RESEARCH REPORT

Maintaining Housing Stability

Interim Lessons from the Denver Supportive Housing Social Impact Bond Initiative

Mary Cunningham, Sarah Gillespie, Devlin Hanson, Michael Pergamit, Alyse D. Oneto, and Prasanna Rajasekaran
URBAN INSTITUTE

Tracey O’Brien, Liz Sweitzer, and Christine Velez
THE EVALUATION CENTER AT THE UNIVERSITY OF COLORADO DENVER

November 2019
ABOUT THE URBAN INSTITUTE

The nonprofit Urban Institute is a leading research organization dedicated to developing evidence-based insights that improve people’s lives and strengthen communities. For 50 years, Urban has been the trusted source for rigorous analysis of complex social and economic issues; strategic advice to policymakers, philanthropists, and practitioners; and new, promising ideas that expand opportunities for all. Our work inspires effective decisions that advance fairness and enhance the well-being of people and places.
Contents

Acknowledgments iv

Maintaining Housing Stability 1
Introduction 1
  Chronic Homelessness in Denver 2
  Criminal Justice System in Denver 3
  Need for Supportive Housing 5
What Is the Denver SIB? 6
  Partners 6
  Target Population 7
  Referral Process 8
  Program Model 9
Evaluation 10
  Research Questions 11
  Process Study 11
  Outcomes and Impact Study 11
Who Is the Program Serving? 12
How Is the Program Enrolling and Housing Participants? 14
  Challenges and Strategies in the Engagement Pipeline 17
Are Participants Stably Housed? 19
  Housing Retention and Exits 19
  Challenges to and Strategies for Helping Participants Maintain Housing 21
  Housing Stability Success Payments 23
Are Participants Returning to Jail? 23
  Jail Stays 23
  SIB Strategies for Maintaining Housing Stability while Navigating the Criminal Justice System 25
Conclusions 27

Appendix 28

Notes 32

References 33

About the Authors 34

Statement of Independence 36
Acknowledgments

This report was funded by the City and County of Denver as part of the social impact bond evaluation contract. We are grateful to them and to all our funders, who make it possible for Urban to advance its mission.

The authors acknowledge the partners who made this research report and the supportive housing program possible. They include Dellena Aguilar, Cathy Alderman, Carrie Craig, Kelly Eisentraut, Sophia Lawson, Kamrey Lucero, Matt Mollica, John Parvensky, Monique Phillip, Lisa M. Thompson, Deanne Witzke, and the modified Assertive Community Treatment team staff members from the Colorado Coalition for the Homeless; Takisha Keesee, Adrian Leija, Jillian McNaughten, Kristi Mock, Oriana Sanchez, and JoAnn Toney from the Mental Health Center of Denver; Katie Bonamasso at the Corporation for Supportive Housing; Eliel Villalobos at the Denver Sheriff Department; Kirk Bol at the Colorado Department of Public Health and Environment; and Cindy Laub and Mike Nichols at the Denver Police Department. We thank Margaret Danuser at the City and County of Denver for her guidance of this project. The authors also acknowledge all other partners involved in the social impact bond project, including leadership and key staff members from the City and County of Denver, Colorado Coalition for the Homeless, Mental Health Center of Denver, Corporation for Supportive Housing, Denver Crime Prevention and Control Commission, Denver Police Department, Denver Sheriff Department, and Enterprise Community Partners.

We acknowledge our research partners from the Evaluation Center at the University of Colorado Denver, led by Bonnie Walters, for their ongoing data collection and analysis on various aspects of the social impact bond evaluation. We thank Dr. Dennis Culhane and Dr. Stephen Metraux for their careful review of the final reports. Finally, we acknowledge Meghan Ashford-Grooms for her copyediting assistance.

The views expressed in this report are those of the authors and should not be attributed to the Urban Institute, its trustees, or its funders. Funders do not determine research findings or the insights and recommendations of Urban experts. Further information on the Urban Institute’s funding principles is available at urban.org/fundingprinciples.
Maintaining Housing Stability

Introduction

When the Denver Supportive Housing Social Impact Bond Initiative (Denver SIB) launched in 2016, about 850 people were experiencing chronic homelessness in the Denver metropolitan area. Since then, that number has grown; more recent data show that chronic homelessness spiked in Denver in 2018, when 1,596 individuals were experiencing it, then decreased in 2019, to 1,158 individuals, but overall has maintained an upward trend. Many people experiencing chronic homelessness live on the street, while the rest reside in emergency shelters.

A lack of affordable housing and supportive services, as well as the criminalization of homelessness, can have dire consequences. People who experience chronic homelessness move in and out of jail, a cycle that affects their health and well-being and does not address the underlying causes of homelessness. Many die on the street. Chronic homelessness affects the entire community, straining police and emergency services and affecting downtown neighborhoods and businesses. All of this comes at a significant cost to taxpayers.

To address this issue, the City and County of Denver, along with eight private investors, funded the Denver SIB in January 2016. The goals were to help people disrupt the jail-to-street cycle, find permanent housing, and access supportive services. Three years into the program, the Colorado Coalition for the Homeless (CCH) and the Mental Health Center of Denver (MHCD) have engaged some of the city’s most vulnerable homeless residents and placed them in supportive housing. In 2018, based on early promising results, the City and County expanded the capacity of the Denver SIB (referred to as SIB 2.0).

This report highlights key lessons that were learned and outcomes that were achieved over the first three years of the Denver SIB program. We start by describing the problem of chronic homelessness in Denver and the role of supportive housing as a potential solution. Next, we provide an overview of the initiative, including the key partners, program model, engagement and enrollment process, and program participants’ move into supportive housing. Finally, we discuss successes and challenges in helping participants maintain housing stability and stay out of jail. A companion brief, “Denver Supportive Housing Social Impact Bond Initiative: Housing Stability Payments,” describes the housing stability payment outcomes for the Denver SIB to date (Cunningham et al. 2019).
Chronic Homelessness in Denver

Providing adequate and affordable housing for people experiencing long-term homelessness and other disabling conditions, also called chronic homelessness, continues to be an enormous challenge in Denver. According to the annual point-in-time count conducted by the Metro Denver Homeless Initiative, 1,158 people experienced chronic homelessness in metropolitan Denver in 2019 (figure 1). The chronically homeless population represents one-fifth of the total homeless population in the Denver region. Most of the 1,158 people who were chronically homeless in 2019 lived in the City and County of Denver (806 people). Sixty-nine percent of the 1,158 people who were chronically homeless were living in a shelter, 29 percent were living unsheltered on the street, and the remaining 2 percent were residing in safe havens (Metro Denver Homeless Initiative 2019).

In Denver, homelessness has been increasing as the city has gone through dramatic changes over the past decade. Job opportunities, urban amenities, and an interest in walkability have made the city more attractive. And as the area’s population has grown, median housing prices have skyrocketed, from $254,000 in January 2014 to $429,000 five years later. Median rent in Denver is approximately $2,200, according to Zillow. More than half of Denver residents pay more than 30 percent of their incomes toward rent. A recent study from Zillow links the rise in rental burden with homelessness, finding that homelessness rises faster when households are paying more than one-third of their income toward rent.

