eliminate them. The moratorium in the state of Minnesota prohibited aimed evictions for non-payment of rent and for lease violations and thus should have reduced the eviction concerns among hotline callers to near zero. Our findings show that tenant concerns about formal evictions did not nearly disappear during the moratorium. Over the period of the moratorium HOME Line was receiving about 100 calls each month from tenants with concerns about eviction. This amount is roughly equivalent to the volume of calls the service had received prior to its 2019 eviction prevention program. This pattern is more visible when we plot the number of calls by months as shown in figure 1.

[figure 1 here]

Figure 1 shows the monthly call volume over these years as the three-month moving average. The spikes in 2019 and 2022 are pronounced. The jump in formal eviction calls in 2019 reflects the fact that HOME Line initiated an eviction prevention program in January of 2019. The program aimed to assist renter households facing eviction proceedings. HOME Line staff collected eviction filing data on a daily basis and produced tenant/defendant-specific mailings that were sent to every eviction defendant. The letter was multilingual and encouraged the tenant to contact HOME Line for free legal and practical advice related to their eviction case. As a result of the change in HOME Line policy in 2019, we restrict our regression analysis to 2019 through 2022.

Another change in HOME Line policy was initiated in 2021. From 2014 through 2020 HOME Line staff used up to two codes to characterize the concerns of callers. Beginning in 2021 more than two call codes were allowed. This change in policy might make a difference in the prevalence of any particular type of call simply by allowing more types to be acknowledged through the expanded coding. In a practical sense, this policy change had virtually no impact on formal eviction calls. In 2021 and 2022, 99.5% of the formal eviction calls were coded thusly in either the first or second code in the database, reflecting the relative importance of formal eviction compared to other issues that might have been discussed in the call. For informal evictions, 78.4% were coded for informal eviction in the first two codes. This suggests that as many as 22% or one-fifth of the informal eviction calls in 2021 and 2022 might not have been coded that way in previous years. Thus, for the years 2021 and 2022, we used only the first two codes for each call, in order to make the data comparable to the 2019 and 2020 period.[4]

[insert figure 2 here]

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[4] This also reinforces the possibility that our measure of informal eviction is a conservative one when thinking about the absolute level of such concerns among renters.

Figure 2 shows the actual versus counterfactual cumulative formal eviction calls HOME Line received between 2019 and 2022. In the counterfactual scenario, we assume that the number of calls received each month during and after the moratorium period is the same as the historical average of that month in the pre-moratorium period. Based on our estimation, the eviction moratorium helped to prevent 1,694 formal eviction calls in the metro area. However, the actual calls related to formal evictions quickly caught up with the counterfactual calls in the post-moratorium period, meaning that any aggregate reduction in calls about formal eviction during the moratorium was temporary, and by the end of 2022 the aggregate number of evictions calls is at the level it would have been had there been no moratorium at all. The quick catch up of the actual calls suggests that the moratorium did not permanently eliminate tenant concerns over the eviction actions of their landlords, it merely postponed them.[5]

Home Line Callers

Table 2 shows the demographic profile of HOME Line callers in comparison with the renter population in the metro area. Central city renters are over-represented among HOME Line callers. While central city renters constitute only 26% of all renters in the metro area, they constitute 48% of the HOME Line calls. Black renters are responsible for a disproportionate share of formal eviction calls. Black renters make up 21% of tenants in the metro area but are behind 41% of HOME Line calls about formal eviction and 28% of calls about informal eviction.

[insert table 2 here]

As could be anticipated, HOME Line callers are disproportionately lower income. Tenants in the lowest income category, HUD's "extremely low income" group, were typically about one-

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[5] We contextualize HOME Line calls with data from Eviction Lab. The eviction filing data from Eviction Lab (see the Appendix, Figure A1) follows a similar pattern to eviction call data from HOME Line (Figure 2).

half of all HOME Line calls while they make up only 22% of renters in the metro area. Very low-income renters are also over-represented among callers although by a smaller margin, accounting for 18% of renters metro wide and 22% of HOME Line callers.

