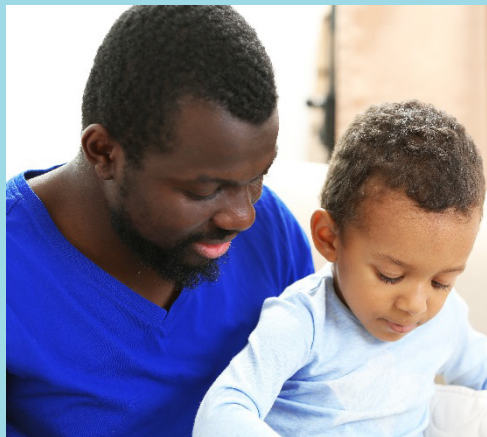# Success in Housing: How Much Does Criminal Background Matter?

A Research Project Initiated by Aeon, Beacon Interfaith Housing Collaborative, CommonBond Communities, and Project for Pride in Living (the Research Collaborative), Conducted in Partnership with Wilder Research

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Key Findings

11 of **15** criminal offense categories have **no significant effect on housing outcomes** after controlling for other observable factors.

These categories include:
- marijuana possession
- other minor drug offenses
- prostitution
- alcohol-related offenses (e.g., public consumption/open bottle)
- minor public order offenses (e.g., loitering)

Major drug offenses, fraud, assault, and property offenses *may* increase the likelihood of a negative housing outcome.

➥ The effects of these backgrounds may be overstated due to the study's data limitations (described in the Caveats and Limitations section), but they increase the risk of negative housing outcomes **by 3 to 9 percentage points at most.**

The effect of a prior criminal offense on a resident's housing outcome **declines over time and becomes insignificant.**

Misdemeanor **after 2 years**

Felony **after 5 years**

Criminal offenses that occurred more than 5 years prior to move-in **have no significant effect** on housing outcomes.

The likelihood of a negative housing outcome is **significantly reduced** in households with:
- 2+ adults
- 1+ children
- Greater average age of adults
- Higher incomes
- Larger subsidies

Race and gender were **not** found to significantly affect housing outcomes.

Characteristics of Households in the Study

The study includes de-identified data from more than **10,500** HOUSEHOLDS, including **15,000** INDIVIDUALS, who resided in one of the properties owned by the partner organizations sometime between March 2010 and June 2017.

HOUSEHOLD TYPE

- **61%** single adult under 65
- **16%** multiple adults without kids
- **13%** single adult 65+
- **11%** families with children

AVERAGE HOUSEHOLD INCOME:

$15,958

AVERAGE LENGTH OF STAY:

3 years

3 in **10** HOUSEHOLDS **contain at least one adult with a prior criminal conviction.** These households tend to be younger and have lower incomes.

Among households with criminal backgrounds, **1** in **3** **have convictions in minor public order offenses** (e.g., loitering), commonly referred to as crimes of homelessness

About **14%** OF HOUSING OUTCOMES are negative. These mostly result from lease violations (8%), skips/leaving without notice (3%), and non-payment of rent (2%).

Contents

Figures

Introduction

The cycle of homelessness and incarceration is well-known in the affordable housing field and well-documented in the literature (Cusack & Montgomery, 2017). With the increased likelihood of criminal justice system involvement among people experiencing homelessness, and housing and employment systems that put ex-offenders at a disadvantage, disrupting this cycle requires stepping away from the norm in at least one of these systems.

Looking for an opportunity to disrupt this cycle, four of Minnesota's nonprofit affordable housing developers came together under a shared goal: to clarify the understanding of how residents' criminal backgrounds contribute to housing outcomes, and to share this understanding across their organizations and with the housing field as a whole. Staff at these organizations questioned the assumption among many property owners and managers that an applicant with a criminal background presents too great a risk or is unlikely to be successful in their housing. They wondered about potential bias held within standard housing application restrictions, and if a more data-driven approach to making decisions on restrictions pertaining to criminal backgrounds would create more opportunities for people to find suitable housing.

Knowing that housing stability is beneficial for individuals and communities, the four organizations joined forces (and data files) to support a quantitative analysis of the relationship between criminal history and success in housing. This summary report presents the key findings of the study.

Research collaborative

In 2016, four nonprofit multifamily affordable housing providers in the Twin Cities area – Aeon, Beacon Interfaith Housing Collaborative, CommonBond Communities, and Project for Pride in Living – created a collaborative to engage in cross-agency research. Together, these four organizations own and manage more than 10,000 affordable apartment homes in the metropolitan area and western Wisconsin. The focus of the group was to examine the relationship between residents' criminal histories and housing outcomes.

The Research Collaborative organizations began examining their resident selection criteria to ensure it was inclusive, data-driven, and did not perpetuate implicit biases found in community systems. To make informed adjustments to their criminal history selection criteria, they reviewed the existing literature and consulted with attorneys, aiming to understand the connection (if any) between an applicant's criminal history and their potential housing success. After a largely unsuccessful search for existing literature, the organizations saw an opportunity to initiate and engage in this research to inform the affordable housing community and other stakeholders.

This research is important because a disproportionately high level of disadvantaged populations have criminal histories. Furthermore, research has found that individuals who have been incarcerated are at a significantly higher risk of becoming homeless, and individuals who are homeless are at a significantly higher risk of becoming incarcerated (National Health Care for the Homeless Council, 2013). The members of the collaborative recognize this disparity and hope this research will lead to increased accessibility to affordable apartment homes for those with the greatest barriers to housing stability.

Aeon believes everyone deserves a home. Home is at the center of everything. With a home, people succeed, families thrive, and our region remains strong. At Aeon, we act boldly to create and preserve quality, affordable homes for those who need them most. Today nearly 8,500 residents have an affordable home with Aeon. Home changes everything. Learn more at aeon.org.

The vision of Beacon Interfaith Housing Collaborative is that all people have a home. We are a powerful collaborative of congregations united in action to create homes and advance equitable housing. By leveraging our collective power, we develop affordable homes, shelter families, and work to impact housing policy. Our focus is on people who make less than $25,000 a year and those who are experiencing homelessness. Learn more at beaconinterfaith.org/.

At CommonBond Communities, we believe home is the foundation for everything in life. By integrating housing and services, we offer more than just a quality place to live—we've been providing homes and support services for those most in need since 1971. Our model has always been about supporting people in achieving their goals and building their best lives. Nearly five decades later, we serve more than 12,000 people every year. We're a nonprofit developer, owner, and manager of affordable apartments and townhomes throughout 60 cities in Minnesota, Wisconsin and Iowa. Through high-quality housing and life-changing support services, we're building stable homes, strong futures, and vibrant communities. Learn more at commonbond.org.

Project for Pride in Living (PPL) is a results-driven housing and job readiness organization. At PPL, we focus on two core drivers of poverty – unemployment and homelessness – and insist that every one of our programs deliver superior results. Last year alone, nearly 14,000 people moved into affordable housing, earned higher incomes, improved their academic skills, and gained economic independence with the help of PPL. Learn more at ppl-inc.org/.

Study population

HIGHLIGHTS

- The study includes de-identified data from more than 10,500 households, including 15,000 individuals, who resided in one of the properties owned by the partner organizations sometime between March 2010 and June 2017.

- Nearly 3 in 10 households (28%) contain at least one adult with a prior criminal conviction. These households tend to be younger, with lower incomes and lower rent (but a slightly higher rent subsidy).

The study includes the de-identified records of more than 10,500 households, with over half of these households residing in properties owned by CommonBond Communities, nearly one-third in Aeon properties, and smaller subsets residing in Project for Pride in Living and Beacon Interfaith Housing Collaborative properties (Figure 1).

1. Study population by housing provider

To be included in the study, a household had to meet all of the following criteria:

- Resided in properties owned by one of these four organizations at some point between March 2010 and June 2017[1]

- Moved out during the study period (between March 2010 and June 2017), or remained housed with one of the four organizations as of June 2017 [2]

- Had complete data needed for the study, including demographics, criminal background, property information, and a move-out reason (if they moved out)

In this study, households with criminal backgrounds tend to have lower incomes and younger adults than households without criminal backgrounds.

Figure 2 presents a comparison of demographics and property characteristics between households with and without criminal backgrounds in this study. This comparison illustrates the importance of controlling for other observable factors when analyzing the impact of criminal background on housing outcomes, because the two populations differ in a number of ways. While both groups are comprised largely of single-adult households, the adults in households with criminal backgrounds tend to be significantly younger. For example, nearly three-quarters (73%) of households with criminal backgrounds are single-adult households under the age of 65, and only 4 percent are single-adult households age 65+. In contrast, among households without criminal backgrounds, 56 percent of households are single-adult households under age 65, while 16 percent are single-adult households age 65+. Households without criminal backgrounds are also more likely to contain two or more adults (21%), compared to households with criminal backgrounds (16%).

What is a criminal background?

For the purpose of this study, having a criminal background means having at least one criminal conviction (felony or non-traffic misdemeanor) on record when the resident applied for housing.

What is a "household with a criminal background"?

The unit of analysis for this study is the household. Therefore, for this study, if any adult in a household has a criminal background, the household is considered a household with a criminal background.

