

2024 MARYLAND EVICTION ANALYSIS - METHODS

Sandhya Kajeepeta, PhD

December 2024

Data Sources

Evictions data

We obtained ZIP code-level data on executed evictions and eviction warrants of restitution from the Maryland Department of Housing and Community Development Landlord & Tenant Eviction Dashboard.¹ Data were restricted to the time period October 2023 – September 2024 because that was the latest full year of data available. For executed evictions and eviction warrants of restitution, the dashboard provided data on the filing type. Each filing was coded as one of five types:

- 1) Tenant Holding Over – A landlord files this when they allege the tenant refuses to leave the property after the lease term has expired. The landlord can use this to seek eviction and possibly monetary damages for rent owed.
- 2) Breach of Lease – A landlord files this when they believe the tenant has violated the lease. The landlord can use this action to seek eviction.
- 3) Failure to Pay Rent – A landlord files this when they believe the tenant owed back rent. The landlord can use this to seek eviction and possibly monetary damages for rent owed.
- 4) Wrongful Detainer – A property owner or other lawful occupant uses this action to seek eviction when someone who is not a lawful occupant of the property refuses to leave.
- 5) Distress/Distrait for Rent – A landlord files this when they believe a tenant, usually one that operates a business, owes a large sum of rent. The landlord can use this to seize and sell the tenant's possession on the leased premises and to use the proceeds of the sale to reimburse the landlord for any unpaid rent.

For this analysis, we were interested in total executed evictions and warrants of restitution as well as holdover evictions and holdover warrants of restitution (category #1).

Demographic data

We obtained ZIP code-level data on the number of renter-occupied housing units and the number of Black renter-occupied housing units from the U.S. Census Bureau American Community Survey (ACS) 2022 5-year estimates.²

Data Analysis

Total executed evictions

We grouped the executed eviction data by ZIP code and calculated the total number of executed evictions from October 2023 through September 2024 per ZIP code. If no eviction data were recorded for a ZIP code, we assumed there were zero evictions in the ZIP code. To calculate the eviction rate, we divided the number of executed evictions by the number of renter-occupied housing units in the ZIP code.

We calculated the percentage of Black renters in a ZIP code by dividing the number of Black renter-occupied housing units by the total number of renter-occupied housing units.

We excluded any ZIP codes with fewer than 50 rental units (n=135, 28%).

To model the relationship between percentage of Black renters and rate of evictions, we fit a Poisson regression model and a negative binomial regression model, which are both used to model rate data. The Poisson model showed evidence of overdispersion and the negative binomial model showed smaller residuals and a better model fit. As a result, we used the negative binomial model for the final analysis. The unit of change for the analysis was a 10-percentage-point change in the percentage of Black renters.

The results from the model showed that Maryland ZIP codes with a higher percentage of Black renters faced a higher rate of total executed evictions (Table 1). A 10-percentage-point increase in the percent of Black renters in a ZIP code was associated with a 14% increase (95% CI: 9%, 18%) in the rate of total executed evictions.

Executed holdover evictions

We conducted the same analysis but restricted the eviction data to only those evictions coded as “Tenant Holding Over.” We calculated the holdover eviction rate for a ZIP code by dividing the number of executed holdover evictions by the number of renter-occupied housing units.

The results from the model were consistent with the results for total executed evictions: Maryland ZIP codes with a higher percentage of Black renters faced a higher rate of executed holdover evictions (Table 1). A 10-percentage-point increase in the percent of Black renters in a ZIP code was associated with a 10% increase (95% CI: 5%, 16%) in the rate of holdover evictions.

Table 1. Maryland ZIP code-level association between percentage of Black renters and total eviction rates, holdover eviction rates (Oct 2023 – Sep 2024)

| | n | Estimate | 95% CI |
|---------------------------------|-----|----------|------------|
| Total executed eviction rate | 343 | 1.14 | 1.09, 1.18 |
| Executed holdover eviction rate | 343 | 1.10 | 1.05, 1.16 |

Total warrants of restitution

We replicated the above analyses for total executed evictions and executed holdover evictions but for total warrants of restitution and holdover warrants of restitution to understand spatial relationships between Black renter populations and eviction filings.

We grouped the warrants of restitution data by ZIP code and calculated the total number of warrants of restitution from October 2023 through September 2024 per ZIP code. If no eviction data were recorded for a ZIP code, we assumed there were zero warrants of restitution in the ZIP code. To calculate the warrant rate, we divided the number of warrants of restitution by the number of renter-occupied housing units in the ZIP code.

Again, we calculated the percentage of Black renters in a ZIP code by dividing the number of Black renter-occupied housing units by the total number of renter-occupied housing units.

And again, we excluded any ZIP codes with fewer than 50 rental units (n=135, 28%).

To model the relationship between percentage of Black renters and rate of warrants of restitution, we again fit a Poisson regression model and a negative binomial regression model. The Poisson model showed evidence of overdispersion and the negative binomial model showed smaller residuals and a better model fit. As a result, we used the negative binomial model for the final analysis. The unit of change for the analysis was a 10-percentage-point change in the percentage of Black renters.

The results from the model showed that Maryland ZIP codes with a higher percentage of Black renters faced a higher rate of total warrants of restitution (Table 2). A 10-percentage-point increase in the percent of Black renters in a ZIP code was associated with a 32% increase (95% CI: 25%, 39%) in the rate of total warrants of restitution.

Holdover warrants of restitution

We conducted the same analysis but restricted the warrant data to only those warrants of restitution coded as “Tenant Holding Over.” We calculated the holdover warrant rate for a ZIP code by dividing the number of holdover warrants of restitution by the number of renter-occupied housing units.

The results from the model were consistent with the results for total warrants of restitution: Maryland ZIP codes with a higher percentage of Black renters faced a higher rate of holdover warrants of restitution (Table 2). A 10-percentage-point increase in the percent of Black renters in a ZIP code was associated with a 13% increase (95% CI: 9%, 18%) in the rate of holdover warrants of restitution.

Table 2. Maryland ZIP code-level association between percentage of Black renters and total warrants of restitution, holdover warrants of restitution (Oct 2023 – Sep 2024)

| | n | Estimate | 95% CI |
|---------------------------------|-----|----------|------------|
| Total warrants of restitution | 343 | 1.35 | 1.28, 1.42 |
| Executed holdover eviction rate | 343 | 1.14 | 1.09, 1.19 |

¹<https://app.powerbigov.us/view?r=eyJrljoiYWl1Yzg0YjYtNDZkZS00MDUyLThlMDctYmE1ZjY5MGl0MWJhliwidCI6IjdKM2I4ZDAwLWY5YmUtNDZlNy05NDYwLTRlZjJkOGY3MzE0OSJ9&pageName=ReportSection>,

² [https://data.census.gov/table/ACSST5Y2022.S2502?q=S2502&g=040XX00US24\\$8600000&tp=true](https://data.census.gov/table/ACSST5Y2022.S2502?q=S2502&g=040XX00US24$8600000&tp=true).