Finally, HOME Line callers are more likely to be suffering from a high housing cost burden compared to all tenants in the metro area. Tenants paying more than half of their incomes for housing accounted for 29% of callers in the study period, while they are only 15% of all renters in the metro area. Tenants paying 30 to 50% of their incomes on rent made up 35% of HOME Line callers, compared to 19% of all tenants in the metro area. The housing affordability problem is the most pronounced among formal eviction callers. Forty-one percent of the formal eviction callers reported spending more than half of their incomes on housing. In summary, HOME Line callers are predominantly and disproportionately female, are disproportionately extremely low- or very low-income, and have high-cost burdens compared to all tenants in the metro area.

Impact Of The Moratorium

Calls about formal eviction reduced significantly while the calls about informal eviction remained stable in the metro area when the eviction moratorium was in place. Table 3 shows the results of zip-code-level regression analysis. Model 1 suggests a significant decrease in formal eviction calls during the moratorium, controlling for other factors. On average, a zip-code-quarter saw 2.4 fewer eviction calls compared to the pre-moratorium period, representing a 51% decline. Our basic hypothesis *H1*, expecting a decline in formal eviction calls during moratorium, is supported by the results. Again, we note that the moratorium reduced eviction calls but did not come close to eliminating them.

[insert table 3 here]

The number of formal eviction calls surged after the moratorium ended. Compared to the period when the moratorium was in place, there was a statistically significant increase of 4.6 formal eviction calls per zip code quarter on average, representing a 202% increase ($p<0.001$, two-tailed test). This finding supports *H2*, predicting a rebound in formal eviction activity after the moratorium was lifted. In fact, not only did the level of formal eviction calls rebound, but they have risen to a level higher than the pre-moratorium period.

Contrary to the expectation that landlords would substitute informal eviction actions for the more formal eviction strategies that were proscribed by the moratorium, the regression results from Model 2 show no statistically significant change in informal eviction calls before, during, and after the moratorium. Thus, *H3* is not supported; we cannot say that during the moratorium, landlords substituted informal eviction actions for the formal evictions that were limited by the moratorium. As with formal-eviction calls, informal-eviction calls were more common in predominately BIPOC zip codes, lower income zip codes, and zip codes with more renter households.

Racial Difference In The Effect Of The Moratoria

In this section we test whether the moratorium differentially affected call volume across racial groups. The results in Table 4 show that the impact of eviction moratorium on formal eviction calls varies by race. The average number of formal eviction calls in a zip-code-quarter from Black callers was 1.4 calls lower during the moratorium compared to the pre-moratorium period ($p<0.001$, two-tailed test), while the average number of formal eviction calls in a zip-code-quarter from White callers was 0.8 calls lower during the moratorium compared to the pre-moratorium period ($p<0.001$, two-tailed test). There is a 0.6 greater decline in formal eviction calls for Black callers compared to White callers ($p<0.001$, two-tailed test). The findings support

hypothesis **H4**, that the reduction in formal eviction calls was greater for Black callers when the moratorium was in place.

[insert table 4 here]

While a greater reduction in the number of formal eviction calls was observed among Black callers during the moratorium, the post-moratorium period saw a greater increase in these calls among Black callers (+2.6) compared to White callers (+1.1) when compared to the moratorium period (Figure 3). In the post-moratorium period, the average number of formal eviction calls in a zip-code-quarter from Black callers reached a high of 3.3.

The data, however, do not support our hypothesis about the racial pattern of informal eviction calls. The results in Table 5 show that the eviction moratorium reduced the number of informal eviction calls from Black callers. The average number of informal eviction calls in a zip-code-quarter from Black callers reduced by 0.2 calls when the moratorium was in place. Changes in informal eviction calls from White and Other-Race callers are statistically insignificant during the moratorium. The results lead us to reject **H5**, the expectation that the increase in informal eviction calls was greater for Black callers during the moratorium.

CONCLUSION

The COVID-19 public health crisis led to the imposition of eviction moratoria at the national and local level in the United States. These moratoria were enacted with varying durations and varied also by their scope. Our research design allowed us to assess whether any impact of a moratorium might be offset by a shift in landlord strategy to non-judicial means of removing tenants. Non-judicial evictions are difficult to study because of their informal nature. We indirectly measure them through the coded calls of tenants to a statewide help line.

