



CENTER FOR GUARANTEED  
INCOME RESEARCH  
*Social Policy & Practice*  
UNIVERSITY OF PENNSYLVANIA

# The American Guaranteed Income Studies: Paterson, New Jersey

## **AUTHORS**

Elizabeth DeYoung, PhD

Nidhi Tandon, MPhil

Catarina Neves, MPhil

Amy Castro, PhD

Stacia West, PhD

December 2023



**SUGGESTED CITATION**

DeYoung, E., Tandon, N., Neves, C., Castro, A., & West, S. (2023, December). *The American Guaranteed Income Studies: Paterson, New Jersey*. University of Pennsylvania Center for Guaranteed Income Research.

*Front Cover Image: Aerial cityscape of Paterson, New Jersey and its City Hall (Source: Shutterstock).*

*Inside Cover Image: Paterson Falls in Paterson, New Jersey (Source: Shutterstock).*



# The American Guaranteed Income Studies: Paterson, New Jersey

## Executive Summary

As the earliest days of the COVID-19 pandemic swept New York City and its environs, Paterson, New Jersey was positioned on the front lines. A former industrial center, Paterson is now home to a diverse population of foreign-born residents, including one of the largest Arabic-speaking populations in the US. The city has struggled with symptoms of industrial decline and structural racism, including high rates of community violence and disinvestment. As a predominantly low-income and racially and ethnically diverse city, Paterson bore the brunt of COVID's effects.

The pandemic disproportionately impacted people of color, low-income individuals, women, and children (Center for Disease Control, 2023; Masterson et al., 2023; Vasquez, 2020). This was multifaceted: people of color were more likely to be working in jobs with greater exposure to the virus, rather than engaging in remote work. They were more likely to reside in densely populated urban neighborhoods that further elevated their vulnerability to viral exposure. They also had increased levels of comorbidities that placed them at higher risk.

During the first few months of the pandemic, Paterson's hospital recorded a spike in bed occupancy and rapid increase in ventilator use, with 75% of COVID patients on ventilators during one period in Spring 2020 (Mallajosyula, 2022). In 2020, Passaic County recorded 2,267 deaths, the majority of which had an underlying cardiovascular disease (58.8%) and 39.26% of whom were Black, Hispanic, Asian or "Other (non-white)" (Mallajosyula, 2022). Paterson residents experienced the panic and isolation of lockdown and the grief of losing friends and loved ones to the virus.

Those in Paterson who were already experiencing financial precarity pre-pandemic were devastated by COVID's economic consequences. Many were laid off from their jobs and had no other source of income. Others had to balance

### KEY FINDINGS

1. The treatment group was two times less likely to report reducing food intake 12 months into the pilot compared to the control group. This trend continued post-intervention.
2. The treatment group demonstrated improved financial resilience, improved financial well-being, financial stability, savings, and greater ability to cover for unexpected expenses. By post-intervention, the treatment group was five times more likely to cover a \$400 emergency expense compared to the control group, and more than twice as likely to report saving of \$500 or more.
3. Household chaos and distress improved in the treatment group during the intervention.
4. The GI significantly liberated participants from time constraints, enabling them to make deliberate choices in their professional and personal lives. Specifically, the treatment group was twice as likely to be employed compared to the control group post-intervention. At the same time, the GI also subtly influenced caregiving roles, illustrating the GI's profound effect on balancing workforce participation with family responsibilities.

unpredictable shift work with lack of access to childcare. The pandemic created the additional burden of online schooling for families in lockdown; for single parents in particular, many could no longer work, since they had to stay home while schools were closed. The closure of schools in turn brought increased food insecurity, as some families in Paterson depended on school breakfasts and lunches for meals. But behind the scenes of COVID's havoc were networks of community members, faith leaders, nonprofits, and elected officials building coalitions that reflected the diversity of the city, motivated by a commitment to being one of the earliest cities to experiment with unconditional cash during the pandemic.

Meanwhile, the City of Paterson stepped in, mobilizing emergency food distribution and delivery services from the beginning of the pandemic (Malinconico & Rumley, 2020; Mallajosyula & Sharma, 2021). The city also provided emergency rental assistance, small business grants, and other pandemic relief (Passaic County, NJ, n.d.). State and federal eviction moratoriums were enacted to ensure people could remain in their homes. At a community level, mutual aid groups organized to deliver meals to homebound and at-risk populations, and individuals shared food and resources (Mallajosyula & Sharma, 2021). However, environmental stressors were so severe that citizens required a level of assistance beyond what mutual aid efforts could provide.

In this context, the Paterson Guaranteed Income Pilot Program (GIPP) picked up experimentation with cash where the 1960s negative income tax experiments in Paterson had stopped. Launched in March 2021 by Mayor Andre Sayegh and a task force, the program ran from July 2021 through June 2022. The pilot was designed as a randomized control trial (RCT) to assess the impact of providing \$400 per month, with no strings attached, to 110 individuals and families earning below New Jersey's living wage of \$35.34/hour (Glasmeier, 2023). Since the income was guaranteed, there were no work requirements or restrictions on how the money could be spent. Approximately 3,600 people applied to the program. A selection of applicants was made randomly, with an ethnic distribution of 60% Latinx, 26% Black, 8% White, and 4% Asian. These individuals were then assigned to either a treatment group receiving the guaranteed income (GI) or a control group that did not receive the GI. Both treatment and control group members were invited to participate in voluntary, compensated research activities to better understand the impact and role of GI on outcomes like financial, mental, and physical well-being, quality of life, sense of self and community belonging, and paid and unpaid labor.

Despite the unprecedented challenges of a global pandemic and nation-wide inflation, research findings revealed encouraging trends, highlighting the efficacy of unconditional cash assistance. Notably, not unlike Paterson's 1969 negative income tax experiment, which demonstrated increases in economic well-being and was a forerunner to the current wave of GI pilots (Kershaw & Skidmore, 1974), data from this pilot suggest a positive impact on the financial well-being of participants in the treatment group. The \$400 contributed to smoothing income volatility from month to month, enhancing financial stability. Some recipients were able to set financial goals, like establishing savings, against enormous odds. Given the vulnerabilities faced by the pilot participants during the pandemic, achieving even modest monthly income stabilization was noteworthy. Improved financial well-being, in turn, contributed to improved quality of life; the data indicated an attenuation of mental distress in the treatment group relative to the control, alongside an increase in a positive, organized household environment. The GI likely also provided temporary relief for participants struggling with rising rents and food costs amid inflation.

Many pilot participants faced the perpetual obstacle of juggling paid work with unpaid care responsibilities. This was exacerbated by low wages, time scarcity, and the cost of childcare. Pandemic-era layoffs and the volatility of the gig economy complicated the employment landscape. The GI seemed to ease the dual burden of making ends meet and providing care, allowing recipients to better balance their time. Some used the \$400 to pay for childcare; others were able to reduce shifts, leave second or third jobs, or temporarily exit the labor market in order to care for children, relatives, and elders. In turn, recipients described having more agency over their time and more opportunities to spend time with family.

Pilot participants also described a robust network of informal social supports and nonprofit initiatives throughout the city; civically-engaged residents came together even before the pandemic to share resources and support others in their communities. It seemed that the GI animated this spirit of mutual support and interdependence. Recipients wanted to extend the GI's impact to others, describing the program as “a glimmer of hope” in challenging times and noting its potential “ripple effect” at a community level. In contrast to the typical benefits system, framed by conditionality, the GI program felt like validation that the government cared about and trusted people.

While encouraging, these positive trends felt unsustainable given the significant pressures people in Paterson faced. These included the trade-off between low-wage work and caregiving; long waiting lists for affordable housing versus increasing market rent; the ways the city absorbed the stressors of New York City's housing market, and the demands of employment vs. the benefits cliff. \$400 for 12 months was not enough to mitigate this broader context in the short term.

However, findings also suggest that despite the challenging circumstances and heightened adversity brought on by the pandemic, the GIPP demonstrated its effectiveness as an intervention. The \$400 monthly cash allowance, while not a panacea, offered financial relief for many participants and served as a valuable blueprint for future policy initiatives—particularly in a diverse city landlocked by extraordinary wealth and exorbitant housing costs. Additionally, its role in fostering a sense of empowerment among participants highlights the critical need for innovative approaches in combating systemic poverty and inequality. The resilience shown by the study participants, coupled with the tangible benefits of the GI program, points towards an optimistic path forward: these insights are not mere silver linings but serve as vital lessons, emphasizing the importance of comprehensive, compassionate, and credible support mechanisms. Thus, while the pilot's findings highlight persistent gaps and needs, they also underscore the program's role both as a catalyst for change and a beacon of hope amid adversity.

# Table of Contents

Background .....	7
Context and Demographics .....	10
Research Questions .....	12
Methods .....	13
Quantitative Methods .....	13
Qualitative Methods .....	15
Findings .....	17
Quality of Life and Well-Being in Paterson .....	17
Balancing Paid Work and Unpaid Caregiving in Paterson .....	34
Social Connection, Reciprocity, and Belonging .....	41
Study Limitations .....	46
Discussion .....	47
Center for Guaranteed Income Research .....	50
References.....	51
Appendix.....	58

# Acknowledgements

The Paterson Guaranteed Income Pilot Program and the Center for Guaranteed Income Research (CGIR) would like to thank Mayor Michael Tubbs, the Mayors for a Guaranteed Income, and the task force members who spent countless hours establishing this program during some of the harshest months of a global pandemic. The task force spent months holding focus groups, town halls, and meetings with stakeholders across an extremely diverse constituency. Special thanks to Mayor Sayegh’s commitment to prioritizing the most financially vulnerable members of the community, and to Harsha Mallajosyula, who added project coordination on top of normative duties as Chief Data Officer. The task force members are included below. Finally, we would like to thank the study participants who contributed to the research by sharing their valuable perspectives and experiences.

## Cabinet Members

Oshin Castillo	Kathleen Long
Corey Fleming	Mike Powell
Farrah Irving	Daci Tilos

## Community Members

David Asiamah	Ferdous Hussain
Mary Celis	David Kim
Mark Dingalasan	Pastor Weldon McWilliams
Jennifer Gasparino	D’Auja Nelson
Amber Huq	Idida Rodriquez
Kimmeshia Jones	

## Contributing Researchers

Meagan Cusack, PhD
Erin Coltrera, MSSP, MSW
Leah Pranschke, MSSP
Juan Diaz, MSW
Nina Cross, MEd
Joana Halder, MA
Ajita Singh, MPA



## Background

Paterson, NJ, once an industrial powerhouse, has always been a place of diversity, complexity, and financial innovation. Today, Paterson stands as a city of many faces—a reflection of its history and the socio-economic challenges and opportunities that shaped its journey. On the heels of the American Revolution, Alexander Hamilton seized on the proximity of the agrarian village to the Great Falls to transform the area into one of the United States' earliest manufacturing regions. By 1794, Hamilton's vision of building up the country's economic base through manufacturing and waged labor was established with the first mills—setting the stage for a future marked by waves of immigration, capitalist overreach, and resistance. By the 1860s, the city also stood as a key stop on the Underground Railroad, led by the unlikely duo of William Van Rensalier, Paterson's first Black engineer, and Josiah Huntoon, a White industrialist and abolitionist from Vermont (Richardson, n.d.). Their friendship and business partnership formed the backbone of Paterson's Underground Railroad, operated out of Huntoon's mill and home and aided by the city's first mayor, the county sheriff, Black and White houses of faith, and the African American led anti-slavery newspaper.

Meanwhile, the city's burgeoning textile industry, powered by the Great Falls, was attracting a multitude of European immigrants seeking work. "Silk City," as Paterson was called, functioned as an economic hub and a pivotal center for the industrial labor movement. Indeed, its story is embedded in the fabric of American labor history. Beneath the veneer of Paterson's industrial prosperity existed a stark reality of grueling working conditions, systemic exploitation, and meager wages. This sparked a series of labor disputes, ultimately leading to the historic Paterson Silk Strike of 1913 (Gerstle, 2017). The strike involved over 25,000 workers, lasted nearly 5 months, and resulted in the closure of 300 silk mills and dye houses. During an era marked by violent labor disputes, the Paterson strike was also noteworthy for its non-violent approach (Golin, 1988). Despite its failure to achieve its immediate goals, the strike was a turning point in labor rights history, setting the stage for future reforms and epitomizing the wider struggle for justice and equality in the American labor movement.



Left Image: Paterson Falls in Paterson, New Jersey (Source: Shutterstock). Right Image: Landscape view of Paterson Silk Machinery Exchange (Source: Shutterstock).

Deindustrialization in the mid-20th century brought economic decline and attendant socio-economic challenges, culminating in an increase in violence in Paterson. The city was in turn designated as an Urban Enterprise Zone (UEZ) by the State of New Jersey to encourage economic development and employment (The City of Paterson Urban Enterprise Zone, n.d.). However, in keeping with Paterson's history of financial innovation, in 1969 the city served as one of the four original GI sites through the negative income tax experiments funded by the Office of Economic Opportunity (Kershaw & Skidmore, 1974).<sup>1</sup> The unconditional cash was not associated with changes in health, but the research found increases in economic well-being, family income, and more household autonomy in securing material goods. Most notably, the research found “no widespread withdrawal from work” (Kershaw & Skidmore, 1974, p. 73), underscoring that the current argument and fear that unconditional cash will negatively impact employment is far from new.

Paterson's inherent vibrancy has persisted over the years, manifesting in new waves of immigrants from regions like Latin America, the Caribbean, and the Middle East. Now, Paterson is home to one of the largest Muslim communities in the US (Islamic Center of Passaic County, n.d.) and boasts an incredible diversity of languages, religions, and backgrounds. This ever-evolving demographic landscape, while a testament to Paterson's adaptability, has also given rise to stark economic disparities as different wards attracted different socio-economic groups. For instance, in South Paterson, a predominantly Arabic-speaking area, robust immigration and neighborhood-led regeneration has taken place,

<sup>1</sup> The remaining sites were Trenton, NJ, Jersey City, NJ, and Scranton, PA (Kershaw & Skidmore, 1974).



creating a distinct sense of community. In other parts of Paterson, more speculative development has led to luxury condominiums and apartment blocks being built in low-income, predominantly Black neighborhoods, although existing residents cannot afford them.

Paterson occupies a peculiar place in relation to the New York metro area. Located only 18 miles from New York City (NYC), it is surrounded by some of the wealthiest suburbs in New Jersey. The contrast between Paterson and neighboring towns is staggering; it is essentially an island, surrounded by gated mansions with a view of the NYC skyline. Housing pressures have also become more acute in Paterson as the city absorbs former residents of NYC who have been priced out of the city. This deep inequality between the highest- and lowest-income residents of the area is clearly written into the built environment. Gender, health, and racial inequities, visible across different wards and populations, are testament to historical discrimination, past and present urban planning policies, and the broader repercussions of industrial decline.

Though Paterson has a high proportion of low-income residents, it boasts elected officials and a wide array of community stakeholders committed to addressing poverty and the excesses of a speculative housing market. The city also has economic and social policies in place to address food insecurity and housing and health challenges, but these policies have limits. Some participants in the pilot program described experiences with government assistance programs that kept them “treading water,” but unable to move forward. Some had to navigate the stringent requirements that came with receiving Federal benefits like SNAP and WIC.<sup>2</sup> Others experienced the benefits cliff, where they struggled to stretch their wages across bills and necessities, yet earned just over the income threshold that would qualify them for programs to help mitigate that gap. Many had to take on second or third jobs in the gig economy to survive. Caregivers contended with the competing demands of employment, childcare, and time for self and family. Finally, residents faced a lack of affordable housing, intergenerational poverty, addiction, and violence in their neighborhoods, born of deeply rooted systemic racism.

The pandemic profoundly affected Paterson’s residents. During the height of the pandemic, some pilot participants worked in public-facing occupations with exposure to the virus. Several recounted their work as healthcare aides and medical assistants in eldercare facilities, and the risks they faced every day. One pilot participant described how she and her whole family were hospitalized with COVID, incurring rehabilitation bills and other medical expenses. The financial fallout was intense. So too was the emotional and mental toll: participants spoke of their stress and fear during lockdown, and of people they knew who had contracted the virus.

During the pandemic, Paterson, along with the rest of the country, experienced a series of economic shocks. This included record inflation: in May 2022, inflation in the US was recorded at 8.6%, a high not seen since the early 1980s (U.S. Bureau of Labor, 2022b). Findings showed that during the pilot, both treatment and control groups were paying high utility bills, averaging \$250 per month, and a number of participants described substantially higher costs of living. It was in this context that the pilot program took place and the subsequent findings were interpreted.

---

2 The Supplemental Nutrition Assistance Program (SNAP) provides food benefits to low-income families; the Special Supplemental Nutrition Program is specifically to assist Women, Infants, and Children (WIC).

## Context and Demographics

Paterson is situated in Passaic County in northern New Jersey, close to NYC. According to U.S. Census figures, the city's population is 156,661 (U.S. Census Bureau, 2022b). A little less than two-thirds of residents are Hispanic/Latinx (62.6%), about a quarter are Black (24.7%), and a small percentage are Asian (4.4%) (U.S. Census Bureau, 2022b). The percentage of Paterson residents born outside the US is 43.5%, compared to the national average of 13.6%. There is also a greater percentage of those who speak languages other than English compared to the national average (65.8% vs. 21.7%), indicating a high concentration of immigrants and a diversity of culture, religion, and language in the region (U.S. Census Bureau, 2022b). South Paterson is home to one of the largest Arabic-speaking populations in the country at an estimated 2,704 households (Data USA, n.d.).

Paterson's median household income was \$48,540 from 2017–2021—relatively low compared to New Jersey's average of \$89,703 and the national average of \$69,021. These numbers belie an even starker picture, where there is a significant divide between high-earning residents and those who live significantly below the poverty line. At 21.5%, the poverty rate in Paterson is nearly double the national average of 11.5% and considerably exceeds New Jersey's rate of 9.7%. There is therefore a considerable population of people in Paterson who are living on extremely low incomes.

The research sample predominantly consisted of low-income participants: the median income for the control group was \$18,988, with a mean income of \$17,761. The treatment group had a median income of \$13,904 and a mean income of \$16,604. Approximately 56% of the control and 74% of the treatment participants had incomes less than \$24,200, which is the 2020 Federal Poverty threshold for a family of three (Office of the Assistant Secretary for Planning and Evaluation, 2017). Average annual household income was comparable between treatment and control groups.

