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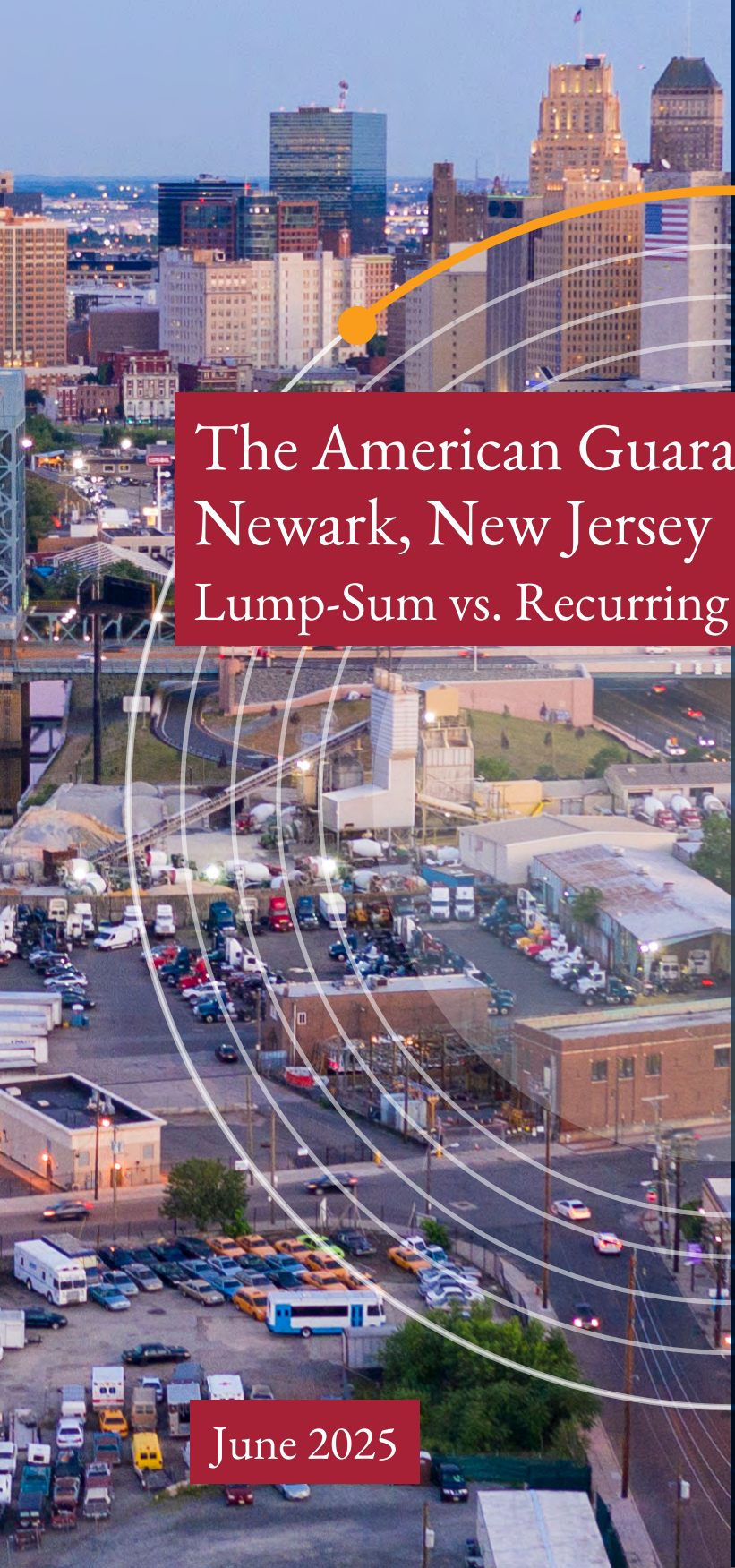

The American Guaranteed Income Studies: Newark, New Jersey

Lump-Sum vs. Recurring Cash Transfers

AUTHORS

Nidhi Tandon, MPhil

Stacia West, PhD

Elizabeth DeYoung, PhD

Henisha Patel, MSW

Allison Thompson, PhD

Amy Castro, PhD

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The American Guaranteed Income Studies: Newark, New Jersey

Executive Summary

As part of his broader commitment to prioritize economic growth; address economic, educational, and health disparities; and respond to persistent and systemic structural barriers to economic security exacerbated by the COVID-19 pandemic, Mayor Ras J. Baraka launched the Newark Movement for Economic Equity (NMEE) in the fall of 2021. NMEE provided $6,000 per year for 2 years to 400 adult Newark residents with incomes below 200% of the federal poverty line (FPL) and who had been negatively impacted by COVID-19 (Center for Guaranteed Income Research, Stanford Basic Income Lab, & Mayors for a Guaranteed Income, 2023). Both supporting its community and adding to the research base on unconditional cash distribution, Newark implemented a novel model of two types of cash transfers, providing 200 recipients with 2 years of recurring bi-monthly cash transfers (i.e., $250 twice a month) and 200 recipients with 2 years of semi-annual lump-sum payments ($3,000 twice a year). This model was designed to provide actionable evidence to federal- and state-level policy makers about how to most effectively structure unconditional cash payments.

NMEE partnered with the University of Pennsylvania's Center for Guaranteed Income Research (CGIR) to serve as the third-party evaluator. CGIR conducted a mixed-methods, three-arm randomized controlled trial (RCT) consisting of 878 participants randomly selected from a pool of approximately 4,700 applicants. The study included two treatment arms (recurring cash transfers=200 and lump-sum payments=200) and one control arm with no cash payments (n=478), and all study participants were invited to participate in compensated research activities. Cash disbursements for NMEE recipients occurred from October 2021 through September 2023. Surveys assessing financial security, employment status and opportunities, food security, mental and physical well-being, and hope and mattering were administered every 6 months throughout the NMEE program and 6 months after the cash payments stopped. Semi-structured interviews were conducted in months 10 and 26 with 42 study participants across the control, lump-sum, and recurring cash transfer groups. Interviews focused on decision-making trajectories, stressors, health and well-being, care work, relationships, and finances.

On average, study participants were 39 years old and predominantly identified as female, single, non-Hispanic Black caregivers with at least one child in the household. Most study participants spoke English, and the majority had a high school diploma or less education. The median household income for all groups was less than $9,500 per year. A subgroup of participants across study arms also reported the presence of Adverse Childhood Experiences (ACEs), the most common of which were parental separation or divorce (47–48%), substance abuse in the household (32–40%), emotional neglect (34–36%), and psychological abuse (30–35%).

Consistent with the study sample, residents of Newark experience heightened disparities in income, housing, education, health, and economic mobility compared to their state-wide counterparts. Specifically, the median household income of Newark residents is $48,416 compared to $101,050 for the rest of the state, and home values in Newark fall roughly 20% below the state average, albeit still in an unaffordable range for most Newark residents (U.S. Census Bureau, 2024a). Only 17% of Newark residents complete a four-year college degree, and more than four in five Newark children qualify for free or reduced-price meals (Newark Board of Education, 2023; U.S. Census Bureau, 2023). Newark's unemployment rate is 7.2%, compared to only 5.5% in the rest of Essex County and 4.7% in the state of New Jersey (U.S. Bureau of Labor Statistics, 2025). The child poverty rate for Newark exceeds 20%, compared to just 14% state-wide, and Newark lags behind the rest of the state in a host of health outcomes, including preterm births, infant mortality, and asthma-related emergency room visits (New Jersey Department of Health, n.d.). Newark was hard-hit by the COVID-19 pandemic, which compounded many of these socioeconomic factors and disproportionately impacted women of color with children and low incomes.

In response, the Mayor's Office invested in a number of emergency programs to better support Newark residents during the pandemic, including NMEE, which was designed to test the effectiveness and role of recurring versus lump-sum unconditional cash transfers. Drawing from prior research, lump-sum and recurring cash payments function differently to support varying outcomes (Balakrishnan et al., 2024; Haushofer & Shapiro, 2013; Parolin et al., 2023). In short, lump-sum payments provide recipients with a single large cash infusion, allowing them to make more targeted, point-in-time investments or purchases, such as paying off debt, buying an expensive item like a refrigerator, or paying a set of bills in advance. However, recurring cash transfers provide a steady flow of consistent and predictable cash for families, enabling families to absorb the funds into their household budgets, smoothing income volatility to meet basic needs over time. Consistent with this literature, NMEE study findings revealed a similar pattern: recipients of recurring cash transfers used the money to pay for day-to-day expenses, which led to a greater ability to meet basic needs and handle recurring bills over time, such as food and childcare costs. However, the lump-sum recipients used their payments to pay bills in advance, for savings, and for bigger one-time expenses such as car repairs or apartment deposits. In the accompanying NMEE report focused on housing, parenting, and educational outcomes, findings revealed that the recurring cash transfers helped to cover rent each month whereas the lump-sum payments facilitated bigger moves by covering deposits, moving expenses, and furniture, suggesting that both forms of cash transfers may be helpful to support housing stability (DeYoung et al., 2025). Recipients in the recurring cash transfer and lump-sum groups also experienced improvements in student academic outcomes, such as improved grades and increased AP enrollment.

RECURRING CASH TRANSFERS

Findings from the surveys revealed that differences in household income between the treatment and control groups were small and not statistically significant. However, after 6 months of cash payments, the treatment group experienced a significant reduction in income volatility (fluctuations in monthly income) compared to the control group, though this effect was not sustained in subsequent study timepoints. Likewise, savings patterns were similar between both groups, with most participants struggling to save more than $200 throughout the study period. Participants' financial well-being was

also similar throughout the cash transfer period, though the treatment group reported significantly lower financial well-being after the cash payments ended compared to the control group, possibly reflecting the challenges associated with the end of the cash payments. Although both groups experienced financial vulnerability and limited savings, the ability of the treatment group to handle a $400 emergency expense was significantly higher than that of the control group 18 months into the experiment, though this significant difference did not hold at 24 or 30 months. The ability to help friends and family fluctuated over time for both groups, with no statistically significant differences at any study time point. Differences in full- and part-time employment were also null, though when unemployed, the treatment group was significantly more likely to be looking for work compared to the control group. Additionally, caregiving rates were significantly lower for the treatment group compared to the control, suggesting that alternate childcare options may have been more affordable for the cash recipients. Indeed, cash recipients were significantly more likely to experience meaningful improvements in food security across several domains and study timepoints, including improved food access, choice, and preferences as well as improved ability to make utility payments. These improvements, along with reduced income volatility and ability to weather an emergency expense, alleviated some financial concerns for the recipients of recurring cash payments. And compared to the control group, the treatment group also experienced significant reductions in psychological distress and household chaos at multiple timepoints throughout the study, though there were no differences in perceived stress levels. Impacts on physical well-being were mixed, with no significant differences for general health outcomes or role limitations due to physical health, though limitations in physical functioning were significantly less among GI recipients at 6, 12, and 18 months. Similarly, findings for Mattering, Hope, and Tragic Optimism were mixed, with the treatment group experiencing significant improvements in their sense of Awareness at all study timepoints and improved Affirmation at 12 and 30 months. However, the treatment group also reported significantly lower rates of Courage at 6 months and Self-Transcendence at 24 months, suggesting that some external stressors likely still impacted cash recipients. All other group differences in sense of self indicators, including Future Outlook, Sense of Importance, Reliance, and Hope, were null, as were differences in civic engagement.

LUMP-SUM PAYMENTS

Similar to the recurring cash transfer group, the lump-sum group did not report significant differences in their annual income over time, though they did not experience reduced income volatility as the recurring cash transfer group did. However, the lump-sum group was significantly more likely to have savings greater than $500 at 6, 12, and 18 months compared the control group, though this pattern was not sustained at the 24- or 30-month marks. Likewise, the lump-sum group reported a significantly greater ability to handle a $400 emergency expense at 6, 12, and 18 months compared to the control group, but differences between groups were not significant at 24 or 30 months. However, similar to the recurring cash transfer group, the lump-sum group reported a significant decline in financial well-being compared to control after NMEE ended, suggesting that the end of the program may have impacted recipients' sense of financial security. Group differences were null for changes in employment or caregiving activities, food security, psychological distress, and household chaos. Of note, the lump-sum group experienced significantly higher levels of perceived stress compared to the control group at 12 and 30 months. Results were mixed for physical health outcomes. Specifically, there

were null differences for general health, though the lump-sum group experienced significantly fewer physical functioning limitations at 6 and 18 months and fewer role limitations at 6 months. Findings were also mixed for sense of self indicators, with null findings present for Mattering, Awareness, Reliance, Hope, and Courage but significant findings present for all other indicators. Specifically, compared to the control group, the lump-sum recipients experienced significantly higher scores on Importance at 6 months and Self-Transcendence and Faith at 12 months, though the treatment group also reported significantly lower Acceptance scores at 18 months. Finally, similar to the recurring cash transfer group, there were no significant differences between the lump-sum and control groups for civic engagement.

KEY FINDINGS AT-A-GLANCE

- **Decision-Making Patterns:** Recipients of the bi-weekly recurring cash transfers typically incorporated the money into their routine budgets to pay for daily expenses, which led to a greater ability to meet basic needs and handle recurring bills over time, such as food, utilities, and childcare costs. Conversely, the lump-sum recipients more often used their bi-annual payments for larger one-time expenses such as car repairs or apartment deposits, increasing their ability to save and make bigger, single purchases.
- **Financial Outcomes:** Compared to the control group, the recurring cash transfer group experienced reduced income volatility at 6 months; improved ability to handle a $400 emergency expense at 18 months; improved food security throughout the entire program period; and were more likely to be looking for work when unemployed at 12 months and less likely to be stay at home caregivers at 18 months. The lump-sum group reported savings greater than $500 and the ability to handle a $400 emergency expense at 6, 12, and 18 months. Both cash transfer groups reported declined financial well-being 6 months after the NMEE ended.
- **Health and Mental Health Outcomes:** Compared to the control group, the recurring cash transfer group reported decreased Psychological Distress and improved Physical Functioning at 6, 12, and 18 months; improved Awareness at all study timepoints; and increased Affirmation of meaning and value at 12 and 30 months. However, they also experienced decreased Courage at 6 and 24 months and decreased Self-Transcendence at 24 months. The lump-sum group experienced improved Physical Functioning at 6 and 18 months; fewer Role Limitations due to Physical Health at 6 months; improved Sense of Importance at 6 months; and increased Faith and Self-Transcendence at 12 months. However, this group reported lower rates of Acceptance at 18 months.
- **Child Outcomes:** At Baseline and prior to the cash transfers, there were no significant differences in the percentage of children with A grades among the control, recurring cash, and lump-sum groups. However, by the pilot's conclusion, children in families receiving either the recurring cash or lump-sum payments were more likely to earn A grades than the control group. Additionally, by the end of the pilot, children in families with recurring cash transfers had a 10-percentage point higher AP course participation than the control group, though this was not statistically significant.

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Community Partners

Members of the Newark Guaranteed Income Task Force

Task Force Working Group:
Kim Boller, Wole Coaxum, Jayne Johnson, Catherine Wilson, Frederick Wherry, Aisha Glover, and Leslie Kantor

Ironbound Community Corporation

La Casa de Don Pedro

Urban League of Essex County

United Vailsburg Services Organization

Greater Newark Local Initiatives Support Corporation (LISC)

Rachel Black, Guaranteed Income Task Force
Report author

Jain Family Institute

Steve Nunez, Task Force advisor

Economic Security Project

Dreamplay Media

Mocafi

Contributing Researchers

Ben Cochran, MSSP

Joana Halder, MA

Nina Cross, MSEd

Tonanziht Aguas, MPP

Genesis Vasquez, MPA

Sophia Glaspie, MPA

Ella Israeli, MSW

Claire Migliore, MS

Jo Moley, MSSP

Karim Sharif, MSSP

Kait Bailey, MSSP

Kelsey Love Russom, MSSP

Kalen Flynn, PhD

MAYORS FOR A GUARANTEED INCOME

Founded by Michael D. Tubbs, MGI is a coalition of mayors advocating for a guaranteed income to lift all of our communities and build a more resilient, just America. Since launching in 2020, MGI has grown its ranks from 11 to over 125 mayors, supported the launch of 50-plus guaranteed income pilots across the country, and delivered more than $250 million in direct, unconditional relief to everyday Americans. MGI has also launched two affiliates, Counties for a Guaranteed Income and United for a Guaranteed Income Action Fund. MGI's work has ensured that guaranteed income spreads from a single moment in Stockton, CA to a national movement—pushing the conversation forward in cities, state capitals, and Congress.

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Background

Newark's Socio-Historical Landscape

In the industrial age, Newark was a leading manufacturing city. Its location along the Passaic River and Newark Bay facilitated trade and transport; it was a hub for leather tanneries, breweries, and factories making jewelry, paint, thread, and military equipment (Rabig, 2025). The city saw many waves of immigration as people sought employment and opportunity in its factories. The first groups were European, then South and Central American, Caribbean, Cape Verdean, West Indian, and Iranian immigrants who arrived over the years (Ramos-Zayas, 2012). The Ironbound neighborhood, named for the various railways that shaped its geography, was a particular center for industry but today is known for a large population of Brazilian and Portuguese immigrants (Rabig, 2025).

During the Great Migration, Black Southerners living under racist Jim Crow laws fled to the north and west of the US seeking safety and opportunity, and many made Newark home (Wilkerson, 2010). It was estimated that 40% of Newark's Black residents relocated to the city since the mid-1950s, with most of them hailing from the South (Herman, 2013). Although the new residents were greeted with racial discrimination in housing and employment, by the 1940s Black Newarkers had successfully built a thriving middle-class Black community life fueled by churches, block associations, the Moorish Temple, the *New Jersey Afro-American Herald*, and the *New Jersey Herald* (Rabig, 2025). These social ties and institutions stood as crucial bulwarks against deindustrialization and the failed urban renewal policies that the city would encounter in the coming decades.

The city was hit hard by deindustrialization in the wake of World War II; it is estimated that between 1958–1970, a total of 1,300 manufacturers left the city, and over 20,000 manufacturing jobs disappeared (Herman, 2013). Factories shut down, some leaving derelict lots and buildings or quantities of hazardous waste. Employment prospects declined sharply for new arrivals along with those deindustrialization left behind. Newark has been called "a living laboratory for nearly every bad planning idea of the twentieth century" (Ramos-Zayas, 2012, p. 48), and it is particularly instructive for the long-term legacy of structural racism on Black residents. Post World War II, over 100,000 White Newark residents left

for the suburbs due in part to blockbusting and White flight, which led to the large-scale racial turnover of neighborhoods. Widespread redlining also occurred, where resources were directed away from Black neighborhoods, undermining opportunities for Black wealth-building and introducing predatory behaviors among landlords taking advantage of the growing Black population and suburban White flight. Newark was among the first cities in the US where the federal government intervened to implement urban renewal, a polite term for the aggressive clearance of predominantly Black neighborhoods to situate new highways and commercial development. Huge swathes of the city were razed despite extensive interracial resistance and organizing from the Central, South, and North wards. Whole communities were destroyed and never rebuilt, their residents displaced to high-rise, low-quality public housing (Rabig, 2025).