Our analysis of the impact of the State of Minnesota's moratorium in the metropolitan area of Minneapolis and Saint Paul shows a partial success in reducing tenant concerns about evictions. Our findings suggest, however, that landlords did not substitute informal eviction actions against tenants for the formal evictions that were prohibited by the moratorium. Our data on tenant hotline calls indicates that this may be due to two other strategies that landlords pursued during and after the moratorium. First, some landlords exploited the loopholes in the moratorium, pursuing formal evictions through false claims like tenant threats or criminal activity (Morgenson 2020; Nesterak 2020). Our data show that despite a drop in eviction concerns, there remained throughout the moratorium period a significant number of calls related to formal evictions. Second, the post-moratorium pattern clearly suggests that in the cases where the moratorium was not ignored, landlords simply waited out the restrictions and filed formal actions shortly after the moratorium ended. ERA programs, which conditioned rent payments to landlords on not evicting during the moratorium, may have contributed to this postponement. Tenant calls about formal evictions rebounded sharply in the post-moratorium period and soon reached a point matching the level that would have prevailed in the absence of the moratorium.

These two strategies, it seems, made resort to the third strategy – a shift to informal means of tenant removal – unnecessary for landlords. Had the moratorium been more effective in reducing and potentially eliminating formal evictions, perhaps the substitution effect we were looking for might have appeared. This counterfactual is impossible to assess given our data.

Our findings are consistent with previous research indicating the importance of race in understanding evictions (e.g., Desmond and Schollenberg 2015; Teresa 2018; Nelson et al. 2021). Black renters were disproportionately represented among those who called the tenant hotline about formal and informal eviction concerns, and in general eviction related calls were more common in

non-white neighborhoods. Our findings also indicate that the moratorium was associated with a greater reduction in the formal eviction call rate among Blacks compared to Whites and other BIPOC groups. This finding contradicts previous evidence suggesting that eviction-related policy interventions had no impact on racial disparities (Merritt and Farnsworth 2021).

The tenant hotline call data we used in this study allowed for a unique analysis of informal eviction activity, a phenomenon that has been difficult for researchers to observe. But the data we use have important limitations. The propensity of tenants to call into a hotline can vary by neighborhood and by individual characteristics not measured. We observe only the call itself and none of the behaviors or actions behind the call. Thus, our analysis only estimates formal and informal eviction activity. While we are reasonably confident that tenant calls track landlord eviction actions well, caution should be used in applying our findings.

The reliance on call data, moreover, focused our study on a segment of the rental market. Callers to the hotline were disproportionately people of color, very low-income, and rent burdened compared to the full tenant population in the Minneapolis-Saint Paul area. While this is the population that is at greatest risk for eviction and therefore an appropriate submarket for analysis, the trends seen for these renters may not match trends market wide.

Landlords clearly do pursue non-judicial actions aimed at moving tenants out; our data and the studies of others demonstrate this well enough (Hartman and Robinson 2003; Bucholtz 2021; Desmond et al. 2015). There are clearly cases in which landlords enact this strategy rather than file formally. In the case of the Twin Cities metropolitan area, however, call data suggest that landlords were not pushed to pursue such strategies to any greater extent during the moratorium on formal evictions. This fact, by itself, may reflect the limited impact of the moratorium in the Minneapolis-Saint Paul metropolitan area. It may also reflect the fact, however, that perhaps there are some

cases for which landlords feel an informal eviction strategy may not be appropriate. What such a case looks like, and what the factors are that lead a landlord to pursue judicial or non-judicial means of tenant removal, are important topics for further research.

TABLES AND FIGURES

Table 1. HOME Line Calls about Formal & Informal Evictions, 2014-2022

Year	Total Calls	Formal Eviction Calls	%	Informal Eviction Calls	%	All Eviction Calls	%
2014	10,420	1,262	12.1	884	8.5	2,129	20.4
2015	10,493	1,201	11.4	929	8.9	2,113	20.1
2016	10,645	1,164	10.9	1,025	9.6	2,170	20.4
2017	9,413	1,133	12.0	863	9.2	1,971	20.9
2018	9,921	1,142	11.5	926	9.3	2,050	20.7
2019	11,741	2,390	20.4	957	8.1	3,312	28.2
2020	10,699	1,247	11.7	1,054	9.9	2,261	21.1
2021	11,599	1,522	13.1	867	7.5	2,359	20.3
2022	15,703	4,253	27.1	1,022	6.5	5,247	33.4
Total	100,634	15,314	15.2	8,526	8.5	23,611	23.5

Source: HOME Line call records. Author's calculations.

