

## Denver Basic Income Project

YEAR ONE EVALUATION REPORT | JUNE 2024







Center for Housing & Homelessness Research UNIVERSITY OF DENVER



Graduate School of Social Work UNIVERSITY OF DENVER Submitted to and in partnership with:

## DENVER BASIC

### Prepared by:



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## Executive Summary

### Executive Summary

Guaranteed income initiatives provide unconditional cash to individuals and families and is often used to address issues related to poverty with the understanding that people know best how to meet their own needs. The Denver Basic Income Project (DBIP) is a guaranteed income project for adults experiencing homelessness in Denver, CO. DBIP began delivering guaranteed income in October 2022. This report presents findings from a comprehensive evaluation of the first 12 months of DBIP, focusing on participant outcomes related to housing stability, financial well-being, physical and mental health, family and social networks, and public service interactions.

A total of 807 participants experiencing homelessness enrolled in DBIP, with 93% consenting to research participation. The study cohort for this evaluation report is comprised of 631 individuals who completed the Timepoint 1 survey. Participants ranged from 18 to 86 years, with significant representation across gender and racial/ ethnic identities. Notably, compared to the general unhoused population in Denver, DBIP participants demonstrated greater diversity in gender identity, race/ethnicity, and sexual orientation, reflecting the project's inclusive approach.

#### HOUSING

Analysis of housing outcomes revealed significant improvements across all payment groups. Approximately 45% of participants reported residing in their own house or apartment at Timepoint 3 (10-months), a substantial increase from Timepoint 1 (enrollment). Moreover, the proportion of participants experiencing unsheltered homelessness decreased markedly, with fewer individuals spending nights in unsheltered locations. Participants also reported feeling safer and more welcome at their sleep locations over time.

#### FINANCIAL WELL-BEING

Participants experienced changes in financial well-being during the first year of the program, with increases in fulltime employment and improved ability to meet financial obligations. Across all payment groups, individuals reported reduced reliance on emergency financial assistance and greater financial security. Notably, participants from payment Groups A and B demonstrated a more pronounced improvement in ability to pay bills and overall financial well-being compared to participants in payment Group C.

#### HEALTH

Participants reported varied health outcomes. General health and energy levels showed mixed changes, with some groups experiencing declines over time. Notably, stress and anxiety levels remained relatively stable, while parenting distress improved for participants with children or dependents. Food insecurity decreased across all payment groups.

#### **HOPE AND AGENCY**

Participants' sense of hope and agency remained relatively stable over the study period for participants in payment groups A and B. Participants in payment Group C reported decreases in overall hope and agency, highlighting potential disparities in perceived future opportunities.

## FAMILY AND SOCIAL NETWORKS

DBIP positively influenced participants' engagement in leisure activities and reduced time spent accessing resources, potentially indicating enhanced social connectedness and leisure opportunities. Transportation security improved for participants in Groups A and B.

#### **COSTS OF SERVICE USE**

Analysis of cost savings associated with DBIP participation revealed substantial reductions in public service interactions, including emergency room visits, hospital nights, and jail stays. While cost savings varied across payment groups, all cohorts demonstrated significant reductions in public service utilization, indicating the potential economic benefits of DBIP.

#### **DBIP SPENDING**

A subset of participants consented to track spending data using DBIP-issued debit cards, providing insights into spending patterns and financial behaviors. Most transactions were cash disbursements, followed by expenditures at retail stores and utility services.

## Introduction

### Guaranteed Income and Homelessness

The purpose of guaranteed income is to supplement income and other cash and noncash benefits while providing the necessary flexibility and agency over how individuals and families choose to spend their money. Two main components of guaranteed income are low-barrier access and unconditional use (Castro, 2020). For example, recipients receiving guaranteed income do not need to participate in financial literacy courses or maintain sobriety, there are no restrictions on how they spend their money, and recipients do not stop receiving the cash transfer if they have an increase in savings, use other supports and services, or have an increase in other income. This low-barrier access and unconditional use allow for the flexibility that individuals and families often need to meet their basic needs (Mayors for Guaranteed Income, 2021). Communities across the United States are piloting and testing guaranteed income with various populations such as individuals and families in poverty, mothers in low-income housing, and artists, to name a few.

### Denver Basic Income Project (DBIP)

**DBIP** is a guaranteed income project for adults experiencing homelessness in Denver, Colorado. In addition to monthly cash transfers, DBIP participants receive a cell phone with a data plan or a modest stipend if a participant chooses to use their own phone and plan to receive information about payments and to participate in research activities. Participants choose to have their guaranteed income deposited directly to a personal bank account or to a refillable debit card.

DBIP participants were recruited through homelessness service-providing agencies in Denver in 2022. DBIP intentionally selected 19 homelessness service-providing agencies to include a wide range of service provision and a diverse sample of participants. Agencies include large organizations that provide a wide variety of services, small transitional housing programs, outreach and advocacy groups that work with people living unsheltered, and organizations that specifically work with minoritized and marginalized groups such as Black and Indigenous People of Color and the LGBTQ+ community. The 19 agencies that partnered with DBIP are listed in the methods section of this report.

### Target Outcomes and Research Questions

This report describes findings from the first year of DBIP. The outcomes addressed in the report are as follows:



#### Housing

Do people who are unhoused and receive a guaranteed basic income experience improved housing stability compared to a randomly selected active comparison group of people who are unhoused?





#### **Financial Well-Being**

Do people who are unhoused and receive a guaranteed basic income experience improved financial well-being compared to a randomly selected active comparison group of people who are unhoused?

Do people who are unhoused and receive a guaranteed basic income experience improved workforce involvement compared to a randomly selected active comparison group of people who are unhoused?





#### Health

Do people who are unhoused and receive a guaranteed basic income experience improved physical and psychological health compared to a randomly selected active comparison group of people who are unhoused?

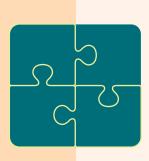




#### **Family and Social Networks**

Do people who are unhoused and receive a guaranteed basic income experience improved social support compared to a randomly selected active comparison group of people who are unhoused?

Do people who are unhoused with children receiving a guaranteed basic income report improved child well-being compared to a randomly selected active comparison group of people who are unhoused with children?





#### **Public Service Interactions**

How does the receipt of a guaranteed basic income impact public service interactions for people who are unhoused compared to a randomly selected active comparison group of people who are unhoused and receive a much smaller guaranteed basic income?



### Methods

#### **RESEARCH DESIGN**

This research employs a mixed-methods randomized controlled trial design. Participants were randomly assigned to one of three payment groups (described in the "Randomization" section of this report). Participants in all three payment groups were invited to provide qualitative and quantitative data through various research activities. The research in this report focuses primarily on quantitative data.

#### SAMPLING AND RECRUITMENT

DBIP participants were recruited through homelessness service-providing agencies located in Denver, Colorado. DBIP intentionally selected partner agencies based on the population served, the size of the agency, and the agency's capacity to partner with DBIP. Ultimately, DBIP partnered with 19 organizations (see Figure 1).

Eligibility criteria for DBIP participation included being 18 years old or older, accessing services from one of the partner agencies, not having severe and unaddressed mental health or substance use needs, and experiencing homelessness, as defined by DBIP. DBIP intentionally adopted a broad definition of homelessness which includes individuals without fixed, regular, and adequate nighttime residence, which



includes the following: living in motels, hotels, camping grounds due to lack of alternative accommodations, sharing housing due to loss of housing, economic hardship, or similar reason, living in cars, parks, public spaces, abandoned buildings, living in emergency shelters or transitional shelters, people whose nighttime residence is a public or private place not designed for, or ordinarily used as, a regular sleeping accommodation.

Partner agencies advertised DBIP at their site and talked to clients about participation. Service providers were asked to encourage

all clients to apply to DBIP. The application process screened participants for eligibility by asking participant age, housing status (determined by previous night sleep location), and severe and unaddressed substance use and mental health (determined by the BASIS-24 standardized measure (Cameron et al., 2007) and self-report of current treatment for substance use or mental health).

#### RANDOMIZATION

Eligible applicants were randomly assigned to one of three payment groups: A) \$1,000 a month for 12 months, for a total of \$12,000 in a year; B) \$6,500 upon enrollment and \$500 a month for the subsequent 11 months, for a total of \$12,000 in a year, C) \$50 a month for 12 months, for a total of \$600 in a year. Group C acts as an active comparison group to understand what may happen when people receive a much smaller guaranteed income.

Applicants selected for DBIP were notified of their assigned payment group and instructed to attend enrollment at the agency where they completed their application. Upon enrollment, participants were invited to engage in research activities. In alignment with unconditional cash transfer programs, participation or non-participation in the research did not affect DBIP involvement.

#### DATA COLLECTION

DBIP participants were invited to consent to research activities when they enrolled. Cohort enrollment took place over four months,

from November 2022 to February 2023, with Cohort 1 receiving their first payment on November 15, Cohort 2 on December 15, Cohort 3 on January 15, and Cohort 4 on February 15.

All DBIP research activities were voluntary and participation or non-participation did not impact monthly payments. DBIP recipients who decided to participate in the research were invited to complete various research activities including long-form surveys, biweekly text surveys, sharing spending data, and in-depth interviews.

Upon enrollment, participants were asked to complete a long-form survey which took approximately 20 minutes (Timepoint 1). Participants were told that they would be asked to complete this survey again six months after enrollment (Timepoint 2) and 10 months after enrollment (Timepoint 3). Importantly, timepoint 3 data was collected at 10-months rather than 12-months to try and avoid capturing participants perspective while they were experiencing feelings and behaviors related to the potential "cliff effect" of the end of the program. Participants received \$30 for each completed long-form survey. The long-form survey measured the following constructs: housing, employment and financial health, physical and mental health, service use and public service interactions, and family dynamics.

Participants were also asked to complete text-based surveys biweekly. Text-based surveys took approximately five minutes to complete, and participants received \$5 for each completed biweekly survey. The biweekly text surveys measured the following constructs: housing, service use, mental health, and employment.

Twenty-four participants (8 from each payment group) were randomly selected to complete in-depth interviews about their experience receiving a guaranteed income. Interviews were conducted roughly 2 months after enrollment and again roughly 10 months after enrollment. Complete qualitative findings from the interviews can be found in the Qualitative Evaluation Report.

#### **ANALYSIS**

Mean scores, standard deviations, frequencies, and percentages describe enrollment data. Then, we provide analysis of self-reported changes between Timepoint 1 and Timepoint 3 from participants who completed both surveys. One way analysis of variance (ANOVA) was used to assess differences between payment groups. Paired sample t-tests examined changes within each group. Importantly, changes between Timepoint 1 (enrollment) and Timepoint 3 (ten months) are only reported for participants with complete data at both timepoints. When statistical significance is detected, it is noted in the figure or table with an asterisk.



#### **Definitions**

**M:** The average or mean score of a variable.

**SD:** The standard deviation of an average/mean score. The standard deviation shows how much the data varies from the mean. A small standard deviation indicates that the data points are closely clustered to the mean, while a large standard deviation indicates that the data points are spread further from the mean.

%: The percentage of participants.

**n:** The number of participants who answered the question.

**Statistically Significant:** The probability of the detected difference occurring by chance is less than 5%

Group A: \$1,000 per month.

**Group B:** \$6,500 the first month, \$500 per month for next 11 months.

Group C: \$50 per month.