STRUCTURAL RACISM

Structural racism refers to the social and political scaffolding that fosters racial discrimination within and across systems, such as housing, employment, education, finance, healthcare, law, media, and others. These systems become mutually reinforcing and contribute to the normalization of racist beliefs, values, culture, and practices in the broader environment. These racist systems and beliefs perpetuate one another and maintain racial disparities and hierarchies as part of the status quo.

Sources: American Public Health Association, 2020; Braveman et al., 2022

The destruction of neighborhoods had lasting impacts on equity over the decades, eliminating pathways to wealth and financial stability. Urban renewal coupled with deindustrialization created a stark landscape for Newark's Black population. Factories had closed and jobs were hard to come by; schools were overcrowded and underfunded. A housing shortage existed despite the public housing that had been built. Communities had been torn apart, and with them the social ties and infrastructure that had previously existed. Frustrated by the failures of planners and politicians, Black residents organized around community development and affordable housing (Rabig, 2016). In the 1960s, one particular plan aimed to replace residential areas of the Central Ward with a university-associated medical school, garnering outrage from residents. A commentator at the time suggested that,

the city's vast programs for urban renewal, highways, downtown development, and most recently, a 150-acre Medical School in the heart of the ghetto seemed almost deliberately designed to squeeze out this rapidly growing [Black] community that represents a majority of the population. (Hayden, 1967, p. 6, cited in Herman, 2013, p. 9)

In the 1950s and 1960s, frustrations around the destruction and clearance of predominantly Black neighborhoods were compounded by the deaths of Black men, allegedly at the hands of the police. In 1967, continued reports of police abuse culminated in 5 days of protests and demonstrations known as the Newark Rebellion (Krasovic, 2016). These events led to two dozen deaths and hundreds of injuries, millions of dollars' worth of damaged property, and a legacy of distrust between citizenry and the

police. Volumes of testimony on the Newark Rebellion reveal the extent of police brutality before and during the protests (Krasovic, 2016). The exaggerated imagery of racial violence and urban decay circulated by the media during the rebellion redefined the city as a locus for lawlessness and mayhem. It exacerbated fears of racially based crime and violence while ignoring the injustices inflicted upon the Black community, and intensified the stigmatization of these areas (Herman, 2013; Ramos-Zayas, 2012).

From the late 1990s onward, the city has seen something of a renaissance. Development has centered around arts, tourism, and culture; the success of the New Jersey Performing Arts Center, known locally as NJPAC, is often cited as a catalyst for regeneration (NJPAC, 2021). The downtown now houses branches of Rutgers University and the New Jersey Institute of Technology, along with the Newark Museum and Library. All of these institutions, as nonprofits, are tax-exempt. The Prudential Center, home of the New Jersey Devils hockey team, and Panasonic also both received significant tax incentives to relocate to Newark. Although those tax credits required job creation, and in some cases community benefits agreements, employment opportunities may not be trickling down to the people who could benefit most. As of 2023, the unemployment rate for Black individuals persistently remains significantly higher than for White and Asian workers (Department of Labor and Workforce Development, n.d.), and the city still experiences high levels of unemployment. The public school system, too, has suffered from chronic underfunding, fracturing the education-to-employment pipeline (Farrie & Johnson, 2015). In response, the City has implemented initiatives like 'Hire.Buy.Live', which connects the city's unemployed to living wage jobs and creates procurement opportunities for local businesses (City of Newark, 2017). The Mayor, Newark Alliance and the Newark Anchor Collaborative, made up of the city's anchor businesses, have also collaborated to address disparities in hiring and procurement (Newark Alliance, n.d.)

Significant development has occurred in downtown Newark to entice visitors and commuters, driving up the cost of housing. The City has made efforts to mitigate the steep rise in rents, including assembling an Equitable Growth Advisory Commission in 2018 to oversee development priorities and policies (City of Newark, 2018a); and founding the Office of Tenant Legal Services that same year to support tenants facing eviction (City of Newark 2018b). The Mayor also created the Office of Affordability and Sustainable Housing (OASH) to preserve affordable housing and oversee inclusionary zoning (City of Newark n.d.).

Newark Today

Today, Newark is New Jersey's most populous city. With 304,960 residents, it constitutes 35.8% of Essex County's population and 3% of the state's total. Demographically, the population is predominantly Black (46.7%), followed by Hispanic or Latino (37.2%), with smaller proportions identifying as White (16.5%), Asian (1.9%), and Other (U.S. Census Bureau, 2024a). Economic disparities are pronounced: the median household income of $48,416 stands at less than half the state average of $101,050, while the poverty rate (24.7%) exceeds the state average by a factor of 2.5. The ripple effects of these disparities are evident in housing, education, health, and economic mobility.

HOUSING

Racial wealth gaps remain substantial, primarily driven by inequitable homeownership patterns rooted in policies like redlining and discriminatory lending. White households own significantly more assets than Black and Latino households (New Jersey Institute for Social Justice, 2020). The 2008 financial crisis amplified these inequalities, with Black and Latino homeowners experiencing higher foreclosure rates while receiving limited federal support (Rugh & Massey, 2010; U.S. Government Accountability Office, 2009). Today, Black residents make up just 12% of New Jersey's total population but account for 48.8% of its unhoused residents, highlighting the enduring impact of housing instability among communities of color (Monarch Housing Associates, 2024). Citywide homeownership rates remain low, with just 25% of residents owning homes compared to two-thirds statewide. Median home values of $337,800, and median gross rents of $1,330, stand approximately 20% below state averages, yet are often unaffordable to local residents. Digital infrastructure access is limited, with only 81.4% of homes having broadband connectivity (U.S. Census Bureau, 2024a).

Nearly all our participants spoke to the skyrocketing cost of housing. For some, it felt as though Newark's ongoing regeneration has left behind its low-income residents. However, others felt the mayor was doing the best he could given the circumstances:

> *I think people are really wanting to, um, I think people are tired of gentrification being the reason why chocolate cities change... So I think Ras Baraka is trying to like, really support and like balance it out, like the things that he does in terms of like, the developers coming in and like, trying to make sure they honor like, the low-income cap and like, making sure people who are from the city can get into these new apartments and not, like, be keeping it where it's like, making it impossible for the people who have been here to reap the benefits of these changes. (Gloria Sanchez)*

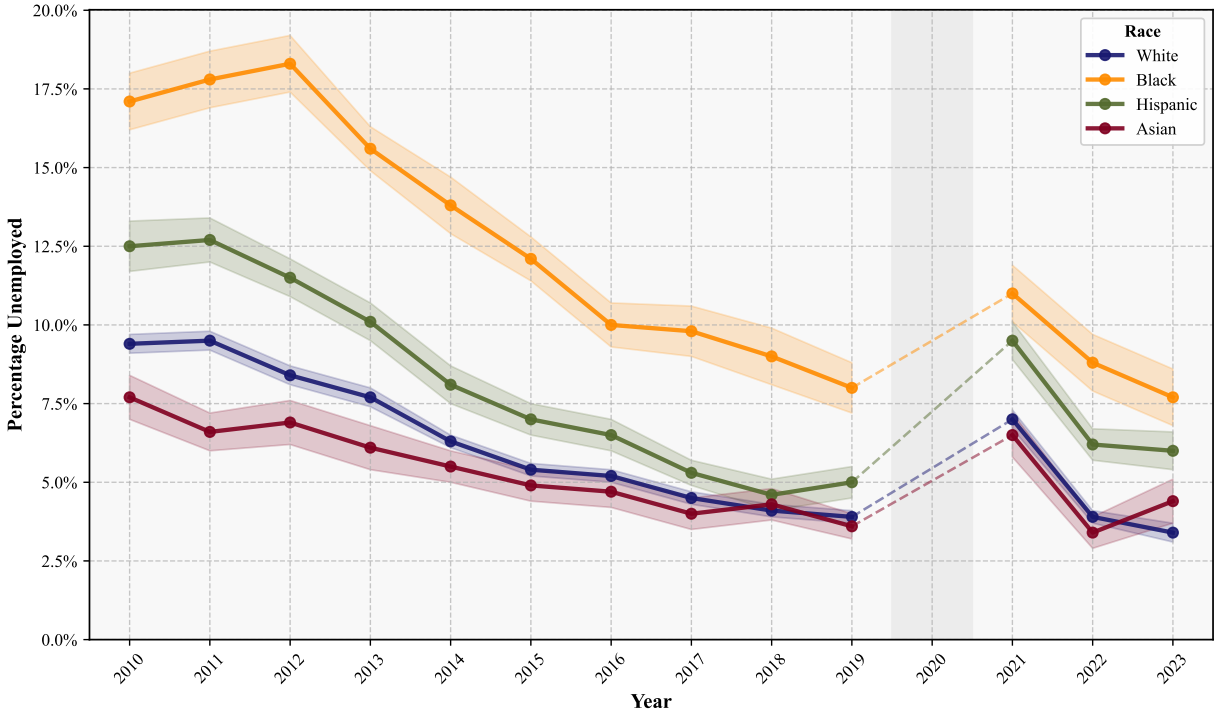
From 2021–2026, the Mayor set out a comprehensive vision for housing that includes funding 6,600 affordable homes for Newarkers making less than 30% AMI (City of Newark, 2021a). More recently, the City passed inclusionary zoning measures that give priority to Newark residents for affordable housing during the first 90-day period of availability (City of Newark, 2023). Other participants also noted that the city offers many other resources for its people, with city-funded programs addressing food insecurity and providing community violence interventions, mobile health clinics, and major investments in addressing homelessness under Mayor Baraka's leadership (Baraka, 2024; *Nourishing Newark*, n.d.). Monique, a recurring GI recipient, added "all the opportunities with the mayor and everything he bringin' to Newark. I see it changing. Especially, like, with the different programs he have and like, jobs and schoolin' and like, I see, I see the change myself." Stacy, another recurring recipient agreed, saying, "we do more for the youth now, and I have to, I give my mayor a lot of credit for that."

EDUCATION AND EMPLOYMENT

In Newark, gaps in educational attainment continue to limit opportunities for economic and social mobility. Despite the region's proximity to high-income professionals in finance and technology

across the New York-New Jersey metro area, only 17% of Newark residents hold a Bachelor's degree or higher, and about three-fourths have completed high school or above. This gap begins early. Newark's public schools reflect broader socio-economic challenges, serving over 42,000 students who are predominantly Hispanic (54.5%) and African American or Black (35.6%). With 30% of school-aged children living in poverty and 81.1% qualifying for free or reduced-price meals, the district faces significant hurdles (Newark Board of Education, 2023; U.S. Census Bureau, 2023). Student performance lags considerably behind state averages—English Language Arts proficiency stands at 28.8% vs. 51.3% statewide, while Mathematics proficiency is 15.1% compared to 38.2% statewide. Despite increased state funding, the district continues to struggle with chronic absenteeism (13.2%) and low Advanced Placement participation (19.1% vs. 34.9% statewide), reflecting persistent barriers to academic achievement rooted in intergenerational poverty (Irwin et al., 2022; New Jersey Department of Education, 2023; Newark Board of Education, 2023; Waters, 2024).

Figure 1: New Jersey Unemployment Rates by Race and Ethnicity, 2010 to 2023



Note: Shaded areas show margin of error. 2020–2021 data omitted due to pandemic statistical anomalies.
Source: New Jersey Department of Health, 2024.

Educational gaps can translate into limited job opportunities, particularly for low-income Black women without a college degree, who were largely represented in the NMEE program. Many Black women remain concentrated in service-sector jobs that offer meager benefits, low wages, and little stability. Bureau of Labor Statistics figures from September 2024 report an unemployment rate of 7.2% in Newark, compared to 5.5% in Essex County and 4.7% statewide (U.S. Bureau of Labor Statistics, 2025). However, these figures mask deeper racial disparities. Historically, Black and Hispanic populations have

faced significantly higher unemployment rates than White residents due to systemic barriers such as limited access to quality education, job training programs, and discriminatory hiring practices—factors that continue to impede economic mobility.

The high cost of childcare further compounds employment challenges for caregivers in low-income households. According to the Women's Bureau, the median cost of center-based infant care in many counties in NJ, including Essex County, exceeds the median cost of rent (Women's Bureau-Department of Labor, 2025). Families spend an average of 15% of their median income on infant childcare and 8% on school-aged childcare. Given these financial pressures, caregivers may face an impossible choice between paying for prohibitively expensive childcare or leaving the workforce entirely, trapping them in economic hardship.

Economic marginalization and health disparities are structurally integrated with social determinants of health, exacerbating asymmetries in quality of life and access to care. Newark is home to seven of New Jersey's 55 designated Economically Disadvantaged Areas (EDAs) (State of New Jersey, n.d.). Disability rates among residents under 65 (13.2%) are double the state average, and 21% are without health insurance (U.S. Census Bureau, 2024a). Limited healthcare access has contributed to a life expectancy of 76.6 years—more than 2 years below that of comparable cities. Essex County's health indicators consistently trail state averages, with higher rates of preterm births (10.2% vs. 9.3% statewide), infant mortality (5.3 vs. 4.0 per 1,000 live births), and asthma-related emergency room visits (72.1 vs. 41.2 per 10,000). A child poverty rate of 20.8%, exceeding the state's 14.3%, further underscores how these health disparities stem from both medical and social inequities (New Jersey Department of Health, n.d.).

Responding to persistent and systemic barriers to upward economic mobility, Invest Newark has successfully leveraged philanthropic dollars to launch new local development initiatives. Operating since 2007, their primary program areas include business development, internet connectivity and access, grants and loans to small businesses, and land banking. It made small gains from 2021 to 2023, with a 3 percentage point improvement in GDP, nearly 1,000 new jobs created, nearly 40,000 new internet connections, and millions invested in affordable housing and small business loan programs (Neal & Pang, 2024). However, it will take many years for these investments to mature and for more meaningful impacts to be realized among the most economically marginalized households.

Development of the Newark Movement for Economic Equity Program

Newark was positioned on the front lines of the COVID-19 pandemic, which disproportionately impacted people of color, low-income individuals, women, and children (Masterson et al., 2023; Vasquez Reyes, 2020). As a predominantly low-income and racially diverse city, Newark bore the brunt of COVID's effects. The virus disproportionately affected Newark's predominantly Black and Hispanic population, with essential workers facing the greatest exposure. Preexisting health inequities left Newark residents especially vulnerable. By late 2020, Essex County recorded one of the state's highest age-adjusted death rates (226.4 per 100,000) (New Jersey Department of Health, 2023). The economic aftershocks further strained households, as food prices increased by 12% in August 2022, and energy costs surged following Russia's invasion of Ukraine (Bureau of Transportation Statistics, 2022). These compounded health and economic disruptions provide the context for understanding conditions faced by NMEE program participants.

"The GI also came in handy for me, because I don't do self care. I never did self care... I felt like I didn't even know what I was stressed about or depressed about. I felt so good. I felt like, oh... this is what they mean about self-care? Taking care of yourself. It... worked a lot. It came a long way. It helped me a whole lot. "
~ Samantha

The Mayor's Office immediately invested $6 million in emergency programs to keep Newark's residents afloat, including small business support and rental assistance (Insider NJ, 2020). In 2021, the city went further, introducing the NMEE for those who had been affected by the pandemic. The program was designed in partnership with community members and nonprofits; eligible applicants were Newark residents 18 years or older with an income below 200% of the federal poverty line (FPL) and who had been impacted by COVID-19 (City of Newark, 2021b; CGIR, Stanford Basic Income Lab, & MGI, n.d.).

Sample Demographics

In NMEE, the study sample encompassed these socioeconomic stratifications, with Baseline characteristics balanced across the three groups. Participants were predominantly female (78%), single, and non-Hispanic Black, with a mean age of 39 years. Most households included one child and averaged three members. English was the primary language, and educational attainment was low—approximately 70% had a high school diploma or less, with few holding college or technical degrees. Annual household incomes were precariously low, with median values of $8,832, $9,323, and $8,657 for the control, recurring payment, and lump-sum payment groups, respectively. Approximately two-thirds of the participants received some government assistance from Supplemental Nutrition Assistance Program (SNAP) or other support programs.

Table 1: Study Sample Demographics

NEWARK, NJ		CONTROL	RECURRING PAYMENT	LUMP-SUM PAYMENT
SAMPLE SIZE		478	200	200
AVG. AGE OF RESPONDENT (YEARS)		39	39	39
GENDER (%)	Male	21	21	22
	Female	78	78	78
	Other	1	1	0
CHILDREN IN HOUSEHOLDS (%)	Yes	63	64	71
AVG. NUMBER OF CHILDREN IN HH		1	1	1
AVG. HH SIZE		3	3	3
ETHNICITY (%)	Non-Hispanic	83	80	84
RACE (%)	White	7	7	8
	African American	88	85	87
	Hispanic/Latino origin	5	6	5
	Other/Mixed	0	2	0
MARITAL STATUS (%)	Single	86	83	83
	Married	7	11	10
	Partnered/In-relationship	7	6	7
PRIMARY LANGUAGE AT HOME (%)	English	94	91	96
	Spanish	5	6	3
	Other	1	3	1
EDUCATION (%)	High school or less	68	71	73
	Associate's degree (two-year college)	11	5	11
	Bachelor's degree (four-year college)	7	10	7
	Trade or technical school	10	13	8
	Other	4	1	1
ANNUAL HH INCOME (IN $)	Median	8,832	9,323	8,657
	Mean	9,014	9,204	8,887

Beyond economic hardship, participants' financial trajectories were shaped by systemic inequalities associated with Adverse Childhood Experiences (ACEs). The ACE framework explains how childhood trauma from abuse, neglect, and household dysfunction can lead to physical, mental, and economic challenges (U.S. Centers for Disease Control and Prevention [CDC], 2024). A dose-response relationship links higher ACE scores to increased risks of depression, chronic illness, and financial instability (Felitti et al., 1998; Thurston et al., 2023). Several NMEE participants reported multiple ACEs, with nearly

half experiencing parental separation or divorce, and approximately one-third reporting emotional neglect, household substance abuse, and psychological abuse—childhood adversities that increase their risk for long-term health and economic challenges.

Table 2: Percentage of Participants Who Experienced ACEs, by Category

ACES CATEGORY	CONTROL	RECURRING	LUMP-SUM
Psychological abuse	35	33	30
Physical abuse	31	27	26
Sexual abuse	22	23	24
Emotional neglect	35	34	36
Physical neglect	19	20	27
Parental separation or divorce	47	47	48
Mother treated violently	19	17	18
Substance abuse in household	32	35	40
Mental illness in household	35	20	28
Criminal behavior in household	23	21	27

* $p<0.05$, ** $p<0.01$, *** $p<0.001$

Lump-Sum vs. Recurring Transfers: A Review

As experimentation with unconditional cash transfers and GI grows in the US, the architecture and timing of transfers requires further inquiry. While lump-sum cash transfers have a lengthy history in the US, recurring cash transfers in the form of a monthly GI are relatively new (Castro & West, 2024). This gap leaves open questions for policymakers and advocates about how the timing of cash transfers may alter outcomes and the ways that participants engage behaviorally with unconditional cash interventions.