Table 2. Profile of HOME Line Callers, 2014-2022.

		Metro Area Renters (%)	HOME Line Callers (%)	Formal Eviction Callers (%)	Informal Eviction Callers (%)
Location	Central Cities	26	48	44	47
	Suburban	74	52	57	53
Race & Ethnicity	White#	54	53	42	54
	Black^	21	30	41	28
	Other	25	17	17	18
Gender	Male	51	30	33	34
	Female	49	70	67	66
Income*	Extremely low	22	48	59	44
	Very low	18	22	24	22
	Low	20	17	13	18
	Moderate / High	41	12	4	16
Cost burden	>= 50% of income	15	29	41	27
	30-50% of income	19	35	38	33

Notes: # Non-Hispanic White (one race). ^ Non-Hispanic Black (one race) * U.S. Department of Housing and Urban Development income classes.
Sources: HOME Line; 2019 ACS 5-year estimates.

Table 3. Negative Binomial Regression Models on Formal and Informal Eviction Calls.

	(1) Formal Eviction Calls		(2) Informal Eviction Calls	
	AME	SE	AME	SE
Moratorium status#				
During-moratorium	-2.350***	0.188	-0.129	0.095
Post-moratorium	2.254***	0.261	-0.021	0.093
White ZIP	-2.627***	0.376	-0.944***	0.142
Median household income ($1,000) +SD	-0.925***	0.072	-0.310***	0.036
Renter Households (1,000) +SD	2.684***	0.127	0.939***	0.045
Suburb	0.657**	0.236	-0.055	0.097
Quarter fixed effects	✓		✓	
Pseudo-R²	0.163		0.178	
N	2,208		2,208	

Notes:
AME = Average Marginal Effects. In Negative Binomial regression, the AME is the mean of the partial derivatives of the regression equation for each unit in the data.
SE = Standard Error.
SD = Standard Deviation.
# Reference category is pre-moratorium period.
*p<0.05, **p<0.01, ***p<0.001 (two-tailed test).

Sources: HOME Line; IPUMS NHGIS 2015-2019 5-year ACS.

Table 4. Negative Binomial Regression Models on Formal Eviction Calls from White, Black, and Other-Race Callers.

	(3) Formal Eviction Calls from White Callers		(4) Formal Eviction Calls from Black Callers		(5) Formal Eviction Calls from Other Race Callers	
	AME	SE	AME	SE	AME	SE
Moratorium status#						
During-moratorium	-0.774***	0.085	-1.440***	0.117	-0.271***	0.053
Post-moratorium	0.330**	0.101	1.115***	0.175	0.928***	0.083
White ZIP	0.018	0.122	-1.825***	0.243	-0.425***	0.108
Median household income ($1,000) +SD	-0.271***	0.039	-0.529***	0.045	-0.175***	0.032
Renter Households (1,000) +SD	0.985***	0.056	0.801***	0.070	0.386***	0.035
Suburb	0.626***	0.099	0.100	0.141	-0.007	0.072
Quarter fixed effects	✓		✓		✓	
Pseudo-R²	0.123		0.146		0.131	
N	2,192		1,424		1,552	

Notes:
The models are estimated simultaneously to allow the comparison of average marginal effects.
AME = Average Marginal Effects. In Negative Binomial regression, the AME is the mean of the partial derivatives of the regression equation for each unit in the data.
SE = Standard Error.
SD = Standard Deviation.
# Reference category is pre-moratorium period.
*p<0.05, **p<0.01, ***p<0.001 (two-tailed test).

Sources: HOME Line; IPUMS NHGIS 2015-2019 5-year ACS.

Table 5. Negative Binomial Regression Models on Informal Eviction Calls from White, Black, and Other-Race Callers.