# Findings

### Enrollment and research response rates

Ultimately, 807 participants were enrolled in DBIP. Of the 807 DBIP participants, 93% (n=748) consented to research, and of those consenting participants, 631 completed a Timepoint 1 survey, representing a 78% research completion rate at Timepoint 1. The response rates for the 631 participants are provided in Table 1.

As expected due to typical attrition, the number of participants who completed research activities did decrease at each timepoint. Just over 70% of the 631 participants completed the Timepoint 2 survey and just over 60% of the 631 participants completed the Timepoint 3 survey. Table 2 provides the number of participants completing a survey by timepoint for each payment group. Percentages represent the response rate compared to Timepoint 1 survey completion.

#### Distribution of Research Participants Across Payment Groups

|         | n   | %       |
|---------|-----|---------|
| GROUP A | 209 | 33.10%  |
| GROUP B | 193 | 30.60%  |
| GROUP C | 229 | 36.30%  |
| TOTAL   | 631 | 100.00% |

#### Table 1

#### Participant Retention at Each Timepoint

|         | T1                      | T2    | T3           |
|---------|-------------------------|-------|--------------|
|         | n (%)                   | n (%) | n (%)        |
| GROUP A | 209                     | 154   | 140          |
|         | (100%)                  | (74%) | (67%)        |
| GROUP B | 193 136<br>(100%) (70%) |       | 114<br>(59%) |
| GROUP C | 229                     | 167   | 142          |
|         | (100%)                  | (73%) | (62%)        |

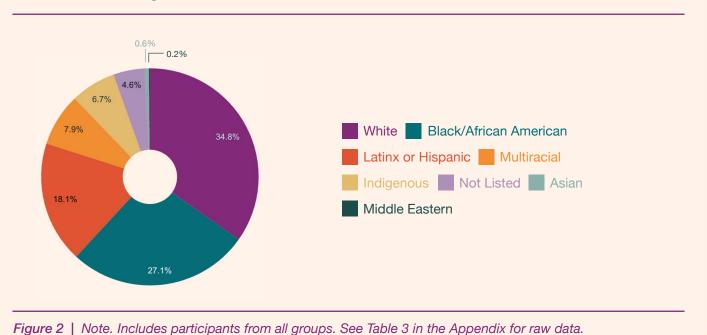
Table 2

### Participant Characteristics

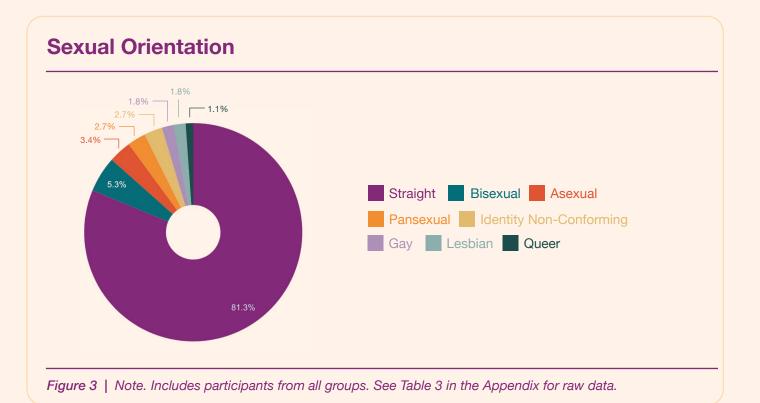
Figures 2-5 show self-reported characteristics of 629 participants who completed the Timepoint 1 survey. The average age for participants is 44 years old. The youngest participant was 18 at enrollment and the oldest was 86 years old. Almost 48% of DBIP participants are male, 27% identified as Black, seven percent identified as Indigenous or Native American, and 34% identified as White. A full list of participant characteristics can be found in Table 3 in the Appendix.

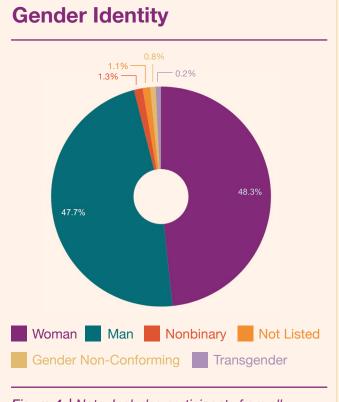
According to the Metro Denver Homeless Initiative's (MDHI) Point-In-Time Count (PIT), 60.7% of the unhoused population are male, 20% identify as Black, six percent identify as Indigenous or Native American, and 62% identify as White (MDHI State of Homelessness 2022 Report, 2023).

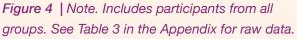
We compared participant characteristics across the three payment groups to assess group balance from the randomization process. As expected, chi-square tests of independence show no statistically significant differences in race or ethnicity, gender identity, sexual orientation, or military status across payment groups.

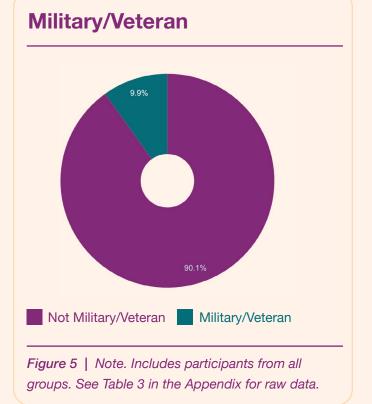


#### **Race/Ethnicity**







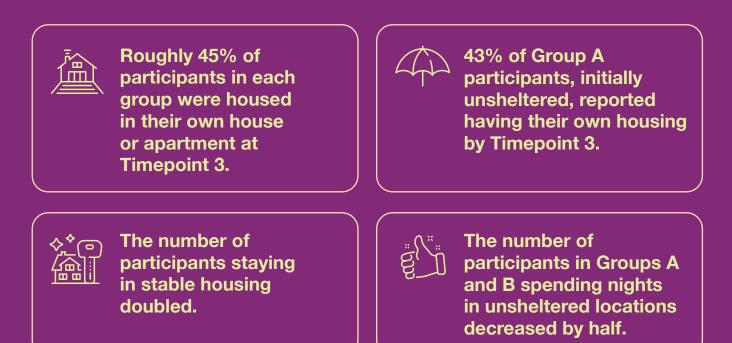


## Housing

In general, housing outcomes improved at a similar rate for participants in all three groups. Across payment groups, between 43% and 48% of DBIP participants reported having their own house or apartment at Timepoint 3 (Figure 6). For all participants, the proportion living in housing they considered to be stable more than doubled, from about 20% to 50% (Figure 12). Similarly, the proportion of participants who spent at least one night unsheltered in the previous week decreased for all groups (Figure 8). At Timepoint 3, 19% of Group A participants spent at least one night unsheltered, 29% of Group B, and 30%

of Group C (Figure 13). Additionally, while no statistically significant change was detected, participants in all three groups reported feeling safer and more welcome at their sleep location at Timepoint 3 than they did at Timepoint 1 (Figures 14 and 15). We did analyze a subpopulation of participants who were unsheltered at Timepoint 1. For these participants, 45% from Group A reported being in their own house or apartment at Timepoint 3, while roughly 25% from Groups B and C reported being in their own house or apartment at Timepoint 3.

### **Featured Findings**



### **Sleep Location**

Table 4 in the Appendix describes participants' previous night sleep location at Timepoint 1 and Timepoint 3. Only those who completed both surveys are included in this table. Of note, roughly 45% of each group reported having their own house or apartment at Timepoint 3, compared to 6-12% at Timepoint 1 (Figure 6). Additionally, fewer participants in all groups reported staying in a shelter or outside at Timepoint 3 (Figures 7-8).

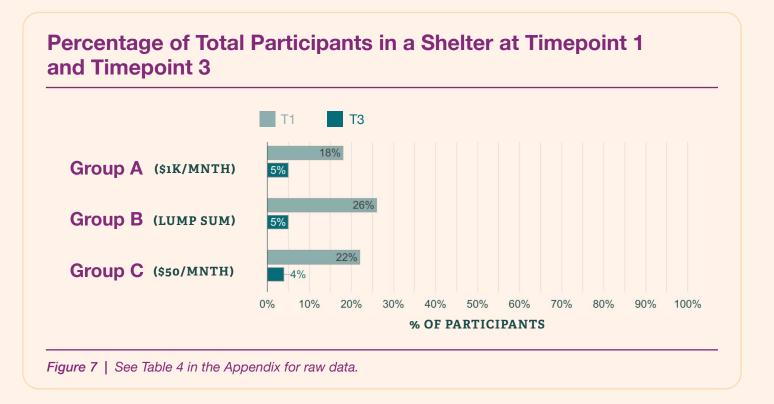


Roughly 45% of each group reported having their own house or apartment at Timepoint 3.

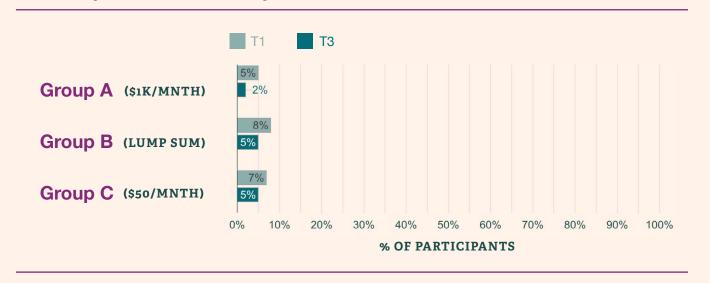
#### Percentage of Total Participants in a House or Apartment They Rent or Own at Timepoint 1 and Timepoint 3



#### *Figure* 6 | See Table 4 in the Appendix for raw data.



#### Percentage of Total Participants Sleeping Outside at Timepoint 1 and Timepoint 3



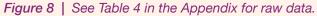


Table 5 in the Appendix reports the sleep locations at Timepoints 1 and 3 for participants who reported sleeping in an unsheltered location at Timepoint 1. Roughly 20% of participants reported sleeping in an unsheltered location at Timepoint 1 (Figure 9). Of participants who reported sleeping in an unsheltered sleep location at Timepoint 1, 43% of Group A participants reported being in their own house or apartment at Timepoint 3, compared to 25% of Group B and 28% of Group C participants (Figure 10). Fewer participants in all three groups reported sleeping outside at Timepoint 3 (Figure 11).



#### **Unsheltered Definition**

We define an "Unsheltered" sleep location as an abandoned building, a Safe Outdoor Space, a vehicle, or outside.