According to the Census Bureau, Paterson's dominant economic sectors include manufacturing, healthcare, retail trade, and utilities (U.S. Census Bureau, 2022b), and data suggest that the most common job groups are laborers, truck drivers, and retail salespersons (Data USA, n.d.). Research participants reported being engaged in professions in the medical assistant and health aide fields, house cleaning, restaurant and fast-food work, food trucks, landscaping, and furniture delivery. Many of these jobs were low-waged.

In the study, the average age of respondents was 42 years for the treatment group and 41 years for the control. In both the treatment and control groups, 61% of households had children, with an average of one child per household; the typical household size across both groups was three. The majority of respondents in both groups were single (67% in treatment and 78% in control group). Marital status showed 28% of the treatment group were married versus 15% in the control group. An equal percentage of participants in both groups identified as being in a partnership or relationship, with 5% in the treatment group and 7% in the control group. Women constituted 75% of the treatment and 78% of the control groups.

Among the respondents, 20% in the treatment group and 61% in the control group identified as non-Hispanic. Racially, 38% of the treatment and 19% of the control groups identified as White, while 15% and 52% identified as African American, respectively. Further, 32% of the treatment group and 16% of

the control group identified as Latinx. Other racial categories made up 15% in the treatment and 13% in the control. English was spoken by 59% in the treatment and 76% in the control groups. Spanish speakers constituted 36% of the treatment group and 21% of the control group.

Table 1. Participant Demographics

<b>CONTROL 131</b>	<b>SAMPLE SIZE</b>	<b>TREATMENT 110</b>
41	<b>AVG. AGE OF RESPONDENT (YEARS)</b>	42
	<b>GENDER (%)</b>	
21	Male	25
78	Female	75
	<b>CHILDREN IN HOUSEHOLDS (%)</b>	
61	Yes	61
1	<b>AVG. NUMBER OF CHILDREN IN HH</b>	1
3	<b>AVG. HH SIZE</b>	3
	<b>ETHNICITY (%)</b>	
61	Non-Hispanic	20
	<b>RACE (%)*</b>	
19	White	38
52	African American	15
16	Latinx	32
13	Other/mixed**	15
	<b>MARITAL STATUS (%)</b>	
78	Single	67
15	Married	28
7	Partnered/in-relationship	5
	<b>PRIMARY LANGUAGE AT HOME (%)</b>	
76	English	59
21	Spanish	36
3	Other	5
	<b>EDUCATION (%)</b>	
58	Less than high school	61
26	Associates/Bachelor	19
15	Other	19

CONTROL 131	SAMPLE SIZE	TREATMENT 110
ANNUAL HH INCOME (IN \$)		
18,988	Median	13,904
17,761	Mean	16,604

\* To ensure the confidentiality and privacy of participants in the study given the small sample size, we are reporting limited race categories, as the application of differential privacy techniques or suppression is not feasible, raising concerns about potential identification of individual respondents.

\*\* The category "Other/Mixed" Race includes individuals identifying with ethnicities such as Middle Eastern, Southeast Asian, and American Indian and Alaska Native heritage.

Less than half of both treatment and control groups had earned some type of degree: 19% of the treatment group reported having an Associate’s or Bachelor’s degree, compared to 26% of the control group, and 19% of the treatment group and 15% of control reported other educational levels. 61% of treatment and 58% of control had a high school education or less.



## Research Questions

While the roots of unconditional cash in the US date back to Thomas Paine (1797/2004), since the 2010s the country has been experiencing a resurgence of interest in the concept as a remedy for poverty and lack of economic mobility (Decker & Kelly, 2022). Nonetheless, most of the GI pilots in the US are still underway, leaving few empirical priors to draw on for hypothesis development. With the exception of the ongoing Baby's First Years study (Troller-Renfree et al., 2022), the Magnolia Mother's Trust in Jackson, MS (Onifade et al., 2023), THRIVE East of the River in Washington, D.C. (Bogle et al., 2022), the Denver Basic Income Project (Brisson et al., 2023), and the Stockton Economic Empowerment Demonstration (SEED) (West & Castro, 2023), little empirical research on this new wave of cash experimentation exists. Therefore, this research rests on a theoretical framework developed by CGIR, which posits that consistent receipt of unconditional cash ought to calm income volatility and alleviate scarcity which will in turn generate an increased sense of health, well-being, and agency (West et al., 2023).

In Paterson, this theoretical framework was expanded further to account for the unique ways that mutual aid, social networks, and community belonging operate in a space characterized by dense urban enclaves with distinct immigration patterns. As Stack (1983) reminds us, low-income households survive through creative adaptation, organization, and resource-sharing in material and immaterial ways. To that end, this work is rooted in the theory of reciprocity, which states that most feel an impulse or obligation to pay back or pay forward benefits received from others or institutions. This in turn creates space for developing sustained relationships. Most welfare states embody a commitment to the norm of reciprocity (Bowles & Gintis, 2000; Goodin, 2002; Mau, 2004); it is also a key mechanism for understanding safety nets, social cohesion, and community belonging.

The Paterson GIPP provided a monthly unconditional cash transfer, or GI, of \$400 for 12 months to answer three primary research questions: how does GI impact participants' quality of life, including financial, physical, and mental well-being? What is the relationship between GI and participants' sense of self, including community connection, trust, and self-worth? How does GI affect participants' income, and through what mechanisms, including the balance of paid and unpaid work? The Paterson project also included a qualitative sub-question asking, to what degree does GI facilitate the norms of reciprocity and community belonging?

## Methods

All research methods were approved by the Institutional Review Board of the University of Pennsylvania, and followed a pre-registered analysis plan (cite forthcoming). This research utilized a parallel mixed-methods design (QUANT + QUAL), meaning the quantitative and qualitative strands started with the same primary research questions, with the option of including analogous questions within each strand (Teddlie & Tashakkori, 2009). In this design, data collection and analysis occur independently and are not integrated across strands until a full set of findings are produced within each research arm. After a full analysis within each strand, the findings were integrated into the primary research questions and sub-studies of the analogous questions pertaining to a single strand.

The City of Paterson invited all eligible residents to apply for both the GI program as well as the accompanying research study. Eligible participants had to be 18 years old and above and earning below New Jersey's living wage of \$30,000 (single person) or \$88,000 (families). To promote accessibility for the application and to ensure a fair and legitimate selection process, the City of Paterson contracted with the University of Pennsylvania's Center for Guaranteed Income Research to oversee both processes. CGIR used an online platform to administer an informed consent and baseline survey, notifying participants of the voluntary nature and purpose of the study as well as the confidentiality of the data collected. The application was offered in English, Bengali, Arabic, and Spanish to promote equitable access to the program and study. In addition, the mayor's office worked closely with community partners to promote the program and provide technical support and computer access for community members without smartphones or the internet. At the close of the application period, 3,600 participants had applied, indicating a strong need in the community for cash support and a willingness to engage with a new program. CGIR thoroughly reviewed all applications to remove any duplicates to ensure that each applicant had an equal chance of being selected to participate. CGIR then used a random selection and assignment method to identify the treatment group participants. During the notification and onboarding process, treatment group participants received benefits counseling to identify any impacts of the cash transfers on their receipt of public benefits. In sum, the application and selection processes were carefully designed to promote transparency, accessibility, fairness, and justice.

### **QUANTITATIVE METHODS**

**Study design and participant selection:** A randomized controlled trial (RCT) was conducted to evaluate the causal impact of a GI of \$400 per month for a 12-month period. The study utilized a sample of 241 respondents, randomly drawn from a larger pool of approximately 3,600 applicants. Participants included individuals aged 18 years old and above who earned below New Jersey's living wage of \$30,000 for single individuals and \$88,000 for families. 110 participants were randomly assigned to the treatment group and received the \$400/month unconditional cash transfer, with the first disbursement in July 2022. An additional 131 applicants were randomly assigned to the control group. The randomized sample was weighted as 60% Latinx, 26% Black, 8% White, and 4% Asian. The study aimed to determine the impacts of GI on overall health and well-being of recipients. Data were gathered at four

intervals: Baseline (April 2021), 6 months (December 2021), 12 months (June 2022), and 18 months (December 2022), which was 6 months after the conclusion of the program. All participants were compensated for their time spent completing the surveys. Potential sources of error, including both sampling and non-sampling errors, were duly considered and addressed. Detailed response rates for each wave of the survey are provided in the appendix.

**Data Analysis:** A standardized framework was employed to detect and manage outliers, ensuring that extreme values did not unduly influence the results. Outliers were addressed through the winsorization method. The Multiple Imputation by Chained Equations (MICE) (Azur et al., 2011) iterative imputer was systematically employed to handle missing data across the dataset. MICE is adept at handling complex data structures and patterns, offering more accurate imputations in scenarios with significant missing data. MICE operates through a series of iterations, with each iteration employing a unique random seed to ensure a diverse range of imputation results, thereby bolstering the robustness of the imputed datasets. The imputation was conducted over specified outcome variables and selected demographics. By considering both treatment and control groups separately, the imputation ensured that the unique characteristics of each group were preserved. After the imputation process, several measures were taken to validate the accuracy and reliability of the imputed data, which included evaluating the distribution analysis comparing the distribution of the original observed data to the imputed data to ensure consistency. Plausibility checks to ensure that all imputed values fell within a valid range for each respective variable were also employed. Additionally, convergence diagnostics were closely monitored to ensure stability of imputed values. Finally, sensitivity analyses and model fits were conducted as supplementary validation measures. As a result of these rigorous checks, a set of imputed datasets was generated, each offering a comprehensive set of plausible values for missing data points. These datasets then formed the foundation for subsequent analyses in the study.

Due to the challenges posed by not being able to establish baseline equivalence between treatment and control groups, robust regression techniques were employed. Following imputation, a comprehensive analytical approach was employed to assess the impact of the GI treatment intervention across multiple validated measures. The dual-method analysis involved both a linear mixed-effects model and a regression-adjusted means analysis, allowing for a robust examination of the data collected at several time points. A regression-adjusted means analysis for each measure provided a direct mean difference in the outcomes, adjusting for potential confounding variables and enabling a straightforward comparison between the treatment and control groups at each time interval: Baseline, 6-month, 12-month, and 18-month follow-ups. Additionally, for each outcome measure, a linear mixed-effects model accounted for both fixed effects and random effects. The use of the linear mixed-effects model to account for the potential confounding due to the initial imbalances in ethnicity and race enabled a detailed understanding by controlling for ethnicity. The data were structured in a long format, with each observation uniquely representing a participant's outcome at a specific wave. The model was specified to include fixed effects for treatment, wave, ethnicity, and their interactions. A random intercept for

each participant was also incorporated to account for the within-subject correlations present in the repeated measures data. The consistency of findings across both analytical methods was critical in reinforcing the reliability of the conclusions.

### QUALITATIVE METHODS

At the midpoint of the program, January 2022, the qualitative team recruited 25 individuals to participate in a semi-structured interview. Two participants canceled, yielding a sample of 23 (15 treatment and eight control). Three interviews were conducted in Spanish and translated. Interviews lasted 1.5–2 hours and occurred in a location of the participants' choosing. Most chose to interview at home or a community setting of their choice, and some interviewed over Zoom to minimize risk of COVID-19 exposure; some participants were still fearful of in-person interactions as they grappled with their experiences during the pandemic. Participants were compensated for their time with a \$40 Walmart gift card and chose their own pseudonyms for anonymity. The interview protocol was informed by

*Image: An industrial building in a historical Paterson, NJ neighborhood (Source: Shutterstock).*





literature on scarcity indicating that chronic material hardship impacts cognitive capacity, limits goal-setting, curtails one's ability to cope, and intensifies financial risk (Mani et al., 2013; Shah et al., 2012). The interview protocol domains included prompts on financial well-being, program design, benefits interaction, trust, health, pooling behaviors, relationships, decision-making, care work, moral judgments, and ideology. The protocol also included specific questions on belonging, civic engagement, and practices of reciprocity in the city that reflected the expanded theoretical framework noted prior. All interviews were digitally recorded on DVRs and professionally transcribed verbatim.

An integration of thematic analysis and grounded theory approaches was employed to address the research questions. Semantic analysis utilized Braun and Clark's (2012) five stages of thematic analysis with a codebook anchored in the prior theoretical framework for process coding and values coding (Saldaña, 2016). Latent analysis used Charmaz's (2014) grounded theory approach and followed an open phase to conceptualize the phenomenon of an unconditional gift, an axial phase to see the relationships between themes, and a selective coding phase to conceptualize theory. This section of analysis focused on agency, care work, beliefs about deservedness, structural vulnerability, belonging, and reciprocity. Structured and recursive memo-writing occurred throughout data collection, cleaning, and analysis. This formed the anchor of a blended approach: consistent "thick descriptions" of analysis and close reads of specific themes in isolation (Fish, 1982), before generating thematic maps of salient themes and relationships between codes within each interpretive community. Full narratives on participants' life experiences were also extracted out of the transcripts and reviewed to contextualized isolated quotes in the axial and selective phases.

Finally, the research team practiced a "rapid ethnography" approach in Paterson where, in addition to primary data collection, researchers engaged in several field visits outside normative semi-structured interviews and held semi-structured conversations with key community figures (Baines, 2013). During field visits, the team walked several of Paterson's neighborhoods. Walking as methodology is used to interrogate broader questions of economics, demographics, belonging, and exclusion (Harvey, 1996, 2009; Massey, 2005; McFarlane, 2011). The act of walking in Paterson afforded researchers perspective on the city's racial, ethnic, and class divisions and on patterns of development that created disparities over time. This felt particularly prescient given the context of housing pressures and speculative development at the time of fieldwork. After each field visit, the research team recorded systematic and detailed fieldnotes (Berg, 1989; Emerson et al., 1995).

Using snowball sampling, the research team also held semi-structured conversations with eight key community figures in Paterson both in person and over Zoom. These figures either accompanied the team on ethnographic walks, drove the team around Paterson's neighborhoods, or hosted virtual or in-person meetings. They held combined expertise in the health, community development, political, and faith-based sectors of Paterson. After each interaction, the research team again recorded robust field notes and thick descriptions. Conversations with these individuals afforded important context on the city's history, its opportunities and challenges, and the potential impacts of the GIPP.

# Findings

## Quality of Life and Well-Being in Paterson

*“I had two choices, swim or sink.”*

The majority of pilot participants in Paterson were living in extreme financial precarity well before the onset of the pandemic; it is within this context that findings should be interpreted. Despite these constraints, data suggest that the GI positively impacted the treatment group’s financial well-being relative to the control group. The \$400 played a role in smoothing income volatility from month to month and allowed some members of the treatment group to set financial goals like establishing savings. The GI also improved other quality of life outcomes, like mental health and food security. However, across the study, both treatment and control participants reported heightened stress levels, likely in response to enduring environmental stressors like the pandemic, inflation, and community violence. Housing affordability and access posed another major obstacle. As incomes failed to keep pace with soaring rents and affordable housing options remained scarce, Paterson residents were increasingly cost-burdened during the study. Recipients were able to use GI towards their rent, and in some cases, also improve the quality of their housing. But these were only temporary trends, given the significant disparities people in Paterson faced. Together, these findings suggest that \$400 blunted the impact of structurally produced scarcity, but it was not enough to mitigate the broader context of the pandemic, inflation, and housing costs. It nevertheless represented a significant beginning.

## Financial Well-Being

Pilot participants in Paterson were, by and large, living in extreme financial precarity—not even paycheck to paycheck—with very few opportunities to spend, splurge, or save. Almost three-quarters of treatment participants had household incomes below the poverty line. Many lived consistently in a “scarcity mindset,” where most cognitive capacity was fixated on short-term survival (West et al., 2023, p. 148) and meeting basic needs represented a monthly challenge.

Low-income earners in Paterson navigated a complex web of administrative burdens and eligibility criteria to qualify for and maintain public benefits such as food assistance, housing vouchers, and childcare assistance. Participants were well-versed in the perpetual struggle of the “benefits cliff,” also termed a cliff effect, where any income increase beyond pre-set benefits eligibility criteria can

cause a household's financial stability to worsen (Dinan et al., 2007, p. 1). While these dynamics are not novel to Paterson, the city's commitment to recruiting a sample of the most financially marginalized households meant that the majority of the sample had spent years navigating the cliff effect to ensure they did not lose benefits. This indelibly shaped the ways they interacted with financial decisions. This constant dance wore on participants over time and contributed to their financial vulnerability, particularly when they had to forgo raises or new employment opportunities because the wage increase would not warrant the loss in benefits. 27-year-old Dante spoke about weighing the desire to work with the need to maintain benefits in order to survive:

*This is the weird thing about this whole health thing that they have in this country. That if I make a certain amount of money ... I would actually be making less, because the help that I get would be taken away, and what I make wouldn't be enough to cover. So I have to stay under a certain amount of money so that the help that I get from the programs that help me help me just stay sort of afloat. I could make more and with the help, you know, sort of, I guess, build myself up, and then not have to deal with the help or not have to ask for it. But I can't ever get past a certain point because they always keep me sort of, you know, just not to be okay. That's not really, that's not really help. ... If they see you have something to save, they say you have too much. And it doesn't make any sense.*

Navigating the benefits cliff constituted a heavy mental burden, indicating how cognitive capacity is often circumvented by financial circumstances. Participants with a scarcity mindset juggled overlapping demands: balancing work and benefits, covering basic necessities, and responding to shifting financial stressors. Consistent with the literature (Ballentine et al., 2022), this constrained agency and eliminated pathways out of poverty. Scarcity mode was compounded by the devastating consequences of the pandemic and historic inflation. The \$400, although a relatively low sum of money, therefore made an enormous difference in getting by for some participants; respondents shared overwhelmingly that they used the GI towards rent and household bills. At the same time, the level of short-term need was so great that \$400 could only go so far.

Given the context of scarcity, the concept of financial well-being looked and felt different in Paterson. Financial well-being is typically defined as a sense of security and freedom in one's financial situation, both presently and in the future. It encompasses four key elements: control over daily and monthly finances, resilience to financial setbacks, being on track for future goals, and having the freedom to make choices that bring joy.<sup>3</sup> Financial well-being serves as a catalyst towards broader quality of life. However, GI recipients in Paterson were still far below the average for County and State levels of median income, so their financial well-being was relative to where they started off at Baseline. While pilot participants experienced an uptick in elements of financial stability, these must be interpreted in the context of low incomes and long-standing financial pressures.