	(6) Informal Eviction Calls from White Callers		(7) Informal Eviction Calls from Black Callers		(8) Informal Eviction Calls from Other Race Callers	
	AME	SE	AME	SE	AME	SE
Moratorium status#						
During-moratorium	0.003	0.058	-0.200***	0.055	-0.034	0.039
Post-moratorium	-0.158**	0.053	-0.017	0.058	-0.002	0.038
White ZIP	0.036	0.065	-0.667***	0.095	-0.219***	0.054
Median household income ($1,000) +SD	-0.064*	0.028	-0.151***	0.019	-0.084***	0.015
Renter Households (1,000) +SD	0.424***	0.027	0.219***	0.025	0.189***	0.015
Suburb	-0.141*	0.058	0.126*	0.057	0.001	0.040
Quarter fixed effects	✓		✓		✓	
Pseudo-R²	0.127		0.118		0.144	
N	2,192		1,424		1,552	

Notes:
The models are estimated simultaneously to allow the comparison of average marginal effects.
AME = Average Marginal Effects. In Negative Binomial regression, the AME is the mean of the partial derivatives of the regression equation for each unit in the data.
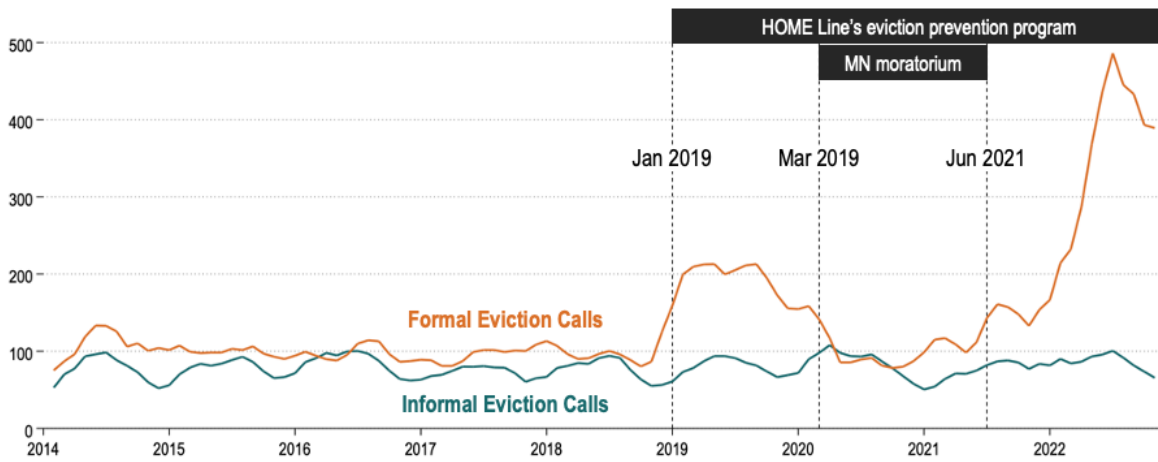SE = Standard Error.
SD = Standard Deviation.
# Reference category is pre-moratorium period.
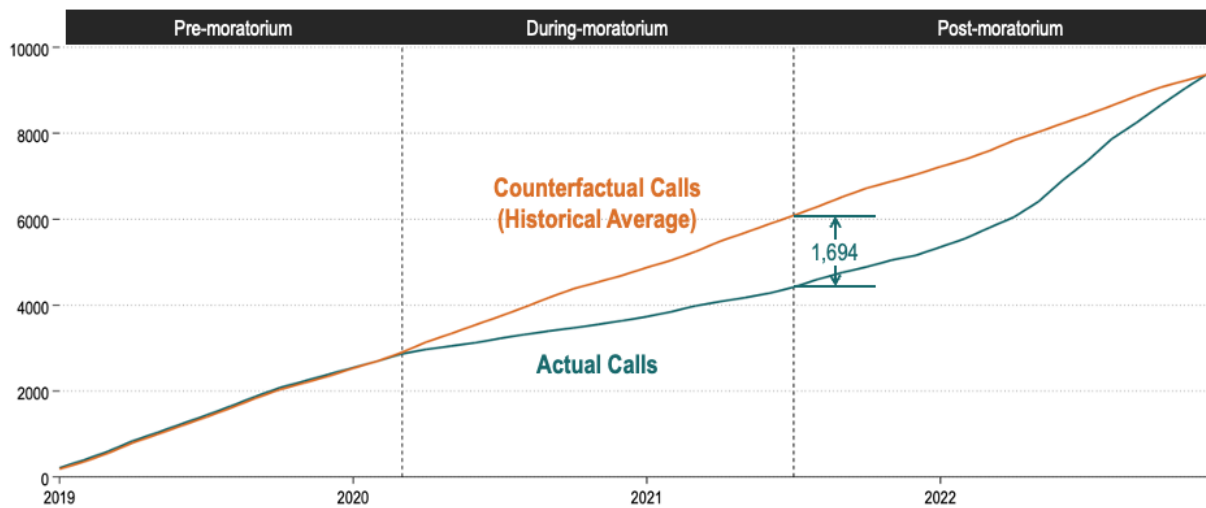*p<0.05, **p<0.01, ***p<0.001 (two-tailed test).