#### Percentage of Unsheltered Participants at Timepoint 1 and Timepoint 3

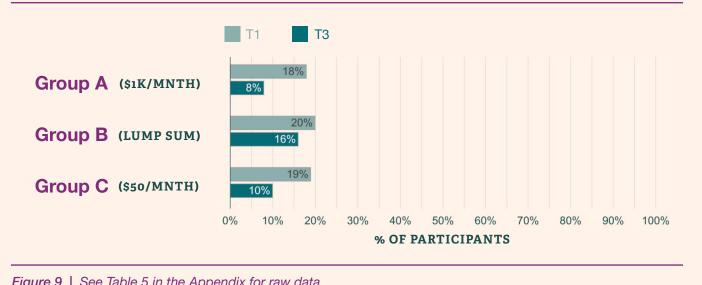
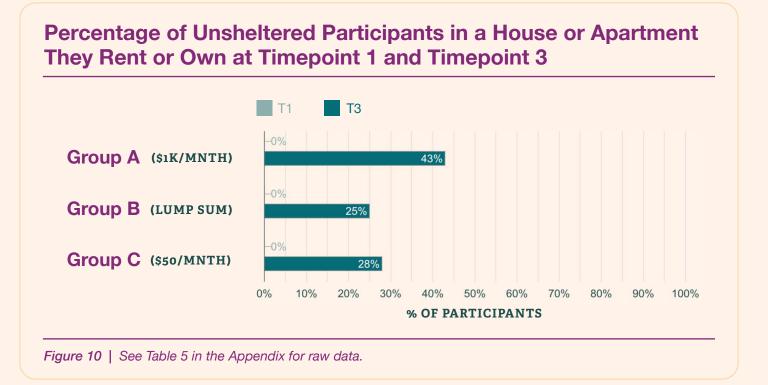
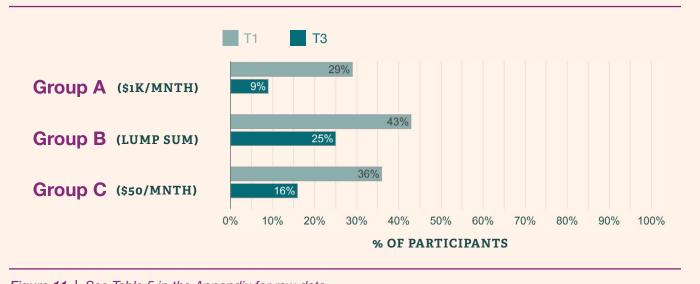
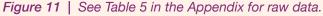


Figure 9 | See Table 5 in the Appendix for raw data.



#### Percentage of Unsheltered Participants Sleeping Outside at Timepoint 1 and Timepoint 3





### Housing Stability

Housing stability is a difficult construct to measure because individuals may have different definitions of what stable housing means to them. Stable housing may mean a house or apartment of their own, it could mean living with a family member, or transitional housing where they know they can be there for a set amount of time. Participants were asked if they considered themselves to be stably housed. About twice as many participants in each group reported being stably housed at Timepoint 3 than at Timepoint 1 (Figure 12).

As Figure 13 shows, fewer participants reported spending nights in an unsheltered sleep location at Time 3 than at Time 1.

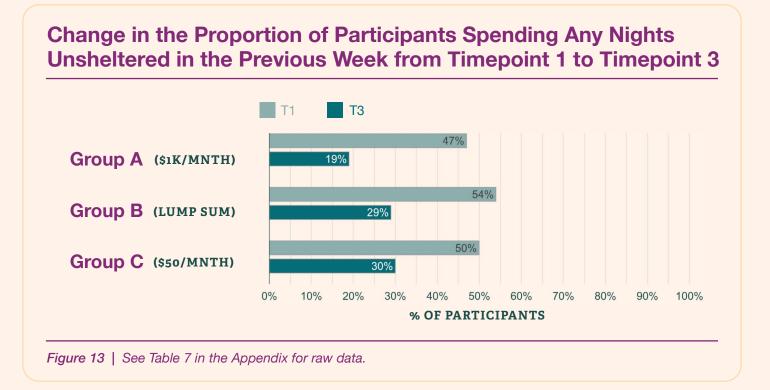


About 2x as many participants in each group reported being stably housed at Timepoint 3.

### Change in Perception of Stable Housing from Timepoint 1 to Timepoint 3

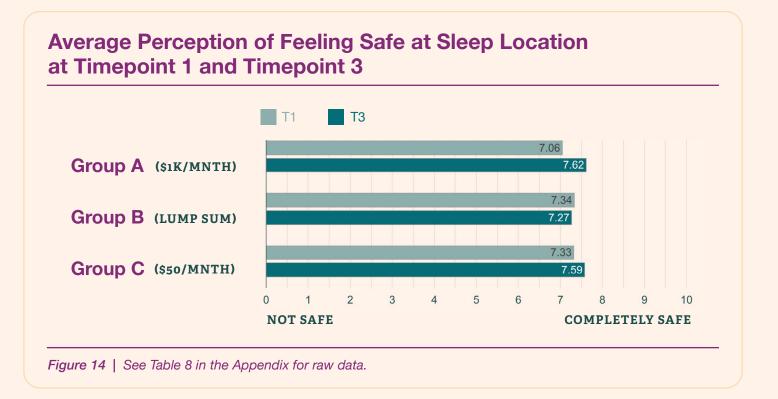


Figure 12 | See Table 6 in the Appendix for raw data.



### Feeling Safe and Welcome

Participants were asked to rate how safe and welcome they feel at their current sleep location on a scale from 1 (not safe or welcome) to 10 (completely safe or welcome). Participants in Groups A and C, on average, report a slight increase in feeling safe and welcome at their sleep location at Timepoint 3. Participants in Group B report feeling slightly less safe, but more welcome at their sleep location at Timepoint 3 (Figures 14-15).



#### **Average Perception of Feeling Welcome at Sleep Location at Timepoint 1 and Timepoint 3**

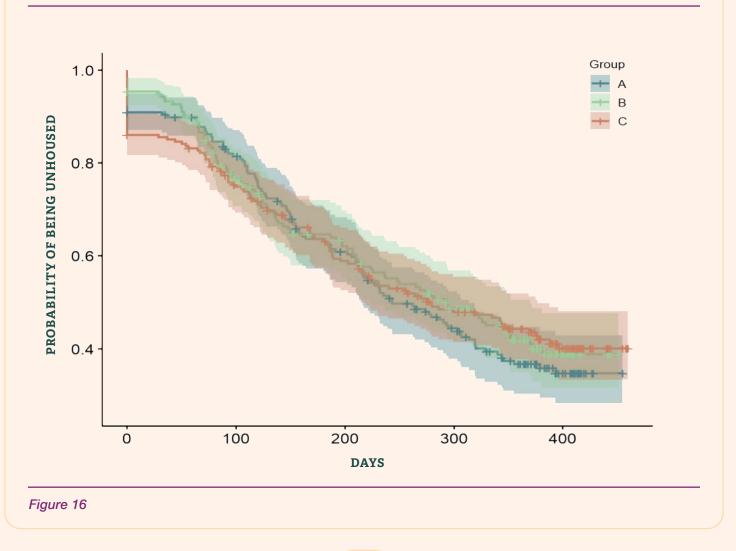


Figure 15 | See Table 9 in the Appendix for raw data.

### Probability of Being Unhoused

We used data from biweekly surveys to track housing outcomes over the course of the first 12 months of DBIP and event history analysis to test the speed at which participants accessed independent housing. Figure 16 shows the proportion of people who were housed (Y-Axis) at different timepoints (X-Axis). While no statistically significant difference between the groups was detected, participants in Group A had a higher probability of being housed 250 days after receiving a guaranteed income (Figure 16).

### Probability of Being Unhoused Over the Course of the First 12 Months of DBIP



## Financial Wellbeing

Of participants who completed both Timepoint 1 and 3 surveys, Participants in Groups A and B reported an increase in full-time work and participants in Group C reported a decrease in full-time work (Figure 17). Using a standardized measure of financial wellbeing, on average, participants in all three groups reported an improvement in financial wellbeing from Timepoint 1 to 3 (Figure 19). While participants in all three groups reported an increase in financial wellbeing, the percentage of participants in Groups A and B who were able to pay all of their bills doubled from Timepoint 1 to 3, while participants in Group C reported a slight increase (Table 18).

### **Featured Findings**

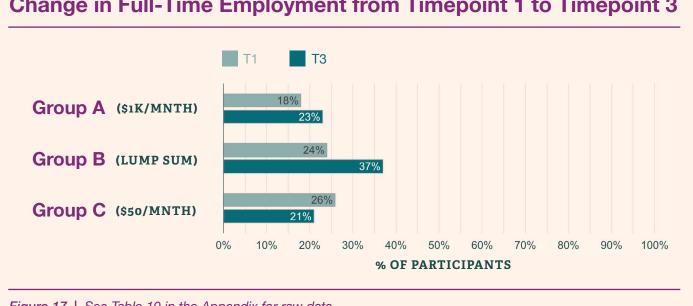
**Participants in Group** Participants in Group A and B report an C report a decrease in increase in full-time full-time work. work. The percentage of Participants in all groups report an participants in Group A and B who were able improvement in financial well-being. to pay bills doubled from Timepoint 1 to 3.

### **Income Sources**

Table 10 provides information about reported sources of income for participants who completed the Timepoint 1 and 3 surveys. From Timepoint 1 to 3, the percentage of participants in groups A and B reporting full-time employment increased (Figure 17). From Timepoint 1 to 3, the percentage of participants in group C reporting fulltime employment decreased. In addition, there was an increase in the percentage of participants in Group B reporting part-time employment. Participants in all payment groups, reported a decrease in income from friends, family, and selling their possessions from Timepoint 1 to 3 (Table 10).



employment.



#### Change in Full-Time Employment from Timepoint 1 to Timepoint 3

Figure 17 | See Table 10 in the Appendix for raw data.

#### Participant Source of Income at Timepoint 1 and Timepoint 3

| SOURCE OF INCOME          | GROUP A (n=122)<br>T1 T3 |     | GROUP B (n=97)<br>T1 T3 |     | GROUP C (n=126)<br>T1 T3 |     |
|---------------------------|--------------------------|-----|-------------------------|-----|--------------------------|-----|
| FULL-TIME EMPLOYMENT      | 18%                      | 23% | 24%                     | 37% | 26%                      | 21% |
| PART-TIME EMPLOYMENT      | 34%                      | 29% | 17%                     | 20% | 30%                      | 21% |
| PAID TEMPORARY WORK       | 26%                      | 23% | 29%                     | 18% | 29%                      | 20% |
| UNEMPLOYMENT              | 3%                       | 3%  | 1%                      | 2%  | 4%                       | 0%  |
| WORK PAID UNDER THE TABLE | 12%                      | 9%  | 9%                      | 12% | 14%                      | 11% |
| SELLING SELF-MADE ITEMS   | 3%                       | 5%  | 5%                      | 8%  | 7%                       | 10% |
| MONEY FROM FRIENDS        | 25%                      | 15% | 21%                     | 12% | 25%                      | 18% |
| MONEY FROM RELATIVES      | 30%                      | 21% | 25%                     | 13% | 26%                      | 21% |
| PEOPLE GIVING YOU MONEY   | 8%                       | 6%  | 12%                     | 8%  | 14%                      | 14% |
| SELLING POSSESSIONS       | 17%                      | 11% | 20%                     | 14% | 23%                      | 15% |
| COLLECTING CANS/BOTTLES   | 7%                       | 8%  | 7%                      | 8%  | 7%                       | 8%  |
| SELLING BLOOD/PLASMA      | 16%                      | 6%  | 10%                     | 4%  | 12%                      | 14% |

Table 10



"I am able to buy the food I need to have lunch at my job every day...I don't have to struggle to find the funds for gas or food, and I have new clothes so I don't have to look like someone who just crawled out of the gutter. I'm able to buy good things like a good razor to shave my face."

-DBIP Participant

### **Paying Bills**

Figure 18 and Table 12 provide information about participants' ability to pay bills and accessing various loans and pawnshops. As Figure 18 describes the percentage of participants who were able to pay their bills in Groups A and B doubled from Timepoint 1 to Timepoint 3, while participants in Group C reported a slight increase.