Previous empirical research on lump-sum transfers has largely been focused on the Earned Income Tax Credit (EITC), the Child Tax Credit (CTC), and the Alaska Dividend Fund in the US, and until recently the only comparative unconditional cash study occurred in Kenya through GiveDirectly (Banerjee et al., 2023). Haushofer & Shapiro (2016) found lump-sum transfers were more likely to prompt spending on durable goods, whereas recurring transfers were more likely to increase food security and spending on consumption goods. GiveDirectly later compared a monthly cash transfer for two years, a monthly transfer for twelve years, and a single lump-sum transfer (Banerjee et al., 2023). Rates of depression dropped in all three groups, with the largest reduction occurring in the twelve-year group and the least in the lump-sum group. Recipients in the latter leveraged the cash transfer to make immediate investments in financial security, whereas the recurring groups made smaller and more consistent financial investments over time, such as participating in lending circles. More recently, Compton, CA compared bi-weekly (high frequency) with quarterly (low-frequency)

transfers and found no significant difference between the two groups with the exception of food security, which was more likely to increase in the high-frequency group vs. the low-frequency (Balakrishnan et al., 2024).

Within the US, lump-sum payments such as the EITC and CTC tend to encourage particular spending behaviors: allowing recipients to pay down debt, stockpile nonperishable resources, make large durable purchases, or pay bills like rent and utilities in advance. On the other hand, recurring transfers tend to be absorbed into household budgets as consumption goods such as groceries (Parolin et al., 2022; 2023; Shaefer et al., 2013). Sykes et al. (2015) also suggest that lump sums like the EITC foster feelings of social inclusion. Invoking Zelizer (2017) and the social significance of money, they argue the opportunities facilitated by a lump-sum payment allow for recipients to take part in social rights of citizenship not typically extended to low-income workers. For instance, while monthly income tends to go towards necessities, lump sums can go towards saving for long-term goals like homeownership or investing in entrepreneurship.

There are a few caveats to lump-sum transfers. The EITC tends to be spent quickly, either on paying down debt, paying ahead on bills, stockpiling goods, or buying big-ticket purchases. As a result, many recipients lack emergency reserves later in the year depending on whether or not their household experiences unexpected financial shocks (Collins & Kulka, 2023; Kramer et al., 2019). The inability to address short-term financial issues or emergencies can turn into major issues in the long-term. Several studies also suggest that after the EITC runs out, people then use credit cards to fill financial gaps. They take on debt, which they aim to pay off next tax time, although it accrues interest and fees (Halpern-Meekin et al., 2015; Jones & Michelmore, 2019). In this way, annual lump sums can create a self-sustaining cycle of debt, arrearage, and payoff.

Some research suggests the flexibility of recurring payments helps prevent or mitigate these issues, allowing people to establish more consistent financial patterns (Balakrishnan et al., 2024; Halpern-Meekin et al., 2015; Kramer et al., 2019; Smeeding et al., 2000). Steady transfers help households to stay on top of bills and necessities in a way the lump sum does not.

UNCONDITIONAL TRANSFERS & TERMINOLOGY

A guaranteed income (GI) is an unconditional cash transfer that is recurring, time-limited and occurs with high frequency (on a bi-weekly or monthly basis). Unconditional lump-sum transfers share the no-strings attached and time-limited features, but occur with low frequency (on an annual or semi-annual basis). Both forms of cash transfers are designed to work alongside the safety net, not in place of it (Castro & West, 2024). In this report, GI and recurring cash are used interchangeably.

Overall, the two disbursement methods of semi-annual (referred to as lump sum in this study) and bi-monthly (referred to as recurring) function to support different outcomes. Research suggests that recurring payments help stabilize households, improve food security, and help recipients stay on top of bills, whereas lump sums are more likely to be spent on material goods and assets, one-off costs, or paying ahead on bills (Balakrishnan et al., 2024; Haushofer & Shapiro, 2013; Parolin et al., 2023). This speaks to how recipients conceptualize the money differently depending on dosage. The NMEE pilot tested the ways in which the lump-sum vs. recurring disbursements shaped different outcomes for recipients.

Methodology

This research was approved by the Institutional Review Board of the University of Pennsylvania and is part of a parallel mixed-methods design (QUANT + QUAL), which involves analyzing quantitative and qualitative data within each strand prior to integration (Tashakkori et al., 2020). Although Newark is part of the American Guaranteed Income Studies, this location differs from previous studies by testing two treatment arms. As a result, this site is following the same Pre-Analysis Plan as the broader portfolio (ABT Associates, 2023), but the findings are being reported separately per strand to account for each arm. The data presented here are primarily derived from the quantitative arm of the experiment, with the qualitative data serving as case study reference points in this manuscript (QUANT + qual). The companion piece, *Guaranteed Income and Reconstructing Home* (DeYoung et al., 2025), is primarily derived from the qualitative arm and includes data on housing, parenting, and children (QUAL + quant). A full description of the entire study methodology is located in the Pre-Analysis Plan. Per the Pre-Analysis Plan, both strands are informed by a theoretical framework resting on the premise that chronic scarcity reduces cognitive capacity and goal-setting (Mani et al., 2013; Shah et al., 2012), mimics trauma, and contributes to a scarcity mindset as a means of survival (West et al., 2023).

Quantitative Methods

The three-arm randomized controlled trial (RCT) consisted of 878 participants, selected from a pool of approximately 4,700 applicants, distributed across nine zip codes. Eligible participants were Newark residents aged 18 years or older, with incomes at or below 200% of the FPL, and who had been adversely affected by COVID-19. The study included two treatment arms (recurring payment=200 and lump-sum payment=200) and one control arm (n=478). To ensure geographic balance, each zip code contributed an equal proportion (11.1%) of participants: approximately 22 participants per zip code for each treatment arm (with two zip codes contributing 23 participants to reach 200) and about 53 participants per zip code for the control arm (with one zip code contributing 54 participants to reach 478). This allocation strategy maintained balanced geographic representation while preserving the overall 1:1:2.4 distribution ratio, with the control group intentionally oversampled by a factor of approximately 2.4 relative to the treatment groups to ensure sufficient statistical power in comparisons. Disbursements were scheduled across six time periods, with the first GI disbursement in November 2021. Data collection occurred in July 2021 (Baseline, prior to randomization), April 2022 (6

months), October 2022 (12 months), April 2023 (18 months), October 2023 (24 months), and April 2024 (30 months), which was 6 months after the last GI payment. All participants were compensated for completing the survey. Detailed response rates are documented in the Appendix.

DATA ANALYSIS

Outliers were managed using Winsorization. Missing data were imputed via Multiple Imputation by Chained Equations (MICE), following the approach of Azur et al. (2011). This method was well-suited for complex data structures and generated a range of values through multiple iterations. The imputed datasets were validated through distribution analyses, plausibility checks, sensitivity analyses, cross-validations with the original data, and model-fit assessments, thereby providing a foundation for subsequent analyses.

Treatment effects were estimated using Linear Mixed-Effects models that accounted for repeated measures across the six time points. The model specification incorporated fixed effects for treatment status, time, and their interaction, as well as random intercepts for individuals. To ensure valid inference under potential violations of model assumptions, a subject-level bootstrap procedure was implemented that preserved the within-subject correlation structure. 1,000 bootstrap samples were drawn with replacement at the subject level. Inference was based on samples achieving model convergence, with a requirement of at least 500 converged iterations to ensure stability. This methodology provided robust standard errors and confidence intervals. Binary and categorical outcomes were analyzed using Generalized Linear Mixed Models or Generalized Estimating Equations with logit link functions, accounting for within-subject correlations.

SURVEY INSTRUMENTS AND KEY OUTCOME MEASURES

The study evaluated the impact of unconditional cash transfers on household well-being by comparing two treatment groups—households receiving recurring payments and those receiving lump-sum payments—to a control group that received no payments. A comprehensive set of survey instruments captured outcomes across several domains, including financial security, employment status, food security, and mental and physical well-being.

Financial health was assessed using multiple complementary indicators. Annual household income provided a snapshot of overall economic status, while the coefficient of variation of monthly income measured income volatility. Financial resilience was evaluated based on participants' ability to cover a $400 emergency expense using cash or a credit card paid in full—an adaptation from the Federal Reserve's Survey of Household Economics and Decision-Making (Board of Governors of the Federal Reserve System, 2024). Additional measures included self-reported savings, the Consumer Financial Protection Bureau's (CFPB) Financial Well-Being Scale to capture subjective financial capability, and an assessment of the household's capacity for prosocial spending, reflecting financial flexibility (CFPB, 2015).

Employment status was measured using the standard Census protocol, capturing both occupation and employment status (U.S. Bureau of Labor Statistics, 2015). In addition to these core measures, participants reported on barriers to employment, such as childcare constraints and reasons for not

actively seeking work when applicable. This approach provided a comprehensive assessment of labor force participation and structural challenges affecting job access.

Food security was measured using a simplified version of the USDA's Food Security Survey Module, consisting of four key questions converted to binary responses (Rabbitt et al., 2025). This approach was specifically chosen for low-income households with children to reduce survey burden and maximize response accuracy. To understand potential trade-offs between food and other basic needs, a question adapted from the U.S. Census Bureau's Household Pulse Survey was included to assess participants' ability to pay utility bills (U.S. Census Bureau, 2024b).

Mental and physical well-being were assessed using several established psychological and health instruments. The 10-item Kessler scale measured psychological distress (Kessler et al., 2003), while the four-item Perceived Stress Scale assessed stress levels (Cohen et al., 1983). Household environmental instability was captured using the CHAOS scale (Matheny et al., 1995). Hope was evaluated using the Adult Hope Scale, which conceptualizes hope as both the ability to set goals and the confidence to pursue them (Snyder et al., 1991). This last includes two components: Pathways, which reflects an individual's capacity to identify and visualize routes to achieving goals, and Agency, which represents the belief in one's ability to take action and progress towards those goals, even during times of uncertainty.

The study also examined the three dimensions of Mattering, which reflect an individual's sense of significance within their community and the extent to which they feel valued and recognized by others (Elliott et al., 2004). These dimensions include Importance (feeling valued and appreciated), Reliance (feeling needed and depended upon by others), and Awareness (feeling seen and acknowledged within one's social environment). The 32-item Life Attitudes Scale measured psychological resilience through five dimensions: Affirmation, Courage, Faith, Self-Transcendence, and Acceptance (Leung, 2019). This framework reflects Tragic Optimism (TO), the ability to find meaning and maintain hope despite adversity (Leung, 2019).

Health-related quality of life was evaluated using the SF-36

Short Form Survey, which measures multiple dimensions of health status and functional capacity (RAND, n.d.). Finally, the Adverse Childhood Experiences (ACE) framework measured early-life trauma through exposure to abuse, neglect, and household dysfunction (U.S. CDC, 2024).

Qualitative Methods

Semi-structured interviews were conducted across all three arms of the experiment. Interviews lasted 1.5–2.5 hours long, were recorded on DVRs, compensated with a $50 gift card, and were transcribed verbatim. Participants chose their own pseudonyms and their own location for the interviews with most occurring either in the participant's home or at a local restaurant. A total of 42 interviews were conducted across two rounds. Round one occurred in month 10 of the experiment and included five control group members, 10 from the lump-sum (low-frequency) arm, and five from the recurring (high-frequency) arm. Round two occurred in month 26 and included two control group members, 10 from the lump-sum group, and 12 from the recurring group. The interview protocol focused on decision-making trajectories, stressors, health and well-being, care work, relationships, and finances. "Thick description" memos were drafted at each stage of the process beginning with the interview and carrying through the entire analysis (Ponterotto, 2006, p. 358).

All coding occurred in Dedoose by human beings without the use of AI. Thematic analysis was utilized for the semantic level (Braun & Clark, 2012) and grounded theory for latent (Charmaz, 2014). Process coding was specifically used across both analytic threads to facilitate comparisons on decision-making in the lump-sum versus recurring groups. Full details can be found in the Pre-Analysis Plan (ABT Associates, 2023). Control group interviews were used for understanding the local context and are part of a larger pooled analysis that is outside the scope of this report.

Findings

1. The Impact of Recurring Guaranteed Income

Summary: Pilot participants experienced significant financial vulnerabilities due to fluctuating incomes, limited access to credit, and the unpredictable work schedules common in low-wage sectors. The burden of childcare expenses and employment instability further intensified their financial precarity. Recurring GI payments effectively buffered participants against income volatility, offering crucial financial support during periods of unemployment and economic uncertainty. Compared to the control group, recurring GI recipients reported reduced psychological distress, increased household stability, and improved food security. Additionally, the intervention fostered a sense of social recognition among recipients, highlighting benefits that extended beyond immediate financial relief. Although rising inflation during the study period increased costs of essential goods and services, potentially limiting long-term financial stability, the overall benefits of the recurring GI on participants' financial and emotional well-being remained significant. Consistent with GI spending in other studies, participants layered the cash onto their existing daily expenses, recurring costs, and household budgets.

Impacts on Income, Savings, and Emergency Preparedness

The $250 recurring GI payment provided some financial relief to recipients both during the program and after the payments concluded. The payments helped households buffer against economic shocks and manage routine expenses, but many of these improvements dissipated within 6 months after the program ended. Income-boosting effects were temporary. During the first year, participants in the recurring payment group saw a modest increase in income ($15,340 vs. control=$14,431), though the difference was not significant. This gap narrowed to $65 by 18 months and reversed to a non-significant decline of $788 6 months post-program.

Income volatility followed a similar pattern. In the first year, the recurring payment group exhibited slightly lower month-over-month variation in income, with a significant reduction in volatility emerging at 6 months (B=-5.07, p=0.02). Even so, this stabilizing effect proved transient, suggesting that the intervention was insufficient to shield participants from long-term economic instability.

Household savings, a key indicator of both financial stability and long-term wealth building, remained persistently low. Among recurring GI recipients, improvements in savings peaked at 18 months (16.0%) compared to 10.7% in the control group, but no statistically significant differences were observed over time. Few participants (11% or less) ever saved more than $500, and over 70% in both groups maintained

their initial savings level throughout the pilot. Still, the recurring payment group consistently had a higher proportion of participants (7.5% to 11%) with savings exceeding $500 compared to the control group, where rates fluctuated between 3.3% and 5.2% after Baseline.

Figure 2: Annual Household Income Trends over Time, Recurring Payments vs. Control

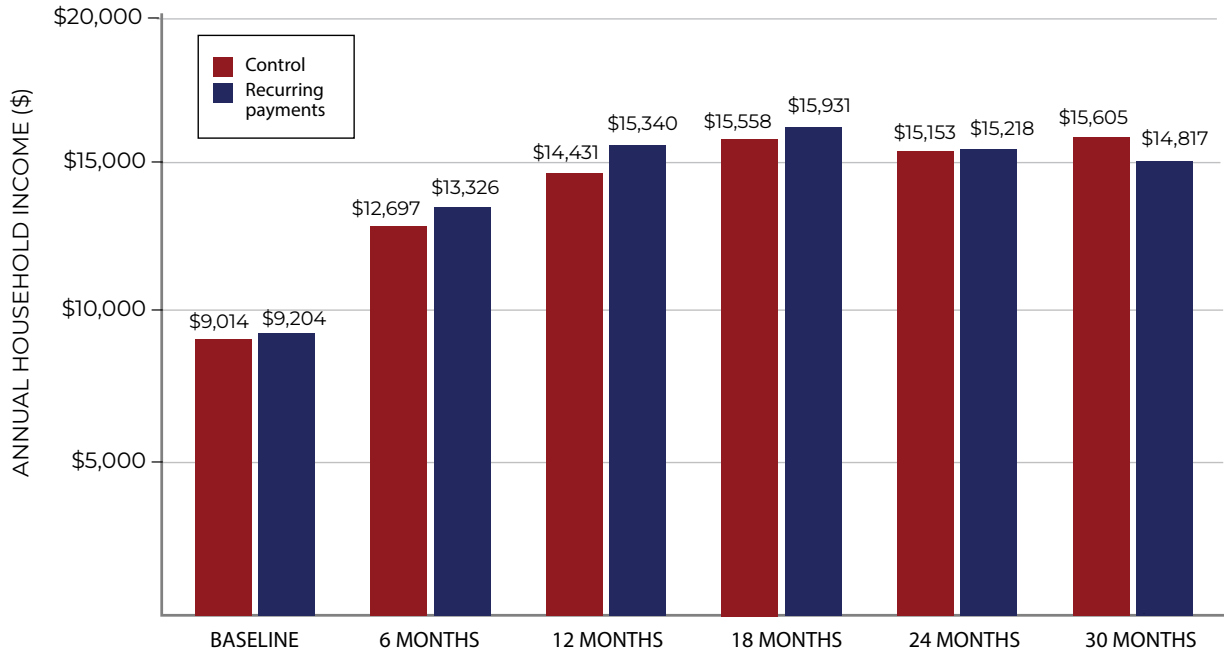


Table 3: Income Volatility over Time, Recurring Payments vs. Control (in %)

	CONTROL	RECURRING
6 months	34	31*
12 months	39	39
18 months	42	41
24 months	44	43
30 months	46	47

* $p<0.05$, ** $p<0.01$, *** $p<0.001$

Participants' financial well-being was similar across groups during the GI disbursement. Baseline scores on the Financial Well-Being Scale clustered in the lower band of the Medium-Low range (38–49), with the control group averaging 39.28 and the recurring group averaging 39.94. These scores typically indicate low rates of savings, difficulty making ends meet, and difficulty when trying to access lines of credit. As financial well-being improved over time—coinciding with a decline in inflationary pressures—a greater proportion of both groups transitioned from Very Low (<37) to High (>50), a progression from acute financial stress to firmer grounds. However, by the end of the pilot, recurring

recipients reported significantly lower financial confidence than the control group (B=-1.04, *p*=0.03). This decline may reflect the psychological impact of GI termination, as participants recalibrated their long-term financial outlook in the absence of regular cash support.