---

3 The 10-item Financial Well-Being Scale items vary based on age groups: those under 62 years and those 62 and above (Consumer Financial Protection Bureau, n.d.). The scores range from 0 to 100, offering a quantifiable measure of an individual's financial well-being, with higher scores indicative of having a feeling of better financial security and freedom of choice.

Overall, the majority of participants from both groups reported Financial Well-Being scores ranging between 39–44, categorizing them within the “medium low” tier (Consumer Financial Protection Bureau, n.d.). Collectively, this particular category is defined by several key characteristics: it includes individuals who primarily have modest savings of \$250 or less and face substantial financial challenges, with the majority finding it difficult to manage their finances and make ends meet; the majority also experience rejection in credit applications. Despite the extreme financial constraints that pilot participants faced, findings affirm that the GI positively impacted the treatment group’s financial well-being consistent with the research team’s hypothesis. Regression estimates indicated a positive and significant impact of the GI from Baseline to the 18-month mark. This shift was perceptible when comparing the control and treatment groups: 86% of the control participants reported consistently low financial well-being, with a mere 4% showing an improvement over time. In contrast, 26% of the treatment group maintained better financial well-being, with about 9% reporting an improvement. Initially, the treatment group reported slightly better financial well-being scores relative to the control group. While this difference was maintained at the 6-month mark, by 12 months the control group reported marginally higher scores. However, 6 months post-intervention, the treatment participants once again reported better financial well-being. Although subject to further investigation, this could imply that the beneficial impacts of the GI persisted beyond the pilot’s conclusion.

Table 2. Change in Financial Well-Being of Households From Baseline to Endline (in %)

Group	Consistent low	Deteriorated	Improved	Consistent high
Control	86	3	4	7
Treatment	44	9	9	26

Table 3. Trends in Financial Well-Being

Group	Treatment	Control	Treatment	Control	Treatment	Control	Treatment	Control
Time period	Baseline		6 months		12 months		18 months	
Mean	42	40	44	38	41	42	42	39

The GI also played a role in smoothing income volatility from month to month for the treatment group. Income volatility describes month-to-month fluctuations in earnings which are associated with poor health outcomes, a scarcity mindset, and market segmentation that can structurally prevent economic mobility (Basu, 2017; Morduch & Siwicki, 2017; Sayre, 2023). The study specifically assessed these variations in earnings from labor. At the outset, both treatment and control groups reported comparable income levels: the treatment group reported a mean of \$16,604 (MD=\$13,904), while the control group’s mean was slightly higher at \$17,761 (MD=\$18,988). However, by the 12-month mark, the treatment group not only saw an increase in their average income (M=\$18,192, MD=\$17,859) but also a notable reduction in income volatility, from 11% down to 4%. In contrast, the control group experienced a decline in their average annual income (M=\$14,168, MD=\$13,264) and had a modest reduction in

income volatility by 4 percentage points. The increase in the treatment group’s income relative to the control group was statistically significant. By the 18-month point (6 months post intervention), the treatment group’s mean saw a notable rise to \$24,810 (MD=\$28,931), while the control group rose to \$19,078 (MD=\$18,965). It is important to note that these figures are in stark contrast to the median household incomes reported for Paterson City (MD=\$48,540), Passaic County (MD=\$78,386), and New Jersey (MD=\$89,703) (U.S. Census Bureau, 2022b). Given the financial vulnerabilities faced by the pilot participants, even a minor stabilization in monthly income was noteworthy.

Table 4. Trends in Annual Household Income

Time period	Baseline		6 months		12 months		18 months	
Group	Treatment	Control	Treatment	Control	Treatment	Control	Treatment	Control
Mean (\$)	16,604	17,761	15,220	21,268	18,192	14,168	24,810	19,078
Median (\$)	13,904	18,988	14,232	20,996	17,859	13,264	28,931	18,965

In turn, financial stability seemed to encourage an orientation towards the future while offering pathways out of precarious situations. For instance, Amelia, mother of two young boys, had exited an abusive relationship during the pandemic:

*I left everything behind, I didn’t—I was sitting on the floor. I left my new table set. I left my sofa, we had nothing. We only had one air bed and we sat on the floor, because I couldn’t afford to buy a chair.*

*You’re living, you’re living on your income tax. It was tough, but I tried to make—I sort of showed [the kids] that you know what? We used to play games, like Hide and Seek at home you know, I just try to make sure that I showed them that, you know what we have, you know, air bed. Now [with the GI] I was able to buy them, they have a bunk bed...*

She used the GI to buy furniture for her new apartment, establishing herself and her children in a new chapter of their lives and creating a sense of home.

Others, like Dante, described ways in which financial well-being led to forward thinking and goal setting. For Dante, improved financial stability meant a chance to build his credit score, a goal that was important to him long before the start of the pilot. In the past, he worked a string of precarious jobs and experienced homelessness but held on to a goal of re-establishing himself financially. One of the first things he did with the GI was open a line of credit.

*I have never been able to build credit at all. But now since I have the sort of steady income and I know it’s going to be coming in, I took some of the money out. I put it in*

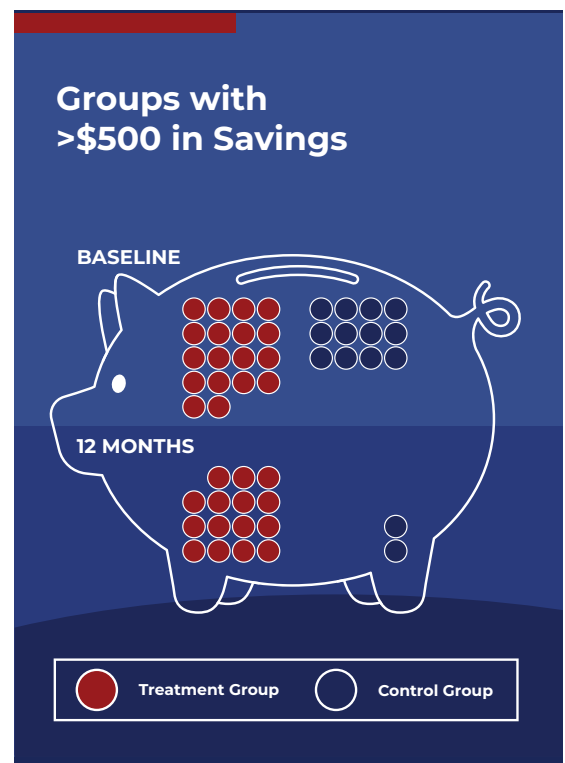
*a bank account, and I opened up one of those credit cards that they use like with your own money. And I've been able to, you know, finally have credit. And it's going well. I have—you know, my credit is like at 712 I think now. ... The credit card, it was a risk that I never took. Because I was always worried if I don't have the money to pay one day. You know, and it starts building up, interest fees, and whatever the heck else they want to charge you. You end up losing God knows how much, and your credit's tarnished forever. Like it never goes away. I was able to take that risk, and so—it wasn't really a risk anymore because I knew it was coming in.*

He had been using the credit card judiciously, paying it down with his GI money each month. However, he did not know how he would continue once the GI ended—a reminder that for participants on the margins, the impact of financial planning was only short-term.

Table 5. Trends in Household Savings (in %)

Savings (\$)	Baseline		6 months		12 months		18 months	
	Treatment	Control	Treatment	Control	Treatment	Control	Treatment	Control
<200	60.00	71.53	68.18	77.69	70.00	80.00	66.36	73.08
200–500	21.82	16.15	15.45	16.15	14.55	17.69	18.18	22.31
>500	18.18	12.31	16.36	6.15	15.45	2.31	15.45	4.61

Other participants spoke about the ability to set financial goals like establishing savings. Overall, the treatment group demonstrated better financial stability and savings habits compared to the control group. While there was no significant difference in savings between the groups at the outset, differences emerged in subsequent Waves, and this difference was more pronounced at the 12-month mark ( $X^2=13.51, p=0.0012$ ), indicating a potential impact of GI on savings behavior. Maria B., who lived with her mother and 5-year-old son, noted that the buffer GI provided allowed her to save 10% of her monthly paycheck. Angela, a single mother of a 13-month-old son, had been attempting to save towards a new car for her family but had not been able to put money aside until the GI. Maria A. was using part of the GI towards a savings account for her three children. As people were able to set and act on financial goals during the pilot, there was a latent sense of momentum and possibility. It felt like validation that they could fully participate in life, defying the constraints of



scarcity mode as the GI acted as a catalyst for participants to take steps towards achieving their goals.

Compared to other pilot sites, the ability to respond to a \$400 emergency was low from the outset: at Baseline both the treatment (17%) and control (18%) groups showed similar capabilities to cover a \$400 emergency expense. As noted prior, this is likely a reflection of the program’s decision to focus on the most economically marginalized. Nonetheless, by the 12-month and 18-month marks, the treatment group was able to maintain this ability (16% and 17% respectively), while the control group’s capability sharply declined to just 3%. Despite the economic challenges created by heightened inflation (U.S. Bureau of Labor Statistics, 2022a) and the lifting of pandemic-era policies (Jones & Toossi, 2023), the treatment group demonstrated greater financial resilience, maintaining their ability to consistently cover emergency expenses. However, the overall low ability among treatment and control indicates a constant experience of precarity in Paterson as compared to other places implementing GI programs across the US.

Table 6. Transitions in Savings: Treatment vs. Control From Baseline to Endline (in %)

	Baseline to 6 months		6 months to 12 months		12 months to 18 months	
	Treatment	Control	Treatment	Control	Treatment	Control
Remained same	62	79	81	89	83	89
Increased savings	23	10	9	5	7	4
Decreased savings	15	11	10	6	10	7

Table 7. Household’s Ability to Cover \$400 Emergency Expense (in %)

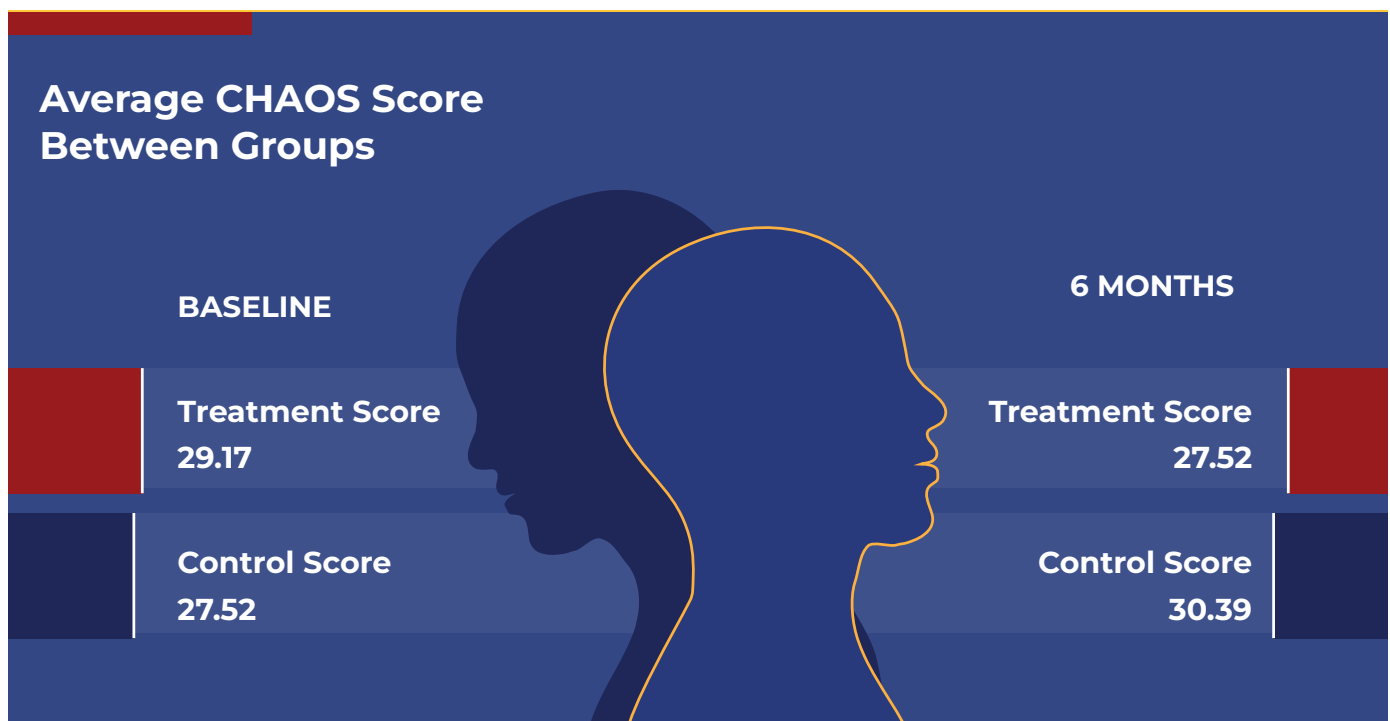
	Baseline		6 months		12 months		18 months	
	Treatment	Control	Treatment	Control	Treatment	Control	Treatment	Control
No	83	82	85	82	84	97	83	97
Yes	17	18	15	18	16	3	17	3

## Mental Health and Well-Being

*Your mental health, once you get money, that helps. It makes you change... it makes you think different because you get some extra money.*

Billy, 54 years old

Another notable quality of life outcome was improved mental health. Before the pilot, Paterson residents displayed low levels of mental health; according to a 2019 community health needs assessment, 49.8% of residents exhibited symptoms of chronic depression (Professional Research Consultants, Inc. [PRC], 2019). In 2020 alone, 16.8% of the population considered themselves to be in frequent mental stress (City Health Dashboard, n.d.). Quantitative findings from the GIPP show that initially, both the treatment (M=21.07) and the control (M=22.32) groups exhibited signs of mental distress as measured by the Kessler Psychological Distress Scale (K-10) (Kessler et al., 2003). Six months into the pilot, there was a discernible attenuation of distress levels for the treatment group (M=19.44) relative to the control (M=21.53), suggesting a potential positive influence from the GI. While this difference was not statistically significant based on the general threshold, when controlled for ethnicity, the result was borderline significant with a relative impact of -9.7%. Six months following the intervention, the treatment group showed a statistically significant improvement across the general population, but this was not mirrored when ethnicity was factored in, implying that there may be variability in the GI’s effectiveness across diverse ethnic groups based on socio-economic positionality. This further underscores the need for future research on determining how the amount of unconditional cash may need to shift case by case based on cost of living and other economic stressors.





The study additionally employed the CHAOS scale (Matheny et al., 1995) as a determinant of home environment; this approach offered insights into the indirect factors influencing mental health. More specifically, the CHAOS scale assesses the level of disorganization, confusion, instability, and disorder in a home, which all impact the home environment and child development. At Baseline, the treatment group reported higher CHAOS scores ( $M=29.17$ ) relative to the control group ( $M=27.52$ ). However, 6 months following the first disbursement, the treatment group ( $M=27.52$ ) reported a notable decrease in the score, while the mean scores for the control group ( $M=30.39$ ) had concurrently increased. The mean difference represented a 9.46% decrease and was statistically significant ( $p<0.001$ ). While ethnicity did not significantly impact the regression estimates, the improved trend observed in the treatment group persisted 12 months ( $-0.95$ ) and 18 months ( $-0.70$ ) into the study, though it was not statistically significant. This pattern suggests a beneficial effect of the GI over time in reducing chaos and disorder in the home, which the literature indicates is associated with a home environment conducive to healthy child development.

Previous research by West and Castro (2023) on the Stockton GI pilot (SEED) found a similar pattern where, in the first couple months of the pilot, the impact of scarcity eased as participants were able to pay bills and attend to basic needs. Income volatility smoothed and psychological distress lessened after these first few months of the GI pilot. These circumstances were borne out by qualitative interview data. In Paterson, every single interview respondent disclosed feeling less stress because of having the extra money. This was particularly important as so many people were struggling to meet their basic needs. Scarcity mode was acute in this setting, and the \$400 represented a lifeline for many.

Across the duration of the study, both the treatment and control participants reported heightened stress levels, as measured by the Perceived Stress Scale (Cohen et al., 1983), above the threshold score of 6. This was evident both in the general population and when controlled for ethnicity. Despite the slight decrease in stress levels reported by the treatment group ( $M=6$ ) relative to the control ( $M=7$ ) at the 6-month point, the subsequent time periods saw a reversal and by 12-months, the treatment group ( $M=7$ ) demonstrated a statistically significant higher stress score relative to the control ( $M=6$ ). However, 6 months after the program's conclusion, while both groups reported scores above 7, the treatment group reported lower stress than the control (mean difference =  $-0.4$ ) and this change remained statistically significant.

External factors contributing to stress cannot be discounted: throughout the program, participants were dealing with the traumatic consequences of the pandemic and unprecedented levels of inflation in addition to the constant churn of living in survival mode. Participants also experienced the spillover effects of community violence in many of Paterson's neighborhoods. Paterson's 2019 community health needs assessment found that 46% of residents perceived their neighborhood as unsafe (PRC, 2019). In the qualitative GIPP data, interview respondents described escorting their children home from school, worrying about them playing on the streets, and generally feeling unsafe because of frequent violence.

In one sense, too, the level of financial precarity was so acute among some participants and the level of relief provided by the GI was so great that the prospect of not having the cash was deeply distressing. The fact that such a relatively low sum of money was so desperately needed speaks to the broader context of scarcity in Paterson. Unlike many of the other pilot sites CGIR is working with, interview

respondents in Paterson shared some fear, anxiety, and stress around the end of the program, further underscoring the level of scarcity in the community. Some described newfound motivation to find new, higher-paying jobs or take on extra gig work to make up the difference. However, others expressed a level of weary acceptance: particularly for people of color and single caregivers, there was an innate expectation that the odds were stacked against them. The impact of the GI on mental health could only go so far, considering the innumerable structural constraints that participants lived with.

## Physical Health and Food Insecurity

Extensive research has elucidated the link between low income and chronic poor health (Adler & Rehkopf, 2008; Braveman & Gottlieb, 2014; Elo, 2009); other data indicates this may be the case in Paterson. St. Joseph’s Healthcare System is one of Paterson’s economic anchors, and the city is home to community health centers, clinics, and rehabilitation centers. However, the area has recorded high

levels of physical distress and low access to health services, scoring 18th out of 21 counties in New Jersey for care access (North Jersey Health Collaborative, 2019). Passaic County recorded acute chronic health issues: among Medicare enrollees, 34% of county residents had been treated for diabetes, with the proportion increasing over time (North Jersey Health Collaborative, 2019). Paterson’s community health needs assessment found approximately 46.3% of adults had been diagnosed with high blood pressure, 90.9% had at least one cardiovascular risk factor, and 39% were obese (PRC, 2019).