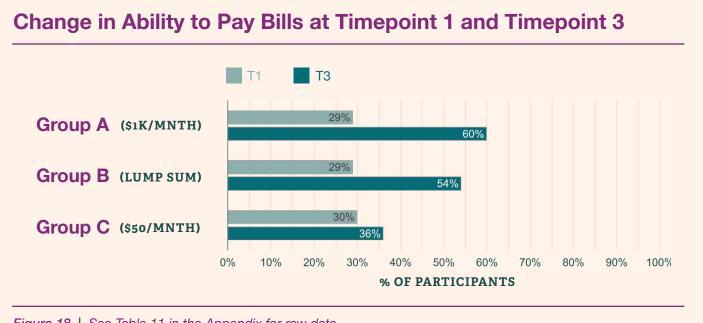


Figure 18 | See Table 11 in the Appendix for raw data.

### Percentage of Participants who Used Loans, Pawnshops, or Rent-to-Own at Timepoint 1 and Timepoint 3

|             | GROUP A (n=78)<br>T1 T3 |     | GROUP B (n=99)<br>T1 T3 |     | GROUP C (n=130)<br>T1 T3 |     |
|-------------|-------------------------|-----|-------------------------|-----|--------------------------|-----|
| AUTO LOAN   | 1%                      | 4%  | 1%                      | 0%  | 2%                       | 3%  |
| PAYDAY LOAN | 8%                      | 5%  | 5%                      | 4%  | 9%                       | 7%  |
| PAWN SHOP   | 21%                     | 22% | 14%                     | 16% | 17%                      | 23% |
| RENT-TO-OWN | 3%                      | 4%  | 0%                      | 2%  | 3%                       | 4%  |

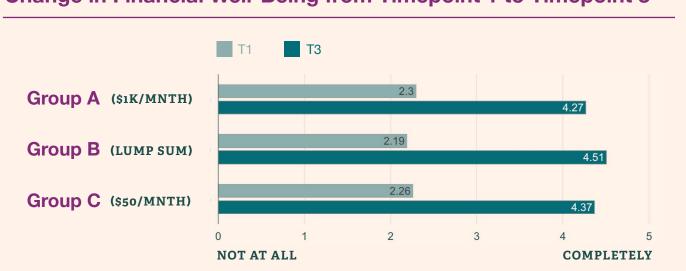
Table 12

### Perception of Financial Wellbeing

The Consumer Financial Protection Bureau's Financial Well-being Short Scale was used to assess general financial well-being. Participants were asked to rate whether statements such as "I have money left over at the end of the month" felt true or not. The financial well-being scale is measured on a scale from 0 to 4 where 0 is "Not at all" and 4 is "Completely." A lower number indicates poor financial well-being, and a higher number indicates positive financial wellbeing. Participants from all three payment groups reported statistically significant increases in their sense of financial well-being (Figure 19).



Participants from all three groups reported improvement in their sense of financial well-being.



#### **Change in Financial Well-Being from Timepoint 1 to Timepoint 3**

*Figure 19* | Note. Measured on a scale from 0 to 4 where 0 is "Not at all" and 4 is "Completely." See Table 13 in the Appendix for raw data.

## Health

Health included various outcomes including general physical health, sleep health, stress and anxiety, food insecurity, and substance use. When comparing outcomes from Timepoint 1 to 3 we detected varying degrees of change. For example, the general health of participants in Group B declined between Timepoint 1 and 3 (Figure 20) and participants in Group C reported a decrease in energy from Timepoint 1 to 3 (Figure 21). Interestingly, outcomes related to stress and anxiety are mixed. While we do not observe changes from Timepoint 1 to 3 in stress and anxiety (Figure 26), parenting distress (Figure 27) did improve for participants with children or dependents across the three groups. Food insecurity improved for participants in all three groups, with participants in Group B showing statistically significant improvements (Figure 24). Results show no change in illegal substance use from Timepoint 1 to 3 (Figure 25).

### **Featured Findings**

Groups A and C reported a decrease in parental stress.

Group B reported a decrease in food insecurity.

Group C reported
 a decline in energy.



Group B reported a decline in general health.

### **Physical Health**

Our research explored several indicators of physical health, including general health, energy, and sleep health. While no significant differences in health indicators were detected across groups, there were changes within groups from Timepoint 1 to 3.

DBIP Participants were asked to rate their general health and energy using the SF-36 (Ware & Sherbourne, 1992), a commonly used health survey instrument. Scores for health and energy go from a low score of 1 to a high score of 100. Figures 20-21 provide results of participants reporting of health and energy. Participants in Group B, on average, reported decreases in health from Timepoint 1 to Timepoint 3. Participants in Group C reported decreases in energy.

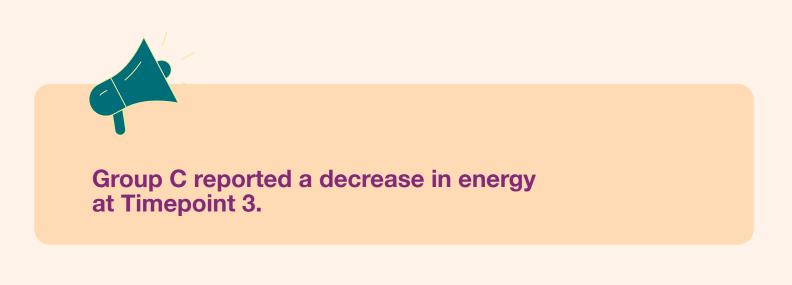


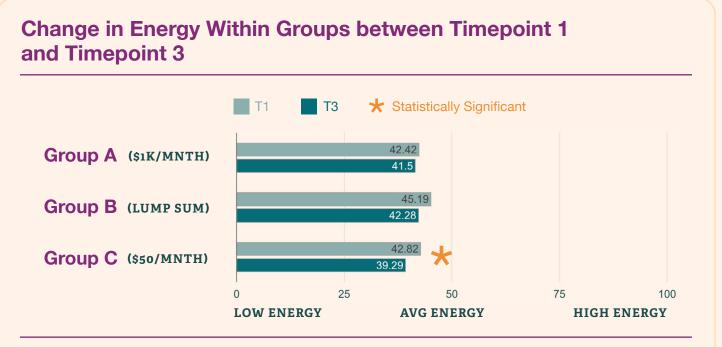
The Lump Sum Group (Group B) reported a decrease in health at Timepoint 3.





*Figure 20* | Note. On a scale of 0 to 100, where 0 is poor health, 50 is average health, and 100 is excellent health. See Table 14 in the Appendix for raw data.



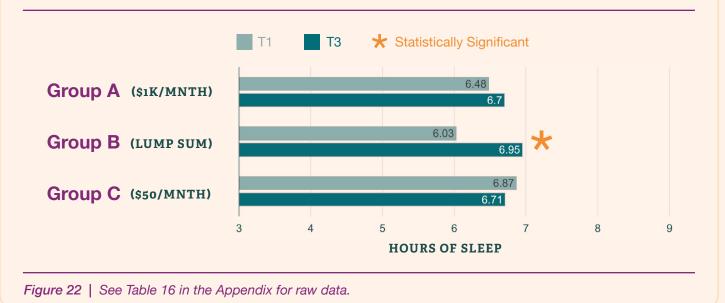


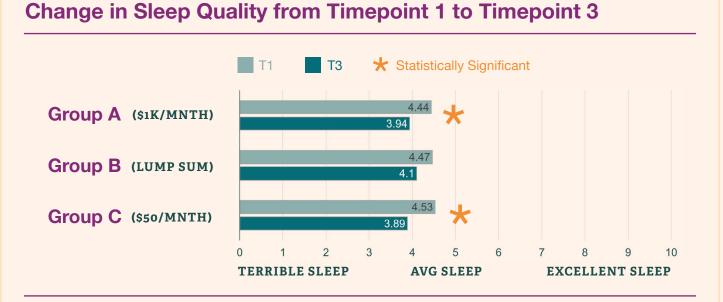
*Figure 21* | Note. On a scale of 0 to 100, where 0 is low energy, 50 is average energy, and 100 is high energy. See Table 15 in the Appendix for raw data.

### Sleep

Participants in Group B reported a statistically significant improvement in the number of hours of sleep from Timepoint 1 to 3 (Figure 22). However, participants in both Groups A and C reported a statistically significant decline in quality of sleep from Timepoint 1 to 3 (Figure 23).

#### **Change in Sleep Quantity from Timepoint 1 to Timepoint 3**





*Figure 23* | Note. Quality of Sleep was measured on a scale of 0 to 10 where 0 is "terrible" and a 10 is "excellent." See Table 17 in the Appendix for raw data.

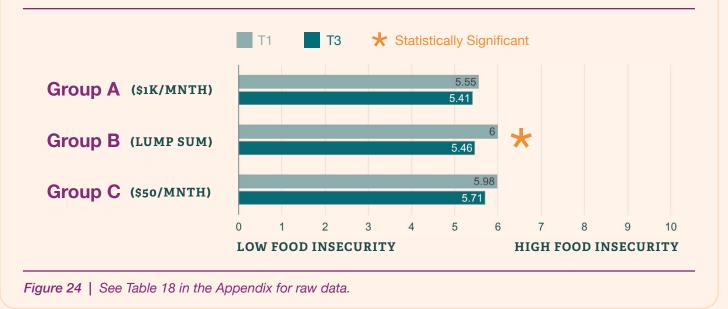
# **Food Insecurity**

Food insecurity was measured using the Household Food Insecurity Access Scale (Coates et al.,2007) where participants were asked if, and how often, they had to skip meals or could not afford food. The scores of the Household Food Insecurity Access Scale were added together to create a sum score, ranging from 0 (indicating low food insecurity) to 10 (indicating high food insecurity. While participants in all three groups reported decreases in food insecurity, only group B participants experienced a statistically significant decrease (Figure 24).



All three groups reported a decrease in food insecurity.

#### **Change in Food Insecurity between Timepoint 1 and Timepoint 3**



### Substance Use

Participants were asked how frequently they use illegal substances on a scale of 0 to 4 where 0 is Never, 1 is Monthly or Less, 2 is 2 to 4 Times a Month, 3 is 2 to 3 Times a Week, and 4 is 4 or More Times a Week. No statistically significant differences were detected when comparing changes for participants within each group from Timepoint 1 to 3. Similarly, no statistically significant differences between groups were detected when comparing changes in illegal substance use from Timepoint 1 to 3 (Figure 25).



#### **Change in Illegal Substance Use from Timepoint 1 to Timepoint 3**

*Figure 25* | Note. On a scale of 0 to 4, where 0 is Never, 1 is Monthly or less, 2 is 2-4 times a month, 3 is 2-3 times a week, 4 is 4 or more times a week. See Table 19 in the Appendix for raw data.

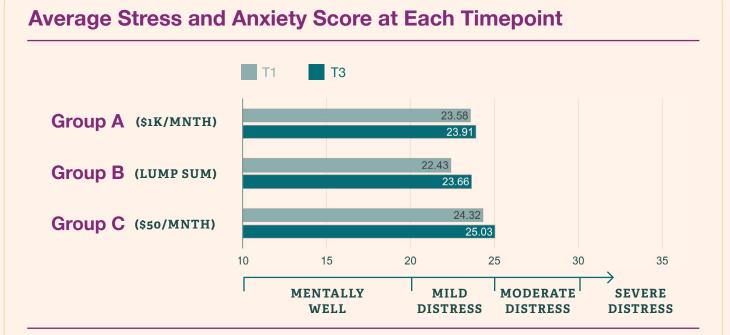
## **Mental Health**

Mental health outcomes are mixed. Stress and anxiety were measured using the Kessler 10 (Kessler et al., 2002) where scores range from 10 to 50 with lower scores indicating lower stress and anxiety and higher scores indicating higher stress and anxiety. On average, participants in all three groups reported slightly higher levels of stress and anxiety at Timepoint 3 than they did at Timepoint 1 (Figure 26). Though participants reported higher stress and anxiety, scores remained in the range of mild psychological distress.