Nearly 3 in 10 households (28%) have a criminal background.

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[1]   Note that the requirement that study participants must have resided with one of the housing providers implies that the study population has already been narrowed to those households who were considered to be low enough risk for the housing providers to accept. The criteria for acceptance varies across providers, however, and the study represents a wide range of backgrounds. See Caveats and Limitations section for more detail.

[2]   The study includes all households that moved out during the study period, regardless of their length of stay. The study also includes households that remained housed with the housing provider at the end of the study period (June 2017), as long as they had resided with the housing provider for at least six months at that time.

In addition, in households with criminal backgrounds, the gender balance is even (49% female, 51% male), while households without criminal backgrounds have a greater proportion of women (62% female, 38% male). Compared to the racial composition of residents without criminal backgrounds (33% white and 59% black), residents in households with criminal backgrounds are more likely to be white (42%) and less likely to be black (51%).

Households with no criminal backgrounds have an average annual household income of about $16,800, nearly $3,000 higher than the annual household income of households with criminal backgrounds.[3]

These differences indicate that we cannot determine the impact of criminal background on housing outcomes by simply comparing the probability of negative housing outcomes between households with and without criminal backgrounds. Instead, this study uses regression analysis, described in detail later in this report, to control for these population differences in order to isolate the impact of criminal background on housing outcomes.

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[3]   It is important to note that these patterns represent associations, not causal relationships, and they do not imply that demographics affect the likelihood of criminal activity or convictions (this study does not analyze the determinants of criminal convictions).

2. Household demographics by criminal background

	Households with criminal background (N=2,969)	Households without criminal background (N=7,540)	All households (N=10,509)
Household size***	1.4	1.5	1.4
Annual household income per person***	$11,091	$13,296	$12,673
Total household income***	$13,808	$16,805	$15,958
Household structure			
Single adult under 65, no children ***	73%	56%	61%
Single adult age 65+, no children ***	4%	16%	13%
2+ adults, no children***	13%	16%	16%
Single adult with children	7%	7%	7%
2+ adults with children***	3%	5%	4%

Characteristics of household members	Members of households with criminal background (N=4,009)	Members of households without criminal background (N=11,135)	Members of all households (N=15,144)
Age			
Children age 0-17***	12%	15%	14%
Adults age 18-24***	19%	22%	21%
Adults age 25-54***	53%	39%	43%
Adults age 55-64	10%	9%	9%
Adults age 65+***	4%	14%	11%
Average adult age***	39	42	41
Race			
Black/African American***	51%	59%	57%
White***	42%	33%	35%
Asian/Pacific Islander***	2%	4%	3%
American Indian***	3%	1%	2%
Other**	2%	3%	3%
Multiracial***	1%	0.5%	1%
Ethnicity			
Hispanic/Latino	4%	3%	3%
Gender			
Female***	49%	62%	59%
Male***	51%	38%	41%

Note. Chi-square significance tests were conducted. Differences are significant at *$p< 0.1$, **$p< .05$, ***$p< .01$.

Households with criminal backgrounds pay lower rent, receive higher subsidies, and don't stay as long.

Figure 3 presents some details of the rental transaction, along with the characteristics of the properties and neighborhoods where study participants reside. Households with criminal backgrounds pay an average of $445 per month in rent (out of pocket), about $39 less than households without criminal backgrounds. Households with criminal backgrounds receive an average of $345 per month in a rental subsidy, about $15 per month more than households without criminal backgrounds. However, the two groups are equally likely to receive a subsidy.

In addition to rental subsidies, many properties in this study also have services available to help residents maintain stable housing. The level of services available in a property ranges from 0 (no services) to 3 (full supportive housing services). The average level of available services is very similar for households with and without criminal backgrounds; the average household from both groups lives in a property with a service level of 2.[4]

Statistical Significance

In this report, we draw particular attention to findings that are statistically significant, which refers to a difference that is determined by statistical analysis to be "real" and more than likely not due to chance. P values are a statistical measure that indicate the likelihood that a difference could be observed due to chance. For example, as shown in Figure 2, households with criminal backgrounds have significantly lower incomes than those without criminal backgrounds, with $p<0.01$. This means there is less than a 1 percent chance that we would observe this pattern if there was no true difference between these populations.

While statistical significance is informative, there is a difference between statistical significance and practical significance. Note, for example, that households with criminal backgrounds have a significantly smaller average household size: 1.4 people, compared to 1.5 in households without criminal backgrounds (Figure 2). Though statistically significant, this small difference is arguably of little practical significance.

In interpreting the results of this study, we encourage the reader to consider both the statistical and the practical significance of the findings.

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[4] In both groups, approximately half of the population resides in properties with level 3 services, which generally include staff on-site for several days per week, in-depth case management services, and programming in areas such as employment services, health and wellness, youth development, etc. About one-quarter of households live in properties with level 2 services, which include fewer days of staff on-site and more limited programming. Level 1 services are lighter-touch and focused on eviction prevention. About 15 percent of households in the study live in properties with level 1 services available.

Households with criminal backgrounds tend to have shorter periods of residency (2.2 years compared to 3.2 years), and to live in smaller properties on average. Their homes tend to be located in neighborhoods with slightly higher poverty rates, higher mobility rates, and higher percentages of residents receiving SNAP food support.[5]

3.   Rental details and property characteristics by criminal background

	Households with criminal background (N=2,969)	Households without criminal background (N=7,540)	All households (N=10,509)
Length of stay (years, average)[a],***	2.2	3.2	2.9
Monthly rent (average)[b],***	$445	$484	$473
Monthly subsidy (average)[b],**	$345	$330	$334
Percent receiving any subsidy[b]	62%	62%	62%
Property and neighborhood characteristics			
Available service level in property[c]	2.1	2.1	2.1
Number of units in property***	76	123	110
Percent receiving SNAP (neighborhood)[d],***	20%	18%	19%
Percent below poverty level (neighborhood)[d],***	22%	20%	20%
Percent residing in same house now as one year ago (neighborhood)[d],***	78%	80%	79%

[a] Length of stay refers to either the length of time between move-in and move-out (for households that moved out between March 2010 and June 2017) or to the length of time between move-in and June 2017 (the end of the study period).

[b] Rent and subsidy data refer to the latest rent or subsidy amount on file (either the value at move-out or, for current residents, the value as of June 2017 when the study period ended).

[c] The available service level is measured on a 4-point scale, ranging from 0 (no services) to 3 (full supportive housing services).

[d] Based on 2012-2016 American Community Survey data for the zip code in which the property is located. Chi-square significance tests were conducted. Differences are significant at *p< 0.1, **p< .05, ***p< .01

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[5]   Note that these differences are quite small, even though they are statistically significant. The reasons for these neighborhood-level differences are not certain, but given that residents generally choose the property to which they apply for housing, they are likely to result from self-selection. For example, higher-poverty neighborhoods likely contain lower-rent properties, which are more accessible for the lower incomes of households with criminal backgrounds. There is no indication that the housing providers play any deliberate role in this pattern.

Housing outcomes

HIGHLIGHTS

■ Fifty-one percent of households in the study had positive housing outcomes (including 39 percent who remained housed with the housing provider at the end of the study period).

■ About 14 percent of housing outcomes are negative. These mostly result from lease violations (8%), leaving without notice (3%), and non-payment of rent (2%).

Table 4 shows the most common resident outcomes. Fifty-one percent of households in the study had positive outcomes (including 39 percent who remained housed with the housing provider and had lived there for more than one year as of the end of the study period), while about 14 percent of households had negative outcomes. Most observed negative outcomes were either lease violations for behavior (8%), leaving without notice (3%), and non-payment of rent (2%), three outcomes with clear negative implications for the housing provider as well as the resident. Finally, 35 percent of move-outs were considered to be "neutral" because it is not clear from the move-out reason (e.g., "relocation") whether the resident maintained their housing stability upon move-out.[6]

Housing Outcomes

In this study, the nature of the housing outcome is defined based on the resident's reason for move-out. From the resident's perspective, a housing outcome may fall into three categories:

- **Positive**: maintaining housing stability

- **Negative**: losing or risking housing stability

- **Neutral**: move-out reason is inconclusive about housing stability

The Research Collaborative members have mission-driven motivation to reduce negative outcomes for residents. This analysis focuses on negative housing outcomes (as opposed to positive outcomes), however, because the negative implications tend to apply to both the resident and the housing provider, allowing the study results to be more broadly applicable to the entire housing field and not only mission-driven organizations.

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[6] A neutral outcome indicates that the household's move-out reason is inconclusive about housing stability. This does not include households without move-out reasons on file; households with missing move-out reasons were excluded from the study.

4. Housing outcomes

	N	%
Total negative (resident does not maintain housing stability)	**1,444**	**14%**
Lease violation for behavior	850	8%
Leave without notice	293	3%
Non-payment of rent	217	2%
Other negative move-out reason	84	<1%
Total positive (resident maintains housing stability)[a]	**5,355**	**51%**
Total neutral (move-out reason is inconclusive about housing stability)[b]	**3,710**	**35%**
All outcomes	**10,509**	**100%**

Note. A complete list of outcomes/move-out reasons can be found in the Appendix.