Homelessness has devastating effects; it damages a person’s physical and mental health and can lead to early death. According to CCH (2018), 233 people experiencing homelessness died in the Denver metropolitan area in 2018.
Criminal Justice System in Denver

People who experience chronic homelessness cycle in and out of jail, often because of nuisance crimes related to loitering, trespassing, sleeping or camping on the street, panhandling, and public drinking or drug use. In 2012, the Denver City Council passed a ban on unauthorized camping. In response, an initiative named the Right to Survive in Public Spaces was on the ballot in the May 2019 municipal election. It would have allowed resting, sheltering, and eating or exchanging food in outdoor public places and was the first ballot initiative in the nation that would have decriminalized homelessness. It was defeated, however. Therefore, police continue to issue citations and use existing laws to clear encampments that develop in Denver’s downtown neighborhoods.

This approach is costly. In Too High a Price: What Criminalizing Homelessness Costs Colorado, researchers at the University of Denver reported that Denver spent $3.2 million enacting five anti-homeless ordinances from 2010 to 2014. According to the report, these ordinances included a ban on camping, park curfews and closures, and prohibitions on panhandling and urinating in public (Adcock et al. 2016). In 2014 alone, those ordinances produced 1,884 total citations and cost the city $750,000 to enforce. The Denver Crime Prevention and Control Commission has estimated that in a given year,
chronically homeless frequent users of the criminal justice and other public systems spend an average of 59 nights in jail and are responsible for more than 2,000 visits to detox facilities. The frequent interaction with jails, detox facilities, and other systems such as emergency care cost the city an estimated $7.3 million a year.⁷

The rise in homelessness has put a significant strain on police and other emergency responders, who are often not equipped to address the mental and behavioral health needs of people experiencing homelessness. In 2016, the city launched a coresponder model, which pairs responding police officers with a clinician who can help assess and direct people toward the services they need. According to MHCD, from April through December of 2016, coresponders answered 1,106 calls related to people in a mental or behavioral health crisis, and 1,043 of the people were sent to treatment or other services instead of jail. As of 2018, the program had grown from four clinicians to 15 licensed mental health clinicians. This expansion was possible through a $1.2 million Medicaid carve-out. In 2018, the coresponder team made contact with 1,725 people, 74 percent of whom were homeless (MHCD 2018).

In 2019, the Colorado General Assembly passed some legislation that could have a positive impact on people in the jail-homelessness cycle.

- **HB19-1225** ("No Monetary Bail for Certain Low-level Offenses"): This bill bans cash bail for petty and municipal offenses, such as violating an open-container law or a park curfew. Critics of the cash bail system argue that it keeps poor people incarcerated while people of means can afford to pay the bail amount and avoid being jailed.

- **SB19-191** ("Prompt Pretrial Liberty and Fairness"): This bill creates rights for defendants related to their release on bail, such as having a hearing within 48 hours of incarceration. Without such rights, a lack of money or a lack of resources in jail often keeps people behind bars.

- **SB19-143** ("Parole Changes"): This bill makes it more difficult for parole to be denied to people who have been convicted of certain low-level felonies. It also allows the director of the Colorado Department of Corrections to recommend that inmates with low-level convictions be released. Prosecutors will no longer be able to send parolees who fail a drug test back to prison.

- **HB19-1263** ("Offense Level for Controlled Substance Possession"): This bill lowers the penalty for certain drug possession violations. For example, people arrested with less than 4 grams of drugs like heroin and methamphetamine will face a misdemeanor charge rather than a felony.
- HB19-1025 and SB19-170 (“Limits on Job Applicant Criminal History Inquiries” and “Inquiry into College Applicant Criminal History”): This pair of bills bans employers and state colleges and universities from asking about an applicant’s criminal conviction history on an application.
- HB19-1275 (“Increased Eligibility for Criminal Record Sealing”): This bill creates a simplified process for sealing criminal justice records.

In addition, several policy and program efforts are trying to change the way those experiencing homelessness navigate the criminal justice system. Although Denver has a long way to go to end the jail-homelessness cycle, these system-wide changes represent significant shifts for the Denver SIB’s target population.

**Need for Supportive Housing**

Previous research points to supportive housing as a solution for chronic homelessness. Permanent supportive housing (PSH) combines a permanent housing subsidy with wraparound services to help people gain increased stability in their lives. Often, PSH is offered using a Housing First approach, which does not require that participants meet preconditions to entry, such as entering treatment, achieving sobriety, or committing to ongoing service participation requirements. As many as 80 percent of chronically homeless people who receive PSH remain housed after one year, and people in PSH use shelters significantly less than they did before entering the program (Byrne et al. 2014; Listwan and LaCourse 2017). In addition, studies have found that after a year in PSH, participants have fewer days in jail than they did before their stay in PSH (Aidala et al. 2014).

Not only does the evidence suggest that PSH improves outcomes for this vulnerable population, but it also shows that this intervention has promising cost offsets because of decreased jail use among the population receiving PSH. In New York City, Culhane, Metraux, and Hadley (2002) found that placing people who are chronically homeless and have mental health issues into supportive housing led to a reduction in service usage and the city’s overall spending on those services. Other research found that people placed in PSH generated fewer jail costs than those who were not placed in PSH (New York City Department of Health and Mental Hygiene 2013).

Despite this promising evidence, the amount of supportive housing in Denver is not sufficient for meeting the needs of the population experiencing chronic homelessness. According to the US Department of Housing and Urban Development, the Denver Continuum of Care, the communitywide coordinating entity for homelessness services, has 1,134 PSH beds dedicated to chronically homeless
individuals (HUD 2018). Despite this inventory, a large share of the homeless population remains chronically homeless, which illustrates the significant gap in the number of beds needed to house all people experiencing chronic homelessness.

What Is the Denver SIB?

The City and County launched the Denver SIB to respond to the need for supportive housing. The goals are to increase housing stability and decrease jail stays for 250 individuals who experience long-term homelessness and have frequent interactions with the criminal justice and emergency health systems by providing them with supportive housing.

The city and eight private investors pooled resources to fund the initiative, which uses an innovative mechanism called social impact bonds to pay for part of the program. The city signed a performance-based contract to leverage $8.6 million in up-front capital from the eight investors to fund supportive services. In addition to that funding, the initiative is leveraging additional housing resources from the Colorado Department of Local Affairs’ Division of Housing and the Denver Housing Authority and is receiving Medicaid reimbursements for supportive services. If the program works, as indicated by performance measures outlined in the contract and validated by a rigorous evaluation, the city will repay, potentially with a positive return, the private investors. If the program does not achieve its performance measures, the city will not repay the investors. The Denver SIB is one of the first supportive housing programs funded through a social impact bond financing mechanism. In shifting from the frequent use of costly emergency services to preventive services, the city hopes to realize future cost offsets or savings.

Partners

In launching the program, the City and County of Denver developed an agreement with Denver PFS LLC, an entity established by the Corporation for Supportive Housing and Enterprise Community Partners, to execute the Denver SIB. CCH began providing supportive housing services in the program’s first year; MHCD started doing the same in the second year. The Denver Crime Prevention and Control Commission provided staff for the program referral process, and the Denver Police Department (DPD) provided administrative data for the evaluation. The Urban Institute is conducting a five-year randomized controlled trial evaluation and implementation study in collaboration with partners from
the Evaluation Center at the University of Colorado Denver and the Burnes Center on Poverty and Homelessness at the University of Denver. Figure 2 shows the basic structure of the SIB project.

**FIGURE 2**
The Denver Supportive Housing Social Impact Bond Initiative Framework

![Diagram of the Denver Supportive Housing Social Impact Bond Initiative Framework](image)

**Source:** Adapted from US Government Accountability Office (GAO), "Pay for Success: A Look at a New Way for Government to Finance Prevention Programs Based on Measured Results" (Washington, DC: GAO, n.d.) and the Urban Institute Pay for Success Initiative.