Investigating the impact of the GI on physical health measures using the SF-36 (36-Item Short Form Survey, n.d.), the study faced challenges in drawing definitive conclusions, partly due to the lack of baseline equivalence between groups. The outcomes here were more variable and less conclusive. Initially, both groups had comparable general health scores, with the treatment group (M=62.78) slightly higher than the control group (M=62.26). Over time, the treatment group’s general health showed a decline

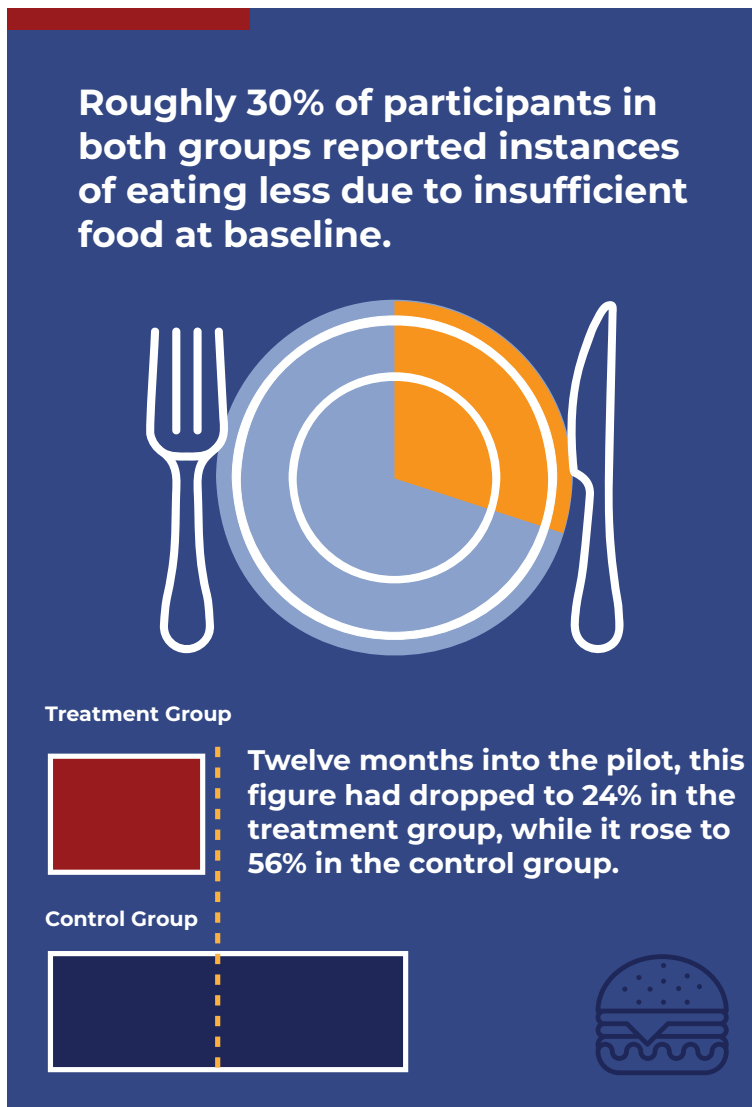
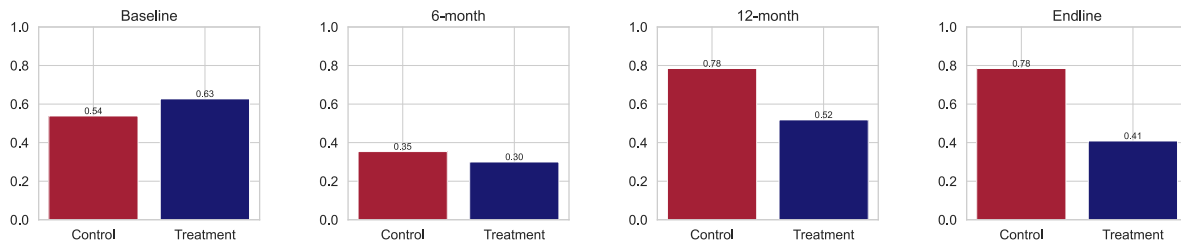
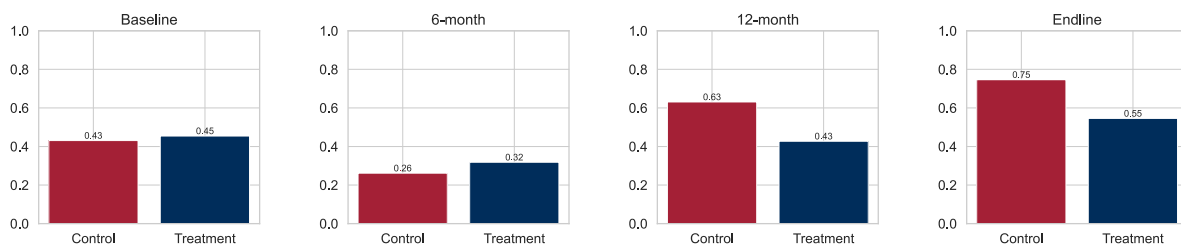


Figure 1. Comparative Responses for Household Food Insecurity Across Time Periods

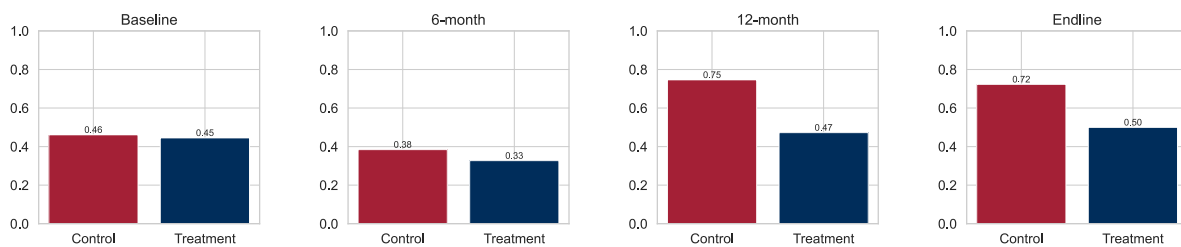
Worry About Food



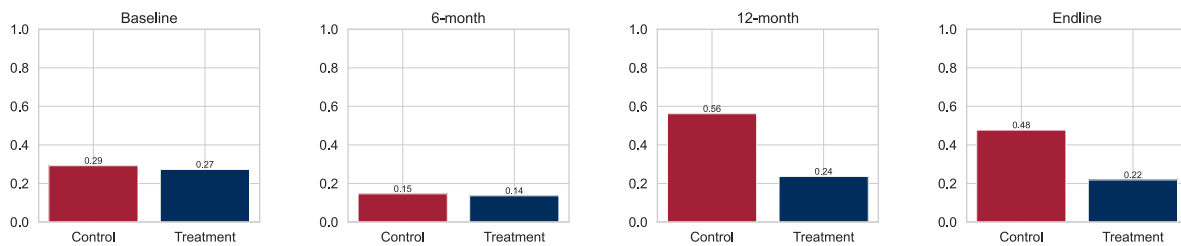
Unable to Eat Preferred Food



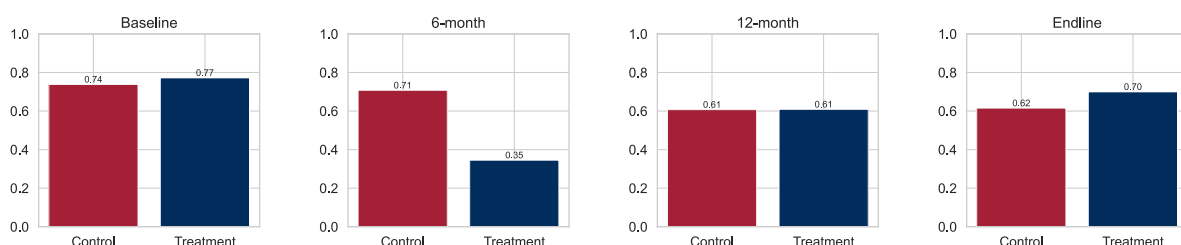
Ate Unwanted Food Due to Resource Constraint



Ate Less Due to Food Shortage



Worried About Paying Utility Bills



and by post-intervention, it demonstrated a notable difference of -3.51 points. For physical functioning, the treatment group (M=72.09) started off higher relative to the control group (M=68.69). While both groups showed some improvements initially, the treatment group's score did not maintain this trend. In the same vein, the treatment group initially reported better scores for physical limits (M=63.52) compared to the control (M=58.41), but experienced a decline over the study period, indicating significant worsening in physical limitations. The contrasting trends observed between the groups, in conjunction with the high standard errors in these measures, introduce uncertainty. These variances suggest that the pandemic's unique impact on each group may have influenced the results, rendering them less conclusive. While the quantitative health findings were mixed, qualitative data indicated some secondary effects on health from the GI. Several participants noted they benefited from Medicaid, which allowed them to pay for healthcare, but another noted that the GI covered medical implements they needed when insurance denied coverage.

Access to food was another issue linked to both physical health and quality of life. Even before the pandemic, Passaic County's rate of food insecurity was among the highest in New Jersey (Passaic County Food Policy Council & United Way of Passaic County, 2017). 45% of Paterson residents were food insecure and 33% found it difficult to buy affordable fresh produce (PRC, 2016). The pandemic and supply-chain issues placed further demands on food distribution systems, from grocery stores to food pantries.

At the time of the pilot, Paterson along with the rest of the country was experiencing historic inflation, leading to higher prices for food and necessities. As Lady J, a 68-year-old retiree, put it: "The economy is so expensive, gas is gonna soon be \$6, I'm gonna fill my tank to go where's necessary to go; and the food is sky high, even though there's [food] pantries and stuff." In interviews, participants expressed worry about the skyrocketing costs of rent and food. Billy, a 54-year-old member of the treatment group, observed, "the food's being so expensive that I don't know how people are dealing with it. I don't know how people are trying to eat because ... if I used to spend \$100 on food for a week, now I have to pay like \$250, \$300."

Amelia also described the impact of inflation on her household budget:

*The inflation has gone up since, I think, a year ago. Um, if you compare today's prices versus a year ago they're worse now. So now more than before—I have to definitely plan what's coming in and what's coming out because what goes up doesn't come down.*

Initially, around 30% of participants in both groups reported instances of eating less due to insufficient food. Twelve months into the pilot, this figure had dropped to 24% in the treatment group, while it rose to 56% in the control group, highlighting prevalent hunger issues. However, the treatment group was able to hold steady while food insecurity among the control group dramatically increased, suggesting a potential impact of the GI. This trend persisted 6 months following the intervention.

Given that many people were already living on the precipice, rising inflation may account for some of the more troubling findings on food insecurity, and it invites the question of how far the \$400 would have gone for participants in more normative economic times. Jean, a 23-year-old control group member from Colombia, noted that,

*not everybody receives food stamps. But they're still having problems finding food because prices are going high. And if it's a mom who lives with three kids and she's the only person who works and she doesn't receive child support ... [they will not have food access].*

The availability of affordable food also depended, in part, on access to a car: nearby Walmarts, Costcos, and supermarkets required long public transit journeys. While the city had numerous small markets and bodegas, these were less likely to support buying food in bulk or on sale, reflecting the truism that “it is expensive to be poor.” Qualitative data showed that with the GI, some treatment group members were able to buy fresh food, which had previously been too expensive to afford.

Overall, findings showed a comparatively more positive trend among treatment group participants relative to the control group. For instance, Billy, who lived alone, described how the GI assuaged his fear of going hungry:

*At least, I'm going to eat this month... I'm not going to be missing any food. Because it has been so expensive. I would say it's probably double the price. I mean, food is the thing that I worry the most because, let's say if you live with another family member and they have food, you're going to have some food, right?*

*Living by yourself and you don't have food, I mean you don't have food. That's it. Whenever I'm having those extra \$400, oh, my God, I cannot thank enough whoever came up with this idea and—that I got to choose. I mean, I just love it.*

While initially, 63% of the treatment group expressed food security concerns, these worries notably decreased to 52% (an 11 percent point decrease) by the 12-month mark and further to 41% at 18 months, contrasting sharply with the control group's unchanging high concern level of 78% at both time points. Overall, the control group performed worse in every survey measure, recording heightened concerns about food insufficiency, having to eat less due to insufficient food availability, and consuming undesired foods or not being able to eat preferred food because of resource constraints.

## Housing Cost and Quality

Housing posed another structural obstacle, with affordability being the foremost issue. The U.S. Department of Housing and Urban Development (HUD) defines individuals at risk of homelessness as those with incomes at or below 30% of the Area Median Income (AMI) and who lack the resources or support necessary to prevent homelessness.<sup>4</sup> Analysis of the Comprehensive Housing Affordability Strategy (CHAS) data from 2016–2020 (U.S. Department of Housing and Urban Development, 2023a) revealed that in Paterson, 22,357 households fall under this definition, with 76% being renters. Among these, an estimated 9,840 households were identified as significantly cost-burdened (spending over

<sup>4</sup> See 24 CFR 91.5 <https://www.govinfo.gov/content/pkg/CFR-2011-title24-vol1/pdf/CFR-2011-title24-vol1-sec91-5.pdf>

50% of their income on housing). Other research has shown that over 62% of renters are cost-burdened in Paterson; of these renters, an estimated 64% spend more than half their income on housing (Mehta et al., 2023).

Like many places in close proximity to NYC, property values started climbing in Paterson well before the pandemic, a phenomenon that nearly every interview respondent acknowledged. There had been a consistent rise in the Housing Price Index in the years before 2020, but it spiked from 164.92 in 2019 to 171.01 in 2020 and has been rising ever since (212.74 in 2022) (Federal Reserve Economic Data, n.d.).

Another recent trend reshaping local housing markets in economically challenged cities like Paterson is the rise of Limited Liability Companies (LLCs) scooping up real estate (New Jersey Department of Community Affairs, 2022). These LLCs, often backed by individual investors or small groups, purchase homes at depressed prices and revamp them, resulting in an artificial hike in property values. At the same time, a surge of institutionally owned properties has further exacerbated housing affordability issues; these properties are held by larger, often publicly traded companies or investment funds with deep pockets and broad portfolios that buy and manage properties at scale. Together, these practices have created an intimidating environment for residents seeking affordable housing. 49-year-old Rose, who was born and raised in Paterson, related:

*Yes, it is [expensive] now. It is now cuz like every apartment is going up compared to when I first got on my own when I was about 19 years old... My rent was only about 450 and I had four bedrooms, uh, living room, kitchen and a bathroom. So I had a second—two floors. Compared to now, I have two floors and the rent is about \$1,800.*

*So, yes, now, the prices just go up and then it's not even that—there's this guy over here that's buying up every property in Paterson, everything he buying that, he's raising the rent—the outrageous rent. But you barely can even live in Paterson, you're moving into one of his properties unless you get assistance.*

In Paterson, the housing landscape predominantly leans towards rentals, with 73.8% of available housing units designated for rent (U.S. Census Bureau, n.d.). This disparity in the housing market is further underscored by the median value of owner-occupied homes standing at \$269,200, and the median gross rent of \$1,278. Even for households eligible for Housing Cost Vouchers (HCV), the average per unit cost increased from \$877 in January 2020 to \$1,015 in October 2022 (U.S. Department of Housing and Urban Development, 2023b). Such data shed light on the unique dynamics of the local housing market, where the majority of available housing units are private rentals and even HCV units are increasing in cost.

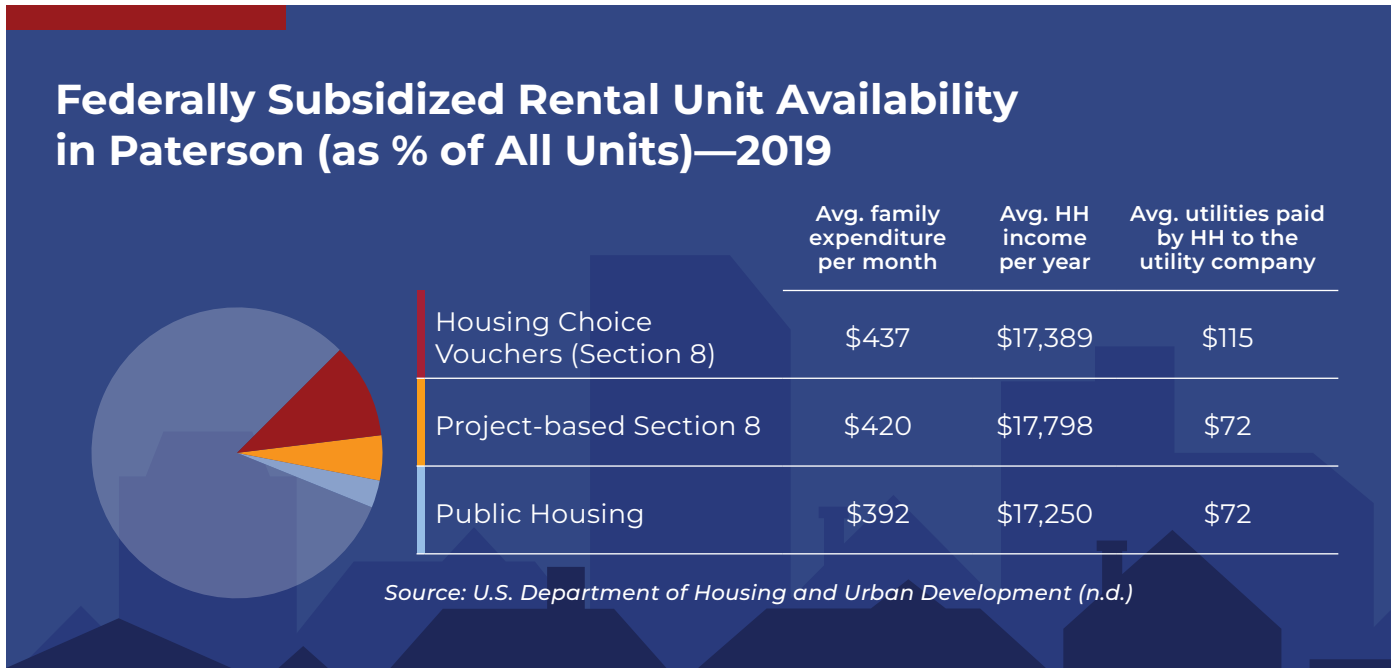


Table 8. Median Rents and Median Household Incomes (\$), Paterson, NJ

Year	Rent (\$)	Median Household Income (\$)
2022	1,227	47,373
2021	1,131	46,451
2020	1,074	45,141
2019	1,054	47,369
2018	1,042	49,367

Source: U.S. Census Bureau, 2018. \*Only 5-year estimate available for 2020.