[a] The most common positive outcomes are continuing successful residency of more than one year (39%) and moving for desired amenities (7%).

[b] The most common uncertain outcomes are "relocation" (18%), health and wellness (6%), and continuing (short-term) successful residency between six months and one year (6%) (This is categorized "neutral" because the period of residency is considered too brief to indicate housing stability).

Criminal background

HIGHLIGHTS

- One-quarter of households have at least one adult with one or more misdemeanor convictions on record. Six percent of households have at least one adult with a felony conviction.

- In households with criminal backgrounds, the most common convictions prior to move-in are property offenses, such as theft and burglary (37% of households) and crimes against public order, such as loitering and trespassing (36%).

The most common criminal offenses in residents' backgrounds are property offenses such as theft and burglary (found in the records of 10 percent of households overall and in 37 percent of households that have at least one criminal conviction) and minor public order offenses often described as crimes of homelessness, such as trespassing, loitering, and spitting on the sidewalk (10 percent and 36 percent, respectively) (Figure 5).

Note that, because some types of offenses are standard disqualifiers for housing in most properties included in the study, and because others were too rarely represented in the available data, we were unable to analyze the impact of some offenses on housing outcomes. The following offenses are not included in this study: arson, major sex crimes, organized crime, extortion, racketeering, and blackmail.

5. Households with criminal convictions by type of offense

	% households with 1+ convictions		Mean # convictions in category per adult (among households with 1+ convictions in the applicable category)
	Households with criminal background (N=2,969)	Overall study population (N=10,509)	
Property offenses (e.g., theft, burglary)	36.9%	10.4%	2.5
Minor public order offenses (e.g., loitering, trespassing)	36.0%	10.2%	2.1
DUI/DWI or reckless driving	27.0%	7.6%	1.8
Serious traffic offenses (other than DUI)	26.6%	7.5%	2.1
Disorderly conduct	23.3%	6.6%	1.6
Alcohol-related offenses (other than DUI)	18.4%	5.2%	1.4
Fraud	17.4%	4.9%	1.9
Minor drug-related offenses	13.1%	3.7%	2.3
Assault	9.5%	2.7%	1.8

5. Households with criminal convictions by type of offense (continued)

	% households with 1+ convictions		Mean # convictions in category per adult (among households with 1+ convictions in the applicable category)
	Households with criminal background (N=2,969)	Overall study population (N=10,509)	
Domestic violence	9.1%	2.6%	1.6
Other minor violence-related offenses	7.9%	2.2%	1.7
Other violent offenses	5.8%	1.6%	1.7
Marijuana possession	3.3%	0.9%	1.1
Prostitution	2.7%	0.8%	2.7
Major drug-related offenses	2.6%	0.7%	1.6
Any conviction	100.0%	28.3%	3.8

Also common are DUI/DWI/reckless driving (8 percent and 27 percent, respectively), other serious traffic offenses like driving with a suspended or revoked license (8 percent and 27 percent, respectively), and disorderly conduct (7 percent and 23 percent, respectively).

Households with convictions in prostitution, property offenses, and minor drug crimes tend to average more than two convictions (in that category) per adult, while the per-adult conviction counts are lower for marijuana possession and non-DUI alcohol-related offenses.

One-quarter of households in the study population (25%) have at least one misdemeanor conviction (non-traffic) on their record, while 6 percent of study households have at least one felony conviction (Figure 6). Because screening criteria are more accepting of convictions that occurred longer ago, rates of felony convictions are higher in the more distant past, with 4 percent of households having a felony on record more than 10 years prior to move-in, compared to only 1 percent with a felony on record in the 2 years prior to move-in. Rates of misdemeanor convictions are more consistent over time, though they, too, are highest in the most distant past.

Households with at least one conviction on record average about 3.5 convictions per adult per class (for example, households with at least one misdemeanor conviction will have an average of 3.5 misdemeanor convictions per adult).

6. Criminal convictions and counts by offense class and timeline

	% households with 1+ convictions		Mean # convictions in category per adult (among households with 1+ convictions in the applicable category)
	Households with criminal background (N=2,969)	All households (N=10,509)	
Any conviction (non-traffic)	100%	28%	3.8
Felony <2 years prior to move-in	3%	1%	1.4
Felony 2-5 years prior to move-in	7%	2%	1.6
Felony 5-7 years prior to move-in	4%	1%	1.4
Felony 7-10 years prior to move-in	4%	1%	1.4
Felony 10+ years prior to move-in	15%	4%	2.7
Any felony	24%	7%	1.4
Misdemeanor <2 years prior to move-in	32%	9%	1.9
Misdemeanor 2-5 years prior to move-in	21%	6%	1.7
Misdemeanor 5-7 years prior to move-in	21%	6%	1.7
Misdemeanor 7-10 years prior to move-in	48%	14%	3.2
Misdemeanor 10+ years prior to move-in	22%	6%	3.4
Any misdemeanor (non-traffic)	86%	24%	3.5

For the purpose of this study, traffic misdemeanors are considered non-criminal. Unless otherwise specified, references to misdemeanors do not include traffic offenses.

HIGHLIGHTS

- Of 15 categories of criminal offenses, 11 show no evidence of a significant link to negative housing outcomes.

- Our analysis suggests that the following criminal offenses *may contribute* to negative housing outcomes: property offenses, major drug offenses, fraud, and assault. *The study's data limitations (described in the Caveats and Limitations section) lead us to question the size and significance of their impact, but having convictions in these categories increases the probability of a negative housing outcome by 3 to 9 percentage points at most.*

- Criminal offenses that occurred more than 5 years prior to move-in have no significant effect on housing outcomes.

- The effect of a criminal offense on a resident's housing outcome declines rapidly over time; the impact of a misdemeanor becomes insignificant after 2 years, while felonies become insignificant after 5 years.

- Household structure (number of adults and children) generally has a larger effect on housing outcomes than the household's criminal history.

Household characteristics matter

In examining the role of criminal backgrounds in determining a household's housing outcomes, recall that the populations with and without criminal backgrounds are not otherwise identical. As shown in Figure 2, households with criminal backgrounds tend to be younger, with lower incomes and fewer children than their neighbors with no records of criminal convictions. We also know that these populations differ in ways we cannot observe in our data; for example, rates of substance abuse conditions have been shown to be higher among those with criminal backgrounds (see Caveats and Limitations section below). Criminal backgrounds present barriers to employment as well. The goal of this study is to control for these confounding factors to the greatest extent possible, in order to isolate and identify any effect of one's criminal history on their housing outcome. To accomplish this goal, we use regression analysis.

Figure 7 illustrates the importance of household factors (other than criminal history) in determining the likelihood of a negative housing outcome. Compared to one-adult households, the probability of a negative housing outcome is 8 percentage points lower for households with two or more adults (and no children), 15 percentage points lower for one-adult households with children, and 23 percentage points lower for households with two or more adults who have children.

What is regression analysis?
Regression analysis is a statistical tool. We input data on the relevant factors contributing to a household's housing outcome and the statistical software exports a set of parameters that tell us how much each factor contributes to the outcome when we hold all of the other factors constant. The regression output quantifies the relative contributions of a variety of factors, including demographics, property and neighborhood characteristics, services and supports, and details of one's criminal background. The results show, for example, that when a household's rent subsidy increases by $100, their likelihood of a negative move-out falls by 1 percentage point.

7. Household characteristics significantly affect the likelihood of a negative housing outcome

Compared to single adults (under age 65) with no children, the likelihood of a negative housing outcome is reduced by:

	In households with…
9 percentage points	2+ adults and no children
16 percentage points	1 adult and at least one child
24 percentage points	2+ adults and at least one child

The likelihood of a negative housing outcome is also reduced by:

1 percentage point	for every $100 increase in monthly rental subsidy
1 percentage point	for every $500 increase in monthly per-capita income

Note. All differences shown are statistically significant at $p < .01$. The likelihood of a negative housing outcome is also reduced in older-single-adult households (age 65+) by 8 percentage points, compared to single-adult households under age 65.

The household's financial circumstances also contribute significantly to their likelihood of a negative housing outcome. For every $100 increase in the monthly rental subsidy, the household's probability of a negative housing outcome falls by 1 percentage point. The probability also falls by about 1 percentage point with every $500 increase in monthly per-capita income.

The regression model also controlled for the household racial and gender composition. These were not statistically significant determinants of housing outcomes.

Most criminal offenses have little to no impact on housing outcomes.

When we examine each category of prior conviction based on a simple measure of whether or not it was present in a resident's history, the regression results show few categories of offenses that had a significant effect on the housing outcome after controlling for other factors.[7] Most categories had no significant impact on housing outcomes, including minor public order offenses, prostitution, alcohol-related offenses, DUI/DWI, and a number of other categories.

Of the 15 categories of offenses considered, only 4 significantly increased the likelihood of negative housing outcomes. Figure 8 presents estimated rates of a negative housing outcome for households with at least one offense in each offense category. These rates are presented alongside a "base rate" of 17 percent, which is the expected percentage of comparable households that would have a negative housing outcome if they did not have a criminal history (see box on right).