**Target Population**
The supportive housing initiative targets people who are experiencing homelessness and other challenges that result in frequent use of the criminal justice and other public systems. To create a list of eligible people, project partners defined the target population as all people who have eight or more arrests with the DPD over three consecutive years. Three of the arrests had to be marked as transient, meaning that the person had no address or gave a shelter address. The DPD identified eligible people through a data pull and created a master eligibility list.
Referral Process

To refer people from the eligibility list to the supportive housing program, the DPD established an automatic report that matches daily police data with the eligibility list to identify people from the list who had a police contact or arrest in the previous 24 hours. This process ensures that those who are referred are still in the community and interacting with the police. The Crime Prevention and Control Commission then screens out people with open felonies from the previous two years. (Project partners added this step in the first months of implementation because people who meet those criteria are likely awaiting sentencing and may not be able to engage in supportive housing. If someone’s felony charge is later closed, they can still be referred to the housing program.)

Next, the Urban Institute conducts a lottery to randomly assign people to the supportive housing program (see the section on evaluation for details) and to the control group, whose members do not participate in the program. Because there isn’t enough housing for all who are eligible, a lottery is a fair way to allocate housing and conduct a rigorous evaluation. The individuals assigned to the supportive housing program (Denver SIB participants) are referred to CCH or MHCD, which are responsible for finding them in the community and engaging them in the program. This referral process is detailed in figure 3.

FIGURE 3
Social Impact Bond Supportive Housing Referral Process

| Police data match with eligibility list | Screen for open felonies | Lottery for random assignment | Referral to service providers |

Referrals to the supportive housing program were made on a rolling basis starting in January 2016, and the evaluation will track participants through 2020. In total, 546 individuals have been referred to MHCD or CCH. This report focuses on the 533 individuals who had been referred to the program as of January 1, 2019, and uses data on the first six months after each referral to understand progress toward participant engagement and housing.
Program Model

Supportive housing combines a permanent housing subsidy with intensive wraparound services. The Denver SIB program provides the following services:

- subsidized housing
- an Assertive Community Treatment (ACT) team
- behavioral health services, including psychiatric services, individual and group therapy, peer support services, and substance use treatment
- links to community resources (e.g., food resources, legal referrals, and advocacy) and to integrated health services (e.g., medical, dental, vision, pharmacy services)
- transportation assistance and referrals

HOUSING

The program model uses a Housing First approach. To meet its goal of providing 250 individuals with supportive housing units, the initiative uses a combination of housing models, including scattered-site units rented with a housing subsidy in the private market and single-site buildings with designated units in the following apartment complexes: Renaissance at North Colorado Station, Sanderson Apartments, and Renaissance Downtown Lofts.

THE ASSERTIVE COMMUNITY TREATMENT MODEL

The SIB service providers employ the ACT model of intensive clinical treatment, support, and case management for residents living in PSH. The core components of the ACT model are smaller, shared caseloads; a multidisciplinary team approach; clinical services provided in the home; and an unlimited time frame. Largely because of resource and funding constraints, some Denver SIB teams practice a modified ACT model that allows the staff-to-client ratio to be slightly higher than the 1:10 ratio required in ACT. In addition, the Denver SIB provides care to everyone in the program, regardless of diagnosis, unlike the typical ACT model, which is designed to help people with specific mental health concerns. Residents are served by CCH and MHCD’s multidisciplinary ACT teams in their project-based buildings and at scattered-site locations.

The ACT teams can be made up of a program manager, case managers, administrative assistants, peer specialists, nurses, and psychiatric prescribers. Although each member has a distinctive role, ACT teams work together to ensure that Denver SIB participants receive the supports they need. The ACT teams and housing teams also work closely with staff members in roles such as resident service
coordinator, property management staff, and behavioral health therapist to enhance communication and ensure seamless transitions for Denver SIB participants. Service providers offer an array of programs, such as vocational training and peer-mentor support, as well as classes on money management, grocery shopping, and food preparation.

CCH and MHCD case managers regularly check on all their clients, but residents are not required to engage in support services. Providers assess the needs of each client and tailor services, with the goal of maintaining the client’s housing. Overall, the ACT teams provide case management, therapeutic, and clinical services. Each client has a case manager, which allows for continuity of care. The ACT model also incorporates a team approach; any team member—whether a nurse, peer specialist, or case manager—can check in with residents and provide them with essential services and support.

Evaluation

The Urban Institute is conducting this evaluation in collaboration with partners from the Evaluation Center and the Burnes Center. The evaluation, funded by the City and County of Denver, has several components that will be reported on at different stages of the five-year project: implementation, outcomes, impact, and costs. In addition, with funding from the Robert Wood Johnson Foundation, the Urban Institute is analyzing differences in health care usage and health outcomes for the evaluation’s target population.

The evaluation uses a randomized controlled trial design. People who are eligible for the supportive housing program are randomly assigned to one of two groups: one that receives supportive housing services as part of the initiative (treatment group) and one that receives usual care services in the community (control group). To measure the outcomes of these individuals, we are collecting administrative data from various sources, described later in this report. In addition, we are conducting key informant interviews with the service providers and other key stakeholders. This report largely focuses on understanding the implementation of the program and tracking housing stability and jail outcomes. It also highlights key lessons and outcomes from the first 3.5 years of the Denver SIB. In 2021, we will measure differences between the groups in key system outcomes using administrative data from the primary systems of interest, such as jails, courts, detox units, homeless shelters, and hospitals.
Research Questions

The report answers the following questions:

- How is the program implemented?
- How are eligible people located and engaged?
- How do participants take up housing and services?
- What are the key strategies and challenges?
- Do housed participants retain housing?
- Do supportive housing participants spend time in jail?

These questions are answered through two primary components of the evaluation, a process study and an outcomes and impact study. For more information on the methodology, see the appendix.

Process Study

Members of the research team from the Evaluation Center conducted site visits and interviews with service providers and other important stakeholders. Between February and April 2019, the Evaluation Center interviewed 20 leaders and key staff members from CCH, MHCD, the Corporation for Supportive Housing, the Crime Prevention and Control Commission, Denver County Court, Denver District Court Probation, and the City and County of Denver.

Outcomes and Impact Study

To collect outcomes on enrollment, engagement, and moves to housing, also called lease-ups, the research team manages a program dashboard that collects data from CCH and MHCD and tracks information on these key indicators, as well as program exits. The program dashboard data have tracked the Denver SIB since its beginning in 2016 through June 30, 2019. We also collect administrative data on jail stays from the Denver Sheriff Department. The jail data include information on the start date, end date, length of stay, and jail facility for each jail stay that a Denver SIB participant had between February 1, 2009 and June 30, 2019. Denver Sheriff Department employees link the jail data in the department’s Jail Management System database to the Denver SIB program participant using his or her name and jail identification number, called a CD number. Our research team worked with the data point of contact at the sheriff’s department to run quality checks on the data and ensure that no errors were made during the data pull process.
Who Is the Program Serving?

Between January 2016 and December 2018, 533 people were referred to the original Denver SIB program (SIB 1.0) and an expansion to the program funded by the City and County of Denver (SIB 2.0). We have included both groups in our analysis because participants in each are drawn from the same referral pool and have the same qualifying characteristics that make them eligible for housing. In addition, some participants referred to SIB 1.0 ended up receiving housing in SIB 2.0 and vice versa, so we’ve combined the two groups to simplify the engagement and jail stay analysis.13

Of the 533 individuals referred to the SIB, most were male (86 percent), and the median age was 44 years. Forty-one percent of the referrals were white, 16 percent were black, 26 percent were Hispanic, and 6 percent were Native American (figure 4).