*"It relieved a lot of stress and pressure from an already stressful situation. [...] I already knew, on the 15th of each month, there was going to be money to pay for bills, food, whatever I needed."* 

-DBIP Participant



*Figure 26* | Note. On a scale of 10 to 50, where scores under 20 are likely to be well, scores 20-24 are likely to have a mild psychological distress, scores 25-29 are likely to have a moderate psychological distress, and scores above 30 are likely to have a severe psychological distress. See Table 20 in the Appendix for raw data.

#### 39

While no statistically significant differences were detected in stress and anxiety, stress related to parenting did improve for participants in all three groups. Participants who cared for children or dependents under 18 were asked to complete the Parenting Distress Scale. Participants in payment Group A and C, on average, reported statistically significant improvements in parental stress, and participants in payment Group B reported near statistically significant improvements (Figure 27).



#### **Change in Parenting Distress from Timepoint 1 to Timepoint 3**



*Figure 27* | Note. On a scale of 1 to 5, where 1 is low parenting distress and 5 is high parenting distress. See Table 21 in the Appendix for raw data.

# **Hope and Agency**

Participants were asked to answer questions on the Snyder Hope/Futures Scale (Snyder et al., 1991). Answers on this scale measure participants' sense of agency and pathways. Agency refers to the energy one directs toward meeting their goals toward future orientation, while pathways refer to the planning that one makes to accomplish these goals. These two components can be scored separately, but when scored together create a hope score that refers to one's beliefs about one's abilities to move themselves, through agency using pathways, toward goals, and thus the future. Snyder posited that having hope leads to higher outcomes in mental and physical health and psychological adjustment. Agency and Pathways both had total potential scores of 32, while the cumulative Hope score is out of 64. Higher scores indicate greater levels of hope.

Participants in Groups A and B saw no statistically significant changes in changes in Agency, Pathways, or the cumulative Hope score from Timepoint 1 to 3 (Figures 28-30). Participants in group C reported statistically significant decreases in Agency and in overall Hope from Timepoint 1 to 3. No statistically significant difference was detected in the changes in average Hope and Agency scores when comparing participants in Groups A, B and C.

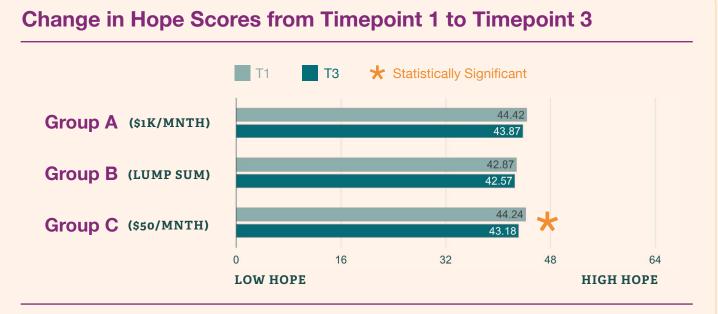


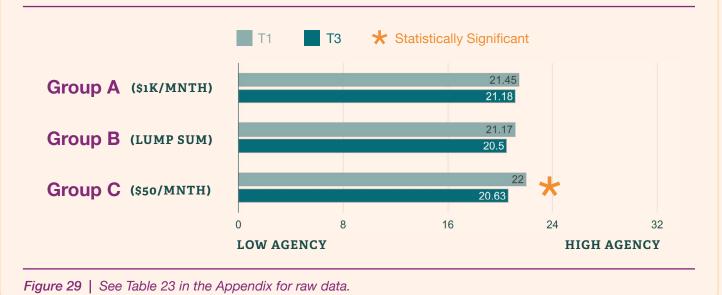
Figure 28 | See Table 22 in the Appendix for raw data.



"The most impact it had on me was a promising future, versus before, it wasn't looking so good. [...] It's a light at the end of the tunnel, and before, I was kinda lost. It just really gave me some hope."

-DBIP Participant







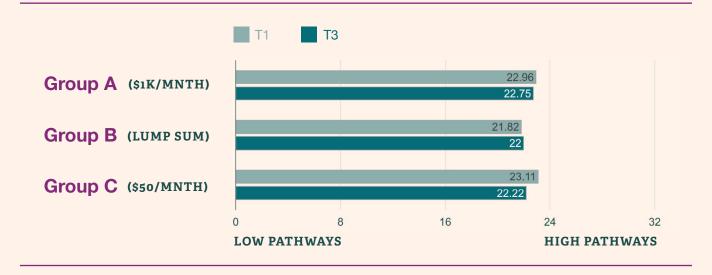


Figure 30 | See Table 24 in the Appendix for raw data.

# Family and Social Networks

To understand family and social networks we assessed how participants used their time, specifically how much time they spent accessing resources and how much time they had for leisure activities. Participants were asked about transportation security and how often they access resources through their DBIP partner agency. Participants in all three groups reported a decrease in the number of hours they spent accessing resources (Figure 31) from Timepoint 1 to 3 and participants in Groups A and C reported an increase in the number of hours they spent on leisure activities (Figure 32). Participants in groups A and B reported improvements in transportation security, and of note, Participants in Group A reported a statistically significant improvement in transportation security (Figure 33). Family and social networks were also explored through qualitative interviews and findings can be found in the Qualitative Evaluation Report.

# **Featured Findings**

Participants in all three groups reported spending less time accessing resources at Timepoint 3.



Participants in Groups A and C reported more time spent on leisure activities.



Participants in Groups A and B reported increased transportation security.

## Time Use

Participants were asked how much time they spent each day accessing resources such as going to food banks, shelters, or case management appointments and how much time they spent on leisure activities like spending time with friends, religious activities, physical activities, or reading. As Figure 31 shows, participants in all three payment groups, on average, reported a decrease in the number of hours spent accessing resources between Timepoint 1 and 3. Similarly, participants in Payment groups A and B, on average, reported a decrease in accessing resources from their DBIP partner agency from timepoint 1 to 3.



Participants in all three groups reported a decrease in the number of hours spent accessing resources.

# Change in Hours Per Day Spent Accessing Resources from Timepoint 1 to Timepoint 3

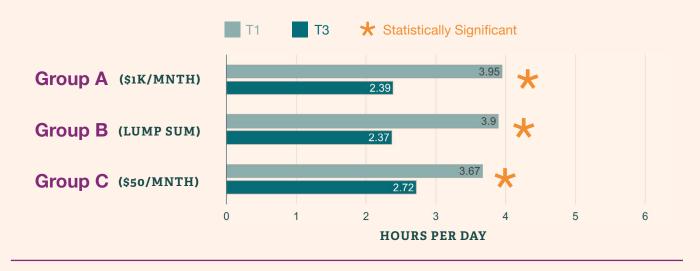
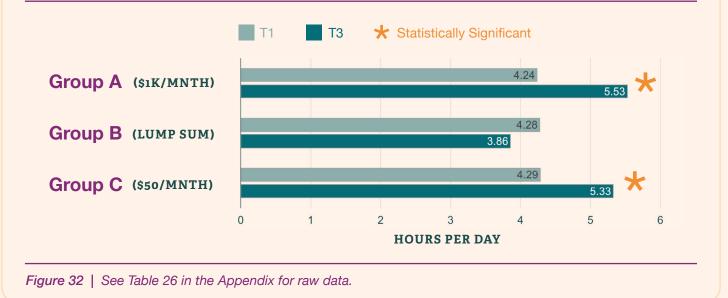


Figure 31 | See Table 25 in the Appendix for raw data.

Participants in Groups A and C reported an increase in the number of hours spent on leisure activities like spending time with friends, religious activities, physical activities, or reading (Figure 32).





## Transportation Security

Transportation can be a difficult aspect of connection for people experiencing homelessness. Transportation security was measured using the Transportation Security Index to assess participants' access to reliable transportation (Murphy et al., 2021). As Figure 33 shows, while no difference between the groups was detected, on average, participants in Groups A and B reported an increase in transportation security and participants in Group C reported a slight decrease. Participants in Group A reported a statistically significant improvement in transportation security from the first timepoint to the last timepoint.

# Change in Transportation Security from Timepoint 1 to Timepoint 3



*Figure 33* | Note. On a scale of 1 to 3, where 1 is low transportation security and 3 is high transportation security See Table 27 in the Appendix for raw data.

# Connection to DBIP Partner Agency

Our research investigated participant experiences with service providers and time spent accessing resources. All participants were connected to a service provider upon DBIP enrollment. Participants were asked about their connections to, and satisfaction with, the DBIP partner agency at each timepoint using the Client Satisfaction Inventory. The Client Satisfaction Inventory is scored on a scale of 0 to 100 where higher scores indicate feeling more connected to or happy with the services provided. While all groups reported a decrease in connection to service providers, participants in payment Group A, on average, reported the smallest change and participants in payment Group C, on average, reported the largest change.

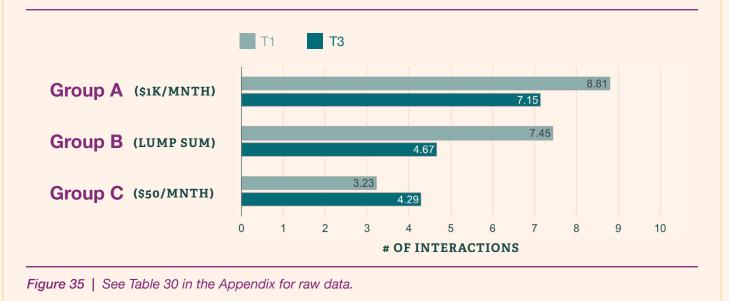
#### Change of Client Connection and Satisfaction with DBIP Partner Agency from Timepoint 1 to Timepoint 3



*Figure 34* | Note. On a scale of 0 to 100, with high scores indicating higher level of satisfaction. See Table 28 in the Appendix for raw data.

Participants were asked to report the number of times they interacted with their DBIP partner agency in the previous 6 months. Group C reported fewer interactions with their DBIP partner agency at every timepoint, including the first timepoint (Figure 35).

#### **Average Number of DBIP Partner Agency Interactions in the Previous 6 Months at Each Timepoint**



# Cost Analysis of Service Use

We estimate costs and cost savings for participants of DBIP for the following public service interactions: 1) emergency room visits in the past six months; 2) hospital nights in the past six months; 3) ambulance trips in the past six months; 4) times in jail in the past six months; 5) jail nights in the past six months; 6) emergency shelter nights in the past six months; 7) drug or alcohol treatment center nights in the past six months.

### Per Person Costs

Per person costs for these public service interactions were estimated using a variety of sources. Per person costs for an emergency room visit come from the Denver Health Medical Center (2023) and are estimated at \$325 per visit (https:// doi.colorado.gov/colorado-hospital-pricereport). Hospital nights are estimated at \$199 per night (https://public.tableau.com/app/ profile/colorado.division.of.insurance/viz/ ColoradoHospitalPriceReport/19 50#1). Per person costs for an ambulance trip come from Denver's social impact bond study (Gillespie et al, 2021) and are estimated at \$69. Per person jail visit come from Denver's social impact bond study of arrest costs (Gillespie et al, 2021) and are estimated at \$179. Per person jail nights also come from Denver's social impact bond study (Gillespie et al, 2021) and are estimated at \$160. Per person emergency shelter nights come from the Denver Housing First Collaborative study (Perlman & Parvensky, 2006) and are estimated at \$86.35.