How we compute the "base rate" of negative housing outcomes
Households with criminal backgrounds are different in several important characteristics from those without. For example, they are, on average, younger and have lower incomes. To estimate how their prior offenses affect their likelihood of negative housing outcomes, it is important to compare them to demographically comparable households with no criminal histories. To do this, we computed the rate of negative outcomes for a population with their same demographic characteristics, minus the criminal conviction(s). For such a population, the rate of negative housing outcomes is 17 percent.

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7   Although this document presents only one set of regression results, we have carefully examined numerous alternate specifications to thoroughly confirm the null findings for most categories of criminal offenses.

In households with at least one major drug-related conviction, the probability of a negative housing outcome is 9 percentage points higher than those without a major drug-related conviction.[8] Adding 9 percentage points to the base rate of 17 percent, we find that 26 percent of households with at least one major drug conviction are expected to have a negative housing outcome.

Similarly, we see a 6 percentage point increase in the probability of a negative housing outcome in households with a history of property convictions, a 5 percentage point increase in households with a history of assault, and a 4 percentage point increase in households with a history of fraud.
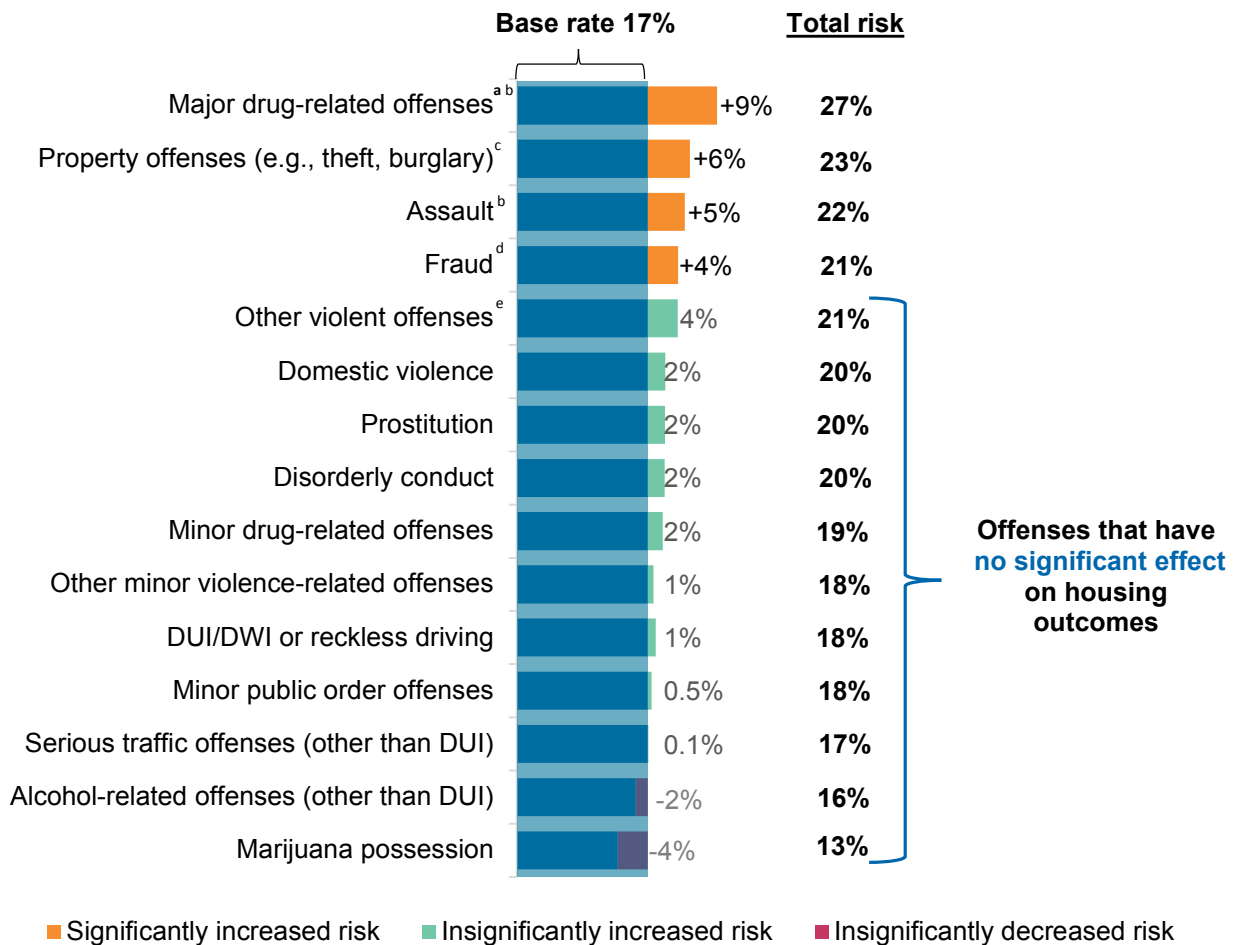
Please note that the observed impact of these criminal offenses would be weakened if data were available to include more factors in the regression analysis. Some critical factors, such as the resident's housing history and any mental health or substance abuse conditions, could not be captured in the model. Because these factors tend to be correlated with both criminal backgrounds and negative housing outcomes, the regression model tends to "blame" the effects of these omitted factors on the criminal background instead. (See "Caveats and Limitations" section for more detail.) Our estimates therefore err on the side of over-estimating the impact of criminal background, and as a result, we can be most confident in results that suggest no significant effect of a given type of criminal history on a household's housing outcome. The statistically significant results, on the other hand, may be driven in large part by the bias noted above, so we are less confident in those results.

Interpreting the results

Consider the following example to illustrate the meaning of the estimated effects in Figures 8 and 9. Suppose a housing provider accepts 100 households that each have at least one major drug-related conviction on record. We would expect 74 of these households to have positive or neutral housing outcomes, while 26 would have negative housing outcomes. Seventeen of the households would have negative housing outcomes even if they had no criminal background (this is the "base rate" described above), while nine households would have negative housing outcomes that are statistically linked to their history of major drug-related convictions.

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[8] Note that, as shown in Figure 5, major drug offenses were among the least common offenses in the study population. The estimated effect is therefore based on a relatively small set of households, suggesting that this result should be interpreted with some degree of caution. Relatedly, this estimated effect is statistically significant only at the level of $p<0.1$, a level sometimes considered to fall short of significance.

8. Most types of criminal background do not significantly increase the likelihood of negative housing outcomes.

Base rate 17%   **Total risk**

Offense	Risk	Total risk
Major drug-related offenses [a][b]	+9%	**27%**
Property offenses (e.g., theft, burglary) [c]	+6%	**23%**
Assault [b]	+5%	**22%**
Fraud [d]	+4%	**21%**
Other violent offenses [e]	4%	**21%**
Domestic violence	2%	**20%**
Prostitution	2%	**20%**
Disorderly conduct	2%	**20%**
Minor drug-related offenses	2%	**19%**
Other minor violence-related offenses	1%	**18%**
DUI/DWI or reckless driving	1%	**18%**
Minor public order offenses	0.5%	**18%**
Serious traffic offenses (other than DUI)	0.1%	**17%**
Alcohol-related offenses (other than DUI)	-2%	**16%**
Marijuana possession	-4%	**13%**

Offenses that have no significant effect on housing outcomes

■ Significantly increased risk   ■ Insignificantly increased risk   ■ Insignificantly decreased risk

Note. The Appendix contains details of the criminal offenses contained in each of the categories shown above. Impacts shown are the effect of the household containing at least one adult that has at least one conviction in the category. For example, a household with at least one adult with at least one assault conviction is 5 percentage points more likely to experience a negative housing outcome than an otherwise comparable household with no assault convictions.

[a] Major drug crimes include drug trafficking and the sale, smuggling, manufacture, or distribution of any controlled substance other than marijuana. This includes unspecified controlled substances. It also includes all 1st or 2nd degree controlled substance offenses.