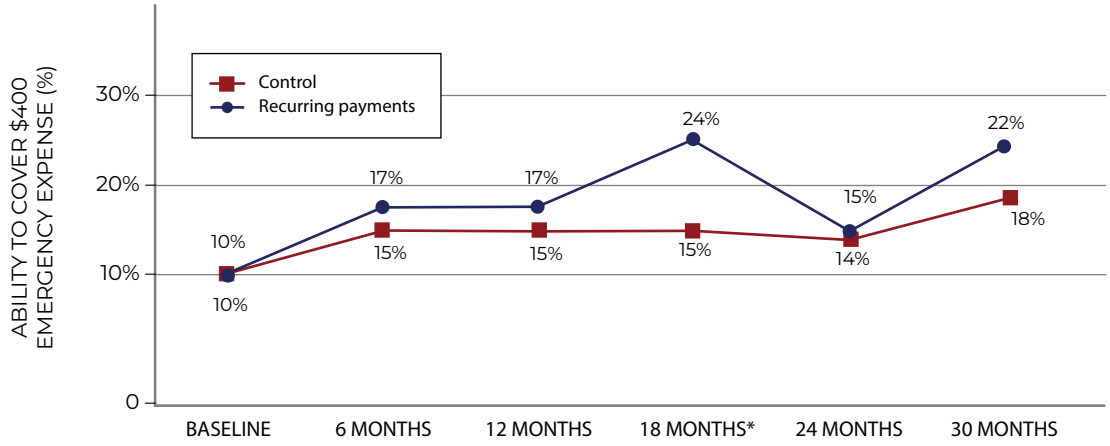
Table 4: Transitions in Savings over Time, Recurring Payments vs. Control (in %)

TIME PERIOD	<$200		$200–$500		>$500		IMPROVED		DECLINED		STABLE	
	C	R	C	R	C	R	C	R	C	R	C	R
Baseline	83.1	81.5	10.0	8.5	6.9	10.0	_	_	_	_	_	_
6 months	77.2	75.0	17.6	16.5	5.2	8.5	8.8	9.0	17.6	17.5	73.6	73.5
12 months	77.0	71.0	18.8	21.0	4.2	8.0	11.5	9.0	13.4	14.5	75.1	76.5
18 months	74.9	75.0	20.5	14.5	4.6	10.5	10.7	16.0	12.6	8.5	76.8	75.5
24 months	83.7	77.0	13.0	15.5	3.3	7.5	15.1	12.5	8.2	13.0	76.8	74.5
30 months	77.0	73.0	18.0	16.0	5.0	11.0	9.4	13.0	13.4	13.0	77.2	74.0

* $p<0.05$, ** $p<0.01$, *** $p<0.001$

Beneath this temporary positive trajectory, participants' financial vulnerability remained evident in their limited ability to manage unexpected expenses. With restricted savings and limited income, they lived paycheck to paycheck, unable to absorb financial shocks. At Baseline, 90% of participants in both groups were unable to cover a $400 emergency expense using cash or a credit card paid in full. The recurring payment group showed improved capacity to absorb financial shocks, reaching a peak of 24% at 18 months (OR=1.09, 95% CI [1.03, 1.16]). As time progressed, while recurring recipients maintained better financial preparedness for an emergency expense (22%) compared to the control group (18%), this difference was no longer statistically significant at months 24 and 30. These end-of-study changes coincided with easing post-pandemic inflationary pressures, particularly in essential expenses such as food and utilities, which may have helped reduce financial strain for some, but not all (Carter, 2024).

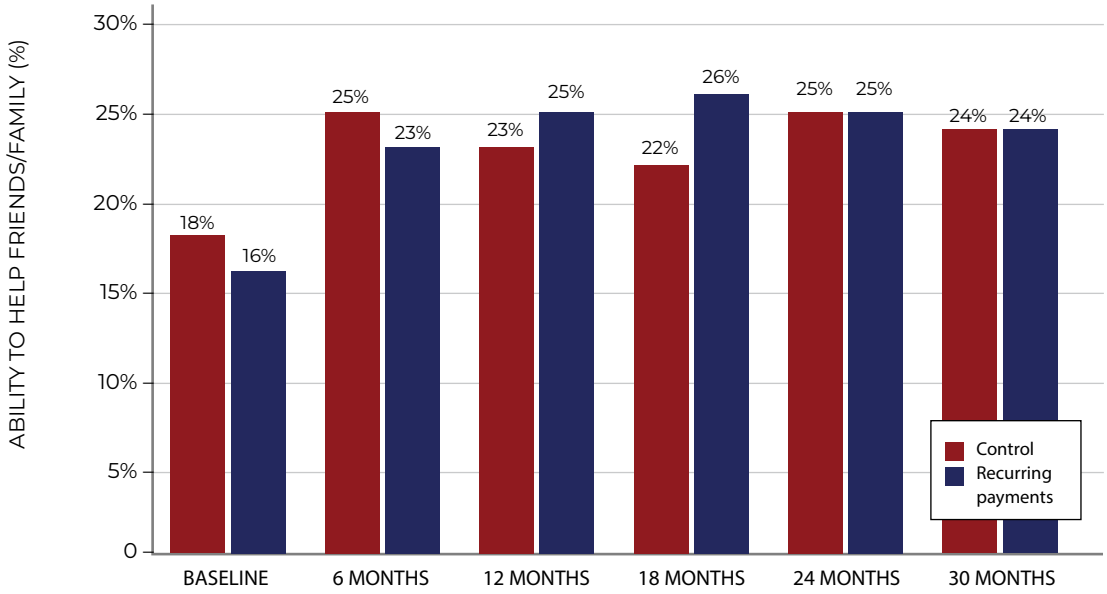
Figure 3: Ability to Cover a $400 Emergency Expense, Recurring Payments vs. Control (in %)



* $p<0.05$, ** $p<0.01$, *** $p<0.001$

Similarly, recurring payment recipients showed an initial increase in their ability to assist friends and family financially, though no statistically significant differences between groups were discernible over the study period. As shown in the chart below, the recurring group showed a marginal increase to 26%, compared to 22% in the control group, during the first 18 months. Parity emerged between the groups by the conclusion of the pilot, with an equal proportion (24%) reporting a capability to help others in the prior month.

Figure 4: Ability to Financially Help Friends and Family, Recurring Payments vs. Control (% Yes)



* $p<0.05$, ** $p<0.01$, *** $p<0.001$

Strategizing Recurring Payments: Monique

Participants who received recurring payments approached their strategizing and consumption in a manner consistent with most GI pilots. Unlike the lump-sum group who focused on larger items such as car repairs or home deposits, which are extremely difficult to save for, their spending was layered on top of their existing daily expenses like groceries and rent. Participants spent years learning to navigate scarcity and cultivating budgeting habits that maximized what little they had. Therefore, the recurring GI infusions created an enhanced capacity for their strategies to pay off.

Monique is a Black mother of three children and a lifelong Newarker. She herself lives with a disability and performs care work both professionally and for family members.

Two of her children live with her, but her oldest child lives with his father. She did not want him spending his teenage years in Newark. She has lived in Newark all her life, embodying the tough, no-nonsense qualities intrinsic to the city. She expresses loyalty to Newark, but equally describes it as a difficult place to live:

> *You gotta be strong to live in Newark, you really have to have a strong mind to actually live out here. You see, I was born and raised here so I got to know what Newark is about, but you really gotta have a strong mind and you gotta have that mind of not giving up because you gonna go through some ups and downs in Newark. You are gonna go through some ups and downs but you gotta be strong just to, you gotta be strong to live out here or else you're not gonna make it, you gonna fall victim to the streets, you're gonna fall victim to the drugs, you're gonna fall victim.*

Monique has experienced housing instability for much of her life, including homelessness.

> *I was homeless, to the point where I literally, I slept in a hallway, and now that's why I guess, I'm the way I am today and with the way, like, I go about certain things, because I'm gonna pay my rent. That's number one. Me being homeless, it, it really like, it took a toll on me. … Everything just was like falling apart and the stress, the depression was falling down on me, and I'm like, oh my God, I know I can get it together. I'm gonna get it together. It's like, nothing was going right. I would apply to certain things, apply to jobs and stuff like that. Nobody was accepting. I'm like, what am I doing wrong?*

She has lived in many different arrangements, including an illegal basement unit. "You always moving," her grandmother said to her. She noted that rent in Newark had skyrocketed in the past few years, and every year it goes up. "It's too high. How can people live?" she asked.

At the time the pilot began, she was in the middle of a high-risk pregnancy. In addition to that physical and mental stress, she was under an enormous amount of financial stress, too. She received disability payments, but they were not enough to cover her rent, and she was physically unable to work to make up the difference. Meanwhile, her landlord kept calling her for the rent, she said,

> *and that just probably why my blood pressure also was so high at the time, because I kept stressing, kept stressing... I was so stressed out. Couldn't work. I couldn't do nothing. Like I couldn't even walk, And me, I'm the person that would like to help everybody else. So, for me not to be able to do for myself, it was like hurtful.*

Monique described using the GI to offset the cost of rent during her pregnancy and the first year of her child's life while also smoothing the impact of monthly bills by leveraging the GI to set up automatic payments for her cable, internet, and phone. Whatever was left over from each round of bills, she spent on groceries; she did not receive SNAP so shopped at multiple stores to get the best deal and stock up. Importantly, these strategies were ones she longed to employ in the past but lacked the funds to do so, highlighting James Baldwin's timeless assertion: "Anyone who has ever struggled with poverty knows how extremely expensive it is to be poor." In other words, living at or below the poverty line often translates into paying more for consumption goods and services when volatility precludes access to cost-saving measures like automatic payments or buying in bulk. Monique preferred the monthly cadence of the payments—she knew exactly how much to expect and what bills it would cover:

> *I'd rather it monthly, so I know I can have it for my bills and the lump sum, it probably would come into play after I'd be done stressed out about what, how I'm gonna do this, and I'm gonna do that, throughout that month. Monthly for me is better.*

Though she received disability, she felt energized about pursuing different pathways for herself in the wake of the GI program. It seemed as though the pilot opened up new aspirations for Monique. In her words:

> *I'm going back into the work world, to see if I can handle it. If it's too stressful because I suffer from major stress and depression, if I can't handle it, at least my rent will be adjusted back [with Section 8]. But if I can handle it, you know, I'll pay according to my... Whatever I make. So I'm going back into that work world. I know it's bigger things out there. It's more out there, like with everything that I've been through. Yeah. And then I want more for [my children]. I want more for them.*

Impacts on Employment and Workforce Participation

Beyond immediate financial effects, labor market engagement was another key dimension in assessing the impact of GI. Employment patterns between the two groups pointed to persistent challenges and limited workforce integration, reflecting the lasting effects of the pandemic. Job opportunities and earnings declined sharply and recovered slowly for low-income workers in Newark in the years that followed the onset of the pandemic (New Jersey Department of Labor and Workforce Development, 2021). Full-time employment remained low throughout the study, with 13% in the control group and 10% in the recurring group employed full-time at Baseline. Among NMEE recipients, full-time employment declined in the first year before marginally recovering to 13% by the end of the study, reflecting a 3 percentage point increase from Baseline to the end of the program. Part-time and seasonal employment remained stable, with rates below 20% at all time points. These findings align with those from the Compton Pledge, which similarly found no significant increases in employment among cash recipients (Balakrishnan et al., 2024). The persistence of low employment rates suggests that while cash assistance may alleviate immediate financial hardship, broader impediments to workforce participation remain unaddressed by cash support alone.

Gig work and self-employment remained extremely limited, reflecting systemic barriers to entrepreneurial or flexible opportunities often observed in low-income Black communities. The proportion of participants identifying as retired or disabled was consistently high, ranging from 12% to 16% in the control group and 14 % to 18% in the recurring group, underscoring the prevalence of health-related barriers to workforce participation.

Caregiving responsibilities, particularly relevant to the study's predominantly female participants, followed divergent trends. In the control group, caregiving rates nearly doubled from 10% at Baseline to 18% by 30 months, whereas rates in the recurring payment group remained stable at 9 to 10%. At 18 months, caregiving rates were significantly lower among cash recipients than in the control group

(OR=0.40, 95% CI [0.18, 0.87]). Rather than directly impacting employment, the recurring cash support appears to have provided recipients more choice in managing work/family trade-offs, potentially by making caregiving arrangements more affordable.

At the start of the pilot, unemployment was widespread, affecting 37% of the control group and 34% of the recurring group. Structural barriers, particularly for Black women, limited access to stable employment. While unemployment rates declined slightly over time, they remained high at 30 months, with 30% of the control group and 33% of the recurring group still out of work. Participants frequently cited employment barriers such as disability, childcare access, limited transportation, job market challenges, and unresponsive employers. For those facing health issues or job loss, the GI provided temporary financial relief, enabling them to delay accepting undesirable jobs. Yet, it was insufficient to address the root causes of long-term employment instability.

STRUCTURAL BARRIERS

Structural barriers are obstacles that collectively affect a group disproportionately and perpetuate or maintain stark disparities in outcomes. Structural barriers can be policies, practices, and other norms that favor an advantaged group while systematically disadvantaging a marginalized group (Simms et al., 2015, p. v).

Types of structural barriers include:

1. A practice, system, or policy that helps maintain advantages and disadvantages by race.

2. An obstacle—experienced disproportionately by race—that even an enterprising, knowledgeable, and intelligent member of the disadvantaged group would have trouble overcoming.

3. A practice, system, or policy that creates physical isolation and requires a “disadvantaged” individual to have something.

4. A practice, system, or policy that relies on individuals—disproportionately by race—having resources that others do not have or cannot access (Simms et al., 2015, p. 7).

Table 5: Employment Trends over Time, Recurring Payment vs. Control (in %)

	BASELINE		6 MONTHS		12 MONTHS		18 MONTHS		24 MONTHS		30 MONTHS	
	C	R	C	R	C	R	C	R	C	R	C	R
Employed full time	13	10	12	9	10	8	10	10	9	10	10	13
Employed part time or seasonal	17	21	15	16	18	18	16	18	14	18	17	18
Stay-at-home parent or caregiver	10	10	17	11	15	8	18	8 *	15	11	18	9
Business owner/Self-employed	4	5	6	4	5	5	4	4	6	4	4	4
Gig worker	2	0	3	3	3	2	3	2	4	1	2	1
Retired/ Disabled	12	14	13	17	16	17	16	17	16	18	14	17
Student	1	3	2	3	1	3	1	4	1	4	1	3
Unemployed looking for work	37	34	29	34	28	36*	29	34	31	32	30	33
Unemployed not looking for work	3	3	3	3	4	3	3	3	3	2	3	2

* $p<0.05$, ** $p<0.01$, *** $p<0.001$

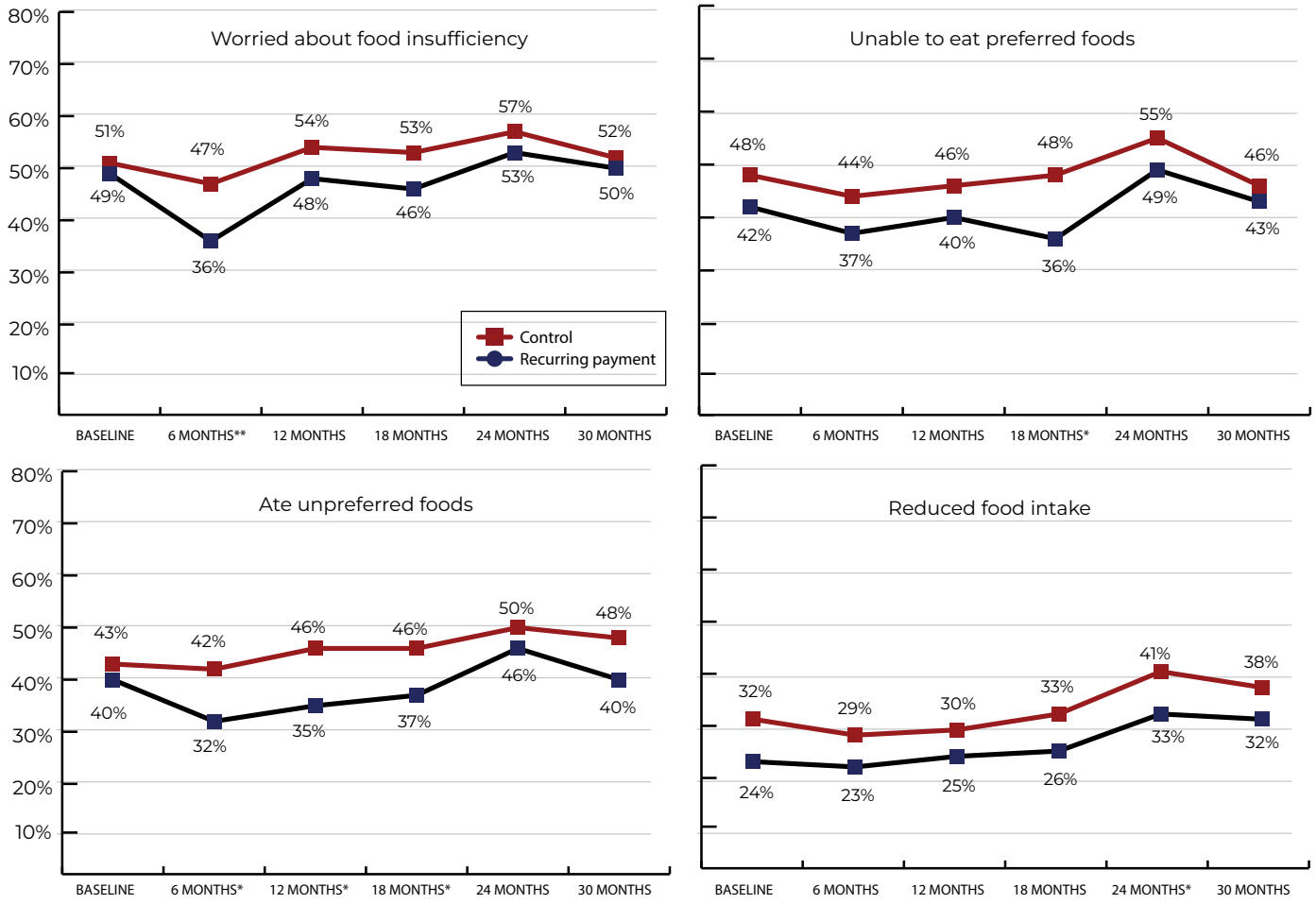
Impacts on Household Food Security

Access to stable, nutritious food remains a critical challenge for low-income households, particularly in areas with limited access to full-service grocery stores. Evidence from other GI programs suggests that more frequent cash disbursements help households prioritize food spending and purchasing healthier foods over other immediate needs (Kim et al., 2024; Liebman et al., 2022; McDougall et al., 2024) and have been linked to increased consumption of healthy produce in 24-month-olds whose mothers receive unconditional cash transfers (Sperber et al., 2023). Building on this research, the study examined how recurring payments influenced food security and contributed to improved dietary stability over time.

The paucity of resources meant that many households, including those with children, struggled to afford fresh, balanced meals, compromising their health and well-being. Findings revealed that the recurring GI significantly alleviated household food insecurity among participants. At Baseline, food

insecurity prevalence was comparable between groups, with similar proportions reporting concerns about food insufficiency (control: 51% vs. recurring: 49%) and the inability to afford preferred foods (control: 48% vs. recurring: 42%). However, significant differences emerged within 6 months of the first disbursement. Households receiving the recurring transfers saw meaningful improvements, with reductions in concerns about food access (B=-0.46, *p*=.008), having to place limits on food choices (B=-0.43, *p*=.015), and making utility payments (B=-0.35, *p*=0.04). These effects persisted at 12 months, with participants reporting significantly lower concerns about restricted food options (B=-0.48, *p*=.005) and utility payments (B=-0.45, *p*=.01). Improvements continued through 18 months, particularly in food preference measures (B=-0.48, *p*=.005), and extended into 24 months, with a reduction in Very Low food security (B=-0.35, *p*=.048), defined as reducing food intake due to limited resources.