According to the American Community Survey (ACS) 1-year and 5-year estimates, median contract rent for renter-occupied units in Paterson increased by 8.5% between 2018–2021, while median household income decreased by almost 6% during the same period (U.S. Census Bureau, 2022a). As incomes fail to keep pace with soaring rents, this makes for a significant housing cost burden. The City of Paterson (2021) recognizes the disparity, noting that,

*contract listing rents continue to outpace increases in the HUD published Passaic County Fair Market Rents ... over 74% of head of households receiving assistance are 51 years of age ... [and] program participants' income is primarily received from Social Security's Supplemental Security Income (SSI) and wages. Increases in these programs did not keep pace with the rising costs of housing.*

Among the pilot's treatment and control group, for instance, the median household income hovered around \$13,904, while their rent averaged \$1,000 per month. When asked what it was like to live in

Paterson, many interview respondents immediately cited the disproportionate rent prices. As Sasha, a medical assistant at a residential care facility, put it, “every place you try... The prices are jacked up. How can you expect someone, let’s say, making \$12 an hour to pay \$2,100 in rent? It’s too high.” As investment occurred in the city’s built environment, an accompanying sense of disinvestment pervaded for those who could not afford to participate.

As Arlene, a control participant and longtime Paterson resident, observed,

*the changes that I’ve seen, I’m going to say the last three to four years, has caused rents to skyrocket. There’s a lot of new housing in [this city]. It’s all labeled luxury apartments. So, you know how much you pay for the luxury part. It’s hard. I don’t understand because, um, they’re not affordable.*

Kini, a 73-year-old woman who lived in a housing assistance unit, observed that, “with the money that I get on a monthly basis, there’s no way I could afford [the unit otherwise]. I’d be lucky if I could afford a room.” However, as the ACS survey also recorded, public housing made up 5.1% of available units and housing choice vouchers in Paterson only covered 10% of available units (U.S. Census Bureau, n.d.). Pre-pandemic (2015–2019), the waitlist for housing assistance was 350 applicants and had been closed to new applicants for 168 months (Gorham, 2015). After receiving an HCV, people often had to wait further—it took an average of 14 months for recipients to successfully secure housing with a voucher (U.S. Department of Housing and Urban Development, n.d.).

The COVID-19 pandemic only increased the difficulty of finding suitable housing for low-income families (City of Paterson, 2021). As of 2023, the waiting list for affordable housing units was 1,388 families, 100% of whom were extremely low income. The waiting list has been closed for 18 months (Gorham, 2023). The HCV waiting list was at 782 families, 83% of whom were extremely low income, and it has been closed for 26 months, with no expectations of reopening (Gorham, 2023). Rose was familiar with the backlog for housing assistance, saying that “over here in Paterson, you’ll be waiting ten plus years.” Beauty, after searching for assistance, concluded there was availability “everywhere else in the state but Paterson.” The inventory of affordable housing (public and private) and of HCVs is desperately inadequate compared to the level of need, and in light of increasing market rent.

For those struggling to afford rising rents, both quantitative and qualitative findings suggest that the GI may have temporarily mitigated the difficulties. A majority of the households in the pilot sample were cost-burdened. At the outset, the average cost burden for the treatment group (93% cost-burdened) was significantly higher relative to the control group (66% cost-burdened). This was also significantly higher than the median cost burden for renters in Passaic County (32.2%) (Cromwell, 2022). At the 12-month mark, a noticeable shift emerged whereby the treatment group reported reductions in cost-burden (74%) relative to the control group (82%). By post-intervention, although both groups reported reductions in burden, the numbers were still high (68% for treatment and 62% for control), emphasizing the challenges of housing affordability in the sample, where average monthly rental rates stood at \$1,200. Data also indicated that GI helped recipients afford housing; most participants related that their first priority for the GI was using it towards rent. While the data suggests a link between GI and the varying cost burden, it does not imply a causal relationship, necessitating further research



for conclusive evidence. However, given the increasing pressures around affordability and access in Paterson, \$400 a month would not be enough to support long-term housing stability, especially in the context of extreme financial precarity. Securing new housing, or moving to a more affordable area of the state, requires a substantial amount of savings and the ability to pay 3 months’ rent up front.

Table 9. Change in Housing Cost Burden From Baseline to Endline (in %)

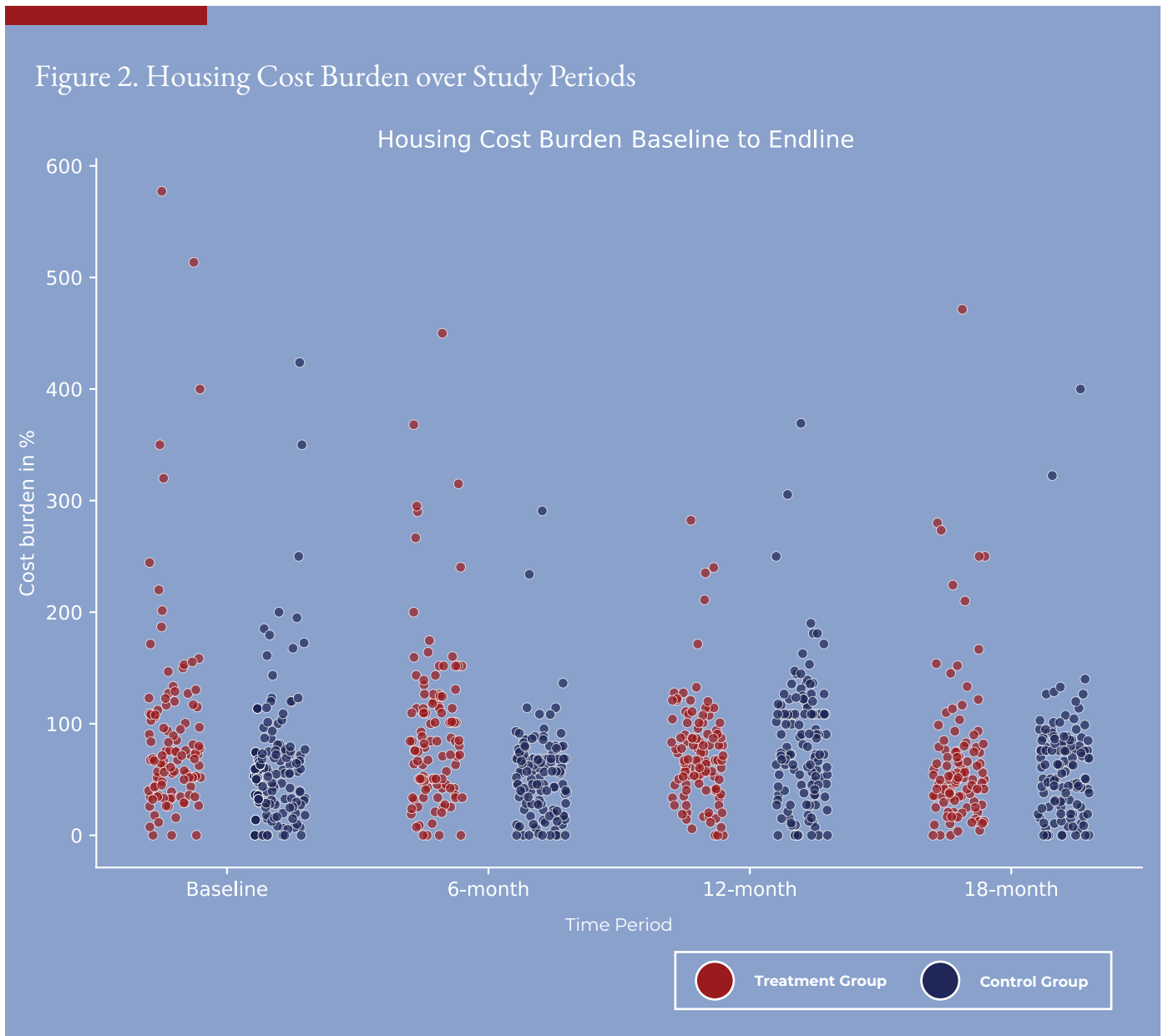
Baseline			6 months			12 months			18 months		
<=50%	50%-75%	>75%	<=50%	50%-75%	>75%	<=50%	50%-75%	>75%	<=50%	50%-75%	>75%
<b>Control</b>											
41	32	26	46	34	20	30	20	49	41	18	42
<b>Treatment</b>											
28	28	44	28	17	55	27	29	44	51	24	25

Table 10. Comparative Analysis of Home Quality Between Treatment and Control Groups (in %)

Home quality	Baseline		Endline	
	Treatment	Control	Treatment	Control
About the same	30	42	39	52
Better home	54	39	51	33
Worse home	16	18	10	15

Throughout the study, the treatment group displayed a positive shift in home quality perceptions. By post-intervention, fewer participants in the treatment group felt they lived in “worse homes” (10%) compared to the Baseline (16%). Conversely, the control group saw a decrease in those perceiving they lived in “better homes,” from 39% to 33%. In qualitative interviews, participants described using the GI for small home improvements, like buying furniture. Ruth, for instance, used some of the extra cash towards a bedroom set, which brought her a sense of peace:

*I was trying to save up for a bedroom set. Cuz I only had the bed frame. Like, my room looked like a guy’s room, you know? I didn’t even have a mirror or anything. It was just like the bedframe and that’s it. And I was like, oh, my god, like I need a set, you know? I need this house to look like a woman’s house. I need to decorate it, I need to do things to it so I can feel at peace. The first time that I received [the] \$400, I was like, yes, you know? ... I bought it, and honestly, like that made me really happy.*



While homeownership rates were relatively low in both groups, the treatment group saw a slight uptick by 1 percent point 6 months post-intervention, compared to the control group, where it declined by 2 percent points. The treatment group also saw a notable decline in proportions of households reporting “living with friends or family” between Baseline and Endline (8 percent point decrease) relative to the control group, which reported a 7 percent point increase during the same time period.

These trends highlight the power of cash in the context of structural constraints, but also demonstrate that GI is not a panacea for consistent lack of access to affordable housing. Recipients were able to use GI as a temporary buttress against market rent, and in some cases, also improve the quality of their housing. However, against a broader backdrop of speculative development and increasing rents, this ability to stay in place is not sustainable for low-income residents without housing assistance.

## Balancing Paid Work and Unpaid Caregiving in Paterson

*“I’m the captain of the boat. I’m the pilot of the plane.”*

**Summary:** Before receiving the GI, a number of GIPP participants struggled to balance unpaid care work responsibilities with paid employment. Constant calculations around low wages, childcare costs, and time scarcity stretched caregivers thin, particularly among those lacking paid sick and family leave. Though not a permanent fix, the GI eased the dual burden of making ends meet and providing care. Some used it to cover the cost of childcare; others were able to reduce their time in low-wage, precarious shift work or exit the labor market entirely in order to provide caregiving for children, relatives, and elders. This also meant increased time spent with family and the ability to engage in meaning-making activities that brought joy. For some participants, their exit from the labor market coincided with pandemic-era layoffs. Quantitative data also showed a surge in gig work and self-employment, potentially reflecting pandemic-induced labor market trends, the need for flexibility or the desire to earn extra income. And for some, the GI was a motivating factor in seeking a new job altogether. Overall, the GI seemed to temporarily free participants from time scarcity, allowing them to make deliberate choices around parenting, workforce participation, and time for self and family.

---

According to data, 60% of pilot participants had a high school degree or less. Most interview respondents in the labor market held poorly paid and physically demanding jobs, sometimes with unpredictable hours. To make ends meet, some described picking up extra gig work, from Uber Eats to hair braiding. A few respondents in Paterson held Bachelor’s degrees and had stable jobs, but these were the minority.

In addition to paid employment, a number of GIPP participants also managed unpaid care work responsibilities for their households, extended families, or broader communities. Unpaid care work includes childcare, eldercare, and household tasks such as shopping, managing the family budget, cooking, cleaning, and the mental burden of maintaining a family’s schedule, finances, and medical needs (Bezanson & Luxton, 2006). Many were single parents. 67% of treatment participants and 78% of control identified as single, and 61% of both cohorts had children at home. In addition to caring for their own children, participants described caregiving for their parents, for relatives’ children, and for neighbors.

Previous research has defined a relationship between economic scarcity and time scarcity for unpaid caregivers (West et al., 2023). There are time costs to financial hardship: dependence on public transit, rather than a car, for instance; cobbling together informal childcare from neighbors or acquaintances; working extra shifts instead of spending time with family. The benefits system poses another time cost in the form of administrative burdens, as applicants are made to wait in line, field long phone

calls, or fill out interminable paperwork in exchange for meager public benefits that disincentivize participation and erode trust (Halling & Baekgaard, 2023).

Constant calculations around care, time, and employment stretched pilot participants thin. Low wages, shifting support networks, and lack of time formed an impossible equation, keeping some caregivers stuck in a loop and unable to think past short-term needs. The GI did facilitate the ability to act on dormant or long-held goals, but pre-existing circumstances precluded many from finding the space to take larger risks, explore different pathways, or set completely new goals. As Amelia put it:

*I'm the captain of the boat. I'm the pilot of the plane... It's only me, so I have to be careful. ... I, I can't take risks as single parent, I can't take it. You have to be smart as a single, well, as any parent but you have to be smart when you have kiddos. Because, especially how things are going now things are just getting worse by the day in a sense of expensiveness. So, there's no way I could do that. I mean, I would feel so guilty taking the risk.*

Single parents within the sample described the pressures of balancing paid work with caregiving when their wages were not enough to cover the cost of childcare. For instance, Amelia was unable to work full-time because she could not afford childcare and had no one to watch her children. Limited in her options, she worked part time as a teaching assistant; she received no pay when the school closed during the summer break. Therefore, remaining a part-time worker to raise her children represented a cruel Catch-22. It afforded her more time for parenting, but it precluded access to benefits associated with full-time work.

Sasha worked as a full-time caregiver in an eldercare facility, but her wages barely covered her household expenses. She was considering doing delivery driving to make up the difference but didn't want to miss out on time with her three children—"I'll try to do enough just so I could be home with them," she said. Nelly, also a caregiver in an eldercare facility, similarly struggled with the tradeoff between employment and care. She changed her work schedule so that she could leave early to pick up her children from school; she considered the streets too dangerous for them to walk alone. She said, "I want to work full time, but I really can't. I can't."

In response to an interview question about stereotypes and social services, 45-year-old fast-food worker Beauty pushed back, describing the impossible tradeoff between work and childcare that people faced:

*A lot of people probably say that "people [on benefits] just don't want to work at all," but it's a lot of people [on benefits] that do want to work but just don't have childcare... It's a lot of people that don't have childcare or in situation that they get to work, but they not able to take care of kids after school and stuff like that.*

Rose, a full-time unpaid caregiver for her disabled adult son, underlined that for some caregivers, participating in the full-time labor market can be untenable due to the demands of unpaid care work. Although caring for her son constituted a significant amount of her time, she attempted to cobble

together piecemeal jobs to supplement his SSI.

*I need income—any type of income and I've been taking care of my son, since he's been out of the hospital since 2013 without an income. Doing babysitting here and there. I'm trying to do Uber here and there but eventually... you know?*

Though not a permanent fix, the GI provided tangible support to caregivers, easing the dual burden of making ends meet and providing care in the absence of supportive family policies. Some were able to use the GI to pay for childcare. Maria B., a full-time medical assistant who cared for both her mother and her son, used part of the GI to cover some of her childcare costs. 30-year-old Olivia chose to send her daughter to a private school and used the GI to cover part of the tuition instead of juggling her monthly budget to cover that expense.

*It's helped... ease my mind a little bit because I know I don't have to work a 13-hour shift, you know, once a week just to make the ends meet. Just so that my kids can get a proper education.*

The GI also allowed parents to scale back on work or exit the labor market entirely in order to care for their family. During the pandemic, Angela's restaurant hours were precarious, and her wages didn't cover the cost of a babysitter. She took a second job cleaning houses to get by. However, when she received the GI, she was able to leave that job and spend time with her baby, instead. After the pilot, she planned to pick up more work again, though it would come at the expense of spending time with her son.

*Before I was doing [a] second job. I dropped the job, because I have [a] little help... I tried to spend more time with [my son] because he is little. But I was deciding if I have to go back to my second job [after the pilot], I will do it... if I need to do it because of the money.*

***“[Now] there's always a constant parental presence in [my child's] life. So no school activity is missed. No sport activity is missed. If they're in sports, there's somebody always there.”***

**— Maria A.**

For some participants, their exit from the labor market coincided with pandemic-era layoffs. Maria C. was laid off during the pandemic. She had initially been receiving unemployment, which ran out, and was providing full-time care to her two children and baby-sitting. She observed that although she was not working in the labor market, her unpaid labor went unrecognized: “I still gotta be at work. Oh, my God, cooking breakfast, lunch, and dinner. People think that the work of a housewife is not work, it's a lot. Too much actually.”

Enith, an immigrant from Central America, was also laid off during the pandemic while pregnant. She started receiving the GI shortly after. Instead of having to enter the labor market, the GI helped her scrape by as she took care of her newborn, providing her with invaluable time to bond with and care for her baby. She said after the 12 months ran out, she would start looking for paid work again.

The GI seemed to support participants in balancing paid work and caregiving responsibilities. They were able to spend more time with their children and less time engaged in low-wage, precarious labor. As Maria A. described, “[now] there’s always a constant parental presence in [my child’s] life. So no school activity is missed. No sport activity is missed. If they’re in sports, there’s somebody always there.” Rather than being forced to re-enter the labor market full-time, parents could choose to be more present in their child(ren)’s lives.

Quantitative data revealed subtle yet significant shifts in employment status and caregiving roles in both the treatment and control groups. Post-intervention, the treatment group saw a drop in full-time employment, from 32% at baseline to 28% at 18 months, contrasted by the control group’s decrease from 35% to 13%. In part-time or seasonal employment, the treatment group experienced a notable increase, rising from 15% to 18%, while the control group saw a more pronounced increase from 13% to 31%. The proportion of stay-at-home parents or caregivers rose markedly in both groups (10 percent points for treatment vs. 8 percent points for the control). These changes suggest that the allocation of a monthly financial support influenced not only employment choices but also caregiving decisions, particularly among those with less access to educational and financial resources.