Sources: HOME Line; IPUMS NHGIS 2015-2019 5-year ACS.

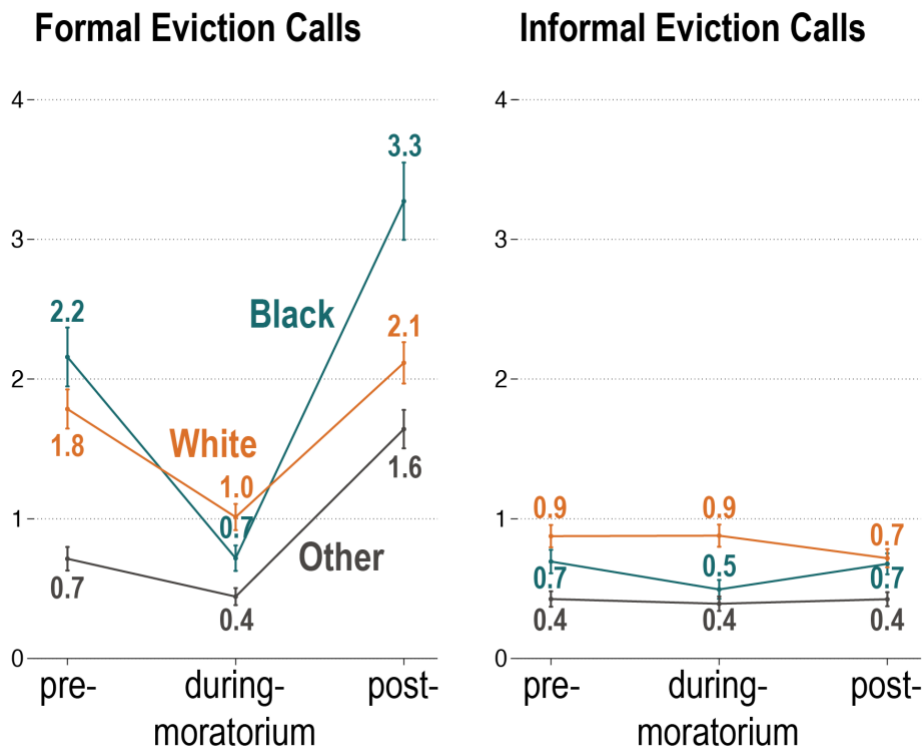## Figure 1. Formal and Informal Eviction Calls, 2014-2022

Note: Smoothed by 3-month moving average.
Source: HOME Line.

Figure 2. Actual vs. Counterfactual Cumulative Formal Eviction Calls, 2019-2022.

Source: HOME Line.

Figure 3. Impact of Eviction Moratorium by Race.

Formal Eviction Calls

4 –

3.3

3 –

2.2

Black

2.1

2 –

1.8

White

1.0

1.6

1 –

0.7

Other

0.7

0.4

0 –

pre- during- post-
moratorium

Informal Eviction Calls

4 –

3 –

2 –

0.9   0.9

1 –   0.7

0.7   0.5   0.7

0.4   0.4   0.4

0 –

pre- during- post-
moratorium

Notes: Predicted race-specific formal and informal eviction calls with 95% confidence intervals. The numbers represent the average call volume for each racial category within a typical zip-code-quarter in the Twin Cities metro, before, during, and after the pandemic. Predictions for calls from White renters are based on 2,192 zip-code-quarters, each with at least 100 White-headed renter households. Predictions for calls from Black renters are based on 1,424 zip-code-quarters, each with at least 100 Black-headed renter households. Predictions for calls from renters of Other Races are based on 1,552 zip-code-quarters, each with at least 100 renter households of Other Races.
Source: HOME Line.