[b] The estimated effects of major drug-related offenses and assault are statistically significant only at the level of $p<0.1$, a level sometimes considered to fall short of statistical significance.
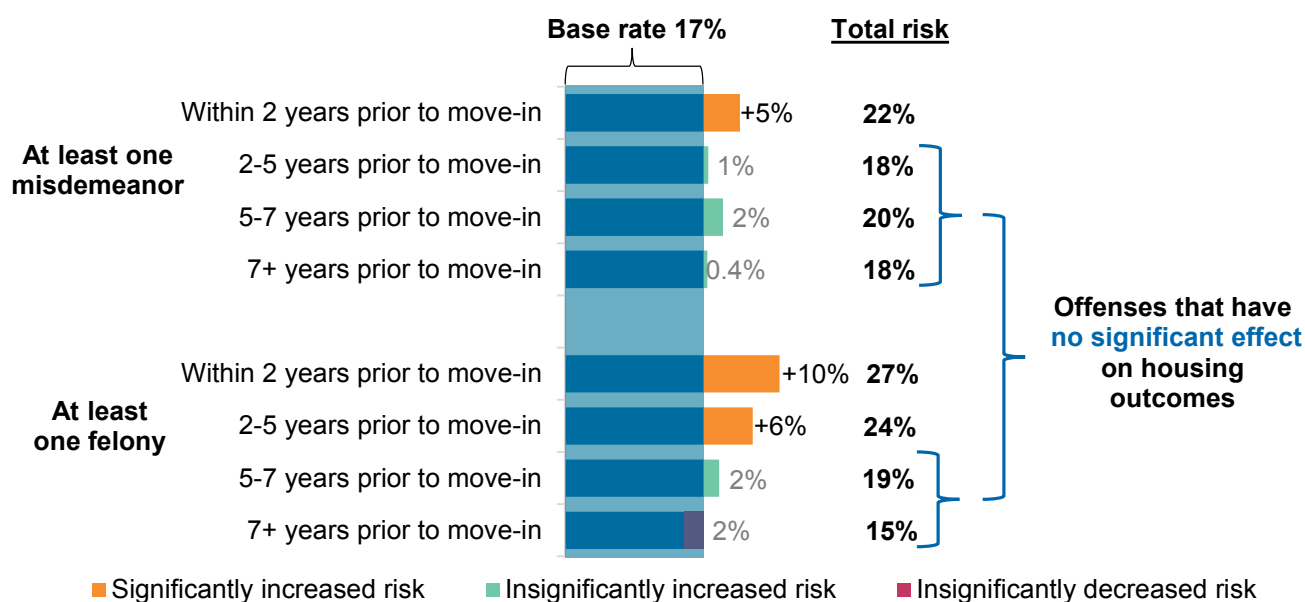
[c] Property offenses include theft, burglary, vandalism, and criminal damage to property. When we drilled down into the results to examine whether any particular type of crime was particularly influential, theft and shoplifting appeared to drive most of the effect of property offenses.

[d] The "fraud" category includes identify theft, use of stolen checks, writing bad checks (when charged and convicted for this), counterfeiting, forgery, etc. There was no noticeable difference in impact among these different subgroups of offenses within the "fraud" category.

[e] Although the magnitude of impact of Other Violent Offenses is similar to that of Fraud, its impact is not statistically significant because it is less common (so the statistical program is less confident in the significance of the impact).

The increased probability of negative housing outcomes for those with criminal convictions fades over time. As shown in Figure 9, rates of negative housing outcomes are significantly higher among households with one or more felony or (non-traffic) misdemeanor conviction in the two years prior to move-in, compared to those with no criminal convictions during that time period. The link is strongest for recent felony convictions (associated with a 10 percentage point increase in probability of negative housing outcomes), whereas the probability increases by only 5-6 percentage points in households with a misdemeanor conviction in the two years prior to move-in or a felony conviction two to five years prior to move-in. Misdemeanors more than two years prior to move-in and felonies more than five years prior to move-in were not found to be significantly associated with greater likelihood of a negative housing outcomes.

9.   The impact of criminal background on housing outcomes fades over time.

■ Significantly increased risk   ■ Insignificantly increased risk   ■ Insignificantly decreased risk

Note. Impacts shown are the effect of the household containing at least one adult that has at least one conviction in the time range. For example, a household with at least one adult with at least one misdemeanor conviction in the 2 years prior to move-in is 5 percentage points more likely to experience a negative housing outcome than an otherwise comparable household with no misdemeanor convictions during that time frame.

In earlier iterations of this analysis, the "7+ years" groups were subdivided into 7-10 years, 10-15 years, and 15+ years. The three were combined after they were found to consistently show the same patterns of estimated magnitudes and statistical significance.

As noted above, these results refer to the impact of the household having at least one conviction in a given category, a very simple approach to examining a very complex issue. We also explored how the impact of criminal history varied based on the number of convictions in a given category, but the results of that analysis were difficult to generalize. For the most part, where we observed significant impacts in Figures 8 and 9 above, we see the strongest impact in the first conviction in a category or time frame, and a declining effect for each additional conviction in that category or time frame.

Caveats and limitations

While these study results may be very valuable in informing criminal background screening criteria, it is important to recognize the limitations in the study data and the impacts of those limitations on what we observe in our results. These study limitations include the following:

- Although we attempt to control for all of the factors that contribute to success in housing in order to present an unobstructed view of the impact of one's criminal background, our study results are limited by a handful of important omissions. We are unable to control for the resident's employment status, education background, disability status, mental health or substance abuse diagnoses, or housing history before entering the housing managed by members of the collaborative. We are also unable to control for individualized factors related to the willingness of building management to take action or not take action related to infractions (i.e., tolerance or inequity in individual decision-making of building management). These factors have theoretical or empirically observed links to both criminal background and housing success (Malone 2009, Tsai & Rosenheck 2013).

    - Impact of this limitation: Omitting these factors from the model tends to bias our results toward overstating the significance and magnitude of the negative impact of criminal background on housing success. Given this bias, we encourage caution in use of findings that identify a significant detrimental impact of criminal backgrounds. We are more confident in results that show little or no impact of criminal backgrounds on housing success, because these backgrounds have been consistently insignificant determinants of housing success despite the model's bias toward greater significance.

- The study is, by definition, limited to residents who were accepted into housing. Given the subjectivity of the housing application process, we might expect that the accepted residents would be more likely to succeed. Those who are screened out will tend to be more severe offenders and/or residents with fewer resources. On the other hand, some programs may focus on residents with the greatest challenges, which would (at least partially) counteract the aforementioned selection effect.

    - Impact of this limitation: For any type of offense that may be used as grounds for screening out, this study may represent the strongest tenants and exclude the ones with lowest likelihood of success. Targeted programs may reverse this effect to some extent, however, leading to uncertainty in the magnitude of the impact of this limitation.

- Because some types of offenses are non-negotiable disqualifiers for housing in most or all properties included in the study, we cannot analyze the impact of these offenses on housing outcomes. Other offenses simply occur too rarely in the study population.

  - Impact of this limitation: The following types of offenses are not represented in this study: arson, major sex crimes, organized crime, extortion, racketeering, and blackmail.

The caveats above are those with the greatest expected impact on the validity or applicability of the results. Additional caveats and limitations are listed in the Appendix.

Of the caveats considered, the first item (omitted variables) is expected to hold the most significant implications for the interpretation of the study findings. The second item may reduce the magnitude of this bias somewhat, but we conclude that the study results overall tend to *overstate the magnitude and significance of the impact of criminal background on housing outcomes.*

Conclusions and issues to consider

The most meaningful and conclusive findings include:

- **Most types of criminal offenses do not significantly increase a household's likelihood of a negative housing outcome when other observable factors are held constant.**

  - Of 15 categories of criminal offenses, 11 showed no evidence of a significant impact on the likelihood of a negative housing outcome.

  - Categories that show no evidence of a link to housing outcomes include: marijuana possession, other minor drug offenses, alcohol-related offenses (e.g., public consumption/open bottle), prostitution, and minor public order offenses, among others.

- **The effect of a prior criminal offense on a resident's housing outcome declines over time.** The impact of a misdemeanor becomes insignificant after two years, while felonies become insignificant after five years.

In addition to the findings above, there were four types of criminal backgrounds that had a statistically significant effect on housing outcomes. Due to the study's data limitations and their impact on the results (as described in the Caveats and Limitations above), we are less confident in these findings. However, they suggest that particular types of criminal backgrounds may increase the probability of a negative housing outcome by 10 percentage points at most (for a felony within two years prior to move-in). The other statistically significant effects are smaller, ranging from 3 to 9 percentage points.

Consider the following example to illustrate the general implications of the statistically significant findings:

Suppose we have 200 households applying for housing, including 100 with no criminal background and 100 with at least one adult with a felony conviction within two years prior to move-in (the background with the largest observed effect). Aside from this one difference in criminal history, the two groups are otherwise identical in all of the ways we can measure. They share the demographic profile of the population used to compute the "base risk" discussed above.

Of the 100 households with no criminal background, 17 households will experience a negative housing outcome. Of the 100 households with a history of at least one felony conviction in the two years prior to move-in, 27 will experience a negative housing outcome. For both groups, we are unable to determine which of the households will experience the negative housing outcomes.[9]

Because the housing provider accepts this relatively small additional risk of a negative housing outcome for these 100 households, 73 of these households will experience a positive or neutral housing outcome, and will remain housed with that housing provider for an average of 2.5 years. The other 27 households will be housed for an average of 1.5 years before experiencing a negative housing outcome. And all 100 households are given an opportunity to break the cycle of homelessness and incarceration.

It is possible, though not conclusive, that a housing provider may incur additional risk of negative housing outcomes by accepting applicants with certain types of criminal backgrounds. Even if these findings were conclusive, they would imply only a relatively small increase in risk to the housing provider, a risk that is arguably outweighed by the societal value of providing a home to these households for 1.5 to 2.5 years.

Most importantly, the study's conclusive findings show that most types of criminal backgrounds do not significantly increase a tenant's risk of experiencing a negative housing outcome. These results illustrate that a wide variety of factors contribute to housing outcomes, and they challenge some common misperceptions about the importance of criminal background in determining the probability of a negative housing outcome.

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[9]   We have identified some factors that are associated with higher or lower risk, but these are generalizations; we cannot definitively pinpoint the households that will experience negative housing outcomes.