## **Cost Analysis**

As can be seen in Table 31, there was an overall cost saving associated with DBIP participation. However, there are not major differences in cost savings across payment groups. On average, cost savings occurred from Timepoint 1 to 3 for participants in payment groups A, B and C for emergency room visits, hospital nights, ambulance trips, jail nights and shelter visits.

As can be seen from Table 31, assessing individual cost categories, participants in payment group A, on average, had the highest cost savings for emergency room visits (\$59,000), hospital nights (\$60,000), and ambulance trips (\$14,000). Participants in payment group C, on average, demonstrated the largest cost savings in jail nights (\$75,000), times in jail (\$358) and shelter visits (\$88,000). Participants in payment group B, on average, had the largest cost savings in drug or alcohol treatment center nights (\$36,000).

Our research does show substantial cost savings in homeless shelter visits for participants in all three payment groups (\$71,000 to \$88,000). Additionally, Table 31 Shows the total cost savings for the 342 participants included in the analysis at \$589,214.

#### Changes in Public Service Costs, T1 to T3

|   | GRO                  | UP A                                | GRO                  | UP B                 | GRO                  | UP C                 |
|---|----------------------|-------------------------------------|----------------------|----------------------|----------------------|----------------------|
| PUBLIC SERVICE  | Per Capita<br>Change | Total Cost<br>Change                | Per Capita<br>Change | Total Cost<br>Change | Per Capita<br>Change | Total Cost<br>Change |
| AMBULANCE TRIPS<br>(\$69 PER TRIP)                                | -\$113               | -\$14,248                           | -\$4                 | -\$414               | -\$57                | -\$7,452             |
| DRUG OR ALCOHOL<br>TREATMENT CENTER<br>NIGHTS<br>(\$86 PER NIGHT) | -\$79                | -\$10,234                           | -\$348               | -\$35,527            | \$74                 | \$9,546              |
| ER VISITS<br>(\$325 PER VISIT)                                    | -\$460               | -\$58,825                           | -\$42                | -\$4,225             | -\$218               | -\$28,275            |
| HOSPITAL NIGHTS<br>(\$199 PER NIGHT)                              | -\$465               | -\$59,501                           | -\$148               | -\$15,124            | -\$182               | -\$23,482            |
| JAIL TIME<br>(\$179 PER TIME)                                     | -\$78                | -\$9,920                            | -\$265               | -\$27,040            | -\$584               | -\$75,336            |
| JAIL NIGHTS<br>(\$160 PER NIGHT)                                  | \$1                  | \$179                               | \$60                 | \$6,086              | -\$3                 | -\$358               |
| SHELTER VISITS<br>(\$40 PER NIGHT)                                | -\$566               | -\$71,319                           | -\$753               | -\$76,073            | -\$674               | -\$87,672            |
| TOTAL COST CHANGE   | (-\$223              | (-\$223,868) (-\$152,317) (-\$213,4 |                      |                      | 3,029)               |                      |
| TOTAL COST SAVINGS  |                      |                                     | -\$58                | 9,214                |                      |                      |

# **USIO Spending**

461 of participants accepted a DBIP issued debit card and consented to having their USIO spending data be used for DBIP research. Figure 36 provides the spending categories and percent of total spending tracked for these 461 participants. All spending categories totaling less than 2% of total transactions were put into a

category called "other". This research tracked \$1,607,884.65 of DBIP debit card spending. As seen from Figure 36, most debit card transactions were from manual cash disbursements. Then, the next highest percentage of debit card transactions took place at retail stores and utility services.



all categories for which spending represents less than 2% of total spending.

# Discussion

# Limitations

There are a number of limitations to the findings in this report that are worth noting. First, the study design did not employ a classic "treatment as usual" comparison group. Instead, an active comparison group was utilized where active comparison group participants received: a phone with 12 months of service, a debit card, \$50 unconditional cash each month, and connection with the DBIP program. An active comparison group design was selected over treatment as usual out of an effort to respect the time and energy of Group C participants. Results show that active comparison group participants, for some outcomes, performed as well as participants in Groups A or B. As a result, it is difficult to discern from the DBIP 12-month findings if changes in outcomes were a result of the differential amounts of unconditional cash or were due to other characteristics of the intervention (e.g. a phone), or due to other factors outside the study such as the availability of temporary housing vouchers during the COVID pandemic.

Another limitation of the study is that treatment conditions were not masked. In a masked study, participants would not know to which payment condition (Group A, B or C) they were assigned before completing baseline surveys. While a masked study was considered, it was ultimately not adopted so prospective participants would be able to understand and explore potential impacts to the benefits they receive. As a result, when completing the Timepoint 1 survey, participants knew they had been randomly selected for DBIP and they knew the amount of unconditional cash they would be receiving for the subsequent 12-months. Therefore, the Timepoint 1 surveys may not represent a true baseline where survey results reflect conditions prior to introduction of the DBIP program. Instead Timepoint 1 survey results reflect conditions at the time of enrollment, when participants already had established feelings and behaviors that were influenced by their random selection into DBIP.

Related, another limitation of the study is that 10-month survey findings represent participants feelings when they knew that the DBIP program was coming to an end. Through participant member checking the research team heard that at Timepoint 3 residents were feeling stress and concern about what they were going to do when the program ended.

Another limitation is the unknown nature of outcomes for participants who did not complete research activities (e.g. completing a Timepoint 3 survey). The DBIP research activities response rate is high compared to many social science survey research studies, and the response rate is very high considering that participants were experiencing homelessness when they applied for DBIP. The response rate for Timepoint 3 survey data collection was over 50%. That being said, any missing data can bias results. Until a thorough analysis of missing data is conducted, there is the possibility that findings reported in this report do not represent findings from the full sample of 807 people enrolled in DBIP. The research team will continue to analyze patterns of missing from the survey, and report on those results.

## Conclusion

Guaranteed income remains a promising approach to addressing homelessness and this approach deserves further investigation. While the findings outlined in this report indicate overall improvement for DBIP participants across many targeted outcomes, minimal differences were observed when comparing outcomes across the different payment groups. This may suggest that consistent cash assistance of even \$50 can improve many aspects of one's life. Or, as we heard through member checking, it was the aggregate of the whole DIBP program that made a difference for individuals. This means the trust conveyed by delivering guaranteed income, attention by community based organizational partner staff, phones and phone plans, and connections.

Additionally, it is important to keep the timeframe of the project in mind when interpreting findings. Ten months is not a lot of time to experience major changes considering the precarity and trauma of a homelessness experience. It is possible that participants in Group C may experience a plateau effect over time while Groups A and B continue to experience improvement across target outcomes. At the time of this report, DBIP has extended for an additional 6 months and is actively raising funds to extend further. The additional time will be important to understand the relationship between amounts of guaranteed income and the amount of time necessary to see changes between groups experiencing homelessness.

It is also important to note that this quantitative report only describes one element of the story. Qualitative data were collected through in-depth interviews and findings are described in the Qualitative Research Report.

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# Appendix

#### **Distribution of Research Participants Across Payment Groups**

|         | n   | %       |
|---------|-----|---------|
| GROUP A | 209 | 33.10%  |
| GROUP B | 193 | 30.60%  |
| GROUP C | 229 | 36.30%  |
| TOTAL   | 631 | 100.00% |

Table 1

#### **Participant Retention at Each Timepoint**

|         | T1<br>n (%) | T2<br>n (%) | T3<br>n (%) |
|---------|-------------|-------------|-------------|
| GROUP A | 209 (100%)  | 154 (74%)   | 140 (67%)   |
| GROUP B | 193 (100%)  | 136 (70%)   | 114 (59%)   |
| GROUP C | 229 (100%)  | 167 (73%)   | 142 (62%)   |

#### Participant Characteristics at Enrollment

|                        | GROUP A<br>n=208<br>M (SD)     | GROUP B<br>n=193<br>M (SD)     | GROUP C<br>n=228<br>M (SD)      | TOTAL<br>n=629<br>M (SD)        |
|------------------------|--------------------------------|--------------------------------|---------------------------------|---------------------------------|
| AVERAGE AGE            | 43.50 (13.70)                  | 42.90 (12.00)                  | 44.10 (13.70)                   | 44.10 (13.70)                   |
| RACE/ETHNICITY         | n=209<br>% (n)                 | n=193<br>% (n)                 | n=229<br>% (n)                  | n=631<br>% (n)                  |
| ASIAN                  | 0.5% (1)                       | 1% (2)                         | 0.4%                            | 0.6% (4)                        |
| BLACK/AFRICAN AMERICAN | 25% (53)                       | 25% (49)                       | 29% (67)                        | 27% (169)                       |
| INDIGENOUS             | 5% (10)                        | 8% (16)                        | 7% (16)                         | 7% (42)                         |
| LATINX OR HISPANIC     | 15% (31)                       | 18% (34)                       | 21% (48)                        | 18% (113)                       |
| MIDDLE EASTERN         | 0.5% (1)                       | 0                              | 0                               | 0.2% (1)                        |
| MULTIRACIAL            | 10% (20)                       | 7% (14)                        | 7% (15)                         | 8% (49)                         |
| WHITE                  | 37% (77)                       | 36% (70)                       | 31% (70)                        | 34% (217)                       |
| IDENTITY NOT LISTED    | 7% (14)                        | 3% (5)                         | 4% (10)                         | 5% (29)                         |
| GENDER IDENTITY        | n=209                          | n=193                          | n=229                           | n=631                           |
| WOMAN                  | <mark>% (n)</mark><br>47% (98) | <mark>% (n)</mark><br>46% (88) | <mark>% (n)</mark><br>52% (118) | <mark>% (n)</mark><br>48% (304) |
| GENDER NON-CONFORMING  | 0.5% (1)                       | 1% (2)                         | 1% (2)                          | 1% (5)                          |
| MAN                    | 48% (101)                      | 51% (99)                       | 44% (100)                       | 48% (300)                       |
| NONBINARY              | 2% (5)                         | 0                              | 1% (3)                          | 1% (8)                          |
| TRANSGENDER            | 1% (2)                         | 0.5% (1)                       | 1% (2)                          | 1% (5)                          |
| IDENTITY NOT LISTED    | 0.5% (1)                       | 2% (3)                         | 1% (2)                          | 1% (7)                          |
| SEXUAL ORIENTATION     | n=209<br>% (n)                 | n=193<br>% (n)                 | n=229<br>% (n)                  | n=631<br>% (n)                  |
| ASEXUAL                | 3% (7)                         | 2% (4)                         | 4% (10)                         | 3% (21)                         |
| BISEXUAL               | 5% (11)                        | 5% (10)                        | 6% (12)                         | 5% (33)                         |
| GAY                    | 1% (3)                         | 1% (2)                         | 3% (6)                          | 2% (11)                         |
| LESBIAN                | 2% (4)                         | 1% (2)                         | 2% (5)                          | 2% (11)                         |
| PANSEXUAL              | 3% (7)                         | 2% (4)                         | 3% (6)                          | 3% (17)                         |
| QUEER                  | 0.5% (1)                       | 1% (2)                         | 2% (4)                          | 1% (7)                          |
| STRAIGHT               | 80% (168)                      | 86% (165)                      | 76% (175)                       | 81% (508)                       |
| IDENTITY NOT LISTED    | 2% (4)                         | 2% (4)                         | 4% (9)                          | 3% (17)                         |
| MILITARY/VETERAN       | n=198<br>% (n)                 | n=180<br>% (n)                 | n=212<br>% (n)                  | n=585<br>% (n)                  |
|                        | 10% (20)                       | 7% (13)                        | 12% (25)                        | 10% (58)                        |