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& Delinquency* 64 (14): 1882–1903.

APPENDIX

Table A1. Formal Eviction Calls are Good Predictors of Eviction Filings, 2014-2021.

	(a1) Filings		(a2) Filings		(a3) Filings	
	AME	SE	AME	SE	AME	SE
Panel A: 2019-2021						
Calls (+SD): current month	362.5	4.7				
Calls (+SD): previous month			350.6	4.6	360.9	5.0
Calls (+SD): next month						
Pseudo R-sq	0.670		0.677		0.604	
BIC	4164		3920		4985	
N	36		35		35	
Panel B: 2014-2018						
Calls (+SD): current month	59.0***	4.0				
Calls (+SD): previous month			31.7***	4.0		
Calls (+SD): next month					40.7***	4.0
Pseudo R-sq	0.160		0.049		0.080	
BIC	1179		1264		1214	
N	60		59		59	

Notes:
The table shows the results from Poisson regression models.
AME = Average Marginal Effects.
SE = Standard Error.
SD = Standard Deviation.
Source: HOME Line; Court Services Division of the Minnesota Judicial Branch.

Table A2. Descriptive Statistics for Models 1 and 2 (N= 2,208 Zip-Code-Quarters).

Continuous Variable	Mean	Std. dev.	Min	Max
Formal Calls	4.25	6.18	0.00	53.00
Informal Calls	1.72	2.30	0.00	16.00
Median household income ($1,000)	85.74	26.31	21.65	171.13
Renter households (1,000)	2.72	2.34	0.10	11.51
Categorical Variable	Frequency	Percentage		
Pre-moratorium	690	31.25		
During-moratorium	690	31.25		
Post-moratorium	828	37.50		
BIPOC ZIP Code	256	11.59		
White ZIP Code	1,952	88.41		
Central City	512	23.19		
Suburb	1,696	76.81		
1st Quarter (Jan-Mar)	552	25.00		
2nd Quarter (Apr-Jul)	552	25.00		
3rd Quarter (Jun-Sep)	552	25.00		
4th Quarter (Oct-Dec)	552	25.00		

Sources: HOME Line; IPUMS NHGIS 2015-2019 5-year ACS.

Table A3. Descriptive Statistics for Models 3 and 6 (N= 2,192 Zip-Code-Quarters).

Continuous Variable	Mean	Std. dev.	Min	Max
Formal Eviction Calls from White Callers	1.61	2.04	0.00	14.00
Informal Eviction Calls from White Callers	0.81	1.17	0.00	11.00
Median household income ($1,000)	85.56	26.32	21.65	171.13
Renter households (1,000)	2.74	2.34	0.10	11.51
Categorical Variable	Frequency	Percentage		
Pre-moratorium	685	31.25		
During-moratorium	685	31.25		
Post-moratorium	822	37.50		
BIPOC ZIP Code	256	11.68		
White ZIP Code	1,936	88.32		
Central City	512	23.36		
Suburb	1,680	76.64		
1st Quarter (Jan-Mar)	548	25.00		
2nd Quarter (Apr-Jul)	548	25.00		
3rd Quarter (Jun-Sep)	548	25.00		
4th Quarter (Oct-Dec)	548	25.00		

Sources: HOME Line; IPUMS NHGIS 2015-2019 5-year ACS.

Table A4. Descriptive Statistics for Models 4 and 7 (N= 1,424 Zip-Code-Quarters).