Further research

The results of this study are quite informative, and they point to several opportunities for further research. If possible, future research should aim to incorporate data on the critical factors not available for this analysis (especially housing history, substance abuse and mental health conditions, and employment). Including these factors would allow us to understand to what extent criminal background acts as a proxy for other more influential factors. In addition, future research could further explore how the impact of one's criminal background changes as the number of convictions increases (within a category or overall). Furthermore, as the study's housing providers have been reviewing and amending their screening criteria in recent years, future research could explore the impact of these changes on the outcomes of interest, such as the rate of negative housing outcomes or the housing providers' costs.

Finally, in order to better understand the opportunities for changes in screening criteria, it would be quite valuable to develop our knowledge of the outcomes of households that were not accepted into housing (those that could not be represented in this study). How many of these households find housing elsewhere, and how many are successful in that housing? What happens to households that are unable to find housing elsewhere? What costs does society incur to support these households as they experience homelessness, and how do those costs compare to the cost of the additional risk of negative housing outcomes if they were accepted into rental housing? Although such a study would be difficult to execute, it could bring a great deal more clarity around the costs and benefits (to society and to individual organizations) of different approaches to criminal background screening.

Appendix

Methods

Study design

Wilder Research staff participated in several meetings with the Research Collaborative to understand the central goals of the study and identify the best use of available resources to meet these goals. The Research Collaborative met regularly throughout the study to provide input on each stage of the process.

Data gathering

Wilder Research staff worked with the members of the Research Collaborative to review the commonalities of available data across the four organizations. Together, we developed the specifications for the requested data from each organization, and the database administrators at each organization assembled data files containing records for past and current tenants that had resided in one of their properties at any point from March 2010 through June 2017.

The data files included the following:

- Demographics and rental information
- Criminal background data for each individual in the household
- Information about the property in which the resident lived

Details of data-gathering for each type of data are covered below.

In order to maintain the anonymity of the residents included in the study, all resident records were de-identified by the housing providers' staff prior to transferring data to Wilder. These files contained no identifying information; individuals were identified only by a unique ID to match records across files. Wilder staff provided technical assistance as needed to facilitate the merge of data. All data were transferred via Wilder's encryption service and stored in a secure location on Wilder's server, with access granted only to staff working on the project.

Demographics and rental information

The study included a number of demographic characteristics, including race, gender, age, income, and household structure. It also included details of the resident's rental relationship with the organization, including move-in and move-out dates, move-out reason, rent amount, and subsidy amount. As with the other data supplied by the housing providers for the study, the demographics and rental information data file was de-identified prior to being transferred to Wilder Research.

Criminal background data

Wilder and the Research Collaborative have worked together to develop detailed specifications for the data file to be requested from each of the organizations' background check providers. After the organizations received their data files from the background check providers, the criminal background data files underwent an additional process to reduce the level of detail in the residents' records. There was some concern that, given the lack of standardized text for the descriptions of criminal offenses, one could potentially search for and identify an individual based on the specific way that their offense is described (e.g. "cntrl sbs poss.. x3," using the unique spelling and punctuation of a manually-entered offense description). We therefore developed the following procedure to code the offenses into categories prior to transferring the records to Wilder Research.

1. Each organization provided Wilder with a list of all criminal offense descriptions present in their criminal background data files. The file contained only one column (the offense descriptions), with no other information about the individual who committed the offense, the class or disposition of the charge, or the date the offense was committed.

2. Wilder coded these offense descriptions into approximately 120 sets of offenses.

3. Wilder developed a syntax file in R (an open-source statistics and data management software package) for the Research Collaborative members to use to open a criminal background data file, add in the offense code for each offense description, and remove the detailed offense description from the file. The syntax also removed the specific date of the offense (leaving only the month and year) and exported a criminal background data file that could be shared with Wilder Research without any risk of potential identifiability of the records contained within it.

4. Wilder provided this syntax file and detailed instructions to the housing providers, who had only to enter the file path for their criminal background file into the syntax, run the file, and verify that the details were indeed removed before sending the de-identified criminal background file to Wilder.

While two of the three background check providers were able to supply records extending back to the beginning of their relationship with the organization, one background check provider only retains background check records for seven years. As a result, their background check file was limited to those who had lived in the organization's properties for under 7 years, excluding the longest-term residents. To reduce the biasing effect of this issue, the organization's staff retrieved the background check reports from the paper file for a sample of current residents whose background checks were run prior to 2010 and manually entered those records into the background data file.

Property information

In consultation with the Research Collaborative, Wilder developed a property information worksheet to be filled out by each organization, detailing various characteristics of each organization's properties. These characteristics include the building's age (or length of time in possession of the organization), zip code, number of units, and any program criteria for the building or units within the building. Each organization provided information about the service level available at each property, with service levels ranging from 0 (no services at all) to 3 (a very intensive level of services). Using this information, the model was able to represent the availability of these services, even though we were not able to fully analyze the impact of receiving these services.

Data merge and cleaning

In preparation for analysis, the data files from the four organizations were cleaned and merged. Because the partner organizations organize their files differently and store their data in different formats (e.g., some may record gender as "Female" while others may record it as "F"), the research team unified the variable formats across organizations to enable analysis across all participating organizations.

Because the outcome of interest (the housing outcome) is observed at the household level, all data were aggregated to the household level for analysis. Data cleaning, merging, aggregation, and analysis were completed using R, SPSS, and STATA.

Analysis

The details of the analysis are described in the "Full Regression Results" section below.

Move-out reasons

A1. Full list of move-out reasons

	N	%
Negative move-out reasons		
Lease violation(s)	850	8.1%
Leave without notice	293	2.8%
Non-payment of rent	217	2.1%
Lack of affordability	59	0.6%
Other negative	25	0.2%
Total negative	**1,444**	**13.7%**
Positive move-out reasons		
Continuing successful resident (>1yr)[a]	4,129	39.3%
Desired amenities	780	7.4%
Purchase of home	172	1.6%
Moved to project-based housing or received tenant-based subsidy	154	1.5%
No longer needs subsidy/services	56	0.5%
Other positive	64	0.6%
Total positive	**5,355**	**51.0%**
Neutral move-out reasons		
Relocation	1,850	17.6%
Health and Wellness	667	6.3%
Short-term resident (180 to 364 days)[b]	666	6.3%
Death	335	3.2%
Change in household composition	117	1.1%
Funding non-compliance	72	0.7%
Other uncertain	3	0.0%
Total neutral	**3,710**	**35.3%**
Total	**10,509**	**100.0%**

[a] resident that has remained housed for between six and 12 months is included in the study but their outcome is coded as neutral because the period of residency is considered too brief to indicate housing stability. Residents who have been housed for fewer than six months were excluded from the study unless they moved out (and therefore had a move-out reason on file).

A2. Descriptions of criminal offense categories

Category	Examples of contents
Property offenses	Theft, burglary, larceny, criminal damage, vandalism, tampering, receiving stolen property, wrongfully obtaining public assistance
Minor public order offenses	Loitering, panhandling, public urination, littering, failure to pay transit fare, disobeying a police officer, obstruction of justice, giving false identification to police
DUI/DWI or reckless driving	DUI, DWI, careless driving, reckless driving
Serious traffic offenses (other than DUI)	Driving with revoked or suspended license, hit and run
Disorderly conduct	Disorderly conduct, affray (public fighting), fighting, menacing/threatening, reckless endangerment, terroristic threats, disorderly conduct, intimidation, intent to cause pain or injury
Alcohol-related offenses (other than DUI)	Consume liquor/beer in public, open bottle (including open bottle in vehicle), public intoxication, underage drinking
Fraud	Credit card abuse/fraud, identity theft, insurance fraud, obtain by false pretenses, embezzlement, financial exploitation of vulnerable adult, counterfeiting, computer-related crimes
Minor drug-related offenses	Possession of any drug other than marijuana, sale of marijuana (but not other drugs), 3rd-5th degree drug charge, or other drug charge where possession/sale is unspecified
Domestic violence	Domestic battery/assault, abuse, abandonment, child neglect, endangering a child, injury to child or elderly, malicious punishment of a child
Other minor violence-related offenses	Weapon possession/permits, harassment, vehicular injury; other offenses where threat is expressed or accident occurs but the offense description includes no deliberate act of physical violence)
Other violent offenses	Violent crimes other than assault: homicide, robbery, kidnapping, DUI causing injury, animal abuse, any crime committed with a weapon, any other non-sexual act of physical violence not listed elsewhere
Assault	Assault
Marijuana possession	Marijuana possession
Prostitution	Prostitution
Major drug-related offenses	Sale or manufacture of drugs other than marijuana, or 1st-2nd degree drug charge

Full regression results

Table A3 presents details of the regression results discussed in the body of the report. These results are based on an Ordinary Least Squares regression (using robust standard errors). The dependent variable is a binary indicator equal to one if the household experienced a negative housing outcome and zero otherwise. This is one of several empirical specifications that were analyzed for this study (including logit models and several alternative approaches to represent the categories, classes, timing, and quantities of criminal convictions in a household's background). The estimated effects were quite similar across specifications. We have presented the linear probability model results (rather than the logit) due to the greater ease of interpretation of the estimates.