FIGURE 4
Demographic Characteristics of Participants Referred to Supportive Housing

<table>
<thead>
<tr>
<th>Demographic Characteristics</th>
<th>533 People Referred to Supportive Housing from January 2016 to December 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethnicity</td>
<td></td>
</tr>
<tr>
<td>white</td>
<td>41%</td>
</tr>
<tr>
<td>black</td>
<td>16%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>26%</td>
</tr>
<tr>
<td>Native American</td>
<td>6%</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
</tr>
<tr>
<td>86% male</td>
<td></td>
</tr>
<tr>
<td>14% female</td>
<td></td>
</tr>
<tr>
<td>Median age</td>
<td>44 years</td>
</tr>
</tbody>
</table>

Source: Denver Police Department.

People referred to the program had high rates of arrest during the three years before referral, with an average of 19 arrests per person during those three years (figure 5). An average of 15 of these 19 arrests occurred when an individual was identified as transient (table A.1). Typically, program participants interacted with police in District 6, which is the downtown district and the smallest of the six police districts (figure 6). On average, 11 arrests were custodial arrests (i.e., people were subsequently booked into jail) and 8 were noncustodial arrests (i.e., people were given a ticket but not
booked into jail). Excluding the required police interaction that triggered randomization into the evaluation, about 50 percent of participants had at least one interaction with the DPD in the month before referral to the program: 44 percent had at least one police contact, 20 percent had at least one noncustodial arrest, and 7 percent had at least one custodial arrest (table A.2).

Compared with the 3,363 people who remained on the eligibility list, the 533 participants who had been referred to the program as of December 31, 2018, were more likely to be slightly older and slightly less likely to be white (table A.3).

In qualitative interviews that the research team conducted for the report on the second year of the initiative (Cunningham et al. 2018), service providers and program administrators confirmed that the earliest participants were highly vulnerable, characterized by long-term homelessness, mental health diagnoses, substance use, physical health issues, and an ability to survive on the streets despite many challenges.

FIGURE 5
History of Arrest and Police Interaction among Social Impact Bond Initiative Participants

Source: 2013–18 Denver Police Department.
Notes: Custodial arrests are those for which someone is booked into jail. Police contacts, noncustodial arrests, and custodial arrests are not mutually exclusive categories.
How Is the Program Enrolling and Housing Participants?

After participants were referred to the program, Urban tracked four key milestones as CCH and MHCD moved participants through the engagement process: participant location, participant engagement in the program, housing application approval, and lease-up in housing (figure 7).

We use both conditional and unconditional analyses to discuss the share of participants who made it to each milestone within six months of being referred to the program. The conditional analysis (figure 8) shows the share of participants who reached each milestone based on when they reached the previous milestone and the average time between each milestone. The unconditional analysis (table 1) shows the share of all referred participants who reached each milestone within six months, regardless

Source: Denver Police Department.
Note: This map shows the location of social impact bond initiative participants at the time of the new police contact or arrest that made them eligible for referral to supportive housing.
of when they reached the previous milestone, and the average and median time to each milestone from the program referral date. Together, the two analyses offer insights into the share of referred participants who attained housing and provide step-by-step breakdowns that highlight potential points of delay within the engagement pipeline.

In addition, we provide findings from qualitative interviews with Denver SIB partners that highlight challenges and successes from each milestone in the referral and engagement process during the first two years of implementation.

FIGURE 7
Milestones Tracked in Engagement Process

TABLE 1
Unconditional Engagement Analysis

<table>
<thead>
<tr>
<th></th>
<th>Share of Referrals Who Reached Each Milestone within a Given Number of Months</th>
<th>Mean days since referral</th>
<th>Median days since referral</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N 1 2 3 4 5 6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Participant location</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>533 48% 61% 67% 72% 75% 77%</td>
<td>34</td>
<td>16</td>
</tr>
<tr>
<td>Participant engagement</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>533 42% 54% 60% 64% 68% 70%</td>
<td>38</td>
<td>20</td>
</tr>
<tr>
<td>Housing application approval</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>533 27% 38% 45% 50% 55% 56%</td>
<td>50</td>
<td>35</td>
</tr>
<tr>
<td>Housing lease-up</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>533 22% 33% 41% 47% 52% 54%</td>
<td>55</td>
<td>45</td>
</tr>
</tbody>
</table>

Source: Colorado Coalition for the Homeless and Mental Health Center of Denver program data from January 1, 2016, to June 30, 2019.

Note: Only individuals referred to housing on or before December 31, 2018, are included. Data cover the first six months after referral.
Participant location refers to the date CCH and MHCD made initial direct contact with the participant. Within six months of referral to the program, 408 people (77 percent) were located. Most of these individuals were located before the six-month mark, with 61 percent located within two months and 72 percent located within four months. It took an average of 34 days for a service provider to locate someone referred to the program and a median of 16 days.

Participant engagement refers to the date CCH and MHCD conducted a housing screening to verify homelessness status and the person agreed to move forward in the housing process. Within six months
of referral, 375 people (70 percent of referrals) were engaged. A majority of participants were engaged within two months of referral. Ninety-two percent of located participants made it to engagement, and the average amount of time between location and engagement was four days.

Housing application approval refers to the date a participant received approval to lease up into a unit. Within six months of referral, 301 people (56 percent of referrals) had their housing applications approved. Around half of all referred people had approvals within four months. The largest drop-off between milestones after location occurred from participant engagement to application approval. Eighty percent of engaged participants had their applications approved, and the average amount of time between engagement and approval was 12 days.

Lease-up refers to the date a participant signed a lease to move into a housing unit. Just over half of all participants referred to the program (54 percent) leased up within six months; this accounts for 288 participants in total. Ninety-six percent of participants whose housing applications were approved reached the lease-up milestone, and the average amount of time between approval and lease-up was five days.

**Challenges and Strategies in the Engagement Pipeline**

Findings from the qualitative interviews with Denver SIB partners highlight challenges and strategies from each milestone in the engagement process during the first two years of implementation. More information on the challenges and strategies across the engagement pipeline can be found in the findings reports from the first and second year of the Denver SIB (Gillespie et al. 2017; Cunningham et al. 2018).

**PARTICIPANT LOCATION**

Making contact with potential Denver SIB participants was a challenge for CCH and MHCD because of the potential participants’ unsheltered status and their location throughout the Denver metropolitan area. The most effective strategies for overcoming these challenges were to build partnerships with service providers outside of the program, coordinate outreach with local health and law enforcement agencies, maximize internal resources, triangulate data, and educate the community about the Denver SIB program.
PARTICIPANT ENGAGEMENT IN THE PROGRAM

Once potential participants were located, service providers used a respectful, informed, and supportive approach to engage participants. Many program participants were apprehensive about becoming involved in the program, and their consistent interactions with police and the criminal justice system caused them to fear and distrust the housing program. In addition, some program participants believed their criminal histories would preclude them from housing opportunities and had lost hope that they would find housing on their own. Nearly all the people in the target population struggled with substance use or mental health issues, which demanded skilled, compassionate, experienced staff members and coordination among local agencies during the engagement process.

Both service providers used various techniques to help build trust and rapport with participants. The service providers also worked with the jail and court system to improve engagement. Despite having access to jails, staff members noted that the jail environment was not conducive to establishing trusting relationships with potential participants.