Continuous Variable	Mean	Std. dev.	Min	Max
Formal Eviction Calls from Black Callers	2.72	4.22	0.00	33.00
Informal Eviction Calls from Black Callers	0.80	1.27	0.00	11.00
Median household income ($1,000)	77.10	23.42	21.65	143.08
Renter households (1,000)	3.80	2.24	0.56	11.51

| Categorical Variable	Frequency	Percentage		
Pre-moratorium	445	31.25		
During-moratorium	445	31.25		
Post-moratorium	534	37.50		
BIPOC ZIP Code	256	17.98		
White ZIP Code	1,168	82.02		
Central City	480	33.71		
Suburb	944	66.29		
1st Quarter (Jan-Mar)	356	25.00		
2nd Quarter (Apr-Jul)	356	25.00		
3rd Quarter (Jun-Sep)	356	25.00		
4th Quarter (Oct-Dec)	356	25.00		

Sources: HOME Line; IPUMS NHGIS 2015-2019 5-year ACS.

Table A5. Descriptive Statistics for Models 5 and 8 (N= 1,552 Zip-Code-Quarters).

Continuous Variable	Mean	Std. dev.	Min	Max
Formal Eviction Calls from Other Race Callers	1.17	1.80	0.00	15.00
Informal Eviction Calls from Other Race Callers	0.52	0.88	0.00	8.00
Median household income ($1,000)	78.96	24.08	21.65	143.08
Renter households (1,000)	3.63	2.23	0.41	11.51
Categorical Variable	Frequency	Percentage		
Pre-moratorium	485	31.25		
During-moratorium	485	31.25		
Post-moratorium	582	37.50		
BIPOC ZIP Code	240	15.46		
White ZIP Code	1,312	84.54		
Central City	512	32.99		
Suburb	1,040	67.01		
1st Quarter (Jan-Mar)	388	25.00		
2nd Quarter (Apr-Jul)	388	25.00		
3rd Quarter (Jun-Sep)	388	25.00		
4th Quarter (Oct-Dec)	388	25.00		

Sources: HOME Line; IPUMS NHGIS 2015-2019 5-year ACS.

Figure A1. Eviction Filings in Minnesota, Actual vs. Historical Average.
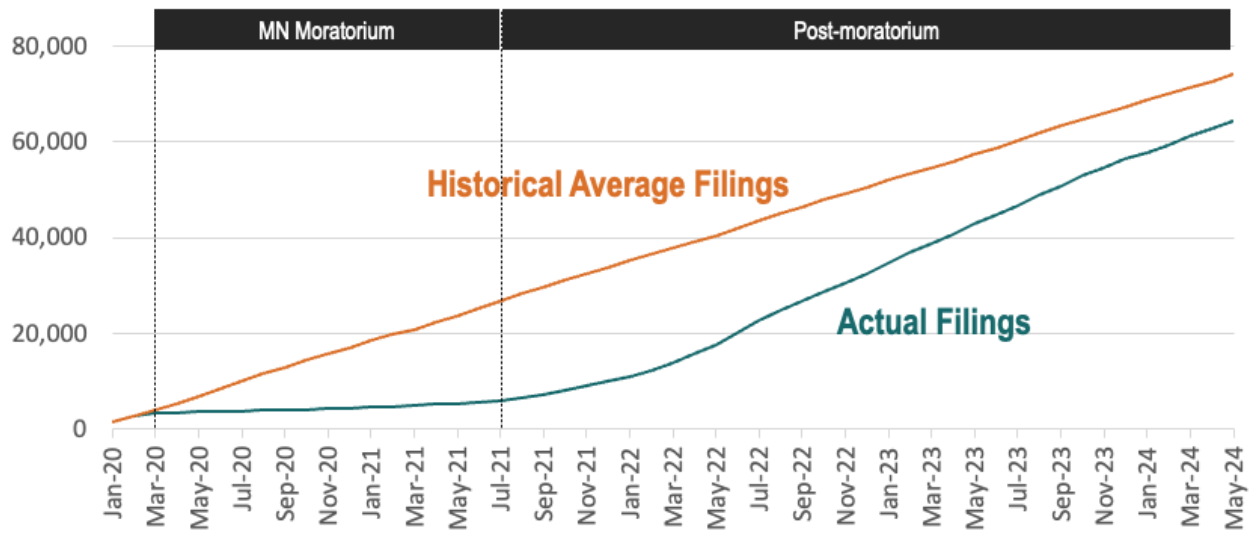
Note: Historical averages cover the years 2012-2019.
Source: Eviction Lab.