The estimated effects shown in Table A3 can be interpreted as the change in outcome (probability of a negative housing outcome) that results from a one-unit change in the explanatory variable. For example, the criminal background variables take values of zero (no convictions in the given category) or one (at least one conviction in the category), so a one-unit change represents the impact of having at least one conviction in the category, compared to households with no convictions in the category. The estimated effect of a major drug-related offense is 0.09, meaning that the probability of a negative move-out increases by 0.09 (9 percentage points) in households with at least one major drug-related conviction. Note that the explanatory variables' units of measure are critical to the interpretation of the estimated effects. See the notes below Table A3 for more information.

The body of the report describes the most policy-relevant results contained in Table A3, including the importance of the observable household characteristics in determining the probability of negative housing outcomes. In addition to the notable findings discussed in the body of the report, the regression results below include two other estimated effects that merit additional explanation:

■ Housing history screening level, a measure of the length and nature of housing history than an applicant must demonstrate in order to qualify for housing, is unsurprisingly found to be significantly linked to a household's probability of a negative housing outcome. This property-level variable ranges from 1 (where applicants must be homeless in order to qualify for housing in the property) to 4 (where applicants must have a demonstrated positive recent rental history, including no evictions in the last three years). Because a resident's housing history is expected to be a critical determinant of housing outcomes but was not available in the individual-level data, this property-level measure was developed to control for housing history to the greatest extent possible. The regression results indicate that a household in a property with level-four screening (the strictest in this study) would be about 3.9 percentage points less likely to experience a

negative housing outcome (after controlling for other factors) compared to a household in a property for residents who were known to have previously experienced homelessness.[10]

Although a property-level measure is a blunt instrument for this purpose, the size and statistical significance of the criminal background variables declined when the housing history screening level was added to the regression model, a likely indication that the correlation between housing history and criminal background was (and may still be) causing an upward bias in the estimated effects of the criminal background variables.

■ The level of housing barriers, on average, among a property's residents is a property-level measure that is based on the level of services available to residents. It ranges from 0 (low-barrier residents in properties with no services) to 3 (residents with greater barriers, living in properties with full supportive housing services). Although this variable was initially intended to measure the impact of the level of services available to residents, it is more appropriately described as a reflection of the residents' level of need, as residents with greater barriers tend to be housed in properties with more services available.[11] In practice, due to our lack of data on several barriers to housing stability (as described in the Caveats and Limitations section), we are unable to distinguish the effect of available services from the effects of the barriers that led residents to live in properties with those services. What we observe is the combination of these effects.[12]

This measure has somewhat limited value in interpretation, but it adds value to the model in helping to control for some of the otherwise-unobserved barriers to housing stability.

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[10] We arrive at 3.9 percentage points by multiplying the estimated effect (1.3 points) by the 3-unit change between level 1 and level 4.

[11] To illustrate, note that the mean per-capita annual income of households in properties with the highest level of services is about $10,500, compared to $19,100 among households in properties with no services.

[12] Consider this example. Suppose we know that people with barrier A are 10 percentage points more likely to experience a negative housing outcome compared to those without barrier A, and that people receiving service level Z are 8 percentage points less likely to experience a negative housing outcome compared to those who don't receive service level Z (controlling for other factors, in both cases). Suppose we examine housing outcomes for residents in a property that offers service level Z to a group of residents with barrier A. With our limited data, we will only see the combination of the effects of barrier A and service level Z, which is a 2 percentage point increase in probability of a negative housing outcome. The services may significantly reduce the probability of a negative housing outcome, but we can only observe the combined effect of the services and the barriers that drive a resident to seek out the services.

A3. Full regression results: determinants of negative housing outcomes

Explanatory variable	Estimated effect	Standard error
Offense category		
Major drug-related offenses	0.09214*	0.052
Property offenses (e.g., theft, burglary)	0.05607***	0.016
Assault	0.04897*	0.027
Fraud	0.04016**	0.02
Other violent offenses	0.03977	0.037
Domestic violence	0.02307	0.026
Prostitution	0.02282	0.049
Disorderly conduct	0.02253	0.018
Minor drug-related offenses	0.01985	0.027
Other minor violence-related offenses	0.00730	0.03
DUI/DWI or reckless driving	0.00058	0.016
Minor public order offenses (e.g., loitering, trespassing)	0.00489	0.016
Serious traffic offenses (other than DUI)	0.01038	0.014
Alcohol-related offenses (other than DUI)	-0.01653	0.018
Marijuana possession	-0.04020	0.043
Offense class and timing		
Felony <2 years prior to move-in	0.09558**	0.047
Felony 2-5 years prior to move-in	0.06170*	0.035
Felony 5-7 years prior to move-in	0.01944	0.04
Felony 7+ years prior to move-in	-0.02410	0.027
Misdemeanor <2 years prior to move-in	0.04580***	0.018
Misdemeanor 2-5 years prior to move-in	0.00596	0.016
Misdemeanor 5-7 years prior to move-in	0.02433	0.02
Misdemeanor 7+ years prior to move-in	0.00449	0.015
Household type[a]		
Single adult age 65+, no children	-0.08039***	0.015
2+ adults, no children	-0.09488***	0.008
Single adult with children	-0.15668***	0.015
2+ adults with children	-0.24070***	0.015

Note. The dependent variable is a binary indicator of a negative housing outcome. All variables representing criminal background are also binary indicator variables, equal to one if any adult in the household had at least one conviction of the variety described in the variable name. The model also included the following variables that are not shown in the table above:

- Indicator variables for each housing provider

- Household racial composition, measured as the proportions of household members who identify as: Black or African American, White, Asian or Pacific Islander, American Indian, Multiracial, and Other. These variables were not found to be statistically significant determinants of housing outcomes.

[a] "Household type" variables are binary indicatory variables, and the estimated effects are relative to the omitted category (single adult under age 65), e.g., a household of 2+ adults and children is 24 percentage points less likely than a single adult under age 65 to experience a negative housing outcome (after controlling for other observable factors).

Estimated coefficients are statistically significant at *p< 0.1, **p< .05, ***p< .01

A3. Full regression results: determinants of negative housing outcomes (continued)

Explanatory variable	Estimated effect	Standard error
Household composition[b]		
Average age of adults	-0.00090**	0.011
Adults age 18-24	0.03121***	0.014
Adults age 55-64	-0.04567***	0.023
Adults age 65+	0.05814**	0.000
Female	-0.00360	0.007
Finances		
Annual household income per person (thousands of dollars)	-0.00155***	0.000
Monthly rent (average)(hundreds of dollars)	-0.00269*	0.001
Monthly subsidy (average)(hundreds of dollars)	-0.00882***	0.001
Property and neighborhood characteristics		
Average level of housing barriers among property's residents[c]	0.02171***	0.003
Housing history screening level[d]	-0.01295	0.008
Number of units in property	-0.00014***	0.000
Percent of neighborhood population receiving SNAP	0.13030***	0.026
Constant	0.53619***	0.09
R-squared	0.271	

Note. The dependent variable is a binary indicator of a negative housing outcome. All variables representing criminal background are also binary indicator variables, equal to one if any adult in the household had at least one conviction of the variety described in the variable name. The model also included the following variables that are not shown in the table above:
- Indicator variables for each housing provider
- Household racial composition, measured as the proportions of household members who identify as: Black or African American, White, Asian or Pacific Islander, American Indian, Multiracial, and Other. These variables were not found to be statistically significant determinants of housing outcomes.

[b] The mid-range age category (25-54) was excluded from the regression due to collinearity. Household composition variables (other than "average age of adults") are measured as the proportion of household members who fit the description of the variable. For example, a household with a 60-year-old female and a 70-year-old male would have a value of 0.5 for "adults age 55-64," 0.5 for "adults age 65+," and 0.5 for "female." The regression coefficients for these variables can thus be interpreted as the effect of a household being entirely comprised of that group, e.g., a household entirely comprised of adults age 55-64 would have a 4.5 percentage point reduction in likelihood of negative housing outcome.

[c] The average level of housing barriers ranges from 0 (residents of properties with no services) to 3 (residents in properties with full supportive housing services available), with levels 1 and 2 representing residents of properties with low and medium levels of available services, respectively.

[d] Housing history screening level is a property-level measure of the housing history required for applicants to be accepted. It ranges from 1 (housing intended for people experiencing homelessness) to 4 (requiring a positive rental history including no evictions in the last three years).

Estimated coefficients are statistically significant at *p< 0.1, **p< .05, ***p< .01

Additional caveats and limitations

The most critical caveats and limitations are discussed in the body of the report above. Below are some additional issues that are worthy of note, though they are thought to have relatively minimal impacts on the implications or applicability of this study.

- Criminal background data are inconsistent and often lacking in important details. The same crime can be called by any number of different names. The same crime may be a misdemeanor in one state and a felony in another. The inconsistent and limited nature of criminal background data is clear in the observed rates of marijuana possession; we would expect the rate to be higher than the observed 1% of households with marijuana convictions, and the likely cause is the fact that so many offenses are listed only as "controlled substance" offenses.

  – Impact of this limitation: With these data limitations, the precision of our estimates is reduced, and the lines between categories of offenses are somewhat blurred.

- Compared to their white neighbors, people of color are more likely to be arrested, charged, and convicted of crimes (Clemons 2014, Burch 2015).