#### **Previous Night Sleep Location at Timepoint 1 and Timepoint 3**

|   | GROUP | A (n=122)  | GROUP | B (n=97) | GROUP | C (n=126) |
|---|-------|------------|-------|----------|-------|-----------|
| LOCATION  | Tı    | <b>T</b> 3 | Tı    | T3       | Tı    | T3        |
| HOUSE OR APARTMENT THAT I RENT<br>OR OWN                            | 6%    | 44%        | 6%    | 48%      | 12%   | 43%       |
| A HOTEL OR MOTEL WITH A VOUCHER                                     | 13%   | 3%         | 6%    | 4%       | 6%    | 3%        |
| A HOTEL OR MOTEL THAT I PAY FOR                                     | 2%    | 3%         | 6%    | 6%       | 4%    | 4%        |
| AN ABANDONED BUILDING   | 1%    | 0%         | 0%    | 2%       | 0%    | 0%        |
| A FRIEND OR FAMILY MEMBERS HOME                                     | 31%   | 27%        | 23%   | 13%      | 19%   | 19%       |
| TRANSITIONAL/TEMPORARY<br>HOUSING (INCLUDING TEMPORARY<br>VOUCHERS) | 9%    | 8%         | 9%    | 6%       | 14%   | 12%       |
| SAFE OUTDOOR SPACE  | 2%    | 0%         | 6%    | 2%       | 4%    | 1%        |
| SHELTER   | 18%   | 5%         | 26%   | 5%       | 22%   | 4%        |
| TINY HOME VILLAGE   | 0%    | 1%         | 1%    | 2%       | 1%    | 0%        |
| VEHICLE OR RV IN A SAFE PARKING<br>LOT                              | 4%    | 1%         | 4%    | 3%       | 1%    | 1%        |
| VEHICLE OR RV NOT IN A SAFE<br>PARKING LOT                          | 6%    | 5%         | 2%    | 4%       | 7%    | 3%        |
| OUTSIDE   | 5%    | 2%         | 8%    | 5%       | 7%    | 5%        |
| OTHER   | 3%    | 1%         | 3%    | 2%       | 6%    | 4%        |

#### **Previous Night Sleep Location among Unsheltered Participants** at Timepoint 1 and Timepoint 3

| LOCATION  |     | A (n=24) |     | B (n=21) |     | C (n=25) |
|---|-----|----------|-----|----------|-----|----------|
| LOCATION  | T1  | T3       | Tı  | T3       | Tı  | T3       |
| HOUSE OR APARTMENT THAT I RENT<br>OR OWN                            | 0%  | 43%      | 0%  | 25%      | 0%  | 28%      |
| A HOTEL OR MOTEL WITH A VOUCHER                                     | 0%  | 0%       | 0%  | 0%       | 0%  | 0%       |
| A HOTEL OR MOTEL THAT I PAY FOR                                     | 0%  | 4%       | 0%  | 5%       | 0%  | 8%       |
| AN ABANDONED BUILDING   | 4%  | 0%       | 0%  | 0%       | 0%  | 0%       |
| A FRIEND OR FAMILY MEMBERS HOME                                     | 0%  | 13%      | 0%  | 10%      | 0%  | 20%      |
| TRANSITIONAL/TEMPORARY<br>HOUSING (INCLUDING TEMPORARY<br>VOUCHERS) | 0%  | 4%       | 0%  | 10%      | 0%  | 4%       |
| SAFE OUTDOOR SPACE  | 12% | 0%       | 29% | 10%      | 20% | 0%       |
| SHELTER   | 0%  | 4%       | 0%  | 0%       | 0%  | 4 %      |
| TINY HOME VILLAGE   | 0%  | 0%       | 0%  | 0%       | 0%  | 0%       |
| VEHICLE OR RV IN A SAFE PARKING<br>LOT                              | 21% | 4%       | 19% | 10%      | 8%  | 8%       |
| VEHICLE OR RV NOT IN A SAFE<br>PARKING LOT                          | 33% | 17%      | 10% | 5%       | 36% | 8%       |
| OUTSIDE   | 29% | 9%       | 43% | 25%      | 36% | 16%      |
| OTHER   | 0%  | 0%       | 0%  | 0%       | 0%  | 4%       |

| Change in Perception of Stable Housing from Timepoir | nt 1 |
|--|------|
| to Timepoint 3                                       |      |

|                 | Tı | <b>T</b> 3 | C <sup>2</sup> | р      |   |
|-----------------|----|------------|----------------|--------|---|
| GROUP A (N=106) | 19 | 48         | 22.132         | < 0.01 | * |
| GROUP B (N=90)  | 17 | 48         | 28.748         | < 0.01 | * |
| GROUP C (N=117) | 25 | 46         | 14.482         | < 0.01 | * |

Table 6

#### Change in the Proportion of Participants Spending Any Nights Unsheltered in the Previous Week from Timepoint 1 to Timepoint 3

|                 | Tı | Т3 | C <sup>2</sup> | р      |   |
|-----------------|----|----|----------------|--------|---|
| GROUP A (N=135) | 47 | 19 | 22.82          | < 0.01 | * |
| GROUP B (N=108) | 54 | 29 | 12.92          | < 0.01 | * |
| GROUP C (N=138) | 50 | 30 | 11.02          | < 0.01 | * |

Table 7

#### **Average Perception of Feeling Safe at Sleep Location at Timepoint 1 to Timepoint 3**

|                 | T1<br>M (SD) | T3<br>M (SD) |
|-----------------|--------------|--------------|
| GROUP A (N=132) | 7.16 (2.80)  | 7.62 (2.62)  |
| GROUP B (N=106) | 7.34 (2.65)  | 7.27 (2.70)  |
| GROUP C (N=134) | 7.33 (2.76)  | 7.59 (2.80)  |

 Table 8
 Note. On a scale of 1 to 10, where 1 is not at all safe and 10 is completely safe.

#### **Average Perception of Feeling Welcome at Sleep Location at Timepoint 1 to Timepoint 3**

|                 | T1<br>M (SD) | T3<br>M (SD) |
|-----------------|--------------|--------------|
| GROUP A (N=130) | 7.12 (2.87)  | 7.70 (2.84)  |
| GROUP B (N=100) | 7.11 (2.78)  | 7.29 (2.85)  |
| GROUP C (N=125) | 7.18 (2.87)  | 7.53 (2.84)  |

 Table 9 | Note. On a scale of 1 to 10, where 1 is not at all welcome and 10 is completely welcome.

#### **Participant Source of Income at Timepoint 1 and Timepoint 3**

| SOURCE OF INCOME          | GROUP A | A (n=122)<br>T3 | GROUP<br>T1 | B (n=97)<br>T3 | GROUP (<br>T1 | C (n=126)<br>T3 |
|---------------------------|---------|-----------------|-------------|----------------|---------------|-----------------|
| FULL-TIME EMPLOYMENT      | 18%     | 23%             | 24%         | 37%            | 26%           | 21%             |
| PART-TIME EMPLOYMENT      | 34%     | 29%             | 17%         | 20%            | 30%           | 21%             |
| PAID TEMPORARY WORK       | 26%     | 23%             | 29%         | 18%            | 29%           | 20%             |
| UNEMPLOYMENT              | 3%      | 3%              | 1%          | 2%             | 4%            | 0%              |
| WORK PAID UNDER THE TABLE | 12%     | 9%              | 9%          | 12%            | 14%           | 11%             |
| SELLING SELF-MADE ITEMS   | 3%      | 5%              | 5%          | 8%             | 7%            | 10%             |
| MONEY FROM FRIENDS        | 25%     | 15%             | 21%         | 12%            | 25%           | 18%             |
| MONEY FROM RELATIVES      | 30%     | 21%             | 25%         | 13%            | 26%           | 21%             |
| PEOPLE GIVING YOU MONEY   | 8%      | 6%              | 12%         | 8%             | 14%           | 14%             |
| SELLING POSSESSIONS       | 17%     | 11%             | 20%         | 14%            | 23%           | 15%             |
| COLLECTING CANS/BOTTLES   | 7%      | 8%              | 7%          | 8%             | 7%            | 8%              |
| SELLING BLOOD/PLASMA      | 16%     | 6%              | 10%         | 4%             | 12%           | 14%             |

# Percentage of Participants Able to Pay Their Bills at Timepoint 1 and Timepoint 3

|                 | Tı  | Т3  |
|-----------------|-----|-----|
| GROUP A (N=131) | 29% | 60% |
| GROUP B (N=131) | 29% | 54% |
| GROUP C (N=135) | 30% | 36% |

Table 11

# Percentage of Participants Who Used Loans, Pawnshops, or Rent-to-Own at Timepoint 1 and Timepoint 3

|             | GROUP .<br>T1 | A (n=78)<br>T3 | GROUP<br>T1 | B (n=99)<br>T3 | GROUP ( | C (n=130)<br>T3 |
|-------------|---------------|----------------|-------------|----------------|---------|-----------------|
| AUTO LOAN   | 1%            | 4%             | 1%          | 0%             | 2%      | 3%              |
| PAYDAY LOAN | 8%            | 5%             | 5%          | 4%             | 9%      | 7%              |
| PAWN SHOP   | 21%           | 22%            | 14%         | 16%            | 17%     | 23%             |
| RENT-TO-OWN | 3%            | 4%             | 0%          | 2%             | 3%      | 4%              |

Table 12

#### **Financial Well-Being Changes within Groups**

|                 | T1<br>M (SD) | T3<br>M (SD) | t      | p     |
|-----------------|--------------|--------------|--------|-------|
| GROUP A (N=124) | 2.30 (1.26)  | 4.27 (1.52)  | -9.84  | <.001 |
| GROUP B (N=96)  | 2.19 (1.21)  | 4.51 (1.15)  | -12.55 | <.001 |
| GROUP C (N=133) | 2.26 (1.38)  | 4.37 (1.26)  | -10.62 | <.001 |

#### **Change in Health between Timepoint 1 and Timepoint 3**

|                 | T1<br>M (SD)  | T3<br>M (SD)  | t     | p      |
|-----------------|---------------|---------------|-------|--------|
| GROUP A (N=130) | 55.34 (25.66) | 55.87 (24.05) | -0.28 | 0.39   |
| GROUP B (N=103) | 61.04 (24.13) | 56.67 (25.34) | 2.35  | 0.01 🔸 |
| GROUP C (N=133) | 55.08 (25.26) | 56.63 (23.65) | -0.83 | 0.20   |

 Table 14 | Note. On a scale of 0 to 100, where 0 is poor health, 50 is average health, and 100 is excellent health.

#### Change in Energy Within Groups between Timepoint 1 and Timepoint 3

|                 | T1<br>M (SD)  | T3<br>M (SD)  | t    | p      |
|-----------------|---------------|---------------|------|--------|
| GROUP A (N=130) | 42.42 (21.99) | 41.50 (23.74) | 0.52 | 0.30   |
| GROUP B (N=103) | 45.19 (22.70) | 42.28 (24.04) | 1.24 | 0.11   |
| GROUP C (N=133) | 42.82 (22.20) | 39.29 (22.92) | 1.89 | 0.03 🔸 |

 Table 15
 Note. On a scale of 0 to 100, where 0 is low energy, 50 is average energy, and 100 is high energy.