HOUSING APPLICATION APPROVAL

For program participants, filling out a housing application and receiving approval were prerequisites to leasing a unit. This stage of the engagement process was time-intensive. In many cases, it involved the use of bridge housing and depended on team members’ communication, flexibility, and commitment.

Once potential program participants had been located and engaged, MHCD and CCH could place many of them in bridge housing, which allowed case managers to be in regular contact with program participants early in the process. Bridge housing was not always available, however, which required team members to be creative in strategizing how to regularly engage participants throughout this stage.

Case managers then conducted a housing screening, with the goal of completing it within a week of engagement. The process of obtaining identification documents (e.g., birth certificates or state ID cards) and other paperwork was challenging and sometimes long. To expedite the process, service providers worked with the Colorado ID Project, an organization that is run by volunteers, is often staffed by retired lawyers and judges, and can help people get an ID quickly and efficiently. During the Denver SIB application approval process, ACT team members worked together seamlessly, picking up where one another left off.

LEASE-UP IN HOUSING

Leasing up was the final step in the referral and engagement process. A central tenet of the Housing First model is that staff members work with participants to determine the most promising housing
match for them and placement is based on a thorough assessment of each client’s needs and desires. The first step in the lease-up process was determining what type of housing—project-based or scattered-site—would best fit the client. Denver SIB teams discussed housing options with each participant and made every effort to show participants the housing units before a final decision was made. Ultimately, client choice and preference were honored in the housing location process.

After clients selected a housing type, the Denver SIB teams worked to find them a unit. For both service providers, locating scattered-site housing and managing landlord relationships proved to be an initial hurdle to leasing up people. In CCH’s early experience with the program, the team had to negotiate landlord relationships and ensure that participants were placed in the best housing option for them. The CCH team understood that the first property might not be the right placement. When participants needed different housing options, the team made sure that they were available. MHCD found that finding scattered-site housing to rent from private-market landlords was very challenging. However, both CCH and MHCD staff members have successfully negotiated landlord relationships and used several strategies to recruit scattered-site properties.

Are Participants Stably Housed?

After participants initially signed a lease to enter housing, CCH and MHCD worked to keep them stably housed. From January 1, 2016, to June 30, 2019, 383 participants were housed in the SIB 1.0 and 2.0 programs. After one year, 85 percent of all participants who could have been housed for at least one year were still housed (including those who reentered housing). After two years, 79 percent of all participants who could have been housed for at least two years were still housed (table 2).

Housing Retention and Exits

In the Denver SIB, housing stability is measured by whether a participant is still housed, had a planned exit from housing, or had an unplanned exit from housing. People are considered still housed if they were in housing or had reentered housing as of the milestone (i.e., six months, one year, or two years).

Planned exits meet housing stability payment requirements and include deaths, exits to other permanent housing or long-term residential treatment, or incarceration in connection with actions solely occurring before referral to the SIB program. Deaths are included in planned exits to ensure that providers are not penalized for the vulnerability of some participants. To date, all of the project’s planned exits have been due to participant deaths.
Unplanned exits result from incarceration or any other interruption that causes the participant to be out of housing for more than 90 days. Although participants can reenter housing after an unplanned exit, these exits are an important measure of project performance.

The rates of housing stability among the various cohorts in the program are promising. Six months after entering housing, 92 percent of people were still housed, and 3 percent had died; one year after entering housing, 85 percent of people were still housed, and 4 percent had died; and two years after entering housing, 79 percent were still housed, and 11 percent had died (table 2).

Most unplanned exits stem from incarceration. For those who could have been housed for six months, 60 percent of unplanned exits were due to incarceration (table 3). This percentage increases to 63 percent for those who could have been housed for one year and to 71 percent for those who could have been housed for two years. The other common causes for unplanned exits include voluntary exits (18 percent of total exits for those who could have been housed for one year) and housing voucher loss (5 percent for those who could have been housed for one year).

**TABLE 2**

Housing Retention and Exits

<table>
<thead>
<tr>
<th></th>
<th>6 Months after Entering Housing&lt;sup&gt;a&lt;/sup&gt;</th>
<th>1 Year after Entering Housing&lt;sup&gt;b&lt;/sup&gt;</th>
<th>2 Years after Entering Housing&lt;sup&gt;c&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>Share</td>
<td>N</td>
</tr>
<tr>
<td>Still housed or had a planned</td>
<td>311</td>
<td>94%</td>
<td>252</td>
</tr>
<tr>
<td>exit at milestone</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Still housed at milestone</td>
<td>302</td>
<td>92%</td>
<td>240</td>
</tr>
<tr>
<td>Planned exits</td>
<td>9</td>
<td>3%</td>
<td>12</td>
</tr>
<tr>
<td>Unplanned exits</td>
<td>20</td>
<td>6%</td>
<td>40</td>
</tr>
<tr>
<td>Reentered housing</td>
<td>1</td>
<td>0%</td>
<td>8</td>
</tr>
</tbody>
</table>

Source: These numbers represent both the original SIB program (SIB 1.0) and the SIB expansion that began in 2018 (SIB 2.0). Days in housing and exit data come from Colorado Coalition for the Homeless and Mental Health Center of Denver program data from January 1, 2016, to June 30, 2019.

Notes: This table represents different cohorts of participants based on when an individual entered housing. "6 months after entering housing" applies to people who entered housing before January 1, 2019; "1 year after entering housing" applies to people who entered housing before July 1, 2018; and "2 years after entering housing" applies to people who entered housing before July 1, 2017. People are considered "still housed" if they were in housing or had reentered housing as of six months, one year, or two years after they initially entered housing. All planned exits to date are due to participant deaths. Unplanned exits include any interruption that caused the participant to be out of housing for more than 90 days, most commonly due to incarceration.

<sup>a</sup> N = 330.
<sup>b</sup> N = 284.
<sup>c</sup> N = 131.
TABLE 3
Breakdown of Unplanned Exits

<table>
<thead>
<tr>
<th></th>
<th>6 Months after Entering Housing</th>
<th>1 Year after Entering Housing</th>
<th>2 Years after Entering Housing</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>Share</td>
<td>N</td>
</tr>
<tr>
<td>Unplanned exits</td>
<td>20</td>
<td></td>
<td>40</td>
</tr>
<tr>
<td>Incarceration</td>
<td>12</td>
<td>60%</td>
<td>25</td>
</tr>
<tr>
<td>Voluntary</td>
<td>5</td>
<td>25%</td>
<td>7</td>
</tr>
<tr>
<td>Voucher loss</td>
<td>2</td>
<td>10%</td>
<td>2</td>
</tr>
<tr>
<td>Other</td>
<td>1</td>
<td>5%</td>
<td>6</td>
</tr>
</tbody>
</table>

Source: Denver Sheriff Department.

Notes: These numbers cover both the original SIB program (SIB 1.0) and the SIB expansion that began in 2018 (SIB 2.0). Unplanned exits include any interruption that caused the participant to be out of housing for more than 90 days. “6 months after entering housing” applies to people who entered housing before January 1, 2019; “1 year after entering housing” applies to people who entered housing before July 1, 2018; and “2 years after entering housing” applies to people who entered housing before July 1, 2017.

Challenges to and Strategies for Helping Participants Maintain Housing

In the first three years of the program, staff members at both CCH and MHCD identified challenges to supporting participants’ stability in supportive housing. These included challenges related to the provision of services to clients, as well as challenges in billing Medicaid. The service providers also learned that a guest policy for the program units in project-based locations was needed. The most effective practices for promoting housing stability, according to CCH and MHCD staff members, are individualizing care and providing intensive services based on the specific needs of the SIB clients. More information on the challenges and solutions to supporting participants’ stability in the first two years of the evaluation can be found in the findings reports from the first and second year of the Denver SIB (Cunningham et al. 2018; Gillespie et al. 2017).