Figure 5: Food Insecurity over Time, Recurring Payment vs. Control (% Yes)



* *p*<0.05, ** *p*<0.01, *** *p*<0.001

These findings highlight the role of recurring payments in stabilizing household food security, with the strongest effects observed during the early and middle phases of the pilot—when food inflation was at its peak (U.S. Department of Agriculture, 2025). Beyond meeting immediate needs, frequent cash payments helped reduce Very Low food security, minimizing the need for households to cut

back on meals. These results must be considered within the broader context of Newark's status as a food desert, where limited access to affordable, nutritious food continues to constrain healthier dietary choices (New Jersey Economic Development Authority, 2022).

Impacts on Mental Well-Being, Stress, and the Household Environment

Financial strain is a well-established causal driver of psychological distress in low-income households (Ridley et al., 2020; West et al., 2023). While GI can temporarily reduce distress, its mental health effects vary across studies, often dissipating once payments stop. Though cash transfers provide short-term financial relief, they do not resolve the underlying structural barriers to mental well-being.

"it's always guaranteed when y'all say, you know what I'm saying? So for me, I'm able to budget and incorporate that with my monthly whatever I need."
~ Ebony

Recurring cash payments eased psychological distress by alleviating financial concerns. At the start of the pilot, both groups showed similarly high levels of distress on the K-10 scale (control: 22.70 vs. recurring: 22.58), with about half scoring 22 or above, indicating mild to moderate distress (Kessler et al., 2003). Six months after payments started, the recurring recipients showed significant improvement (B=-1.10, p=0.03), with their average scores dropping below 20 (M=19.55), reaching the "likely to be well" range, while the control group remained higher (M=20.77). Although the recurring payment group maintained lower distress levels at 12 months (B=-0.99, p=0.06) and 18 months (B=-1.08, p=0.04) compared to the control group, their scores stayed just above 20, suggesting the strongest benefits occurred in the first 6 months. Looking at distress components measured by the K-10 scale, recurring recipients reported feeling less depressed at 6 months (B=-0.68, p=0.04) and 12 months (B=-0.69, p=0.04), and less anxious at 6 months (B=-0.42, p=0.03) and 18 months (B=-0.54, p=0.02). Yet, by 24 months, the time of the last payment, the differences between groups were no longer significant, indicating that the mental health benefits waned as financial support tapered off.

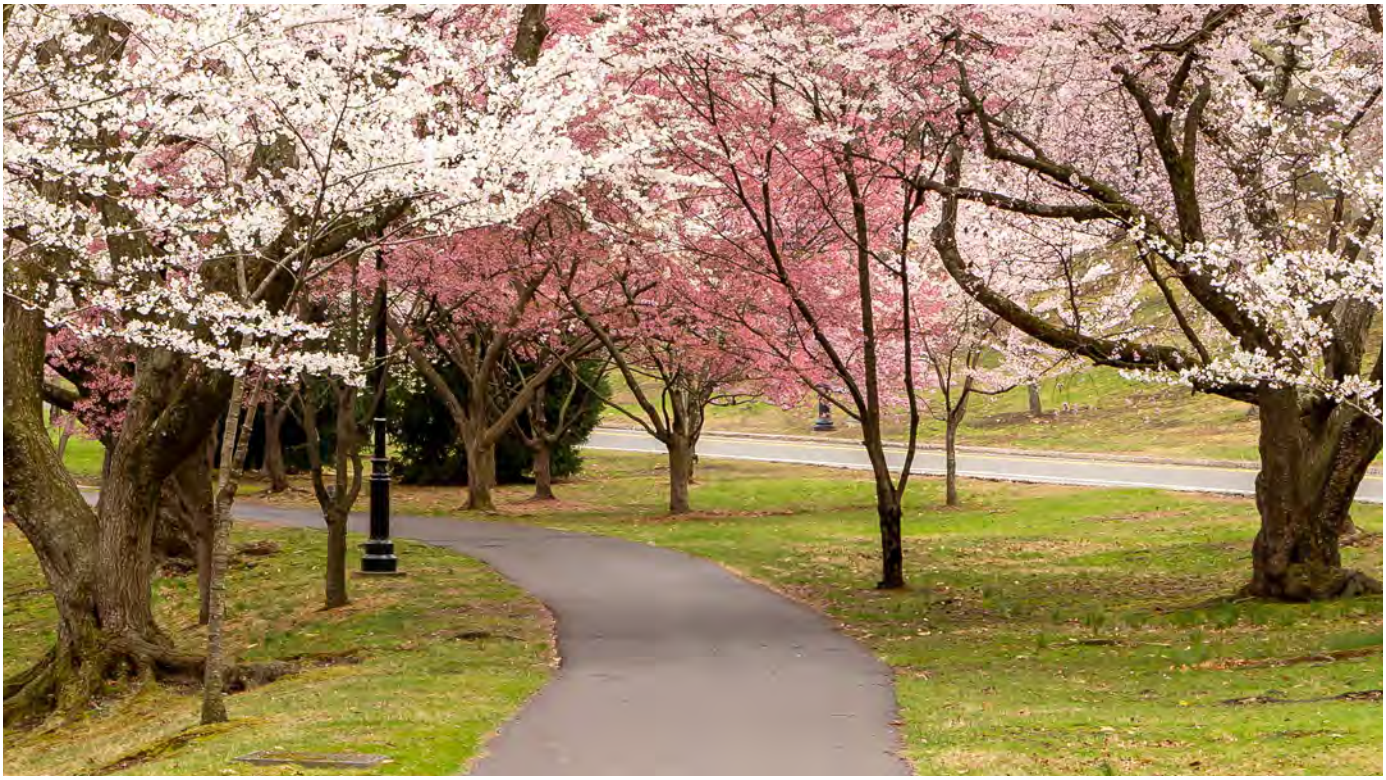
Symptoms of stress over the previous month showed similar patterns, though were not statistically significant at all time points evaluated. The proportion of recurring payment participants reporting lower stress levels remained consistently comparable to or higher than the control group throughout the GI period (35% vs. 27% at 6 months; 29% vs. 25% at 12 months; 28% vs. 29% at 18 months; and 25% vs. 31% at 24 months). Stress levels increased marginally 6 months post-intervention for cash recipients, but remained below Baseline levels. Overall, while the recurring GI did not eliminate high stress levels, it helped some recipients manage their stress more effectively.

In addition to reducing psychological distress, the recurring payments helped stabilize home environments, minimizing household disorganization, and improving family dynamics. Baseline assessment of household environment showed comparable levels of household chaos across the two groups (control: 28.76 vs. recurring: 28.03) (Matheny et al., 1995). Six months after the first disbursement, cash recipients showed significant reduction in household chaos (M=26.34) compared to the control group (M=28.98; B=-1.90, p=0.00). The reduction persisted at 12 months (mean diff.=-2.00, p=0.01) and

18 months (mean diff.=-1.79, p=0.02), and remained lower, though not statistically significant, at 24 and 30 months. Additionally, the proportion of participants reporting low levels of household chaos decreased by 7 percentage points in the control group between Baseline and 6 months, while the recurring group showed a 7 percentage point increase. Collectively, these findings establish that while the effects of recurring GI payments did not extend beyond the intervention, they effectively improved household environments and mitigated financial stress induced conflicts during the disbursement period.

Impacts on Physical Well-Being

Recurring GI payments had limited impact on health-related quality of life, which is shaped by multiple structural factors. While GI can ease financial strains and reduce certain stressors at the individual level, non-financial social determinants of health that are systemic, like inequalities in the built environment or in healthcare access, preclude substantive physical health effects for many. Over the course of NMEE, no significant differences emerged between groups for general health or role limitations due to physical health. Limitations in physical functioning were less prevalent among the recurring GI recipients, with statistically significant differences observed at 6 months (mean diff.=0.68, p=0.047), 12 months (mean diff.=1.50, p=0.02) and 18 months (mean diff.=3.17, p=0.003), compared to control. The higher proportion of disabled individuals in the sample make these findings particularly relevant, as the recurring GI may have facilitated better access to healthcare or assistive services, though overall differences remained within established global norms (RAND, n.d.).



Health Scares and Guaranteed Income: Stacy

"This program has saved my life."

Stacy is a Black mother of three. Born and raised in Newark, she comes from a big, close-knit family. "Every holiday, birthdays, we are always together," she said. "I've always felt cared for and loved." When she applied for NMEE, she was working as a toll collector and loved the work—"you meet people from all over," she said. "Just to make somebody's day… Just good morning, you know, could change somebody's day. You never know." A few months later, she felt unwell and went to the emergency room only to learn she had several brain tumors.

> *I was in shock. In shock because they, uh, they first thought it was a stroke because of the symptoms. It was like blurry vision, um, headaches. I had numbness on my left side. So, they thought it was just maybe a stroke. Then they said, I'm sorry. No, no, no, don't be here. Then they said maybe, um, just maybe side effects from a migraine. But once they saw it that I had actual brain tumors, that's when they was like, I had to have surgery, like right away.*

With her health and the demands of medical appointments, Stacy was unable to continue working. Because she was part-time, she did not receive any benefits, and because she left voluntarily, she was not eligible for unemployment and was denied Social Security income. After receiving this news, she then learned she was randomized into the recurring GI group, saying, "God had it set up to where my application was processed, that, that I got selected to get that call to say that you were picked." Stacy's family was there for her every step of the way: they came to visit her in the rehabilitation center, and if they had extra money, they would share it, although she did not like to ask them. "I've always worked, I've always had a job," she said. She relied on her tax return to put aside money for her daughter's and granddaughter's birthdays and the summer months, while the recurring GI went towards her credit card bill, her car note, and her internet bill.

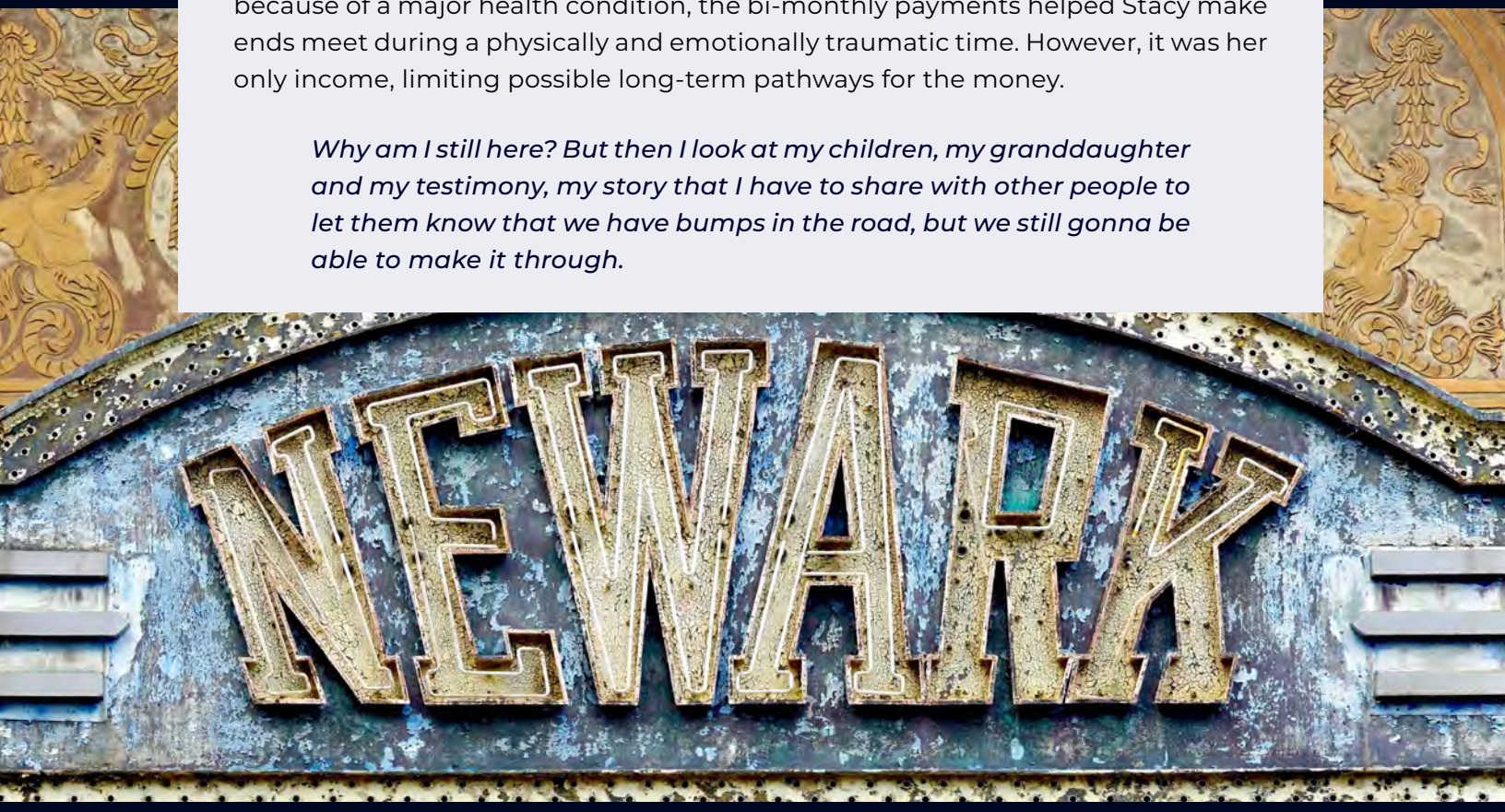
> *If I can squeeze something else out of it, I may, but other than that, I try to make sure the bills are paid first. … It comes on the 1st and the 15th. So, I say, okay, I know I gotta take something from that to put towards the car note. Something to that, maybe towards my, like I said, my Wi-Fi internet bill, you know, put something just to make sure I have gas in the car. I do it by the 1st and the 15th when it comes, and then I break down what, that needs to be covered at that time.*

Sometimes, she was able to treat her daughter and granddaughter to McDonald's. But for the most part, Stacy was living solely on the GI, leaving little room for extra expenses. She expressed frustration:

> *I have a 13-year-old and you know, they, they don't understand the, um, the concept of money and budgeting and saving. So, sometimes I have to tell her, you know, we can't go to the movies or we can't go out because I don't have it... So, you know, I have to, I try my best. I try not to show it in front of them because I don't want them to get worried. But, but some days I, it's very difficult some days. I try my best like I said, not to show. I don't, some days I feel like I'm wearing a mask to hide how I'm really feeling, but I just have to accept it and I still have to thank God that I'm still here to share my story.*

Between financial precarity and health struggles, Stacy was very much living in the present, but she wanted to share her story, noting, "I was always timid and quiet. And I was never outspoken. I was just, to hold things in, but lately [after the surgeries], uh, you know, I'm talk, I'm a talker now." She described the program as a "blessing—not just to me, to my family as well." She hoped that the GI program helped other families in the long run, too. Denied for SSI but unable to work because of a major health condition, the bi-monthly payments helped Stacy make ends meet during a physically and emotionally traumatic time. However, it was her only income, limiting possible long-term pathways for the money.

> *Why am I still here? But then I look at my children, my granddaughter and my testimony, my story that I have to share with other people to let them know that we have bumps in the road, but we still gonna be able to make it through.*



Impacts on Participants' Subjective Sense of Self: Mattering, Hope, and Tragic Optimism

With some degree of financial stability, the recurring GI payments enhanced participants' sense of awareness—their perception of being seen, acknowledged, and recognized by others (Elliott et al., 2004). Baseline scores were comparable across groups but diverged 6 months after the first disbursement, with the recurring cash group consistently outperforming the control group at every subsequent time point: 6 months (mean diff.=1.52, p=0.00), 12 months (mean diff.=1.22, p=0.01), 18 months (mean diff.=1.36, p=0.00), 24 months (mean diff.=0.96, p=0.046), and 30 months (mean diff.=1.34, p=0.00). The persistence of these gains suggests that the frequency and predictability of the recurring payments played a key role in reinforcing a lasting sense of mattering. Beyond immediate financial relief, the payments may have created opportunities for participants to engage more fully in their communities, feel acknowledged, and experience a greater sense of belonging over time. Overall, the sustained improvement implies that frequency of payments, rather than just the amount of assistance, played a role in reinforcing feelings of mattering and social recognition. However, these gains did not extend to other measures and did not translate into broader shifts in future outlook, sense of importance, or reliance.

Hope, deeply tied to one's sense of agency and perceived economic mobility (Snyder et al., 1991), remained largely unchanged and was not significantly different among groups at any time point. At Baseline, scores were comparable between control and recurring groups for Agency, Pathways, and Total Hope measures. Over time, minimal variations in Hope metrics were observed. Hope categories were also evenly distributed across both groups, suggesting that the recurring GI did not necessarily alter participants' outlook on their long-term trajectories.

Even as hope levels remained steady, participants' ability to cope with challenges shifted significantly over time. The recurring payment group reported higher Affirmation scores at 12 months (mean diff.=0.52, p=0.01) and 30 months (mean diff.=0.56, p=0.01), suggesting an improved appreciation for life's values. Yet, Self-Transcendence trended lower in this group, with a significant difference at 24 months (mean diff.=-0.76, p=0.01), indicating a reduced sense of connection beyond oneself. Courage was also significantly lower among NMEE participants compared to the control group at 6 months (mean diff.=-0.23, p=0.00), indicating a reduced ability to face life's challenges and pursue goals. These results suggest that while the GI enhanced some aspects of participants' orientation toward life's challenges and purpose, external stressors may have moderated its broader impacts.

Impacts on Civic Engagement

Findings reveal similar patterns of civic engagement between the two groups, with both showing variability across activities. These patterns could have been influenced by the timing of actual electoral and civic engagement opportunities during the study period. NMEE recipients showed slightly higher civic engagement at Baseline, though both groups subsequently experienced declines, with no statistically significant differences emerging at any observation point. Voting rates were comparable

at Baseline (control: 25% vs. recurring: 26%) and Endline (control: 17% vs. recurring: 14%), with variations potentially reflecting the presence or absence of elections during these periods. Working with fellow citizens showed minimal differences (Baseline—control: 31% vs. recurring: 30%; Endline—control: 15% vs. recurring: 11%), as did petition signing (Baseline—control: 27% vs. recurring: 32%; Endline—control: 10% vs. recurring: 9%). Volunteering for political parties or candidates remained similar between these groups (18–28% range).