Taken together with the qualitative data, this recorded decline in employment and shift to “stay at home” among treatment and control groups may reflect several factors. For both groups, the pandemic forced widespread layoffs. For those with a high school degree or less, new opportunities were thin on the ground, with available jobs predominantly concentrated in high-risk public-facing roles (e.g. food delivery, restaurant, or warehouse work). Given the difficulties around childcare access during the pandemic and ongoing issues around childcare affordability, it is conceivable that those receiving the GI chose to stay at home instead. And particularly but not exclusively for those with newborns or children with disabilities, the GI offered the ability to stay home, bond with, and support their children.

More broadly, the GI also seemed to temporarily free participants from the constraints of economic and time scarcity, allowing them to make deliberate choices around parenting that are key for healthy child development. Typically in situations of financial precarity, decision-making is shaped by survival and trade-offs. However, the GI offered increased agency for parents, allowing them to make choices outside the bounds of financial vulnerability. For instance, parents were able to treat their children with the GI, creating space for joy and reward. Maria A., for instance, said:

*[With the GI], you get good grades, I get you whatever you want at the end of the report card. So each marking period, good grades, you get whatever. Um, you had a hard week, let’s go get chocolate. You’re struggling, you want to do this, alright, let’s go eat here. Um, so it’s helped me spoil [my children] more so because they deserve it.*

Ruth, a 23-year-old college graduate and single mother, described being able to buy new clothes for her child on a whim, because they were pretty and not just because they were on sale, “and that

makes me—that makes me really happy because I—I wasn't able to do that for her first year, you know?" Maria B. planned and saved for months so that she could take her young son to a restaurant for his birthday. These kinds of parenting choices brought gratification to participants and their families. While a birthday party or a meal at a restaurant may seem like small gestures, they represent the ability to prioritize making memories with one's family and participating in normative rites of childhood passage. This sends clear signals to parents and children that they deserve to participate in meaning-making activities that bring joy.

Finally, qualitative data elicited a few instances of GI supporting time for self. Parents, and single parents in particular, tended to have little free time to rest and restore from parenting under the demands of capitalism. This was compounded by situations of scarcity. With the GI in hand, participants could pause, if briefly, from the demands of making ends meet under persistently stressful economic conditions. For instance, Lezette, a 42-year-old accountant, noted that the "cushion" the GI provided allowed her to rest and spend time at home instead of taking up a third job.

*In the sense that I'm not stressing as much as I probably should have, given that I have a \$400 cushion. I don't, you know, as opposed to trying to maybe do a third job like Uber or something, I'm actually able to just, you know, stay home, unwind, you know, not have so much stress where I'm taking it out on the family.*

Ruth pointed out that the GI allowed her to buy what she wanted to buy—the ability to choose “and buy things I like—not everything is bills you know. If you see a new pair of jeans you like, you should be able to buy it without feeling guilty or not paying the light [electricity] bill.” The ability to reclaim a sense of self, to believe that one deserves good things—whether that means time and space to relax or a new pair of jeans—makes us human. The choice inherent in taking that time for self pushes back against the stigma that those with low incomes do not deserve “treats” or moments of joy.

An additional theme highlighted by qualitative data was that for a small number of participants, the \$400 was a motivating factor in getting a new job. Since the GI altered participants' views of their worth as employees and alleviated scarcity enough that they had the cognitive bandwidth to set alternative goals, some respondents took concrete steps to either increase their income or find stronger employment options.

Lezette was focused on going back to school to get a higher-paying job. For her, the GI had a consciousness-raising effect around her capabilities and the value of her time.

*Uh, well, just receiving the money made me realize that I felt like I needed to make more, I didn't want to keep living this way. And I thought, well, maybe furthering my degree that I can maybe go somewhere else where I can get paid more. ... I think having the money made me realize that I need to make more, you know, and I have to find ways to make more, because I really like my job, I, I really do like my job, I like the flexibility. So, I don't want to leave it but at the same time, I know I probably should. So, uh, it just made me create a plan, where I can take advantage of the benefits that my job gives so that maybe I can move on.*

Maria A. and Olivia also mentioned how the GI had impelled them to consider supplementary gig work after the pilot ended so they would have the capacity to continue working towards their financial goals. For other participants, the GI provided a short-lived break from their jobs in the informal economy. They would be forced to go back after the pilot to supplement their earnings. Billy, who was retirement-age but could not live off social security alone, anticipated having to go back to landscaping under-the-table: “I’m going to have to go back to reality and then start looking for something else to do then, especially on the weekends.” Ruth planned to go back to hair-braiding on the weekends; although she enjoyed the work, it also meant time away from her daughter. “[When the GI’s gone], it’ll take a little bit of my freedom away,” she lamented.

Table 11. Trends in Employment (in %)

Categories	Baseline		6 months		12 months		18 months	
	Treatment	Control	Treatment	Control	Treatment	Control	Treatment	Control
Employed full-time	32	35	18	16	16	13	28	13
Employed part-time or seasonal	15	13	29	18	16	22	18	31
Stay-at-home parent or caregiver	5	3	13	19	21	26	15	11
Business owner/ Self-employed	5	4	4	8	8	16	13	3
Gig worker	4	1	14	6	12	2	10	21
Retired/disabled	14	17	16	17	15	16	10	14
Full-time student	1	0	0	5	2	2	1	5
Unemployed looking for work	24	22	6	9	10	3	5	2
Unemployed not looking for work	0	5	0	2	0	0	0	0

Data also revealed a significant rise in gig work within the treatment group, increasing from 4% at baseline to 10% at the 18-month post-intervention mark. In comparison, the control group observed a more substantial increase in gig work, from 1% initially to 21% at the end of the study. For those who were business owners or self-employed, the treatment group exhibited an increase from 5% at baseline to 13% post-intervention, while the control group saw a decrease from 4% to 3%. These trends highlight a pronounced shift in employment patterns, particularly the growth in gig work and self-employment, suggesting an evolution in work preferences or opportunities among participants.



The surge in gig work and self-employment may reflect both pandemic-induced labor market trends and the desire to earn a little extra income for weathering economic shocks. During the pandemic, lack of supportive sick and family policies in tandem with lingering economic uncertainty forced individuals to seek more flexible employment opportunities and diversify income sources, but these choices came with a cost. Low-wage workers, without adequate benefits or affordable childcare, are structurally positioned between the lack of flexibility in more stable or lucrative employment and the flexibility gig work provides. Notably, income volatility, a key driver of poor health and lack of economic mobility (Basu, 2017; Morduch & Siwick, 2017), is closely tied to the prevalence of gig work and a scarcity mindset (Sayre, 2023). This means that these short-term strategies employed to patch holes in the waged economy and safety net carry the potential for trapping people in unpredictable income sectors. In turn, this can exacerbate or create physical health and mental health strain, further miring low-wage workers in a scarcity trap.

In the perpetual struggle to balance low-wage work and unpaid caregiving, GI provided people with the ability to choose. In Paterson, where people's actions were often bound by the byzantine requirements of the benefits system and poor choices for waged work; constrained by the intersections of race and gender; and shaped by structural and street-level violence, opportunities for choice were hard to come by. Regardless of whether they were engaging in more unpaid caregiving or taking on more paid work, participants receiving GI had agency over their decision-making and time while receiving unconditional cash. For those who were parents, this infusion of time meant the ability to be present and engaged with their children.

## Social Connection, Reciprocity, and Belonging

### *“Community is a verb.”*

**Summary:** Outside official channels of social assistance, Paterson has a robust network of both informal social services and nonprofit initiatives throughout the city. Residents often found support in their communities—sharing or pooling resources and extending help to others without judgment. It seemed that the GI animated this spirit of mutual support and community interdependence, leading to a spillover effect that mitigated against social isolation and loneliness. Recipients were grateful for the GI and, despite their own financial precarity, extended that support to others; they also spoke about the ways GI could inspire hope in other community members and improve the social ties crucial for survival, belonging, and joy. For many pilot participants, their relationship with government assistance programs had been characterized by skepticism and mistrust. In contrast, the GI program made people feel recognized and valued by institutions and society. It underlined that the government cared about participants, contributing to a sense of trust and connection.

Many Paterson pilot participants were accustomed to the complex requirements of the benefits system. Nevertheless, interactions with social support programs were sometimes fraught with bureaucratic obstacles. Rose, for instance, as the sole caregiver for her disabled son, described the hurdles she had gone through over the years—detailed back and forth communications, time-consuming paperwork—in order to avoid being mandated to work so that she could care for her son’s medical needs. During the pandemic, bureaucratic delays in the benefits system had serious consequences for those struggling to get by. Lady J had to wait for her social security card to be replaced; in the interim, social assistance mechanisms that required a social security card (i.e., subsidies for utilities) were unavailable, and she found herself with limited options for help. Nelly became extremely ill, which prevented her from working in an eldercare facility for a full month, but without access to paid leave it pushed the family towards poverty. Her husband’s income was not enough to cover their expenses. She applied for temporary disability, but the process took months, and her bills piled up in the interim. Amelia had to stay home with her school-age children during the pandemic, yet the unemployment for which she was eligible took seven months to process. For these participants, administrative limitations carried serious financial consequences outside of their control.

Other respondents described demoralizing or dismissive experiences, where they felt a lack of trust from government representatives or social workers. Mary, a 51-year-old mother of three, believed social services did not respect people’s struggles and implied that often, they did not bother to explain what people are required to do to prove eligibility or the reasons why they might be denying someone help.

Dante reflected:

*You know, you got to bring in a bunch of documentations... sign paperwork, this, this, and that. And there's a lot of bureaucracy to it. It feels like there's, there's a lot of work to it. But then they treat you like you're getting something for free.*

*... Well, it's not wrong to ask for help... I don't know. Everybody needs help.*

Sasha, too, declared that, “sometimes you need the system to help you a little bit.” Yet seeking help through traditional modes of assistance felt fraught with judgment.

In contrast, Amelia shared that the GIPP made her feel seen and valued.

*We have had moments that we thought, “okay, you know, there's no way out,” but this [program] give us hope that there's still good in people, that there's still help out there from programs that give us that glimmer of hope that there is a way if you keep going, because it's tough out there.*

Some participants had had negative interactions with the benefits system in the past and did not initially trust the GI program to deliver. Kini often found herself extremely stressed and anxious before each disbursement, clicking repeatedly on the app with the GI money, concerned about whether it would be credited that month or not. This speaks to the alienation some felt from systems of social support. For many living in financial precarity, their experiences with the system had made them feel invisible and ignored. However, the existence of the GI program was validation that the government cared about people who were struggling.

When traditional modes of social assistance posed obstacles to those seeking help, they often found support in the community. This community-level engagement preceded the GI program and reflected the literature on the norms of reciprocity which indicates that resource-sharing with others facilitates sustained relationships and community building (Bowles & Gintis, 2000; Goodin, 2002; Mau, 2004). Several interview respondents were involved in nonprofit organizations and community work, including organizing drives for warm clothing and baby supplies; contributing to food banks; cooking meals on holidays; and engaging in service within recovery groups. “For me, community is a verb. It's an action. Um, community is the people of the city or the neighborhood coming together to the common good,” Maria A. said. Indeed, when the GI program itself was announced, people described telling friends and neighbors about the pilot, even knowing that more applicants would decrease their chances of being chosen.

Interview respondents acknowledged feeling that their contributions mattered to their community. Mattering is rooted in the idea that people inherently want to feel valued as human beings, recognized and important outside of their relationship to capitalism (Castro et al., 2021). The feeling of mattering to others in turn seemed to bolster recipients' sense of self-esteem; according to Maria A.,

*having that extra to help others makes you feel better. And it's like, I'm not the richest person. We don't have money like that, but I can help you with a plate of food. I can help you with five cans of food.*

The quantitative analysis indicates that participants in the treatment group reported heightened feelings of mattering and awareness, aligning with studies that link community connectedness to increased self-esteem (House et al., 1988). However, the data, especially for the Importance sub-scale, reveal a more complex picture with a marginal decrease in mean scores for the treatment group relative to the control group, implying that the GI's impact was varied. Within the mattering scale, importance means that an individual feels that other people and institutions care about their well-being and future (France & Finney, 2009).

People on the margins have often gotten by in community—sharing, supporting, and pooling resources outside official channels of assistance (Stack, 1983). For instance, 69-year-old Nancy talked about helping an elderly house-bound neighbor with errands and providing company. Some interview respondents were able to live in relatives' properties for reduced rent. People carpoled to errands and doctor's appointments. Several participants shared food packages with neighbors and friends during the pandemic:

*I was doing and getting food and trying to help because they gave us bags of food, and I'm not going to use all the bags of food, so we'll try to share around my couple of friends. They also did the same between them, but because obviously it's just me and my son, I don't get the help. I was helping them to go to the [food distribution sites] because you have to be in person to get [the] little bags of food. (Angela)*

*I actually would give some of my neighbors because I would get things from different programs, and sometimes I wouldn't be able to use it during the period that it was—like for food. I wouldn't be able to use it before it went bad or something. So I would give it to my neighbors. (Dante)*

As Amelia put it, “help is not only money, help is words, help is action.” And in Paterson, people were moved to help others. For some, this was in part because of help they had received themselves over the years. Qualitative data suggest that although people had little to give, they were still inclined to donate money or food, even to a stranger, or time to civic causes. Because people had experienced adversity, they expressed empathy in turn. Lezette said,

*[re: helping a stranger] Oh, I wouldn't mind doing it, I would do it instantly, because I've been there, I know how that feels. Where you have no choice, and you just ask whoever's around. Where, where, you know, for whatever reason, you just felt helpless at the moment, and you needed somebody to just give you a little hand.*

It seems that the GI energized this sense of mutual support and community interdependence, leading to a spillover effect. In some cases, GI provided the material means for participants to share with their family members or friends. Enith sent remittances to her mother in Central America, and Maria B. paid her mother's phone bill. However, as mentioned, most participants had little flexibility in their finances. The GI was used to pay basic expenses, and the ability to share was limited by circumstances. Regardless, the desire to share the wealth and to help others in Paterson was communicated in

different ways.

Billy suggested that having a little extra money meant that he could share it. He was grateful for the GI and wanted to extend that support to others. He said that if the GI was made permanent:

*I love to help, especially because I will say that's something that I have for myself that I got that help where I needed the most... I had nowhere to go to get that help and it came out of nowhere. And I got like the GI and I'd say it's one of the point that I can—that [if] I can help anybody—I will do it. I will do it.*

Participants also spoke about the ways receiving GI could function as an example for other members of their community. The cash facilitated a sense of dignity and hope for those accustomed to scrutiny and stigma. As Amelia put it,

*[the GI program] has shown me where there's a will, there's a way. You know, um, if you keep going, there's more options... I mean, if you think about it, this world is so dark, this world is so negative. But, um, if you could give that example to other people, that [here's] this girl, who's a single parent with a special needs child, if she has the glimmer of hope then maybe I could have one... I [hope to see an example], you can only hope.*

She suggested that the GI could have a ripple effect, inspiring hope for others in a difficult situation.

Nelly also viewed GI as a catalyst for hope, saying:

*[Receiving the GI] was a wonderful experience. I hope that this can take it somewhere one day where, you know, I'm able to say, "Hey, I remember having a conversation with someone and look at the change that has been made." So yeah, hopefully that can—that'll happen one day.*

Table 12. Feelings of Hope Across the Study-Period (in %)

Group	Time period	Hopeful	Moderately hopeful	High hope
Treatment	Baseline	44	44	12
Control		41	34	25
Treatment	6-month	48	41	11
Control		46	33	20
Treatment	12-month	56	35	10
Control		59	35	5
Treatment	18-month	47	41	12
Control		43	38	20

Results from the quantitative data complemented insights from the interviews and shed light on the participant's perceptions of hope across the duration of the study. While not statistically significant, data suggest that overall, both groups demonstrated fluctuations in perceptions of hope, but the treatment group appeared to demonstrate a more consistent elevated trend in hope relative to the control group till the end of the GI. Six months post intervention, the feeling of hope diminished for the treatment group relative to the control.

GI's potential to strengthen social ties emerged in still other ways. Some participants were living in social isolation because of their low income. The cash allowed them to participate more fully in wider society. Kini observed that, "[The GI] has definitely made a very positive change in my life, that I've been able to do some things that I couldn't afford to do before." The GI's effects included the ability to get out and engage more with people and places, mitigating social isolation and loneliness. Without money, there was typically little reason to go out, as Nancy indicated. Her sister, retired, would sometimes go shopping or to the racing track or casino. But Nancy couldn't afford to participate in excursions:

*I don't go, I didn't got no money for that. She said if I was to give you \$20 in the casino, it would be gone in two minutes. You stay home and so... So, it's not fun without money.*

Nancy, like several other respondents, was older, and had a small immediate social network. Other recipients were parents, many of whom were sole caregivers and/or caring for children with disabilities. Their narratives were imbued with a sense of solitude, forced self-reliance against odds, and sometimes, distrust. The GI seemed to give people a chance to move outside of those confines, to connect more with others and to engage in activities they enjoyed. Billy, who lived alone, hosted a barbecue for friends with the GI money. Kini, who had previously avoided going out, got her hair cut.

*I have a friend who is a beautician, stylist. And I talked to her about the idea of coloring. And so that was probably the one splurge, I did cuz that—I would never have spent that, without this. But that one month, I just said—I'm doing this. And it felt so good. You know, I felt a little guilty, but just a little. Because I thought, this is a gift and I deserve to treat myself good. And that's not always easy for me.*

The GI allowed recipients to participate more fully in their own lives, to build social connections, and to engage with their communities.

## Study Limitations

While this study offers valuable insights into the impacts of guaranteed income on individuals' health and overall well-being, it is essential to consider several limitations that might influence the interpretation and generalizability of the findings.

First, the study utilized a sample of 241 respondents, a small subset of the diverse demographic of Paterson; as a result, the sample might not adequately capture the full range of Paterson's diversity, limiting the generalizability of the findings. Additionally, even though the sample was randomized, the specific demographics used might not be representative of the broader population in New Jersey or other regions. This concern is compounded by potential sample imbalances due to human error during participant onboarding, whereby the intended sample weights were not maintained. This resulted in baseline imbalance between the treatment and control groups. Despite the use of robust regression techniques to mitigate this, there is no guarantee that all confounding factors were accounted for, which may introduce biases in the causal inference.