During the past year of SIB implementation, CCH and MHCD continued to provide Denver SIB participants with supportive housing services and resources. Overall, the ACT teams provided case management and therapeutic and clinical services. Service providers also offered an array of social group activities and classes and maintained gathering spaces at single sites such as a reading room and courtyards. CCH and MHCD staff members also identified ongoing barriers to housing stability, including difficulty finding the appropriate housing for participants and navigating relationships between program participants.
CHALLENGES TO HOUSING RETENTION
As reported in 2018, housing in the same location a large number of people in various stages of recovery from substance use and mental health issues can be challenging. Some participants have found living in a building with many people to be difficult. In addition, some participants have found that they want to be closer to relatives or work, or away from a triggering location. For these reasons, providers need to be able to relocate people when needed.

Finding the right housing placement. In some cases, people determined that project-based housing was not a good fit and new vouchers were assigned or reassigned to them. Also, when participants move, they may receive a different voucher and have to complete the required paperwork again. Service providers have used over nine different voucher types throughout the project, and tracking and completing the relevant paperwork is difficult and time-consuming. In addition, finding scattered-site housing continues to be difficult as these resources are extremely limited in the Denver area. However, both service providers have recently made significant progress in locating scattered-site housing for program participants.

Navigating relationships between participants. In scattered-site locations, problems with unauthorized guests or neighbor disturbances have occasionally developed. However, both CCH and MHCD have successfully used tenant conferences to stabilize situations and resolve conflicts. If a problem develops at a property, a meeting between property management, housing staff members, a housing counselor, and clinical staff members is held. This process helps maintain the safety and stability of the property.

STRATEGIES FOR HOUSING RETENTION
As previously reported, the most effective practices for supporting housing stability are individualizing care and providing intensive services based on the specific needs of the Denver SIB clients.

Although providers are still navigating transitions, many residents are settling into their community. For example, CCH and MHCD created resident councils, and more than half of residents now attend meetings and activities. Residents also share meals and cook together. In addition, CCH has reported that participants have become more inclined to dive deeper into therapy or counseling. The providers’ buildings have created opportunities for group services and activities. As of April 2019, two-thirds of MHCD’s residents were either employed or attending vocational activities. MHCD also employed a few residents who were initially afraid to work in the community but who later gained the confidence to move into other jobs.
CCH has also created an eviction prevention process to address community struggles within its buildings to support housing stability. Property management and clinical services staff members meet weekly to review problematic behaviors within the building. The prevention process includes detailed steps, including tenant conferences, housing goal worksheets, and eviction prevention subcommittee meetings to discuss preventive measures and housing stability goals. This process is time-consuming but helpful for communication among services providers, property management, and Denver SIB participants. CCH staff members note that this preventive process helps maintain high rates of housing stability.

**Housing Stability Success Payments**

Examining the city’s repayments to investors is another way to understand the progress of the Denver SIB program. In accordance with the Denver SIB contract, the Urban Institute calculated housing stability outcomes for the third success payment from the City and County of Denver in fall 2019 to the investors. Specific calculations to determine this success payment are required by the SIB contract. More information can be found in the companion brief to the Denver SIB governance committee (Cunningham et al. 2019).

**Are Participants Returning to Jail?**

The target population for the Denver SIB program is people experiencing homelessness who had been to jail at least eight times in three years. The program was designed to increase participants’ housing stability and reduce their jail stays.

**Jail Stays**

Two years after entering housing, 36 percent of participants (those who remained in the program and those who did not) had not returned to jail, while 64 percent had at least one jail stay (table 4A). Among people with at least one jail stay in the two years after entering housing, the average number of days spent in jail was 68, and the median was 26 (table 4B). The share of people with jail stays is lower for shorter time frames: within six months of entering housing, 47 percent of people had returned to jail; within a year of entering housing, 62 percent had. In addition, the average number of days spent in jail was shorter: 25 days and 41 days, respectively.
Without data on jail stays among a comparable group of people who are not participating in the Denver SIB, interpreting these findings is difficult. In the final report in June 2021, we will use the SIB’s randomized controlled trial research design to compare the days that participants in supportive housing (the treatment group) spent in jail with a group of people from the target population who continued to receive usual services in the community (the control group). Because of the experimental evaluation design, the difference in jail days will be directly attributable to the SIB supportive housing program.

We will also explore the reasons for participants’ jail stays. From qualitative interviews with Denver SIB service providers, we know that participants in supportive housing may return to jail for reasons that support their longer-term housing stability. For example, once in housing, some participants may be supported in addressing an outstanding warrant. This may result in a jail stay but may also stop the cycle of criminal justice involvement so that participants may return to and remain in stable housing.

**TABLE 4A**

<table>
<thead>
<tr>
<th>Jail Stays</th>
<th>6 Months after Entering Housing</th>
<th>1 Year after Entering Housing</th>
<th>2 Years after Entering Housing</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>Share</td>
<td></td>
</tr>
<tr>
<td>No jail stays</td>
<td>176</td>
<td>53%</td>
<td></td>
</tr>
<tr>
<td>Any jail stays</td>
<td>154</td>
<td>47%</td>
<td></td>
</tr>
<tr>
<td>1 stay</td>
<td>85</td>
<td>26%</td>
<td></td>
</tr>
<tr>
<td>2 stays</td>
<td>38</td>
<td>12%</td>
<td></td>
</tr>
<tr>
<td>3 stays</td>
<td>22</td>
<td>7%</td>
<td></td>
</tr>
<tr>
<td>4+ stays</td>
<td>9</td>
<td>3%</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>330</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**TABLE 4B**

<table>
<thead>
<tr>
<th>Jail Stays among People with at Least 1 Jail Stay</th>
<th>6 months after entering housing</th>
<th>1 year after entering housing</th>
<th>2 years after entering housing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean days in jail</td>
<td>25</td>
<td>41</td>
<td>68</td>
</tr>
<tr>
<td>Median days in jail</td>
<td>11</td>
<td>17</td>
<td>26</td>
</tr>
<tr>
<td>Mean days in housing before first jail stay</td>
<td>67</td>
<td>113</td>
<td>169</td>
</tr>
</tbody>
</table>

**Source:** Jail data are from the Denver Sheriff Department and do not include days spent in prisons or in any jails outside Denver.

**Notes:** These numbers cover both the original SIB program (SIB 1.0) and the SIB expansion that began in 2018 (SIB 2.0). “6 months after entering housing” applies to people who entered housing before January 1, 2019; “1 year after entering housing” applies to people who entered housing before July 1, 2018; and “2 years after entering housing” applies to people who entered housing before July 1, 2017. Jail stays are the number of bookings participants had in the first six months, the first year, or the first two years after they entered housing. Days in jail are calculated as the total number of days people spent in jail in the first six months, the first year, or the first two years after they entered housing. This analysis covers January 1, 2016, through June 30, 2019.
SIB Strategies for Maintaining Housing Stability while Navigating the Criminal Justice System

Although the majority of Denver SIB participants return to jail at some point after they enter housing, their experience in the criminal justice system is often very different from what other people face as they cycle between jail and homelessness. When a SIB participant has a new police contact or arrest in Denver, SIB service providers are notified through a daily report generated with data from DPD. In addition, when SIB service providers haven’t seen a participant for a period of time, case managers begin checking for the participant in area hospitals and jails. In these ways, SIB service providers create a personalized safety net intended to help end a participant’s experience of homelessness and jail stays.