2. The Impact of Lump-Sum Guaranteed Income

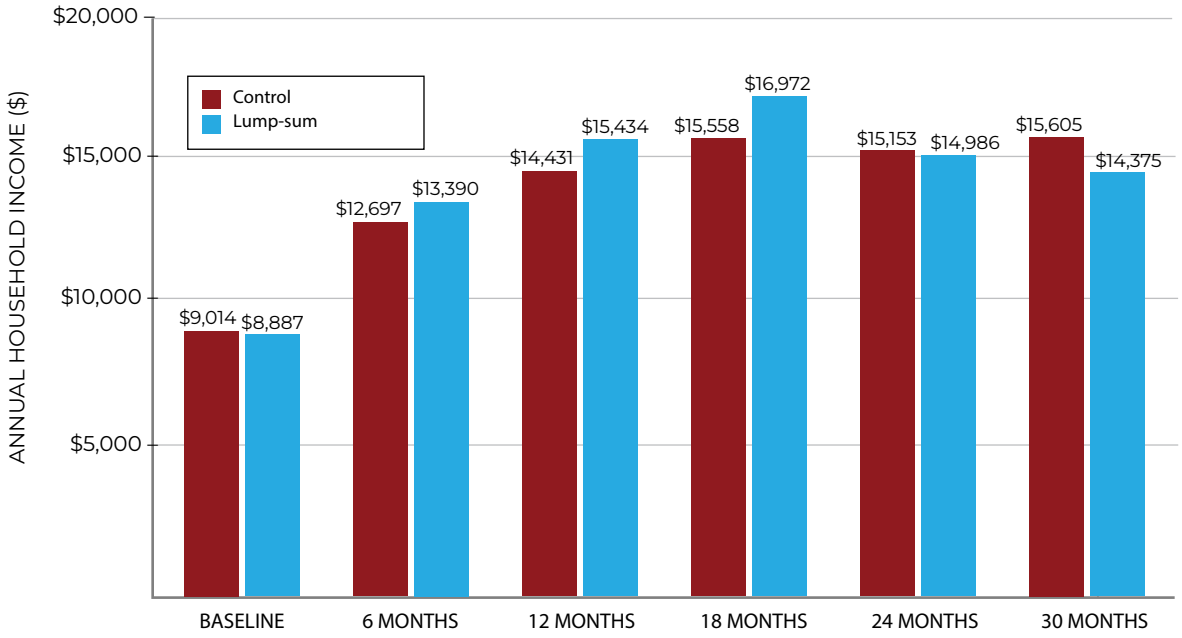
Summary: Pilot participants living in deep poverty faced chronic financial instability, making it difficult to achieve lasting economic security. Without stable, salaried jobs, many relied on irregular earnings from temporary work, leaving them unable to budget consistently or accumulate savings. Limited access to credit and safety nets further restricted their ability to absorb financial shocks, forcing them into short-term coping strategies. For those receiving semi-annual lump-sum GI payments, financial stability improved temporally in parallel with the timing of payments. Compared to the control group, recipients were more likely to maintain household savings exceeding $500 and absorb unexpected $400 expenses using cash or a credit card paid in full. While the GI initially engendered a sense of being valued within the community, these feelings attenuated over time. This points to the importance of payment frequency not only in sustaining economic stability but in preserving the fundamental sense of dignity and social belonging that financial security ultimately provides. Consistent with consumption patterns in EITC and Alaska Dividend Fund payments, participants leveraged the lump-sum payments for larger items that bolstered their future security, such as deposits for apartments, expensive car repairs, and paying bills in advance, but spoke little about using the lump-sum to offset daily expenses. Participants like Samantha described that she "worked out my bills … and whatever I could pay for like 2 months, 3 months. That's just what I did… It felt good just to get up and know your bills was paid for a couple of months. It felt like it was a dream, but it felt good." In contrast, the recurring GI group nested the cash within their existing household budgets and daily needs to offset material hardship, the cost of childcare, and the cost of healthy food.

Impacts on Income, Savings, and Emergency Preparedness

The lump-sum NMEE recipients experienced larger initial gains in household income compared to the control group, with a mean difference of $1,003 at 12 months. By 18 months, this increase approached significance (mean diff.=$1,414). Yet, these gains may have been short-lived. Six months post-intervention, household income declined by $1,230 relative to the control group, though the difference was not statistically significant.

No clear impact on income volatility emerged, suggesting that the cash infusion did not fundamentally alter month-over-month income stability. This pattern aligns with EITC research, showing that while lump-sum payments provide temporary financial relief, they do little to reduce income fluctuations and may actually reinforce periods of financial instability between disbursements (Maag et al., 2021).

Figure 6: Annual Household Income over Time, Lump-Sum vs. Control



* $p<0.05$, ** $p<0.01$, *** $p<0.001$

Analysis of savings accumulation showed that GI recipients in the lump-sum payment group began with the lowest proportion of participants with savings exceeding $500 at Baseline (4%). As the pilot progressed, savings improved significantly compared to the control group. Savings above $500 were significantly higher at multiple time points, with increases at 6 months (OR=3.52, 95% CI [1.58, 7.84]), 12 months (OR=2.84, 95% CI [1.30, 6.21]), and 18 months (OR=2.81, 95% CI [1.28, 6.15]). Peak improvement in savings levels (16.5%) was recorded at 18 months. Yet, these gains were not sustained. By the end of the pilot, less than 10% in this group reported savings exceeding $500, highlighting the transient nature of financial improvements and the disproportionate risk faced by lower-income households weathering frequent financial emergencies.

Table 6: Income Volatility over Time, Lump-Sum Payment vs. Control (in %)

TIME PERIOD	CONTROL	LUMP-SUM
6 months	34	33
12 months	39	44
18 months	42	46
24 months	44	48
30 months	46	50

* $p<0.05$, ** $p<0.01$, *** $p<0.001$

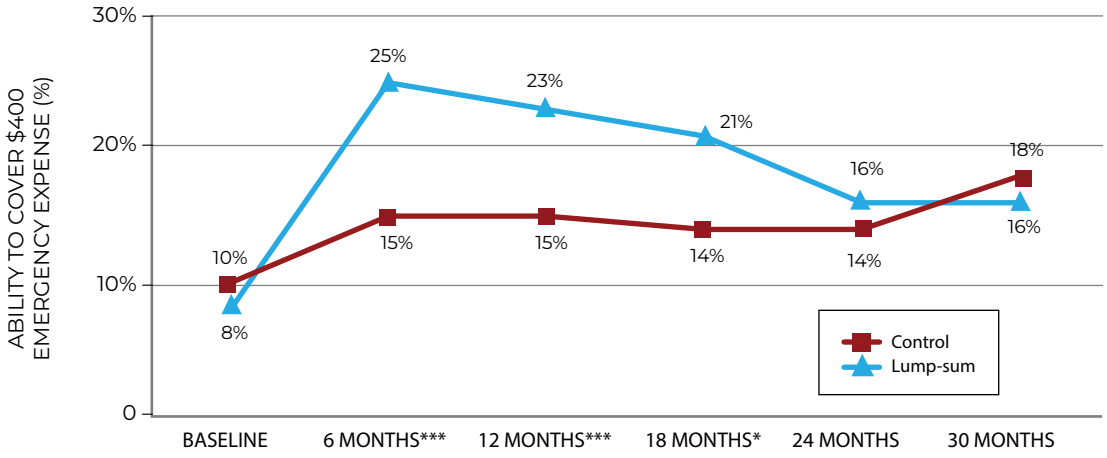
Table 7: Transitions in Savings over Time, Lump-Sum vs. Control (in %)

TIME PERIOD	<$200		$200–$500		>$500		IMPROVED		DECLINED		STABLE	
	C	L-S	C	L-S	C	L-S	C	L-S	C	L-S	C	L-S
Baseline	83.1	84.5	10.0	11.5	6.9	4.0	_	_	_	_	_	_
6 months	77.2	77.5	17.6	16.0	5.2	6.5**	8.8	13.5	17.6	15.0	73.6	71.5
12 months	77.0	75.5	18.8	17.5	4.2	7.0**	11.5	13.5	13.4	14.5	75.1	72.0
18 months	74.9	73.0	20.5	16.5	4.6	10.5**	10.7	16.5	12.6	14.0	76.8	69.5
24 months	83.7	85.5	13.0	8.0	3.3	6.5	15.1	15.0	8.2	10.5	76.8	74.5
30 months	77.0	81.0	18.0	11.5	5.0	7.5	9.4	8.5	13.4	9.5	77.2	82.0

* $p<0.05$, ** $p<0.01$, *** $p<0.001$

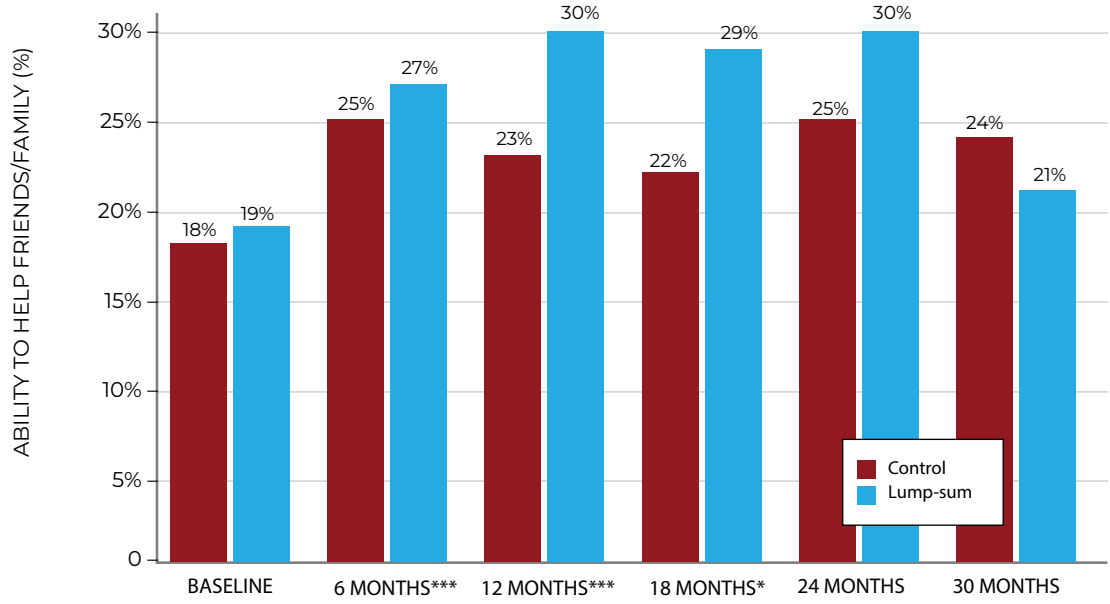
Although the lump-sum NMEE recipients saw early improvements in savings, overall financial reserves remained fragile. Still, the cash infusion provided a degree of financial resilience, particularly in handling unexpected expenses. Participants in this group showed improvements in their ability to cover a $400 emergency expense using cash or a credit card paid in full, increasing from 8% at Baseline to 25% at 6 months and maintaining elevated levels at 12 months (23%) and 18 months (21%). However, these gains atrophied by the end of the study. Regression estimates confirmed these trends, showing significantly higher odds of covering an emergency expense compared to control at 6 months (OR=1.12, 95% CI [1.05, 1.20]), 12 months (OR=1.11, 95% CI [1.04, 1.18]), and 18 months (OR=1.09, 95% CI [1.02, 1.16]). Overall, while this payment structure offered temporary economic relief, the gains did not translate into long-term financial security, and by the end of the pilot, financial resilience had converged between groups.

Figure 7: Ability to Cover a $400 Emergency Expense, Lump-Sum Payment vs. Control (% Yes)



* p<0.05, ** p<0.01, *** p<0.001

Figure 8: Ability to Financially Help Friends and Family, Lump-Sum Payment vs. Control (% Yes)



* p<0.05, ** p<0.01, *** p<0.001

Financial Well-Being scores were similar at Baseline between those receiving lump-sum payments and the control group (control: 39.28 vs. lump-sum: 39.13), both falling in the Medium-Low range (CFPB, 2015). This range indicates that people may have difficulty affording everyday essentials, covering an emergency expense, or accessing lines of credit. Over time, more participants moved into the High category. Yet, after the GI ended, financial well-being among the lump-sum recipients dropped below that of the control group (B=-1.78, p=0.03), suggesting that the loss of cash support may have altered participants' sense of financial security.

Lump-sum NMEE recipients also showed some changes in their capacity to assist friends and family financially. Starting from a Baseline where fewer than one in five participants reported financially helping a friend or family member in the past month, the lump-sum group initially showed a slight advantage of 2 percentage points over control at 6 months. This gap amplified at 12 months (lump-sum: 30% vs. control: 23%) and remained until the GI ended at 24 months. However, 6 months after payments ceased, this advantage disappeared (lump-sum: 21% vs. control: 24%), indicating that the enhanced generosity towards others did not persist beyond the intervention period.

Strategizing Lump-Sum Payments: Summer

Participants in the lump-sum group strategized and spent their cash transfers in a manner consistent with the literature on the EITC and the Alaska Dividend Fund. Rather than layering the cash onto existing household budgets and recurring costs like participants frequently do with GI, they used the lump-sum payments to offset the cost of large purchases that would take months or years to save for on a low-income budget. These purchases were typically for necessities that they could not afford without credit, such as paying the deposit on an apartment, purchasing a laptop for college, or repairing a used vehicle. In contrast to typical GI spending, which often includes offsetting daily expenses like childcare or groceries, their strategy was to leverage the lump-sum towards larger-ticket expenses that would create more stability in the future.

Summer, a Black mother of four school-age children, was born and raised in Newark and described the lump-sum payments by saying it alleviated "a lot of stress, and allowed me the opportunity to save, um, and given me the opportunity to spend more time with my kids." In her case, the lump-sum created a pathway for her to rebuild her life after exiting an abusive marriage.

Before the pilot, Summer experienced emotional and financial abuse from her ex-husband. She was able to leave the relationship, but in doing so, she and her children were left without money, a car, or a home. Her ex-husband controlled everything, including their finances.

> *Yeah, I had to leave, I had to leave... That kind of sucked, because I really loved the [home] where we were and um, I really, you know, had high hopes for us like as a family unit, but you know, um, his behaviors and things wasn't changing. So, you know, I just had to make that decision to get myself and my kids out of the situation before it ended up worse.*

Seeking safety, they escaped to a domestic violence shelter which she described as "a miracle, I mean, I only say that because like, looking back like, when I think back about... I think back on all that stuff, back then, like I could not see myself being where I am now." Nonetheless, she was financially trapped: "It was really tough like not having money, it was really tough not having income and trying to beg your abuser to send you $500." When Summer found out she had been selected for the GI pilot, her first lump-sum payment covered her move out of the shelter, allowing her to establish a sense of safety and security for herself and her children. "I was chosen to get the lump-sum payment and I needed that because I think like, to move in I needed like $2,500, something like that, so, I was really, I was really thankful." With her second payment, she paid off a refrigerator she had purchased for the new place. Summer had earmarked the other installments to pay other bills in advance:

> *I think I'm going to just pay off the rest of my car insurance because I do have a car and sometimes... Well, I feel like, you know, certain bills that I could like, pay off and then not have to worry about it for a couple of months, that helps alleviate a lot of stress too. Um, 'cause that's what I did with the, the second payment, so like, I had a refrigerator so I had like monthly payments on that, but I took a nice portion of the money and just paid it off, so that I'm like okay, so that's one bill that I don't have to worry about anymore 'cause I paid this off.*

As she noted, before the GI she wasn't "making enough money to save money," even with her full-time job.

> *And it's guaranteed, so it's like... It's something that I know I can look, I can look forward to and depend on, so it is allowing me that space to like, actually plan out what I'm gonna do with it. So when I get it, it's like, okay I said I'm gonna do this, this, and this. And then that allows me to save too, that's the other thing that I forgot to point out. It allows me to save, because I can use this money to, to pay for... To pay for things that I would have to take out of my paycheck to pay for.*
>
> *I was really super proud of myself because I almost thought that the reason why I couldn't save money was because it was impossible to save, but it was just because I don't, I'm not making enough money to save money, you know?*

However, Summer's day-to-day was still filled with stressors. Juggling the pressures of work, school, finances, and caring for her four children solo took a toll on Summer's mental health.

> *A lot of the time I, I have to push myself, but there are times where, you know, like my motivation is gone and, and I just like, I'm just like in the slumps like, feeling really depressed and just ready to like, just call it quits because it does, um, it is a lot—it is a lot. So for me to act like it is not, would be a lie.*

In this context, the strategies Summer employed with the first two lump-sum payments informed how she paid her remaining bills. Rather than paying monthly, she used the remaining payments to get ahead on bills, but this at times led to a lack of liquid savings. She anticipated being able to leverage the rest of the GI to finish her degree and shift careers.

> *I feel like the time is perfect because I'll be done with school and then I feel like, that I should be like, in a better position financially because then I'll—getting this degree is opening me up to like, higher paying jobs too. So, I feel like everything will work out and I will be like in a really good position once this program ends.*

Impacts on Employment and Workforce Participation

Employment patterns for participants receiving lump-sum cash revealed only marginally better stability compared to the control group and highlighted ongoing challenges in workforce participation. At Baseline, 16% of the lump-sum payment recipients were employed full-time, compared to 13% in the control group. These rates showed slight fluctuations over time, with the lump-sum group maintaining 14% full-time employment at 30 months, while the control group remained steady at 10%. Part-time or seasonal employment was lower in the lump-sum group throughout the study, averaging 11% compared to 15 to 18% in the control group. Similarly, gig work and self-employment were negligible, with both groups reporting rates between 1 to 4%.