Second, as mentioned in the methodology, MICE was deployed for imputing missing values. While the MICE method is recognized for its robustness in handling missing data, it is important to acknowledge that no imputation technique, including MICE, is entirely free from some degree of uncertainty. Despite rigorous checks and validations, the imputed data may not perfectly represent the true underlying patterns. This inherent limitation of imputation should be considered when interpreting the results.

Third, the study's design specifically accounted for and weighted the distribution of ethnicity and race. While the study controlled for these factors, there is still the potential for confounding influences from interactions between ethnicity, race, and other unmeasured variables. In addition, the use of the Linear Mixed-effect model, as with any statistical model, comes with its own assumptions. Should the basic premises prove inaccurate, the model's conclusions could be compromised, potentially restricting applicability of the findings despite validation checks.

Finally, the study was conducted during the COVID-19 pandemic, a period during which Paterson and the surrounding areas were severely impacted by the virus. Beyond the immediate health concerns, the pandemic would have had broad-reaching implications on individuals' mental well-being. The pervasive atmosphere of uncertainty, the grief of losing loved ones, social distancing, and other health-related concerns could have had a profound influence on the mental health and stress levels of participants. This context may have influenced the results and outcomes of this study. Additionally, the pandemic had widespread economic impacts and cascading effects on cost of living, employment, and income in the region. These economic challenges could have influenced participants' perceptions as they navigated financial stressors exacerbated by the pandemic that are not controlled for in the study design. Therefore, conducting the study during the pandemic means that the findings may be inextricably tied to the socio-economic conditions prevalent during that period, affecting the external validity and generalizability of the results to other times and settings.

## Discussion

Overall, the mixed results observed in the study can be attributed in part to the complex interactions between existing vulnerabilities and additional stressors introduced by the pandemic in Paterson. The study participants were already facing significant challenges. The pandemic's disruption of supply chains and shutdown of schools, workplaces, and social services further intensified issues such as food insecurity and financial precarity. While some improvement in mental health outcomes was observed, as indicated by measures like the Kessler and CHAOS Scale, it is important to note that, despite these slight improvements, overall stress levels remained high. The overarching impact of the pandemic loomed large, exacerbating not only immediate concerns but also contributing to broader societal challenges such as inflation and heightened issues around community violence and safety. This highlights the complexities of evaluating and addressing the effects of GI on individual well-being, especially in the context of the pandemic and pre-existing vulnerabilities.

Mixed findings from the GIPP can also be attributed to the City of Paterson's decisive choice to center their most marginalized residents in the pilot, which represents a bold, justice-oriented choice by the Mayor's office that many choose to not make. By setting pilot eligibility criteria at an income below New Jersey's living wage, the City intentionally targeted those who most needed support. Despite starting from a baseline of extreme precarity, findings demonstrated that GI recipients recorded improved quality of life, with increased financial well-being, decreased income volatility, and the ability to save. Given the extremely low household income of the average participant, these gains should not be devalued. Overall, however, while quantitative and qualitative study data both suggest some promising trends, pre-existing financial stressors coupled with the rising cost of living meant that most of these gains were temporary. Nonetheless, as the qualitative data illustrated, parents used the GI in ways that created space for them to be present and engaged with their children—the gift of time and connection during key moments of child development that pays untold dividends in family life.

In Paterson, the costs of living and housing were so high that the potential opportunities inherent in the extra cash were, in turn, restricted. For instance, rents continue to rise in Paterson, far outpacing income levels. The supply of affordable housing and HCVs is thus far inadequate to address the enormous demand. Low-income residents are caught between unaffordable market rents and a surfeit of luxury condos on one hand, and a dearth of supportive housing options on the other. If the cost burden of housing were diminished, for instance, it is conceivable that the impact of the GI might well have gone further for participants.

The study also pointed to prevailing issues around insufficient food availability. Before the pandemic, Passaic County recorded among the highest rates of food insecurity in the state. The closure of schools during the pandemic and unprecedented nationwide inflation introduced additional pressures around food access. While findings suggest that the GI temporarily mitigated food insecurity for the treatment group, the dramatic upswing among the control group points to broader structural issues that GI alone cannot address.

Findings show that GI empowered participants to make choices around work and parenting with agency, dignity, and the well-being of children in mind. Contrary to pejorative assumptions embedded



in culture of poverty debates (Corcoran et al., 1985), these findings illustrate the desire of parents to provide for their children, focus on their development, and to facilitate experiences that lead to their flourishing. It also underscores the cruelty of poverty and the struggle to make ends meet in the US, where time with family functions as a luxury good and a privilege reserved for higher-income earners.

Yet, the impact of GI in this context, too, highlights gaps in economic and social policy. Mirroring national trends, narratives in Paterson reflected the consistent tradeoff between paid employment and unpaid caregiving. High childcare costs constitute a considerable financial burden for parents in the labor market, particularly for women (Landivar et al., 2023). Meanwhile, unpaid care work remains unrecognized and unsupported, though it is intrinsic to everyday life and necessary for the economy to function. Paid care work, too, is undervalued, as evidenced by interview respondents who struggled to make ends meet despite their critical work in eldercare facilities at the front lines of the pandemic.

Data from Paterson underscores that social policies around caregiving have evolved without much consideration for family life and in ways that pose significant constraints for individual choice. They have also evolved in a way that privileges particular family structures (e.g. a two-parent, heteronormative household) and neighborhoods. This means that social supports are not designed for those parenting alone, taking care of elders or children with disabilities, or living intergenerationally. It also means there is an inherent expectation that caregivers will fill the gap left by systemic failures, contributing to time scarcity and societal stigma.

The study's overarching theory of change posits that through reducing financial precarity, GI tends to free up cognitive capacity, creating the conditions for long-term goal-setting and risk-taking. However, in Paterson, quantitative and qualitative data showed that many pilot participants were engaged in a balancing act between employment and the benefits cliff, a heavy mental burden that constrained forward momentum. Participants also tended to have extremely low incomes and tight financial margins. Findings therefore powerfully demonstrated that GI is not a replacement for the existing social safety net; it should supplement rather than supplant benefits that individuals are already receiving.

Several narratives in Paterson also illustrated the stigma and shame that accompanied receipt of benefits. Pejorative deservedness narratives shape attitudes about benefits access in the United States, and intersecting race-, gender-, and class-based poverty stereotypes inform public discourse. Given the durability of these narratives, there is a risk that they may merely shift from benefits onto unconditional cash (Castro & West, 2022). When policymakers consider how to best operationalize GI, no matter the context, they must take into account the effects of these deservedness narratives on the populations they intend to serve (Thomas et al., 2023).

In many ways, the GIPP pointed to existing gaps in policy. Yet it also highlighted the strong community ties, mutual empathy, and reciprocity that existed throughout the city. Even before the pandemic, a network of city and nonprofit initiatives and informal community systems provided support to those who needed it. And as COVID swept the city, people at every level came together to share resources. The GI had a spillover effect, rippling out from individuals and families to a community level. The \$400 animated networks of support that already existed and fostered new forms of social connection. Recipients valued the trust inherent in unconditional cash: that the government recognized their

needs and aspirations. In Paterson, the GIPP was both a source of comfort in extraordinarily difficult times and a catalyst for future change. The introduction of the GIPP into this environment afforded people a sense of hope and connection. As Amelia put it:

*The Guaranteed Income Program has shown me where there's a will, there's a way. You know, if you keep going there's more options... Look at this pandemic, it brought sadness worldwide, but due to the pandemic, look what happened now that we're helping people out with the [GI]. I'm not sure if it was because of the pandemic, that guaranteed income, but something good came out of it, you know, [that] they give this money to people to help them keep going and be positive.*

# Center for Guaranteed Income Research

The Center for Guaranteed Income Research (CGIR) was established in 2020 at the University of Pennsylvania School of Social Policy & Practice with the aim of developing a shared body of knowledge on unconditional cash transfers.

At CGIR, distinguished academics and professionals in this field lead pilot guaranteed income programs and oversee the planning and implementation of research initiatives. CGIR is led by two Founding Directors: Dr. Amy Castro, Associate Professor of Social Policy & Practice at the University of Pennsylvania, and Dr. Stacia West, who holds a faculty fellowship at the University of Pennsylvania in addition to her primary role as an Associate Professor at the College of Social Work at the University of Tennessee-Knoxville.

CGIR conducts applied cash transfer studies and pilot designs that contribute to the empirical scholarship on cash, economic mobility, poverty, and narrative change. Our investigations build upon existing literature on cash transfers and incorporate evaluation practices and lessons learned from our previous research on guaranteed income and the gender and racial wealth gap.

All of our research is grounded in Durr's (1993) fundamental question: "What influences policy sentiment?" With this in mind, we are committed to conducting public science that challenges prevailing narratives surrounding poverty, deservedness, and economic mobility, utilizing diverse approaches such as multi-site ethnography, politically-driven sampling, and data visualization.

Our dashboards, created in partnership with Stanford Basic Income Lab, feature filters at the pilot level, allowing individuals to access and compare information while obtaining detailed insight into our investigations.

**Please direct all inquiries  
about this study to:**

**Center for Guaranteed  
Income Research**

**[penn-cgir@sp2.upenn.edu](mailto:penn-cgir@sp2.upenn.edu)**

**3701 Locust Walk  
Philadelphia, PA 19104**



**CENTER FOR GUARANTEED  
INCOME RESEARCH**  
**Social Policy & Practice**  
**UNIVERSITY of PENNSYLVANIA**

## References

36-Item Short Form Survey. (n.d.). RAND Corporation. [https://www.rand.org/health-care/surveys\\_tools/mos/36-item-short-form.html](https://www.rand.org/health-care/surveys_tools/mos/36-item-short-form.html)

Adler, N. E., & Rehkopf, D. H. (2008). U.S. disparities in health: Descriptions, causes, and mechanisms. *Annual Review of Public Health, 29*(1), 235–252. <https://doi.org/10.1146/annurev.publhealth.29.020907.090852>

Azur, M. J., Stuart, E. A., Frangakis, C., & Leaf, P. J. (2011). Multiple imputation by chained equations: What is it and how does it work? *International Journal of Methods in Psychiatric Research, 20*(1), 40–49. <https://doi.org/10.1002/mpr.329>

Baines, D., & Cunningham, I. (2013). Using comparative perspective rapid ethnography in international case studies: Strengths and challenges. *Qualitative Social Work, 12*(1), 73–88. <https://doi.org/10.1177/1473325011419053>

Ballentine, K., Goodkind, S., & Shook, J. (2022). How low-paid parents navigate the complex financial landscape of benefits cliffs and disincentive deserts. *Health Affairs, 41*(12), 1707–1714. <https://doi.org/10.1377/hlthaff.2022.00742>

Basu, S. (2017). Income volatility: A preventable public health threat. *American Journal of Public Health, 107*(12), 1898–1899. <https://doi.org/10.2105/AJPH.2017.304109>

Berg, B. L. (1989). *Qualitative research methods for the social sciences*. Allyn and Bacon.

Bezanson, K., & Luxton, M. (2006). *Social reproduction: Feminist political economy challenges neo-liberalism*. McGill-Queen's University Press.

Bogle, M., Bramhall, E., Fiol, O., Gwam, P., Maag, E., Noble, E., Tatian, P. A., Triplett, T., Walker, F., Alston, M., Fultz, H., Holmes, L., Tajo, M., & Jaromin, E. (2022). *An evaluation of THRIVE East of the River*. Urban Institute. [https://www.urban.org/sites/default/files/2022-02/an-evaluation-of-thrive-east-of-the-river\\_0.pdf](https://www.urban.org/sites/default/files/2022-02/an-evaluation-of-thrive-east-of-the-river_0.pdf)

Bowles, S., & Gintis, H. (2000). Reciprocity, self-interest and the welfare state. *Nordic Journal of Political Economy, 26*, 33–53.

Braun, V., & Clarke, V. (2012). Thematic analysis. In H. Cooper, P. M. Camic, D. L. Long, A. T. Panter, D. Rindskopf, & K. J. Sher (Eds.), *APA handbook of research methods in psychology, Vol 2: Research designs: Quantitative, qualitative, neuropsychological, and biological* (pp. 57–71). American Psychological Association. <https://doi.org/10.1037/13620-004>

Braveman, P., & Gottlieb, L. (2014). The social determinants of health: It's time to consider the causes of the causes. *Public Health Reports, 129*(Suppl 2), 19–31. <https://doi.org/10.1177/00333549141291S206>

Brisson, D., Hoops Calhoun, K., Coddington, L., Jett Flaxman, Z., Johnsen, M., & Locke, S. (2023). *Denver Basic Income Project: Interim report*. Center for Housing & Homelessness Research, University of

- Denver. <https://static1.squarespace.com/static/64f507a995b636019ef8853a/t/651ef5ac985acf3e896f0955/1696527789191/DBIP+Interim+Quantitative+Report.pdf>
- Castro, A., Ma, C., Davis, C. G., & Cusack, M. (2021). Hope, mattering, and pathways towards economic agency among financially marginalized adults. *Social Work and Society, 19*(2).
- Castro, A., & West, S. (2022). The case for basic income experiments. *Journal of Policy Analysis and Management, 41*(2), 639–644. <https://doi.org/10.1002/pam.22385>
- Center for Disease Control. (2023, September 28). *Deaths by select demographic and geographic characteristics*. [https://www.cdc.gov/nchs/nvss/vsrr/covid\\_weekly/index.htm](https://www.cdc.gov/nchs/nvss/vsrr/covid_weekly/index.htm)
- Charmaz, K. (2014). *Constructing grounded theory* (2nd ed.). SAGE Publications.
- City health dashboard: Paterson, NJ*. (n.d.). NYU Langone Health. <https://www.cityhealthdashboard.com/nj/paterson/city-overview>
- City of Paterson. (2021). *2021 CAPER Report*. [https://www.patersonnj.gov/egov/documents/1667482590\\_77091.pdf](https://www.patersonnj.gov/egov/documents/1667482590_77091.pdf)
- Cohen, S., Kamarck, T., & Mermelstein, R. (1983). *Perceived Stress Scale [Database record]*. APA PsycTests. <https://doi.org/10.1037/t02889-000>
- Consumer Financial Protection Bureau. (n.d.). *Measuring financial well-being: A guide to the CFPB Financial Well-Being scale*. Consumer Financial Protection Bureau. <https://www.consumerfinance.gov/data-research/research-reports/financial-well-being-scale/>
- Corcoran, M., Duncan, G. J., Gurin, G., & Gurin, P. (1985). Myth and reality: The causes and persistence of poverty. *Journal of Policy Analysis and Management, 4*(4), 516–536. <https://doi.org/10.2307/3323752>
- Cromwell, M. (2022, December 8). *Renters more likely than homeowners to spend more than 30% of income on housing in almost all counties*. Census.gov. <https://www.census.gov/library/stories/2022/12/housing-costs-burden.html>
- Data USA. (n.d.). *Paterson City PUMA, NJ*. <https://datausa.io/profile/geo/paterson-city-puma-nj>
- Decker, P., & Kelly, K. (Eds.). (2022). Do we need more universal basic income experiments? *Journal of Policy Analysis and Management, 41*(2), 632–649. <https://doi.org/10.1002/pam.22383>
- Dinan, K. A., Chau, M., & Cauthen, N. K. (2007). *Two steps forward and three steps back: The “cliff effect”—Colorado’s curious penalty for increased earnings*. National Center for Children in Poverty, Columbia University, Mailman School of Public Health. <https://www.wfco.org/document.doc?id=56>
- Elo, I. T. (2009). Social class differentials in health and mortality: Patterns and explanations in comparative perspective. *Annual Review of Sociology, 35*(1), 553–572. <https://doi.org/10.1146/annurev-soc-070308-115929>
- Emerson, R. M., Fretz, R. I., & Shaw, L. L. (2011). *Writing ethnographic fieldnotes* (2nd ed.). The University of Chicago Press.

Federal Reserve Economic Data. (n.d.). *Housing inventory: Median listing price in Passaic County, NJ*. St. Louis Fed. <https://fred.stlouisfed.org/series/MEDLISPRI34031>

Fish, S. (1982). *Is there a text in this class? The authority of interpretive communities*. Harvard University Press.

France, M. K., & Finney, S. J. (2009). What matters in the measurement of mattering? A construct validity study. *Measurement and Evaluation in Counseling and Development*, 42(2), 104–120. <https://doi.org/10.1177/0748175609336863>

Gerstle, G. (2017). *American crucible: Race and nation in the twentieth century*. Princeton University Press.

Glasmeyer, A. K. (2023). *Living wage calculation for New Jersey*. Massachusetts Institute of Technology. <https://livingwage.mit.edu/states/34>

Golin, S. (1988). *The fragile bridge: Paterson silk strike, 1913*. Temple University Press.

Goodin, R. E. (2002). Structures of mutual obligation. *Journal of Social Policy*, 31(4), 579–596. <https://doi.org/10.1017/S004727940200675X>

Gorham, I. (2023). *2023 annual plan*. Housing Authority of the City of Paterson. <https://patersonhousingauthority.org/download/2023-annual-plan/>

Gorham, I. (2015). *Paterson Housing Authority, 2015 five year and annual plan*. U.S. Department of Housing and Urban Development. <https://patersonhousingauthority.org/wp-content/uploads/2018/09/PHA-2015-2019-Five-Action-Year-Plan.pdf>

Halling, A., & Baekgaard, M. (2023). Administrative burden in citizen-state interactions: A systematic literature review. *Journal of Public Administration Research and Theory*. <https://doi.org/10.1093/jopart/muad023>

Harvey, D. (1996). *Justice, nature, and the geography of difference*. Wiley-Blackwell.

Harvey, D. (2009). *Social justice and the city* (Rev. ed.). University of Georgia Press.