According to Denver SIB service providers, the most effective strategies for achieving better outcomes among SIB participants are establishing relationships with and educating key actors in the criminal justice system and advocating for and accompanying SIB participants within the criminal justice system.

ESTABLISHING RELATIONSHIPS WITH AND EDUCATING KEY ACTORS IN THE CRIMINAL JUSTICE SYSTEM

Denver SIB service providers spend considerable time establishing relationships with actors in the criminal justice system. One service provider holds monthly meetings with the police department and reported that as a result, some police officers have gained a greater understanding of the challenges that Denver SIB participants face. Early on, staff members met with judges, public defenders, city attorneys, and police officers to educate them about the SIB program. On a regular basis, the SIB teams conduct outreach to individuals and agencies within the criminal justice system to re-introduce them to the SIB.

One Denver SIB service provider elaborated on the value of establishing these relationships, explaining that case managers who work within the criminal justice system have more strategies and tools at their disposal to maintain services for SIB participants. For example, case managers can work with a judge to put in a court order for a program participant to be released from jail directly to them, rather than to the street in the middle of the night with no supports, as is often the case with people who have experienced homelessness. This service provider said: “That’s the smoothest way. Then the case manager is there. There is no lapse between getting out of jail and getting lost back to the streets. They just go straight to their case manager, and I think that is pretty rare. I can’t do that. It’s got to come from a judge, so it has to be a case manager going to court, advocating for their client, and then that can happen, and that’s ideal.”
ADVOCATING FOR AND ACCOMPANYING SIB PARTICIPANTS WITHIN THE CRIMINAL JUSTICE SYSTEM

Once notified that a SIB participant has had a new contact with DPD, SIB case managers determine whether the participant received a citation or were taken into custody and the date the participant is expected in court. Case managers then communicate with public defenders and the judge about the services and supports offered through the SIB program and how it intends to keep the participant housed.

SIB service providers have found that a case manager’s presence at the arraignment is crucial. If the participant has been released, the service provider makes sure to know about the court date and often picks the participant up for court. Accompanying participants to court helps them cope with the anxiety of walking into a court room. If a person has been released on a bond, he or she is not yet represented by a public defender. Case managers often walk SIB participants to the public defenders’ office to set up the application to be assigned a defender. The process is very different for people who are not supported by the Denver SIB; when those individuals are released on bond, establishing communication with a public defender can take months. People who are incarcerated are automatically represented by the public defenders’ office. In that situation, SIB case managers appear on the scheduled court date and find out who is representing their client. SIB case managers explain the SIB program and the risk of losing housing that comes with a jail sentence of more than 90 days. One SIB case manager explained that the service providers do “whatever we can do to help show [the public defender] what this individual has been working on….Usually, the public defenders are stoked to hear that.” Some clients have historically experienced trauma from their interactions with the legal system and cannot advocate for themselves. One SIB service provider said: “That’s where a second voice is really good to be able to say, ‘Do you mind if I tell him….can I brag on you? They’re not 100 percent, but we’re seeing progress.’” SIB case managers reported that without advocates, participants are less likely to be released without bail and/or are more likely to receive a more severe jail sentence, or any sentence at all.

SIB participants also benefit significantly from case management support during probation and pretrial processes. Case managers ensure that their clients are maintaining compliance with those systems and showing up for court dates consistently. Case managers are in the court room to hear orders regarding the participant’s bond, any pretrial service requirements, and other court orders. From there, Denver SIB case managers ensure that the probation officer has the client’s contact information and track probation check-ins, frequency of court-ordered urinalysis, in-person meetings, and other requirements. These are essential supports, especially in the early stages of the court process. When
participants are asked whether they are on probation or have other requirements to meet ahead of their next court dates, one SIB service provider said, “the client is usually unable to tell us.”

Conclusions

Over the past three years, the SIB program has housed 383 individuals who experience chronic homelessness in Denver. Eighty-five percent of those individuals remained housed after one year, and 79 percent remained housed at two years. These are promising housing stability results. Does housing stability translate into reductions in jail stays? One year after entering housing, 38 percent of participants had not returned to jail, and 62 percent had at least one jail stay. Although the rate of those returning to jail is high, we cannot yet compare these data to jail stays among the control group, made up of individuals who were not offered supportive housing through the SIB program.

The ultimate test of the program’s success will be measuring the impact. To do so, we will conduct an impact evaluation that will look at the differences between the treatment and control groups three years after enrollment in the evaluation. The analysis of the randomized controlled trial results, which we will report on in 2021, will allow us to draw more definitive conclusions about the impact of the supportive housing model on jail days for this population.

The qualitative findings highlighted some of the challenges to maintaining housing stability for this vulnerable population and the importance of working across systems—mental and physical health and criminal justice (e.g., jails, police, coresponders)—to ensure that participants have support to remain housed and reduce their time in jail. The Colorado Coalition for the Homeless and the Mental Health Center of Denver will continue to work with these system partners as the project moves into its fourth year.
Appendix

Quantitative Methodology

Our engagement analysis uses program data from CCH and MHCD, as well as administrative data from DPD. CCH data included information on the dates of participant location and engagement, housing application approval, and lease-up from January 2016 to December 2018. MHCD data included information on the dates of participant location and engagement, housing application approval, and lease-up from January 2017 to December 2018. DPD data provided information on the full program eligibility list, including demographic characteristics and all arrests from 2013 to 2018. It also covered data on the 533 participants referred to the supportive housing program from January 2016 to December 2018, including information on all arrests and contacts. For our engagement analysis, we conditioned our sample on people referred to the program before January 1, 2019, to ensure that we could analyze at least six months of data for everyone. We also limited our analysis to the first six months after referral. For example, for participants referred to the program in January 2018, we analyzed data through July 2018, and for participants referred to the program in March 2018, we analyzed data through September 2018. Everyone in our sample is observed for the same length of time.

The housing stability and jail stay calculations use Denver Sheriff Department data on jail stays, as well as CCH and MHCD data on lease-ups and housing exits. Denver Sheriff Department data included the booking start and end dates for all jail stays from January 1, 2009, to July 1, 2019, for all people randomized into treatment by July 1, 2019. The CCH and MHCD data included information on the dates of lease-up and dates of housing exits from November 1, 2015, to July 1, 2019.

Data Quality

The Urban Institute works with CCH and MHCD on a regular basis to ensure that all tracking of program participants is up to date and accurately reflects the Denver SIB program.

The Denver Sheriff Department data on jail stays is provided to Urban on an annual basis. In this year’s data extract, the Urban team found some internal inconsistencies in the data file. With the Denver Sheriff Department, Urban identified the issue leading to the quality error. The department fixed the error and pulled a new, complete dataset. To ensure that the dataset matched the original raw records in the department’s Jail Management System, the department’s data point person quality-
checked a list of randomly selected jail stays for SIB participants. All the information in the quality check was consistent with the files Urban received, leaving no remaining quality concerns.