Table 8: Employment over Time, Lump-Sum Payment vs. Control (in %)

	BASELINE		6 MONTHS		12 MONTHS		18 MONTHS		24 MONTHS		30 MONTHS	
	C	L-S	C	L-S	C	L-S	C	L-S	C	L-S	C	L-S
Employed full time	13	16	12	15	10	16	10	15	9	14	10	14
Employed part time or seasonal	17	13	15	11	18	11	16	10	14	10	17	11
Stay-at-home parent or caregiver	10	9	17	13	15	12	18	11	15	11	18	11
Business owner/Self-employed	4	1	6	3	5	4	4	3	6	3	4	3
Gig worker	2	1	3	2	3	2	3	1	4	1	2	1
Retired/ Disabled	12	13	13	16	16	14	16	15	16	16	14	14
Student	1	2	2	2	1	2	1	3	1	2	1	3
Unemployed looking for work	37	40	29	35	28	36	29	38	31	39	30	39
Unemployed not looking for work	3	6	3	3	4	4	3	4	3	4	3	4

* $p<0.05$, ** $p<0.01$, *** $p<0.001$

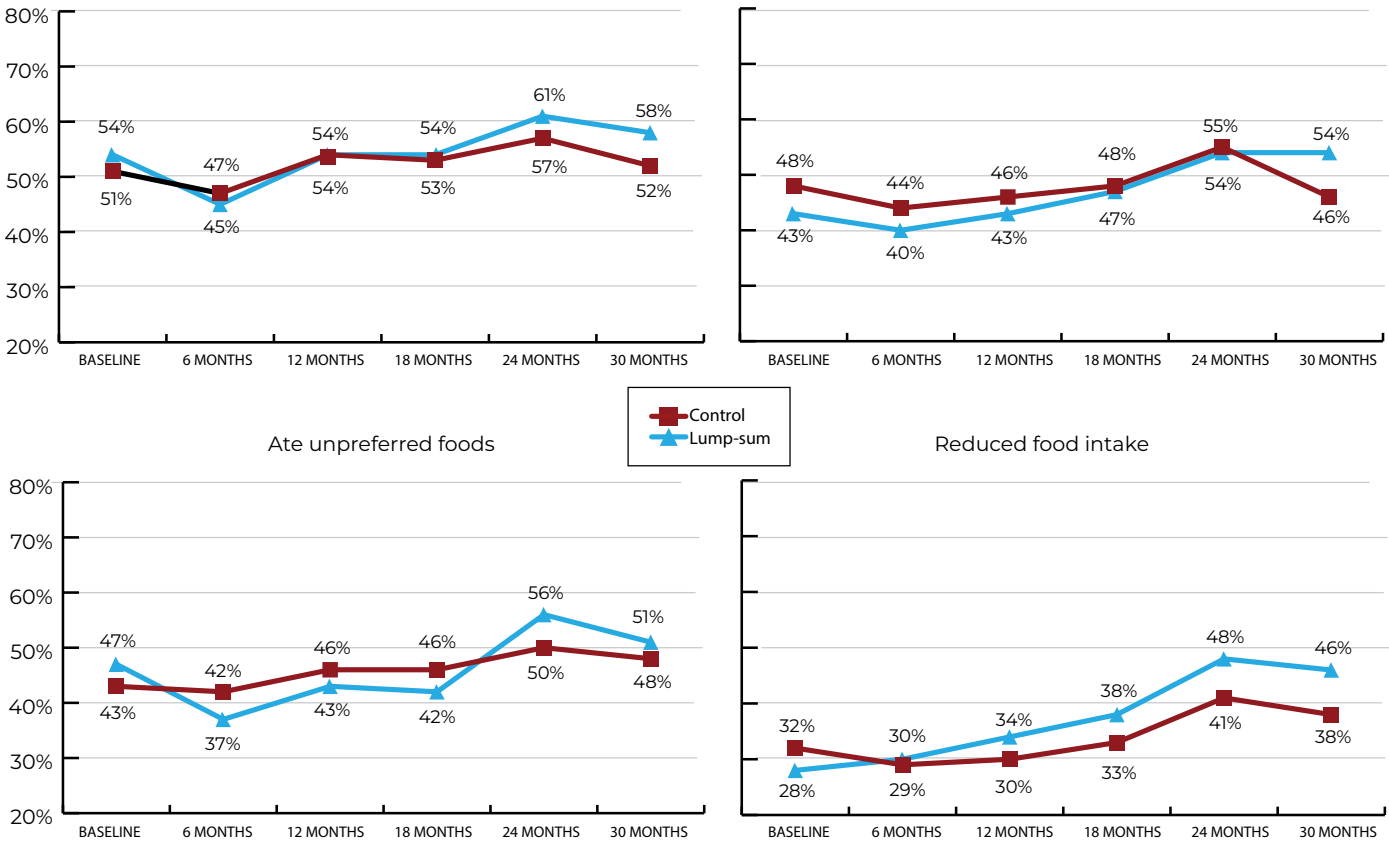
Caregiving responsibilities were relatively consistent among NMEE recipients, remaining between 9 to 13%, compared to the control group's steady rise from 10% at Baseline to 18% at 30 months, suggesting that the payments may have provided some flexibility to manage caregiving demands without significant trade-offs in labor force participation.

Unemployment rates among those actively looking for work remained persistently high in both groups. The lump-sum group showed no significant effect of the GI as rates remained almost steady from 40% at Baseline to 39% at 30 months, while the control group reported a decrease from 37% to 30%. Participants reported several barriers to employment, including retirement or disability, inadequate childcare access, unreliable transportation, difficulty navigating the contemporary job market, and lack of employer responsiveness despite numerous applications. For those grappling with job loss or health issues that prevent work, the GI may have served as a stabilizing mechanism against further financial decline.

Impacts on Household Food Security

The lump-sum GI payments provided temporary relief but did not produce the sustained impact necessary to address food insecurity at scale. By the end of the study, food insecurity levels in this group often surpassed those in the control group. At Baseline, similar proportions of households across the two groups reported concerns about food insufficiency (control: 51% vs. lump-sum: 54%) and inability to afford preferred foods (control: 48% vs. lump-sum: 43%). Worries about having enough food remained elevated throughout the pilot. In year one, the proportion of households unable to afford preferred foods showed a decline in the lump-sum group compared to the control at 6 months (40% vs. 44%, respectively) and 12 months (43% vs. 46%), but this improvement dissipated by 24 months (54% vs. 55%) and lump-sum payment recipients surpassed control levels by the study's end (54% vs. 46%). Similarly, the experience of having to eat less-preferred foods due to resource limitations followed comparable patterns. The lump-sum GI recipients experienced a temporary improvement at 6 months (47% vs. 37%) but saw rates surpass the control group by 24 months (56% vs. 50%) and remain higher at 30 months (51% vs. 48%). Very low food security steadily worsened in both groups. At Baseline, fewer participants in the lump-sum group reported this issue compared to the control group (28% vs. 32%). By 24 months, however, the lump-sum group showed an increase (48%), exceeding the control group (41%), with this gap persisting at 30 months (46% vs. 38%). One explanation for the limited impact is that the lump-sum cash infusions may have been directed toward larger, one-time expenses rather than meeting day-to-day needs. Even so, the financial support provided some relief during the first year, coinciding with peak inflation. Findings on food security align with the Compton Pledge pilot, which revealed small but consistent reductions in food insecurity when payments were distributed bi-monthly rather than quarterly (Balakrishnan et al., 2024). Similarly, this study found no difference in food security between the control and lump-sum payments, but observed improved outcomes with the recurring GI payments.

Figure 9: Food Insecurity over Time, Lump-Sum Payment vs. Control (% Yes)

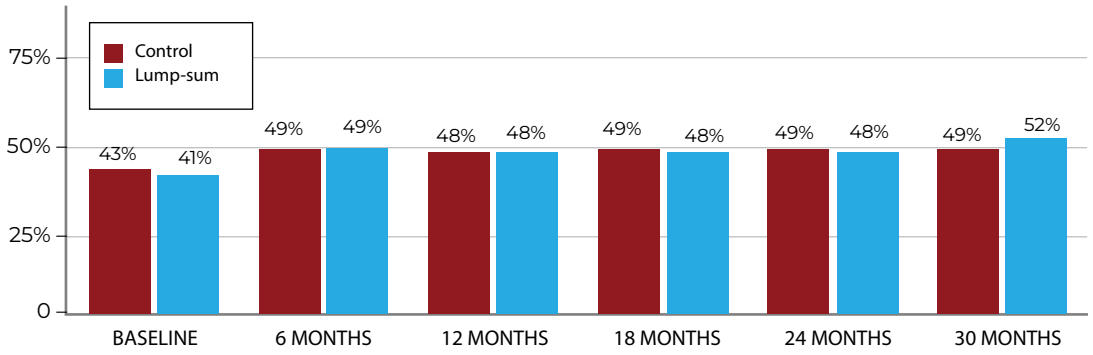


* $p<0.05$, ** $p<0.01$, *** $p<0.001$

Impacts on Mental Well-Being, Stress, and the Household Environment

While there was some indication of temporary improvements in financial resilience, a potential buffer against stress, these improvements did not translate into meaningful changes in psychological well-being, stress levels, or household environment for the lump-sum NMEE group. These null effects on mental health align with findings from the Swedish lottery study, though the comparison warrants caution given Sweden's different, more generous social welfare landscape (Cesarini et al., 2016). Lump-sum payment recipients showed minimal changes in their levels of psychological distress (Kessler et al., 2003). At all time points evaluated, distress levels in this group remained slightly elevated compared to those in the control group, though the differences were not statistically significant. Similar patterns emerged for the household environment, where household chaos levels were consistently higher among payment recipients but did not differ significantly from the control group (Matheny et al., 1995). Moreover, the lump-sum group reported significantly higher stress compared to the control group at both the end of the first year (B=0.49, p=0.02) and 6 months after payments ended (B=0.54, p=0.01).

Figure 10: Participants Likely Mentally Well, Lump-Sum Payment vs. Control



* $p<0.05$, ** $p<0.01$, *** $p<0.001$

Impacts on Physical Well-Being

General health measures showed no significant differences between the two groups (RAND, n.d.), suggesting that the lump-sum payments had limited impact on health-related quality of life. However, GI recipients experienced fewer physical functioning limitations at 6 months (mean diff.=1.73, p=.045) and 18 months (mean diff.=1.59, p=.02) compared to the control group. Role limitations due to physical health were largely similar, with a significant difference emerging only at 6 months (mean diff.=6.23, p=.00). The benefits of receiving higher GI amounts may have been especially relevant for the greater proportion of the disabled participants in the cohort, potentially easing financial barriers to support services, though overall scores remained in line with global benchmarks. These findings align with research on periodic lump-sum cash transfers, such as those from the EITC, showing mixed effects on health (Rehkopf et al., 2014). While such payments provide temporary financial relief, they do not necessarily translate into long-term health improvements. Instead, the research linking EITC income to health outcomes suggests a mix of material factors, consumption patterns, and psychological influences, such as reduced financial stress enabling healthier behaviors (Hoynes, 2019; Nichols & Rothstein, 2016).

Impacts on Participants' Subjective Sense of Self: Mattering, Hope, and Tragic Optimism

For the lump-sum NMEE participants, the GI had minimal lasting effects on Mattering, or one's understanding of how their existence impacts others (Elliott et al., 2004). Importance, a subscale that measures the extent to which people feel others invest in them, trended slightly higher among the lump-sum payment recipients, with a significant difference at 6 months compared to those in the control group (mean diff.=0.46, p=0.049), but these effects attenuated over time. Awareness and Reliance showed no meaningful differences between groups, and Hope remained unchanged,

suggesting that the cash infusion did not fundamentally alter participants' sense of optimism about the future, their perception of others' noticing their existence, or their perception that people could turn to them for help (Snyder et al., 1991). Though the GI briefly reinforced feelings of recognition, it did not translate into sustained improvements in the reported perception by others or long-term outlook.

Similarly, mixed trends across dimensions of the Life Attitudes Scale were also observed (Leung, 2019). Acceptance, or the ability to reconcile one's current conditions, declined at 18 months (mean diff.=-0.47, p=0.00). Self-transcendence, or the ability to overcome one's own plight in the service of a greater collective purpose, showed a brief improvement at 12 months (mean diff.=0.34, p=0.04), but this dissipated over time. Faith, or a belief in a higher power in the face of seemingly intractable obstacles, showed the most consistent gains, with significant differences at 12 months (mean diff.=0.54, p=0.01). Meanwhile, courage trended lower, though no significant between group differences emerged. Overall, the lump-sum payments reinforced some aspects of resilience, but effects were short-lived and inconsistent across subscales.

Impacts on Civic Engagement

NMEE payment recipients displayed slightly higher civic engagement levels across various activities compared to their control counterparts and were more likely to participate in protests. However, these differences were not statistically significant and should be considered within the broader context of available civic participation opportunities. At Baseline, cash recipients reported higher voting rates (33% vs. 25%), but this gap narrowed by the pilot's conclusion (18% vs. 17%). Similar patterns emerged in community collaboration (Baseline: 34% vs. 31%; Endline: 15% vs. 15%) and petition signing (Baseline: 35% vs. 27%; Endline: 11% vs. 10%). Despite these initial differences, engagement levels between the groups converged by the pilot's conclusion.

These results contrast with research on the Alaska Dividend Fund which showed increased voting patterns over two decades (Loeffler, 2022) along with recent research in Providence, RI where GI recipients were more likely than control to volunteer for a political group, vote, and protest (Nichols et al., 2025). This civic engagement change in Providence rested on the GI creating avenues for returning to social ties and community engagement previously severed by scarcity of both time and money, but these conditions did not seem to exist in Newark. While both pilots focused on low-income populations, their demographic composition and contexts differed substantially. Newark's low-income population is predominantly African Americans who are largely long-term residents, whereas Providence's comprises a more diverse mix of newer immigrants and transplants to the city. Providence lacks the integrated, socially engaged groups Newark is known for. So, while financial and time scarcity were present in the Newark data, material hardship did not seem to sever social ties the way it did in Providence, likely due to the prevalence of strong community institutions and the long-term residency of most GI recipients. While it is not possible to conclusively determine the cause from these data, it is clear that structural constraints and community context, not financial support alone, play decisive roles in shaping civic participation.

Limitations

The study's findings must be interpreted within the constraints of the study design and context. First, the participant sample (n=878) was drawn exclusively from Newark, NJ, comprising individuals with incomes at or below 200% of the FPL in 2021, at least one child under 18, and pandemic-related economic hardships. The results may not generalize beyond this specific urban, low-income population.

Newark's unique socio-economic landscape further limits external validity. As one of the largest urban centers in the tri-state area and New Jersey's premier transportation hub, the city has distinct demographic patterns, economic conditions, and housing dynamics that have evolved over decades. These characteristics of Newark's urban environment shaped the study's findings, making direct replication in other locations challenging.

Although the study employed a three-arm RCT to assess the effects of GI payments, with the same total amount distributed in smaller bi-monthly recurring versus larger, semi-annual lump-sum doses, certain limitations remain. While the design effectively isolates treatment effects, dividing the sample across three groups reduces the number of participants per arm, decreasing statistical power. Additionally, multiple pairwise comparisons between groups require statistical adjustments that make it more challenging to detect subtle treatment effects.

To address missing data, the study employed MICE, a widely accepted method for handling incomplete datasets. While MICE improves data reliability, some degree of uncertainty remains, as imputed values may not fully capture the underlying distribution.

Finally, the study was conducted during the post-COVID-19 recovery period, introducing confounding factors such as pandemic-related disruptions, evolving social support networks, and economic stressors like inflation and income volatility. These external pressures could influence health outcomes and financial behaviors, affecting the broader applicability of the findings to different economic conditions.

Discussion

The NMEE pilot offers insight into the efficacy of recurring bi-monthly GI payments vs. semi-annual lump-sum payments. Findings reflect previous research on lump-sum vs. recurring payments, underscoring behavioral differences in spending: larger payments allowed recipients to pay down debt, save, stockpile nonperishable resources, make large household purchases (e.g. furniture or appliances), and pay bills like rent and utilities in advance. Recurring transfers tended to be absorbed into household budgets, increasing financial stability by covering daily necessities like groceries and bills. Participants like Alexis, an accountant, explained that it was a "comfort to know that the money was coming, and has definitely got me over a lot of humps."

Qualitative data found that the majority of pilot participants preferred a recurring GI due to the regularity of the payments, which softened income volatility's impact and facilitated a greater capacity for planning their budgets. The lump-sum participants compared their experiences to the EITC while pointing out that the uncertain amounts contained in an income tax return undermined their efforts. Stacy, a recurring recipient, stressed that the advantage of the symmetrical payments meant she knew exactly how much to budget:

With [the EITC], you never know how much you're getting. It can be different. But this, I know, okay, on the 1st, I'm getting 250, 15th, 250. So, I know how to, you know, spend it. I know, okay, well, this bill is going to be 75, so I'll spend 75 here, maybe do 100 here. So, it's different. Like I said—with the income tax, it fluctuates. It's not a set amount. So, you never know what you're going to get. With this, I know, it's a guaranteed 250 on the 1st, 250 on the 15th. So, that's how I know how to maneuver with certain things.

Findings demonstrate that the flexibility and consistency of recurring payments helped households establish temporary financial stability. In year one of the NMEE pilot, the recurring payment group saw a significant reduction in income volatility emerging at 6 months. Other research by West and Castro (2023) suggests that this point is often when households receiving GI have managed to smooth income volatility, meet needs, and catch up on bills. Recurring GI recipients also showed significant improvement in mental distress scores, with the strongest benefits occurring in the first 6 months. Taken together, it seems that the consistent nature of recurring payments allowed participants to not only secure temporary financial stability, but to reduce the related cognitive burden of making ends meet. Many participants cited the ability to make rent each month as particularly stabilizing, given the context of skyrocketing rent prices and low earnings in Newark. These findings echo data from the Compton Pledge pilot, which suggested steady transfers help households to stay on top of bills and credit installments (Balakrishnan et al., 2024).

The steady, predictable nature of the payments also had a positive effect on household dynamics for the recurring group, stabilizing the home environment and leading to improved family dynamics. Six months after the first disbursement, the recurring group showed a significant reduction in household

chaos compared to the control group. This effect persisted at 12 months and 18 months and remained lower, though not statistically significant, at 24 and 30 months. Findings revealed that GI significantly alleviated household food insecurity among recurring cash recipients within 6 months of the first disbursement; these improvements persisted throughout the pilot. These findings are consistent with the Compton Pledge pilot, which found improved food security in recipients of twice-monthly transfers relative to recipients of quarterly transfers (Balakrishnan et al., 2024). It also reflects broader literature linking regular transfers to improved food security. The effect is particularly notable considering the unprecedented levels of nation-wide inflation that occurred during the pilot and Newark's status as a food desert, with limited access to affordable, nutritious food and grocery stores.

Previous research has found that semi-annual, lump-sum payments tend to be spent quickly on stockpiling or paying down bills; as a result, many recipients lack emergency reserves later in the year. This seemed to be borne out in the NMEE pilot, as lump-sum recipients recorded higher levels of food insecurity, often surpassing those in the control group. Distress, stress, and household chaos levels were also consistently higher among lump-sum recipients than recurring recipients.

However, data also shows the stabilizing effect of recurring payments was transient; the intervention was insufficient to shield participants from long-term economic instability. The cash helped recipients maintain their day to day, but with restricted savings and limited income, they did not have the financial traction to put money aside for emergencies or make moves that supported long-term economic mobility. Findings also show a drop in financial confidence among the recurring treatment group towards the end of the pilot, reflecting that although the payments helped people stay temporarily afloat, they were not enough to build a safety net for the long-term.

No clear impact on income volatility emerged with the lump-sum payment structure, suggesting that it did not fundamentally alter income stability. However, the larger amount did provide a degree of financial resilience in a way that differed from that of the recurring payments. Over time, lump-sum recipients demonstrated substantial improvements in savings relative to the control group, with significantly higher odds of maintaining savings above $500 at multiple time points. They also showed early improvements in their ability to cover a $400 emergency expense, maintaining an increased ability throughout the pilot. Although gains were not sustained post-pilot, they point to a level of financial liquidity afforded by the larger payments.

For both recurring and lump-sum recipients, quantitative findings indicate significant positive effects of GI on children's academic performance, especially for the latter group. By the end of the pilot, children in families receiving the recurring GI had significantly higher odds of earning "A" grades compared to the control group, and children in lump-sum households were more than twice as likely to earn "A" grades than those in the control group.