House, J. S., Landis, K. R., & Umberson, D. (1988). Social relationships and health. *Science*, 241(4865), 540–545. <https://doi.org/10.1126/science.3399889>

Islamic Center of Passaic County. (n.d.). *About*. ICPCNJ.org. <https://icpcnj.org/about-team-2/>

Jones, J. W., & Toossi, S. (2023, August 21). *U.S. food and nutrition assistance programs continued to respond to economic and public health conditions in fiscal year 2022*. U.S. Department of Agriculture, Economic Research Service. <https://www.ers.usda.gov/amber-waves/2023/august/u-s-food-and-nutrition-assistance-programs-continued-to-respond-to-economic-and-public-health-conditions-in-fiscal-year-2022/>

Kershaw, D. N., & Skidmore, F. (1974). *The New Jersey graduated work incentive experiment*. Institute for Research on Poverty, University of Wisconsin & Mathematica, Inc. <https://www.mathematica.org/>

publications/the-new-jersey-graduated-work-incentive-experiment

Kessler, R. C., Barker, P. R., Colpe, L. J., Epstein, J. F., Gfroerer, J. C., Hiripi, E., Howes, M. J., Normand, S.-L. T., Manderscheid, R. W., Walters, E. E., & Zaslavsky, A. M. (2003). Screening for serious mental illness in the general population. *Archives of General Psychiatry*, 60(2), 184–189. <https://doi.org/10.1001/archpsyc.60.2.184>

Landivar, L. C., Scarborough, W. J., Ruppner, L., Collins, C. M., & Rouse, L. (2023). Remote schooling and mothers' employment during the COVID-19 pandemic by race, education, and marital status. *The Russell Sage Foundation Journal of the Social Sciences*, 9(3), 134–158. <https://doi.org/10.7758/RSF.2023.9.3.06>

Malinconico, J., & Rumley, E. (2020, March 17). Paterson distributes 5,700 meals to students in response to NJ schools shutdown. *NorthJersey.com*. <https://www.northjersey.com/story/news/coronavirus/2020/03/17/coronavirus-nj-paterson-distributes-5-700-meals-students/5071217002/>

Mallajosyula, H. (2022, June 3). *COVID-19 tracker for Paterson*. ArcGIS StoryMaps. <https://storymaps.arcgis.com/stories/17bead2ec1b44d338d5817c59e9d13cb>

Mallajosyula, H., & Sharma, J. (2021, March 23). *COVID-19 food insecurity index for Passaic County*. ArcGIS StoryMaps. <https://storymaps.arcgis.com/stories/b192659a843b435080c9c388c94ddae2>

Mani, A., Mullainathan, S., Shafir, E., & Zhao, J. (2013). Poverty impedes cognitive function. *Science*, 341(6149), 976–980. <https://doi.org/10.1126/science.1238041>

Massey, D. (2005). *For space*. SAGE Publications.

Masterson, J. M., Luu, M., Dallas, K. B., Daskivich, L. P., Spiegel, B., & Daskivich, T. (2023). Disparities in COVID-19 disease incidence by income and vaccination coverage—81 communities, Los Angeles, California, July 2020–September 2021. *MMWR Morbidity and Mortality Weekly Report*, 72(26), 728–731. <https://doi.org/10.15585/mmwr.mm7226a5>

Matheny, A. P., Wachs, T. D., Ludwig, J. L., & Phillips, K. (1995). Bringing order out of chaos: Psychometric characteristics of the confusion, hubbub, and order scale. *Journal of Applied Developmental Psychology*, 16(3), 429–444. [https://doi.org/10.1016/0193-3973\(95\)90028-4](https://doi.org/10.1016/0193-3973(95)90028-4)

Mau, S. (2004). Welfare regimes and the norms of social exchange. *Current Sociology*, 52(1), 53–74. <https://doi.org/10.1177/0011392104039314>

McFarlane, C. (2011). The city as assemblage: Dwelling and urban space. *Environment and Planning D: Society and Space*, 29(4), 649–671. <https://doi.org/10.1068/d4710>

Mehta, M., Baldwin, Z., Calvin, E., Cunniff, A., & Robinson, L. (2023, January). *Paterson housing profile*. Regional Plan Association. <https://rpa.org/work/reports/paterson-new-jersey-renter-empowerment-and-neighborhood-tools-nj-rent>

Morduch, J., & Siwicki, J. (2017). In and out of poverty: Episodic poverty and income volatility in the US Financial Diaries. *Social Service Review*, 91(3), 390–421. <https://doi.org/10.1086/694180>

New Jersey Department of Community Affairs, Office of Policy and External Affairs. (2022). *Buying New Jersey: The rise in institutional ownership of residential properties*. [https://www.nj.gov/dca/divisions/dhcr/publications/docs/Institutional\\_Homeownership\\_Report\\_FINAL.pdf](https://www.nj.gov/dca/divisions/dhcr/publications/docs/Institutional_Homeownership_Report_FINAL.pdf)

North Jersey Health Collaborative. (2019). *Community health needs assessment report: Passaic County*. [https://www.njhealthmatters.org/content/sites/njhc/resource\\_library/Passaic\\_County\\_CHNA\\_2019\\_Final\\_Report.pdf](https://www.njhealthmatters.org/content/sites/njhc/resource_library/Passaic_County_CHNA_2019_Final_Report.pdf)

Office of the Assistant Secretary for Planning and Evaluation. (2017, January 31). *2017 Poverty Guidelines*. U.S. Department of Health and Human Services. <https://aspe.hhs.gov/topics/poverty-economic-mobility/poverty-guidelines/prior-hhs-poverty-guidelines-federal-register-references/2017-poverty-guidelines>

Onifade, E., Shishane, K., Elonge, F., & Glover, L. (2023). Guaranteed income: Experiences of African American mothers in the Magnolia Mother's Trust Project. *Journal of Community Practice*, 31(1), 105–120. <http://dx.doi.org/10.1080/10705422.2023.2190327>

Paine, T. (2004). Agrarian justice (1797). In J. Cunliffe & G. Erreygers (Eds.), *The origins of universal grants* (pp. 3–16). Palgrave Macmillan. [https://doi.org/10.1057/9780230522824\\_1](https://doi.org/10.1057/9780230522824_1)

Passaic County, NJ. (n.d.). *COVID-19 relief programs*. PassaicCountyNJ.org. <https://www.passaiccountynj.org/departments/health/covid-19/covid-19-relief-programs>

Passaic County Food Policy Council, & United Way of Passaic County. (2017). *Building a culture of health: Blueprint for action*. <https://www.unitedwaypassaic.org/sites/unitedwaypassaic/files/Paterson%20Building%20a%20Culture%20of%20Health%20Blueprint%20for%20Action.pdf>

Professional Research Consultants, Inc. (2019). *2019 community health needs assessment summary report: Southern Passaic County*. St. Joseph's University Medical Center. <https://www.stjosephshealth.org/images/pdf/2019%20SJUMC%20CHNA%20Summary%20Report.pdf>

Professional Research Consultants, Inc. (2016). *2016 community health needs assessment report: Southern Passaic County*. St. Joseph's Regional Medical Center. [https://www.stjosephshealth.org/images/pdf/CHNA\\_SJPMC\\_Exec\\_2016.pdf](https://www.stjosephshealth.org/images/pdf/CHNA_SJPMC_Exec_2016.pdf)

Richardson, J. (n.d.). *Slavery at the river's edge*. NPS.gov. <https://www.nps.gov/pagr/learn/historyculture/slavery-at-the-river-s-edge.htm>

Saldaña, J. (2016). *The coding manual for qualitative researchers* (3rd ed.). SAGE Publications.

Sayre, G. M. (2023). The costs of insecurity: Pay volatility and health outcomes. *Journal of Applied Psychology*, 108(7), 1223–1243. <https://doi.org/10.1037/apl0001062>

Shah, A. K., Mullainathan, S., & Shafir, E. (2012). Some consequences of having too little. *Science*, 338(6107), 682–685. <https://doi.org/10.1126/science.1222426>

Stack, C. B. (1983). *All our kin: Strategies for survival in a Black community*. Basic Books.

*The City of Paterson urban enterprise zone*. (n.d.). <https://www.patersonuez.com/>



Teddlie, C., & Tashakkori, A. (2009). Foundations of mixed methods research: Integrating quantitative and qualitative approaches in the social and behavioral science. In L. Bickman & D. J. Rog (Eds.), *The SAGE handbook of applied social research methods* (pp. 283–317). SAGE Publications. <https://doi.org/10.4135/9781483348858.n9>

Thomas, C., Walton, G. M., Reinhart, E. C., & Markus, H. R. (2023). Mitigating welfare-related prejudice and partisanship among U.S. conservatives with moral reframing of a universal basic income policy. *Journal of Experimental Social Psychology, 105*, 104424. <https://doi.org/10.1016/j.jesp.2022.104424>

Troller-Renfree, S. V., Costanzo, M. A., Duncan, G. J., Magnuson, K., Gennetian, L. A., Yoshikawa, H., Halpern-Meekin, S., Fox, N. A., & Noble, K. G. (2022). The impact of a poverty reduction intervention on infant brain activity. *Proceedings of the National Academy of Sciences, 119*(5), e2115649119. <https://doi.org/10.1073/pnas.2115649119>

U.S. Bureau of Labor Statistics. (2022a). *Consumer prices up 9.1 percent over the year ended June 2022, largest increase in 40 years*. The Economics Daily. <https://www.bls.gov/opub/ted/2022/consumer-prices-up-9-1-percent-over-the-year-ended-june-2022-largest-increase-in-40-years.htm>

U.S. Bureau of Labor Statistics. (2022b). *Consumer prices up 8.6 percent over year ended May 2022*. The Economics Daily. <https://www.bls.gov/opub/ted/2022/consumer-prices-up-8-6-percent-over-year-ended-may-2022.htm>

U.S. Census Bureau. (n.d.). *Paterson city, New Jersey*. Census.gov. [https://data.census.gov/profile/Paterson\\_city,\\_New\\_Jersey?g=160XX00US3457000](https://data.census.gov/profile/Paterson_city,_New_Jersey?g=160XX00US3457000)

U.S. Census Bureau. (2022a). Median contract rent (dollars). *American Community Survey, ACS 1-Year estimates detailed tables, table B25058*. Census.gov. <https://data.census.gov/table/ACSDT1Y2022.B25058?t=Renter+Costs&g=160XX00US3457000>

U.S. Census Bureau. (2022b). *U.S. Census Bureau quickfacts: Passaic County, New Jersey; Paterson city, New Jersey; New Jersey*. Census.gov. <https://www.census.gov/quickfacts/fact/table/passaiccountynewjersey,patersoncitynewjersey,NJ/PST045222>

U.S. Census Bureau. (2018). Median contract rent (dollars). *American Community Survey, ACS 1-Year estimates detailed tables, table B25058*. Census.gov. <https://data.census.gov/table/ACSDT1Y2018.B25058?t=Renter+Costs&g=160XX00US3457000>

U.S. Department of Housing and Urban Development. (n.d.). *Assisted housing: National and local* [Data set]. Office of Policy Development and Research. [https://www.huduser.gov/portal/datasets/assthsg.html#query\\_2009-2022](https://www.huduser.gov/portal/datasets/assthsg.html#query_2009-2022)

U.S. Department of Housing and Urban Development. (2023a). *Comprehensive housing affordability strategy data*. Office of Policy Development and Research. [https://www.huduser.gov/portal/datasets/cp.html#query\\_2006-2020](https://www.huduser.gov/portal/datasets/cp.html#query_2006-2020)

U.S. Department of Housing and Urban Development. (2023b). *Housing choice voucher program*. Office of Public & Indian Housing. <https://app.powerbigov.us/w?r=eyJrljoiM2Y2OTQ2MTAtODVhNC00>

YmM2LThhOWEtZWY4MGU5YWFmZDFmliwidCl6ljYxNTUyNGM1LTlyZTktNGJjZC1hODkzLTExODBN  
TNmYzdiMiJ9

Vasquez Reyes, M. (2020). The disproportional impact of COVID-19 on African Americans. *Health and Human Rights*, 22(2), 299–307. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7762908/>

West, S., & Castro, A. (2023). Impact of guaranteed income on health, finances, and agency: Findings from the Stockton Randomized Controlled Trial. *Journal of Urban Health*, 100(2), 227–244. <https://doi.org/10.1007/s11524-023-00723-0>

West, S., Castro, A., & Doraiswamy, P. M. (2023). Recurring cash transfers to enhance the mental wellbeing of Americans. *Nature Mental Health*, 1(3), 148–150. <https://doi.org/10.1038/s44220-023-00025-z>

# Appendix A

Table 13. Participant Attrition Over the Study Period (in %)

Time period	Treatment	Control	Overall attrition	Differential attrition
Baseline	110	131		
6 month	51	22	70	-29
12 month	55	26	66	-30
18 month	69	30	59	-40

## Appendix B

Table 14. Comparative Analysis of Select Outcome Measures: Control vs. Treatment Groups

Outcome	Control group	Treatment group	Difference	95% Lower CI	95% Upper CI	Standard Error	Relative Impact (in %)
<b>Financial Well-Being</b>							
Baseline	40.07	42.31	2.24	0.56	3.92	0.85	
6-month	39.07	44.11	[5.04]***	3.97	6.11	0.54	12.90
12-month	42.49	41.79	[-0.63]*	-1.87	0.62	0.63	-1.65
18-month	40.90	42.47	[1.57]*	0.23	2.92	0.68	3.84
<b>Perceived Stress Levels</b>							
Baseline	7.79	6.99	[0.8]*	-1.41	-0.19	0.31	
6-month	7.18	6.24	[-0.95]***	-1.28	-0.62	0.17	-13.09
12-month	6.37	7.05	[0.68]***	[0.32]*	1.03	0.18	10.68
18-month	7.48	7.08	[-0.4]**	-0.83	0.04	0.22	-5.35
<b>Kessler Psychological Distress</b>							
Baseline	22.32	21.07	1.25	-3.09	0.60	0.94	
6-month	21.53	19.44	[-2.09]***	-3.32	-0.87	0.62	-9.71
12-month	20.80	20.26	-0.54	-1.57	0.50	0.53	-2.60
18-month	22.50	20.55	[-1.95]**	-3.19	-0.72	0.63	-8.67
<b>CHAOS</b>							
Baseline	27.49	29.17	1.68	0.38	2.99	0.66	
6-month	30.39	27.52	[-2.87]***	-4.01	-1.74	0.58	-9.46

Outcome	Control group	Treatment group	Difference	95% Lower CI	95% Upper CI	Standard Error	Relative Impact (in %)
12-month	29.94	28.99	-0.95	-2.17	0.27	0.62	-3.17
18-month	30.69	29.99	-0.70	-1.87	0.46	0.59	-2.29
<b>Adult Hope Total</b>							
Baseline	43.66	44.25	0.59	-0.72	1.91	0.67	
6-month	45.19	46.55	[1.36]**	0.37	2.35	0.50	3.01
12-month	43.78	44.03	0.24	-0.74	1.22	0.50	0.57
18-month	45.91	43.37	[-2.54]***	-3.69	-1.38	0.59	-5.53
<b>Adult Hope Pathway</b>							
Baseline	22.49	22.56	0.07	-0.63	0.77	0.35	
6-month	22.56	23.62	[1.05]***	0.52	1.56	0.27	4.70
12-month	22.05	22.24	0.19	-0.36	0.74	0.28	0.86
18-month	23.39	21.96	[-1.43]***	-2.05	-0.81	0.32	-6.11
<b>Adult Hope Agency</b>							
Baseline	21.17	21.69	0.52	-0.20	1.24	0.36	
6-month	22.62	22.94	0.31	-0.19	0.81	0.25	1.41
12-month	21.74	21.79	0.05	-0.49	0.60	0.19	0.23
18-month	22.52	21.41	[-1.11]**	-1.73	-0.48	0.32	-4.93
<b>Adult Mattering Reliance</b>							
Baseline	23.10	22.27	[-0.83]**	-1.44	-0.22	0.31	
6-month	23.02	22.08	[-0.93]***	-1.43	-0.44	0.25	-4.08
12-month	22.97	22.56	-0.41	-0.95	0.13	0.27	-1.78
18-month	24.21	21.48	[-2.73]***	-3.24	-2.21	0.26	-11.28

Outcome	Control group	Treatment group	Difference	95% Lower CI	95% Upper CI	Standard Error	Relative Impact (in %)
<b>Adult Mattering Importance</b>							
Baseline	36.18	36.85	0.67	-0.23	1.57	0.46	
6-month	35.49	36.51	[1.02]**	0.25	1.79	0.39	2.87
12-month	36.88	35.83	[-1.06]**	-1.82	-0.29	0.39	-2.85
18-month	36.30	35.77	-0.53	-1.32	0.30	0.40	-1.46
<b>Adult Mattering Awareness</b>							
Baseline	31.08	30.65	-0.43	-1.21	0.35	0.39	
6-month	30.33	30.45	0.12	-0.50	0.75	0.32	0.40
12-month	30.36	30.04	-0.32	-0.94	0.29	0.31	-1.05
18-month	31.18	30.21	[-0.97]*	-1.62	-0.33	0.33	-3.11
<b>SF-36 General Health</b>							
Baseline	62.26	62.78	0.52	-5.61	6.66	3.13	
6-month	65.27	61.32	[-3.96]*	-7.87	-0.05	1.99	-6.05
12-month	60.55	59.71	-0.85	-4.57	2.87	1.89	-1.39
18-month	60.88	56.58	-3.51	-7.48	0.45	2.01	-7.06
<b>SF-36 Physical Functioning</b>							
Baseline	68.69	72.09	3.40	-0.45	7.25	1.95	
6-month	75.62	74.21	-1.41	-3.20	0.47	0.96	-1.86
12-month	82.69	75.07	[-7.62]*	-9.32	-5.92	0.86	-9.22
18-month	79.33	74.32	[-5.01]*	-7.06	-2.96	1.04	-6.32
<b>SF-36 Physical Limits</b>							
Baseline	58.41	63.52	5.11	-0.31	10.53	2.75	

Outcome	Control group	Treatment group	Difference	95% Lower CI	95% Upper CI	Standard Error	Relative Impact (in %)
6-month	75.34	63.01	[-12.33]*	-14.99	-9.66	1.35	-16.37
12-month	73.99	63.01	[-10.98]*	-13.91	-8.05	1.49	-14.84
18-month	74.33	57.34	[-16.99]*	-20.38	-13.62	1.72	-22.86

**Baseline Mean:** Adjusted average score prior to any intervention.

**6/12/18-month Mean:** Adjusted average score at the respective time mark.

**Difference:** The Mean difference between the treatment and control groups.

**Standard Error:** Indicates the precision of the impact estimates.

**95% CI Lower/Upper:** Bounds of the 95% confidence interval for the impact estimate.

**Relative Impact:** Percentage change in the treatment group compared to the control.

\* Indicates statistical significance: \*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$ .