#### **Change in Sleep Quantity from Timepoint 1 to Timepoint 3**

|                 | T1<br>M (SD) | T3<br>M (SD) | t     | р      |
|-----------------|--------------|--------------|-------|--------|
| GROUP A (N=121) | 6.48 (3.02)  | 6.70 (3.01)  | -0.72 | 0.48   |
| GROUP B (N=94)  | 6.03 (2.79)  | 6.95 (3.70)  | -2.37 | 0.02 🔸 |
| GROUP C (N=130) | 6.87 (3.40)  | 6.71 (2.66)  | 0.42  | 0.68   |

#### **Change in Sleep Quality from Timepoint 1 to Timepoint 3**

|                 | T1<br>M (SD) | T3<br>M (SD) | t    | p      |
|-----------------|--------------|--------------|------|--------|
| GROUP A (N=131) | 4.44 (2.52)  | 3.94 (2.69)  | 1.97 | 0.05 🔸 |
| GROUP B (N=104) | 4.47 (2.18)  | 4.10 (2.90)  | 1.39 | 0.17   |
| GROUP C (N=136) | 4.53 (2.39)  | 3.89 (2.78)  | 2.45 | 0.02 🔸 |

Table 17 | Note. Quality of Sleep was measured on a scale of 0 to 10 where 0 is "terrible" and a 10 is "excellent."

#### **Change in Food Insecurity between Timepoint 1 and Timepoint 3**

|                 | T1<br>M (SD) | T3<br>M (SD) | t    | р      |
|-----------------|--------------|--------------|------|--------|
| GROUP A (N=101) | 5.55 (2.57)  | 5.41 (1.43)  | 0.62 | 0.27   |
| GROUP B (N=85)  | 6.00 (2.46)  | 5.46 (1.40)  | 2.10 | 0.02 🔸 |
| GROUP C (N=107) | 5.98 (2.39)  | 5.71 (1.40)  | 1.33 | 0.09   |

Table 18

#### **Change in Illegal Substance Use from Timepoint 1 to Timepoint 3**

|                 | Tı<br>M (SD) | T3<br>M (SD) | t     | p    |
|-----------------|--------------|--------------|-------|------|
| GROUP A (N=132) | 1.26 (0.89)  | 1.20 (0.71)  | 0.65  | 0.52 |
| GROUP B (N=103) | 1.30 (0.93)  | 1.45 (1.11)  | -1.06 | 0.29 |
| GROUP C (N=129) | 1.22 (0.79)  | 1.37 (1.00)  | -1.39 | 0.17 |

Table 19 | Note. On a scale of 0 to 4, where 0 is Never, 1 is Monthly or less, 2 is 2-4 times a month, 3 is 2-3times a week, 4 is 4 or more times a week.

#### Average Stress and Anxiety Score at Timepoint 1 and Timepoint 3

|                 | T1<br>M (SD) | T3<br>M (SD)  |
|-----------------|--------------|---------------|
| GROUP A (N=131) | 23.58 (9.61) | 23.91 (11.38) |
| GROUP B (N=100) | 22.43 (8.48) | 23.66 (10.29) |
| GROUP C (N=119) | 24.32 (9.64) | 25.03 (9.67)  |

Table 20 | Note. On a scale of 10 to 50, where scores under 20 are likely to be well, scores 20-24 are likely tohave a mild psychological distress, scores 25-29 are likely to have a moderate psychological distress, and scoresabove 30 are likely to have a severe psychological distress.

#### **Change in Parenting Distress from Timepoint 1 to Timepoint 3**

|                | T1<br>M (SD) | T3<br>M (SD) | t    | р    |   |
|----------------|--------------|--------------|------|------|---|
| GROUP A (N=43) | 3.98(0.86)   | 3.73(0.91)   | 2.58 | 0.01 | k |
| GROUP B (N=32) | 3.98(0.68)   | 3.73(0.74)   | 1.99 | 0.06 |   |
| GROUP C (N=36) | 3.97(0.58)   | 3.72(0.67)   | 2.35 | 0.03 | k |

Table 21 | Note. On a scale of 1 to 5, where 1 is low parenting distress and 5 is high parenting distress.

#### Change in Hope Scores from Timepoint 1 to Timepoint 3

|                 | T1<br>M (SD)  | T3<br>M (SD)  | t    | р      |
|-----------------|---------------|---------------|------|--------|
| GROUP A (N=129) | 44.42 (10.97) | 43.87 (11.95) | 0.61 | 0.27   |
| GROUP B (N=101) | 42.87 (12.10) | 42.57 (11.02) | 0.30 | 0.38   |
| GROUP C (N=125) | 44.24 (10.95) | 43.18 (12.26) | 1.76 | 0.04 🔸 |

Table 22 | Note. \*p<.05

#### **Change in Agency from Timepoint 1 to Timepoint 3**

|                 | T1<br>M (SD) | T3<br>M (SD) | t    | p      |
|-----------------|--------------|--------------|------|--------|
| GROUP A (N=131) | 21.45 (6.13) | 21.18 (6.71) | 0.52 | 0.30   |
| GROUP B (N=101) | 21.17 (5.90) | 20.50 (6.90) | 1.37 | 0.09   |
| GROUP C (N=128) | 22.00 (6.04) | 20.63 (6.68) | 2.91 | 0.02 🔸 |

Table 23 | Note. \*p<.05

#### **Change in Pathways from Timepoint 1 to Timepoint 3**

|                 | T1<br>M (SD) | T3<br>M (SD) | t    | р    |
|-----------------|--------------|--------------|------|------|
| GROUP A (N=130) | 22.96 (5.56) | 22.75 (6.24) | 0.44 | 0.33 |
| GROUP B (N=103) | 21.82 (5.93) | 22.00 (6.90) | -0.3 | 0.38 |
| GROUP C (N=126) | 23.11 (5.67) | 22.22 (6.10) | 1.37 | 0.09 |

Table 24

# Change in Hours Per Day Spent Accessing Resources from Timepoint 1 to Timepoint 3

|                 | T1<br>M (SD) | T3<br>M (SD) | t    | p     |   |
|-----------------|--------------|--------------|------|-------|---|
| GROUP A (N=104) | 3.95 (2.75)  | 2.39 (3.81)  | 3.86 | <0.01 | * |
| GROUP B (N=92)  | 3.90 (2.73)  | 2.37 (4.44)  | 3.03 | <0.01 | * |
| GROUP C (N=106) | 3.67 (2.95)  | 2.72 (4.81)  | 1.98 | 0.05  | * |

# Change in Hours Per Day Spent for Social and Leisure from Timepoint 1 to Timepoint 3

|                 | T1<br>M (SD) | T3<br>M (SD) | t     | р     |   |
|-----------------|--------------|--------------|-------|-------|---|
| GROUP A (N=116) | 4.24 (2.67)  | 5.53 (4.95)  | -2.73 | <0.01 | * |
| GROUP B (N=94)  | 4.28 (2.69)  | 3.86 (3.93)  | 0.87  | 0.39  |   |
| GROUP C (N=114) | 4.29 (2.77)  | 5.33 (5.39)  | -1.97 | 0.05  | * |

Table 26

# Change in Transportation Security from Timepoint 1 to Timepoint 3

|                 | T1<br>M (SD) | T3<br>M (SD) | t     | p      |
|-----------------|--------------|--------------|-------|--------|
| GROUP A (N=125) | 1.97 (0.66)  | 2.09 (0.65)  | -2.08 | 0.04 🔸 |
| GROUP B (N=99)  | 1.90 (0.60)  | 2.00 (0.67)  | -1.23 | 0.22   |
| GROUP C (N=122) | 1.95 (0.64)  | 1.93 (0.66)  | 0.33  | 0.74   |

 Table 27
 Note. On a scale of 1 to 3, where 1 is low transportation security and 3 is high transportation security.

#### Change of Client Connection and Satisfaction with DBIP Partner Agency from Timepoint 1 to Timepoint 3

|                | T1<br>M (SD)  | T3<br>M (SD)  | t    | p      |
|----------------|---------------|---------------|------|--------|
| GROUP A (N=85) | 54.27 (10.64) | 52.27 (12.15) | 1.34 | 0.18   |
| GROUP B (N=62) | 54.82 (9.73)  | 49.77 (14.9)  | 3.10 | <.01 🔸 |
| GROUP C (N=88) | 53.16 (12.27) | 44.4 (16.73)  | 5.07 | <.01 🔸 |

 Table 28
 Note. On a scale of 0 to 100, with high scores indicating higher level of satisfaction.

#### **Change in Agency from Timepoint 1 to Timepoint 3**

|                | M (SD)        |
|----------------|---------------|
| GROUP A (N=85) | -2.00 (13.72) |
| GROUP B (N=62) | -5.05 (12.81) |
| GROUP C (N=88) | -8.76 (16.21) |
| F              | 4.72*         |

Table 29 | Note. \*p<.05

#### **Average Number of DBIP Partner Agency Interactions in the Previous 6 Months at Each Timepoint**

|                 | T1<br>M (SD) | T3<br>M (SD) |
|-----------------|--------------|--------------|
| GROUP A (N=128) | 8.81 (26.94) | 7.15 (17.78) |
| GROUP B (N=99)  | 7.45 (23.19) | 4.67 (18.42) |
| GROUP C (N=119) | 3.23 (6.11)  | 4.29 (10.69) |

#### Changes in Public Service Costs, T1 to T3

|   | GRO                  |                      |                      | UP B                 | GRO                  |                      |
|---|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| PUBLIC SERVICE  | Per Capita<br>Change | Total Cost<br>Change | Per Capita<br>Change | Total Cost<br>Change | Per Capita<br>Change | Total Cost<br>Change |
| AMBULANCE TRIPS<br>(\$69 PER TRIP)                                | -\$113               | -\$14,248            | -\$4                 | -\$414               | -\$57                | -\$7,452             |
| DRUG OR ALCOHOL<br>TREATMENT CENTER<br>NIGHTS<br>(\$86 PER NIGHT) | -\$79                | -\$10,234            | -\$348               | -\$35,527            | \$74                 | \$9,546              |
| ER VISITS<br>(\$325 PER VISIT)                                    | -\$460               | -\$58,825            | -\$42                | -\$4,225             | -\$218               | -\$28,275            |
| HOSPITAL NIGHTS<br>(\$199 PER NIGHT)                              | -\$465               | -\$59,501            | -\$148               | -\$15,124            | -\$182               | -\$23,482            |
| JAIL TIME<br>(\$179 PER TIME)                                     | -\$78                | -\$9,920             | -\$265               | -\$27,040            | -\$584               | -\$75,336            |
| JAIL NIGHTS<br>(\$160 PER NIGHT)                                  | \$1                  | \$179                | \$60                 | \$6,086              | -\$3                 | -\$358               |
| SHELTER VISITS<br>(\$40 PER NIGHT)                                | -\$566               | -\$71,319            | -\$753               | -\$76,073            | -\$674               | -\$87,672            |
| TOTAL COST CHANGE   | (-\$223              | 3,868)               | (-\$15               | 2,317)               | (-\$213,029)         |                      |
| TOTAL COST SAVINGS  | -\$589,214           |                      |                      |                      |                      |                      |