Qualitative Methodology

Our qualitative analysis is based on semistructured interviews with program partners. From February to April 2019, the Evaluation Center interviewed 20 people from organizations involved in the SIB implementation. These organizations included CCH, MHCD, the Corporation for Supportive Housing, Harm Reduction Action Center, Denver Health, Colorado’s Law Enforcement Assisted Diversion and Co-Responders programs, and the City and County of Denver, including Denver County Court, DPD, Denver District Court Probation, the Office of Behavioral Health Strategies, and the Denver jail. The interviews addressed how and why the homeless population typically enters and navigates through the criminal justice system, with particular emphasis on the impact of housing, behavioral health, and diversion programs and other social safety nets. The interviews were conducted in person or by phone and, with permission from interviewees, were audio-recorded and professionally transcribed. In addition, the evaluators received written responses to interview questions from one person. The evaluators used NVivo 12 to analyze these qualitative data.
**TABLE A.1**  
Mean Arrest History of Participants 3 Years before Referral

<table>
<thead>
<tr>
<th></th>
<th>Treatment Participants&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Other Eligible Participants&lt;sup&gt;b&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total arrests</strong>*</td>
<td>19</td>
<td>13</td>
</tr>
<tr>
<td>Noncustodial arrests***</td>
<td>8</td>
<td>5</td>
</tr>
<tr>
<td>Custodial arrests***</td>
<td>11</td>
<td>9</td>
</tr>
<tr>
<td>Nontransient arrests***</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Transient arrests***</td>
<td>15</td>
<td>10</td>
</tr>
</tbody>
</table>

Source: 2013-18 Denver Police Department data.

Notes: Custodial arrests are those for which a person is booked into jail. Transient arrests are those that occur when a person is identified as transient.

*** p<0.01

<sup>a</sup> N = 533.

<sup>b</sup> N = 3,363.

**TABLE A.2**  
Treatment Participant Arrests or Police Contacts in Month before Referral

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample</td>
<td>533</td>
<td></td>
</tr>
<tr>
<td>No contacts or arrests***</td>
<td>268</td>
<td>50%</td>
</tr>
<tr>
<td>Custodial arrest***</td>
<td>35</td>
<td>7%</td>
</tr>
<tr>
<td>Noncustodial arrest***</td>
<td>109</td>
<td>20%</td>
</tr>
<tr>
<td>Contact***</td>
<td>232</td>
<td>44%</td>
</tr>
</tbody>
</table>

Source: 2015-18 Denver Police Department data.

Notes: Police contacts, noncustodial arrests, and custodial arrests are not mutually exclusive. These data do not include the arrest that triggered participants’ referral into the program.

*** p<0.01
### TABLE A.3

**Study Population**

<table>
<thead>
<tr>
<th></th>
<th>Treatment Participants</th>
<th>Other Eligible Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>Share</td>
</tr>
<tr>
<td><strong>Sample</strong></td>
<td>533</td>
<td></td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>459</td>
<td>86%</td>
</tr>
<tr>
<td>Female</td>
<td>74</td>
<td>14%</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Under 17</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>17–20</td>
<td>7</td>
<td>1%</td>
</tr>
<tr>
<td>21–30</td>
<td>95</td>
<td>18%</td>
</tr>
<tr>
<td>31–40</td>
<td>118</td>
<td>22%</td>
</tr>
<tr>
<td>41–50</td>
<td>145</td>
<td>27%</td>
</tr>
<tr>
<td>51–60</td>
<td>129</td>
<td>24%</td>
</tr>
<tr>
<td>61–70</td>
<td>35</td>
<td>7%</td>
</tr>
<tr>
<td>71–100</td>
<td>4</td>
<td>1%</td>
</tr>
<tr>
<td><strong>Race or ethnicity</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>221</td>
<td>41%</td>
</tr>
<tr>
<td>Black</td>
<td>83</td>
<td>16%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>141</td>
<td>26%</td>
</tr>
<tr>
<td>Native American or Alaska Native</td>
<td>31</td>
<td>6%</td>
</tr>
<tr>
<td>Asian or Pacific Islander</td>
<td>2</td>
<td>&lt;1%</td>
</tr>
<tr>
<td>Unknown</td>
<td>55</td>
<td>10%</td>
</tr>
</tbody>
</table>

Source: Denver Police Department.

Notes: The mean age for treatment participants was 43 years old and for other eligible participants was 40 years old. The median age for treatment participants was 44 years old and for other eligible participants was 39 years old.

** p <0.05, *** p<0.01
Notes


8 The investors are the Denver Foundation, the Piton Foundation, the Ben and Lucy Ana Walton Fund of the Walton Family Foundation, Arnold Ventures, Living Cities Blended Catalyst Fund LLC, Nonprofit Finance Fund, the Colorado Health Foundation, and the Northern Trust Corporation.


13 The housing stability payment brief that accompanies this report is an analysis of only SIB 1.0 participants because investor payments are only based on that cohort.
References


About the Authors

Mary Cunningham is a senior fellow and the vice president of the Metropolitan Housing and Communities Policy Center at the Urban Institute. Her research focuses on homelessness, housing instability, and concentrated poverty. Cunningham is coprincipal investigator of the Denver Supportive Housing Social Impact Bond Initiative and leads studies examining the impact of supportive housing on high-need families in the child welfare system and outcomes from a homeless prevention program for at-risk veterans.

Sarah Gillespie is a research director in the Metropolitan Housing and Communities Policy Center, where her research focuses on homelessness. She is project director for the Denver Supportive Housing Social Impact Bond Initiative and the national evaluation of the Department of Housing and Urban Development–Department of Justice Pay for Success Permanent Supportive Housing Demonstration.

Devlin Hanson is a senior research associate in the Center on Labor, Human Services, and Population at the Urban Institute. She is a labor economist whose research focuses on vulnerable children and families, including child welfare–involved families and immigrant families. She leads outcome data analysis for the Denver Supportive Housing Social Impact Bond Initiative and specializes in conducting analyses that use large longitudinal and cross-sectional administrative and public-use microdata.

Michael Pergamit is a senior fellow in the Center on Labor, Human Services, and Population. He is a labor economist whose research is focused on vulnerable youth and families, particularly youth aging out of foster care, runaway and homeless youth, and disconnected youth. He is coprincipal investigator of the Denver Supportive Housing Social Impact Bond Initiative and has extensive experience leading randomized controlled trial program evaluations.

Alyse D. Oneto is a research analyst in the Metropolitan Housing and Communities Policy Center. Her research focuses on homelessness and housing policy, and community development.

Prasanna Rajasekaran is a research assistant in the Metropolitan Housing and Communities Policy Center. His research focuses on community and economic development, local housing policy, and homelessness.
Tracey O'Brien is a senior evaluator for the Evaluation Center at the University of Colorado Denver. Her research interests are housing and homelessness, early childhood care and education, K-12 education, and public health equity. She has over 20 years of experience conducting qualitative research and evaluation studies with diverse populations.

Liz Sweitzer is an evaluation specialist with the Evaluation Center. She focuses on improving social and health disparities, conducting ethnographic research, working with communities and vulnerable populations, and adapting research and evaluation to be culturally appropriate and equitable.

Christine Velez is a senior evaluator for the Evaluation Center. Her research interests are housing, education, and vulnerable populations. She is at her best when working in diverse communities and in a variety of contexts, ensuring that culturally relevant approaches are integrated into all aspects of evaluation.
**STATEMENT OF INDEPENDENCE**

The Urban Institute strives to meet the highest standards of integrity and quality in its research and analyses and in the evidence-based policy recommendations offered by its researchers and experts. We believe that operating consistent with the values of independence, rigor, and transparency is essential to maintaining those standards. As an organization, the Urban Institute does not take positions on issues, but it does empower and support its experts in sharing their own evidence-based views and policy recommendations that have been shaped by scholarship. Funders do not determine our research findings or the insights and recommendations of our experts. Urban scholars and experts are expected to be objective and follow the evidence wherever it may lead.