  – Impact of this limitation: The regression model controls for race and ethnicity (which are not statistically significant determinants of housing outcomes when all other factors are controlled for). While we know the impact of this bias on society is substantial, its impact on this study is relatively minimal.

- The data requirements for a household to be included in this study were quite extensive. In particular, a household was excluded if their historical background check data could not be found by the background check providers and linked to their current records in the housing providers' data systems. Name changes alone may have proved to be a significant limiting factor for this purpose, though we have no way of knowing how large an impact that may have had.[13] A household must also have had a move-out reason on file (if they had moved out). Nearly 3,000 past residents had otherwise complete data but no move-out reason, and were therefore excluded from the study.

  – Impact of the limitation: We see no reason to suspect that the households with missing data are meaningfully different from the households with complete data.

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[13] In addition, one of the background check providers only retained records for seven years, resulting in the omission of most of the longest-term residents (those who had moved in more than seven years ago) for that housing provider. The housing provider manually entered the criminal background data (using old paper files) for a sample of these longest-term residents in order to reduce the impact of this limitation.

- Housing outcomes are measured based on the recorded move-out reason. In addition to the limitations resulting from missing data, we also cannot know to what extent the move-out reason reflects future housing stability.
  - Impact of the limitation: Strictly speaking, the study results represent the impact of criminal background on the probability of a negative *move-out reason*, which this study equates to a negative *housing outcome*. The degree of alignment between a tenant's short-run move-out reason and their long-run housing outcome is unknown.

A final note about the relationship between criminal background and housing outcomes

The central goal of this study has been to understand the impact of criminal background on housing outcomes. For this purpose, we have relied on regression analysis to hold other observable factors constant, in order to isolate the impact of criminal background from other correlated factors like income and other household characteristics. In focusing our attention on this complex and multifaceted question, we have set aside a simpler question that the reader may wonder about: how much does criminal background *predict* housing outcomes, by serving as a proxy for these other factors?

The depth of analysis in this study is not necessary to answer this simpler question; most housing providers could examine their own data to quantify the difference in rates of negative housing outcomes between households with and without criminal backgrounds. In the population included in this study, the rate of negative housing outcomes is indeed higher among households with criminal backgrounds, compared to those without criminal backgrounds. Among households without criminal backgrounds, who generally have higher incomes, older adults, and more children, about 9 percent of housing outcomes are negative. In households with criminal backgrounds, most of the 25 percent rate of negative housing outcomes is explained by household characteristics like those listed above, including their lower incomes and their greater likelihood of being single-adult households under age 65.

The focus of this study has been to disentangle the interrelated factors that contribute to housing outcomes in order to understand what truly drives them. In doing so, we have shown that other household characteristics are at least as important as a household's criminal background in determining their housing outcome. Furthermore, we have shown that the impact of a household's criminal background on their housing outcomes depends critically on the specific contents of that criminal background; to apply "criminal background" as a blanket screening device would likely mean unnecessarily weeding out many tenants who could be successful in housing. The results of this study therefore offer greater insights into the importance of these details in criminal background screening.

References

Blackwelder, William C. 1982. "'Proving the Null Hypothesis' in Clinical Trials." *Controlled Clinical Trials* 3 (4): 345–53. https://doi.org/10.1016/0197-2456(82)90024-1.

Blumstein Alfred, and Nakamura Kiminori. 2009. "Redemption in the Presence of Widespread Criminal Background Checks*." *Criminology* 47 (2): 327–59. https://doi.org/10.1111/j.1745-9125.2009.00155.x.

Bradley, Katharine H., R. B. Oliver, Noel C. Richardson, and Elspeth M. Slayter. 2001. "No Place like Home: Housing and the Ex-Prisoner." *Issue Brief. Boston, MA: Community Resources for Justice*.

Burch, Traci. 2015. "Skin Color and the Criminal Justice System: Beyond Black-White Disparities in Sentencing." *Journal of Empirical Legal Studies* 12 (3): 395–420. https://doi.org/10.1111/jels.12077.

Clemons, John Tyler. 2014. "Blind Injustice: The Supreme Court, Implicit Racial Bias, and the Racial Disparity in the Criminal Justice System Notes." *American Criminal Law Review* 51: 689–714.

Cusack, Meagan, and Ann Elizabeth Montgomery. 2017. "Examining the Bidirectional Association between Veteran Homelessness and Incarceration within the Context of Permanent Supportive Housing." *Psychological Services* 14 (2): 250.

Gallistel, C. R. 2009. "The Importance of Proving the Null." *Psychological Review* 116 (2): 439.

Greenberg, Deena, Carl Gershenson, and Matthew Desmond. n.d. "Discrimination in Evictions: Empirical Evidence and Legal Challenges." *Harvard Civil Rights* 51: 45.

Greenberg, Greg A., and Robert A. Rosenheck. 2008. "Jail Incarceration, Homelessness, and Mental Health: A National Study." *Psychiatric Services* 59 (2): 170–77. https://doi.org/10.1176/ps.2008.59.2.170.

Greenspan, Owen. 2014. "Survey of State Criminal History Information Systems, 2012." Criminal Justice Information Policy. Bureau of Justice Statistics.

Kushel, Margot B., Judith A. Hahn, Jennifer L. Evans, David R. Bangsberg, and Andrew R. Moss. 2005. "Revolving Doors: Imprisonment Among the Homeless and Marginally Housed Population." *American Journal of Public Health* 95 (10): 1747–52. https://doi.org/10.2105/AJPH.2005.065094.

LeBel Thomas P. 2017. "Housing as the Tip of the Iceberg in Successfully Navigating Prisoner Reentry." *Criminology & Public Policy* 16 (3): 891–908. https://doi.org/10.1111/1745-9133.12313.

Lutze, Faith E., Jeffrey W. Rosky, and Zachary K. Hamilton. 2014a. "Homelessness and Reentry: A Multisite Outcome Evaluation of Washington State's Reentry Housing Program for High Risk Offenders." *Criminal Justice and Behavior* 41 (4): 471–91. https://doi.org/10.1177/0093854813510164.

Malone, Daniel K. 2009. "Assessing Criminal History as a Predictor of Future Housing Success for Homeless Adults With Behavioral Health Disorders." *Psychiatric Services* 60 (2): 224–30. https://doi.org/10.1176/ps.2009.60.2.224.

National Health Care for the Homeless Council. 2013. "Incarceration & Homelessness: A Revolving Door of Risk." In Focus: A Quarterly Research Review of the National HCH Council, 2:2. [Author: Sarah Knopf - Amelung, Research Associate] Nashville, TN: Available at: https://www.nhchc.org/.

Oyama, Rebecca. 2009. "Do Not (Re)Enter: The Rise of Criminal Background Tenant Screening as a Violation of the Fair Housing Act." *Michigan Journal of Race & Law* 15: 181.

Saddichha, Sahoo, Joelle M Fliers, Jim Frankish, Julian Somers, Christian G Schuetz, and Michael R Krausz. 2014. "Homeless and Incarcerated: An Epidemiological Study from Canada." *International Journal of Social Psychiatry* 60 (8): 795–800. https://doi.org/10.1177/0020764014522776.

Siegel, Carole E., Judith Samuels, Dei-In Tang, Ilyssa Berg, Kristine Jones, and Kim Hopper. 2006. "Tenant Outcomes in Supported Housing and Community Residences in New York City." *Psychiatric Services* 57 (7): 982–91. https://doi.org/10.1176/ps.2006.57.7.982.

Spellman, Brooke, Jill Khadduri, Brian Sokol, and Josh Leopold (Abt Associates Inc.). 2010. "Costs Associated with First-Time Homelessness for Families and Individuals." U.S. Department of Housing and Urban Development. https://www.huduser.gov/publications/pdf/costs_homeless.pdf.

Tejani, N., R. Rosenheck, J. Tsai, W. Kasprow, and J. F. McGuire. 2014. "Incarceration Histories of Homeless Veterans and Progression Through a National Supported Housing Program." *Community Mental Health Journal* 50 (5): 514–19. https://doi.org/10.1007/s10597-013-9611-9.

Thacher, David. 2008. "The Rise of Criminal Background Screening in Rental Housing." *Law & Social Inquiry* 33 (1): 5–30. https://doi.org/10.1111/j.1747-4469.2008.00092.x.

Tsai, Jack, and Robert A. Rosenheck MD. 2012. "Incarceration Among Chronically Homeless Adults: Clinical Correlates and Outcomes." *Journal of Forensic Psychology Practice* 12 (4): 307–24. https://doi.org/10.1080/15228932.2012.695653.

Tsai, Jack, and Robert A. Rosenheck. 2013. "Homeless Veterans in Supported Housing: Exploring the Impact of Criminal History." *Psychological Services* 10 (4): 452–58. https://doi.org/10.1037/a0032775.

Walter, Rebecca J., Jill Viglione, and Marie Skubak Tillyer. 2017. "One Strike to Second Chances: Using Criminal Backgrounds in Admission Decisions for Assisted Housing." *Housing Policy Debate* 27 (5): 734–50. https://doi.org/10.1080/10511482.2017.1309557.

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