A supportive and stable home environment can lead to better student achievement, whether by removing housing-related stress and uncertainty, improving access to food and good sleep, or increasing time spent as a family unit. While the lump-sum cadence supported big moves and big purchases, the recurring payments were instrumental in maintaining stability over time. Qualitative data suggests that an initial lump sum payment, coupled with subsequent recurring payments, may give recipients the boost they need to build lasting financial stability. The two mechanisms operate differently, but complement one another.

It is worth noting that both groups faced challenges with the labor market throughout the course of the pilot, which influenced the extent to which they could leverage the GI. Many participants had chronic or severe health conditions that prevented them from working, yet they had been denied disability benefits. Others were in the midst of applying to numerous jobs—but never received a response. Still others were unable to work because of caregiving obligations. Finally, it seemed that there was little employment opportunity for low-wage workers and little relative demand for gig work in Newark. For those grappling with health issues, job rejections, and a weak employment market, the GI served as a stabilizing mechanism against further financial decline. Yet because it was their sole income, the extent to which it could support participants was limited.

Implications and Implementation

"Society has treated poverty as though it were inevitable, a fact of life that no amount of complex policies can fix. But this is not true."
- Mayor Ras Baraka (Chen, 2023, p. 2)

Earlier research has offered evidence in support of different payment structures for lump-sum and recurring payments. Again, much work centers on tax credits, typically given as a lump sum. One 2015 pilot conducted on the EITC had two treatment groups, one receiving the traditional lump sum and the other receiving periodic payments instead. The latter group attributed a reduction in their financial stress to receiving recurring payments (Greenlee et al., 2020). Our findings also suggest that an initial lump sum, paired with subsequent recurring payments, allows recipients to establish foundational security, which they can then maintain with periodic transfers. Particularly in terms of housing, a large lump sum can help recipients to deal with unexpected moving costs and to finance furniture like beds and appliances—creating a sense of place and rootedness that can then be maintained with regular monthly payments.

Halpern-Meekin et al. (2018) propose a rainy-day element to the existing EITC, allowing taxpayers to defer 20% of their credit for 6 months and to receive a savings match for doing so. This would help low-wage workers build emergency savings. The work by Grinstein-Weiss et al. (2014) on Refund2Save, the largest savings experiment conducted in the US, found modest but significant effects on the rate and amount of savings when people were offered the option to direct at least a portion of their tax rebate into savings.

These findings suggest that offering choices for lump-sum disbursement—directing part of it into periodic payments or savings—is an effective policy directive. Regardless of the way in which it is administered, GI is never intended to replace the existing social safety net (Castro & West, 2024). Rather, the results illustrate not just the potential of GI but also how other elements of the social safety net can be improved and administered more effectively. For too long, the social safety net has been characterized by "potholes, red tape and straightjackets" (City of Newark, 2020, p. 11), obstructions that limit eligibility, create undue administrative burdens, and restrict how assistance can be used. NMEE and the Newark Guaranteed Income Task Force, leveraging lessons learned from GI pilots across the country, have developed a vision for the future of public benefits that prioritizes equity, justice,

and humanity (Chen, 2023; City of Newark, 2020). The promise of not just GI, but also the EITC and CTC, lies in its relative ease to implement, unconditionality, and inclusiveness. Looking ahead, these groups imagine a path towards a state-wide GI. They recognize a need for further GI research, driven by communities, to more clearly see how GI can support specific communities and populations As this report highlights, structural racism and related barriers have historically played a large role in entrenching people, families, and communities into poverty, often for generations. In addition, many people often fall into poverty as a result of medical issues, unprecedented historical events, such as the COVID-19 pandemic, natural disasters, and other challenges outside of their control. These organizations challenge us to rethink how we recognize and respond to this inequity. Distributing more unconditional cash to more people, and reducing structural barriers to accessing assistance, could lay a sturdy foundation from which people can start to climb.

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

3701 Locust Walk
Philadelphia, PA 19104

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

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Appendix

Table 9: Sample Attrition

TIME PERIOD	CONTROL	RECURRING PAYMENT	LUMP-SUM PAYMENT	OVERALL ATTRITION (%)	DIFFERENTIAL ATTRITION (%)
Baseline	478	200	200	--	--
6 months	230	142	151	40.4	25.1
12 months	231	132	147	41.9	21.4
18 months	241	157	167	35.6	30.6
24 months	261	168	166	32.2	28.9
30 months	281	165	163	30.6	23.2

Table 10: Comparative Analysis

				RECURRING MONTHLY PAYMENT VS. CONTROL			LUMP-SUM PAYMENT VS. CONTROL			RECURRING PAYMENT VS. LUMP-SUM PAYMENT		
TIME PERIOD	CONTROL	RECURRING	LUMP-SUM	MEAN DIFFERENCE	STANDARD ERROR	95% CI	MEAN DIFFERENCE	STANDARD ERROR	95% CI	MEAN DIFFERENCE	STANDARD ERROR	95% CI
ANNUAL HOUSEHOLD INCOME (IN $)												
Baseline	9,014	9,204	8,887	190	646	[-1077, 1457]	-127	647	[-1395, 1140]	317	–	–
6 months	12,697	13,326	13,390	629	691	[-959, 1762]	693	697	[-551, 2239]	-64	756	[-1868, 1096]
12 months	14,431	15,340	15,434	909	773	[-832, 2219]	1,003	728	[-252, 2562]	-94	870	[-2067, 1274]
18 months	15,558	15,931	16,972	373	790	[-1456, 1711]	1,414	807	[-81, 3052]	-1,041	866	[-3114, 214]
24 months	15,153	15,218	14,986	65	789	[-1618, 1468]	-167	758	[-1520, 1469]	232	829	[-1745, 1418]
30 months	15,605	14,817	14,375	-788	859	[-2643, 675]	-1,230	845	[-26685, 596]	442	982	[-1892, 2126]
FINANCIAL WELL-BEING												
Baseline	39.28	39.94	39.13	0.66	0.76	[-0.82, 2.14]	-0.81	0.76	[-1.63, 1.33]	0.81	–	–
6 months	43.01	43.41	43.14	0.40	0.66	[-1.55, 1.04]	0.13	0.68	[-1.07, 1.62]	0.27	0.76	[-1.98, 1.01]
12 months	43.32	43.55	43.89	0.23	0.68	[-1.80, 0.90]	0.57	0.68	[-0.64, 2.00]	-0.34	0.78	[-2.58, 0.47]
18 months	44.28	44.12	43.21	-0.16	0.67	[-2.20, 0.55]	-1.07	0.77	[-2.41, 0.46]	0.91	0.80	[-1.34, 1.66]
24 months	43.11	43.40	42.75	0.29	0.72	[-1.83, 1.05]	-0.36	0.69	[-1.58, 1.08]	0.65	0.77	[-1.65, 1.38]
30 months	47.73	46.69	45.95	[-1.04]*	0.75	[-3.12, -0.19]	[-1.78]*	0.75	[-3.06, -0.22]	0.74	0.87	[-1.68, 1.63]

TIME PERIOD	CONTROL	RECURRING	LUMP-SUM	RECURRING MONTHLY PAYMENT VS. CONTROL			LUMP-SUM PAYMENT VS. CONTROL			RECURRING PAYMENT VS. LUMP-SUM PAYMENT		
				MEAN DIFFERENCE	STANDARD ERROR	95% CI	MEAN DIFFERENCE	STANDARD ERROR	95% CI	MEAN DIFFERENCE	STANDARD ERROR	95% CI
KESSLER PSYCHOLOGICAL DISTRESS												
Baseline	22.70	22.58	23.42	-0.12	0.53	[-1.24, 0.85]	0.72	0.53	[0.71, 1.37]	-0.84	_	_
6 months	20.77	19.55	21.40	[-1.22]*	0.52	[-2.13, -0.16]	0.63	0.51	[-1.10, 0.84]	-1.85	0.60	[-2.34, 0.00]
12 months	21.27	20.16	21.85	[-1.11]	0.53	[-2.12, 0.17]	0.58	0.60	[-1.61, 0.77]	-1.69	0.69	[-2.21, 0.37]
18 months	21.52	20.32	22.25	[-1.20]*	0.53	[-2.12, -0.02]	0.73	0.53	[-1.01, 1.04]	-1.93	0.71	[-2.60, 0.03]
24 months	21.07	20.15	21.78	-0.92	0.56	[-1.92, 0.34]	0.71	0.53	[-1.04, 0.93]	-1.63	0.68	[-2.17, 0.36]
30 months	21.07	20.71	22.27	-0.36	0.63	[-1.47, 1.11]	1.20	0.67	[-0.71, 1.83]	-1.56	0.82	[-2.34, 0.69]
PERCEIVED STRESS												
Baseline	8.31	8.06	8.19	-0.25	0.26	[-0.76, 0.26]	-0.12	0.26	[-0.63, 0.40]	-0.13	_	_
6 months	7.20	6.89	7.22	-0.31	0.21	[-0.48, 0.35]	0.02	0.21	[-0.30, 0.56]	-0.33	0.26	[-0.70, 0.32]
12 months	7.04	6.99	7.42	-0.05	0.23	[-0.24, 0.64]	[0.38]*	0.21	[0.10, 0.91]	-0.43	0.27	[-0.83, 0.20]
18 months	7.11	6.94	7.33	-0.17	0.20	[-0.32, 0.47]	0.22	0.22	[-0.08, 0.75]	-0.39	0.25	[-0.74, 0.19]
24 months	7.22	6.81	7.41	-0.41	0.22	[-0.59, 0.26]	0.19	0.21	[-0.12, 0.72]	-0.60	0.26	[-0.99, 0.03]
30 months	7.17	7.15	7.59	-0.02	0.23	[-0.24, 0.66]	[0.42]*	0.22	[0.14, 0.96]	-0.44	0.26	[-0.83, 0.18]

TIME PERIOD	CONTROL	RECURRING	LUMP-SUM	RECURRING MONTHLY PAYMENT VS. CONTROL			LUMP-SUM PAYMENT VS. CONTROL			RECURRING PAYMENT VS. LUMP-SUM PAYMENT		
				MEAN DIFFERENCE	STANDARD ERROR	95% CI	MEAN DIFFERENCE	STANDARD ERROR	95% CI	MEAN DIFFERENCE	STANDARD ERROR	95% CI
HOUSEHOLD ENVIRONMENT (CHAOS)												
Baseline	28.76	28.03	29.75	-0.73	0.63	[1.98, 0.50]	0.99	0.63	[-0.25, 2.22]	-1.72	–	–
6 months	28.98	26.34	29.29	[-2.64]***	0.44	[-2.73, -1.05]	0.31	0.40	[-1.48, 0.10]	[-2.95]*	0.50	[-2.16, -0.25]
12 months	29.13	27.13	29.20	[-2.00]*	0.47	[-2.14, -0.30]	0.07	0.48	[-1.88, 0.03]	-2.07	0.55	[-1.45, 0.80]
18 months	29.04	27.25	29.69	[-1.79]*	0.45	[-1.93, -0.20]	0.65	0.48	[-1.23, 0.57]	-2.44	0.56	[-1.79, 0.37]
24 months	29.72	28.37	30.05	-1.35	0.52	[-1.66, 0.40]	0.33	0.52	[-1.63, 0.31]	-1.68	0.52	[-1.17, 1.32]
30 months	29.53	28.06	30.32	-1.47	0.52	[-1.77, 0.33]	0.79	0.55	[-1.26, 0.85]	-2.26	0.63	[-1.73, 0.74]
AVERAGE GENERAL HEALTH												
Baseline	63.81	60.80	62.18	-3.01	1.92	[-6.76, 0.75]	-1.63	1.92	[-5.39, 2.12]	-1.38	–	–
6 months	66.77	64.88	63.78	-1.89	1.14	[-1.33, 2.85]	-2.99	1.06	[-3.11, 0.70]	1.10	1.30	[-0.02, 4.78]
12 months	65.23	63.85	62.10	-1.38	1.13	[-0.72, 3.61]	-3.13	1.08	[-3.25, 0.65]	[1.75]**	1.21	[0.64, 5.61]
18 months	66.18	65.13	63.58	-1.05	1.28	[-0.39, 3.90]	-2.60	1.12	[-3.22, 1.25]	[1.55]*	1.38	[0.11, 5.35]
24 months	66.26	65.13	63.70	-1.13	1.39	[-0.54, 4.39]	-2.56	1.20	[-3.42, 1.11]	[1.43]*	1.44	[0.19, 5.66]
30 months	64.97	64.53	61.30	-0.44	1.43	[-0.12, 4.87]	-3.67	1.18	[-4.19, 0.35]	[3.23]***	1.48	[1.70, 7.26]

				RECURRING MONTHLY PAYMENT VS. CONTROL			LUMP-SUM PAYMENT VS. CONTROL			RECURRING PAYMENT VS. LUMP-SUM PAYMENT		
TIME PERIOD	CONTROL	RECURRING	LUMP-SUM	MEAN DIFFERENCE	STANDARD ERROR	95% CI	MEAN DIFFERENCE	STANDARD ERROR	95% CI	MEAN DIFFERENCE	STANDARD ERROR	95% CI
PHYSICAL FUNCTIONING												
Baseline	70.95	67.90	68.65	-3.05	2.06	[-7.08, 0.98]	-2.30	0.21	[-6.33, 1.73]	-0.75	_	_
6 months	71.02	71.70	72.75	[0.68]*	1.82	[0.39, 7.19]	[1.73]*	1.95	[0.31, 7.44]	-1.05	2.18	[-4.03, 3.69]
12 months	67.53	69.03	68.78	[1.5]**	1.89	[1.10, 8.11]	1.25	2.01	[0.05, 7.39]	0.25	2.31	[-3.02, 5.35]
18 months	68.96	72.13	70.55	[3.17]***	1.98	[2.16, 10.00]	[1.59]**	1.66	[0.83, 7.17]	1.58	2.22	[-1.95, 6.89]
24 months	71.41	70.83	69.25	-0.58	1.90	[-0.67, 6.11]	-2.16	1.78	[-3.50, 3.26]	1.58	2.12	[-2.03, 6.62]
30 months	68.60	68.55	68.63	-0.05	1.88	[-0.30, 6.85]	0.03	1.67	[-0.89, 5.18]	-0.08	2.14	[-3.51, 5.30]
ROLE LIMITATIONS DUE TO PHYSICAL HEALTH												
Baseline	54.71	54.25	51.25	-0.46	3.40	[-7.12, 6.21]	-3.46	3.40	[-10.12, 3.21]	3.00	_	_
6 months	56.02	59.38	62.25	3.36	2.76	[-2.04, 9.03]	[6.23]***	2.37	[5.02, 13.76]	-2.87	2.82	[-10.78, -0.58]
12 months	55.18	54.00	53.63	-1.18	3.02	[-3.18, 6.66]	-1.55	2.46	[-8.64, 4.81]	0.37	3.47	[-4.28, 7.27]
18 months	57.11	58.00	56.63	0.89	2.78	[-4.28, 7.27]	-0.48	3.50	[-2.54, 7.79]	1.37	3.24	[-7.94, 5.02]
24 months	57.27	60.75	57.38	3.48	3.24	[-2.14, 10.35]	0.11	2.83	[-1.71, 9.03]	3.37	3.55	[-5.29, 7.83]
30 months	56.12	55.75	52.88	-0.37	2.80	[-5.33, 5.18]	-3.24	2.87	[-5.19, 5.08]	2.87	3.38	[-6.42, 6.23]

TIME PERIOD	CONTROL	RECURRING	LUMP-SUM	RECURRING MONTHLY PAYMENT VS. CONTROL			LUMP-SUM PAYMENT VS. CONTROL			RECURRING PAYMENT VS. LUMP-SUM PAYMENT		
				MEAN DIFFERENCE	STANDARD ERROR	95% CI	MEAN DIFFERENCE	STANDARD ERROR	95% CI	MEAN DIFFERENCE	STANDARD ERROR	95% CI
AGENCY												
Baseline	20.95	21.92	21.20	0.97	0.48	[0.03, 1.90]	0.25	0.48	[-6.69, 1.18]	0.72	–	–
6 months	21.58	22.31	21.72	0.73	0.38	[-0.99, 0.49]	0.14	0.38	[-0.90, 0.60]	0.59	0.43	[-1.00, 0.73]
12 months	21.99	22.34	22.37	0.35	0.39	[-1.34, 0.15]	0.38	0.38	[-0.63, 0.86]	-0.03	0.47	[-1.61, 0.24]
18 months	21.95	22.30	22.33	0.35	0.40	[-1.35, 0.14]	0.38	0.40	[-0.67, 0.91]	-0.03	0.46	[-1.56, 0.22]
24 months	21.79	21.82	22.23	0.03	0.40	[-1.69, 0.05]	0.44	0.40	[-0.58, 0.98]	[-0.41]*	0.46	[2.04, 0.22]
30 months	21.71	22.26	21.49	0.55	0.42	[-1.22, 0.43]	-0.22	0.44	[-1.34, 0.42]	0.77	0.50	[-0.95, 1.07]
PATHWAY												
Baseline	21.92	22.17	22.13	0.25	0.46	[-0.67, 1.15]	0.21	0.46	[-0.70, 1.11]	0.04	–	–
6 months	22.54	23.29	22.65	0.75	0.37	[-0.19, 1.21]	0.11	0.40	[-0.86, 0.70]	0.64	0.44	[-0.24, 1.46]
12 months	23.06	22.90	22.54	-0.16	0.41	[-1.19, 0.36]	-0.52	0.42	[-1.51, 0.08]	0.36	0.49	[-0.65, 1.26]
18 months	22.78	23.22	22.86	0.44	0.39	[[-0.55, 0.93]	0.08	0.43	[-0.94, 0.69]	0.36	0.47	[-0.61, 1.18]
24 months	22.67	22.50	22.37	-0.17	0.40	[-1.19, 0.36]	-0.30	0.39	[-1.23, 0.26]	0.13	0.49	[-0.90, 1.01]
30 months	22.10	22.58	21.70	0.48	0.44	[0.63, 1.07]	-0.40	0.45	[-0.51, 0.29]	0.88	0.51	[-0.19, 1.84]

TIME PERIOD	CONTROL	RECURRING	LUMP-SUM	RECURRING MONTHLY PAYMENT VS. CONTROL			LUMP-SUM PAYMENT VS. CONTROL			RECURRING PAYMENT VS. LUMP-SUM PAYMENT		
				MEAN DIFFERENCE	STANDARD ERROR	95% CI	MEAN DIFFERENCE	STANDARD ERROR	95% CI	MEAN DIFFERENCE	STANDARD ERROR	95% CI
TOTAL HOPE												
Baseline	42.87	44.09	43.32	1.22	0.85	[-0.47, 2.89]	0.45	0.85	[-1.22, 2.12]	0.77	_	_
6 months	44.12	45.59	44.37	1.47	0.65	[-1.04, 1.52]	0.25	0.68	[1.43, 1.17]	1.22	0.75	[-0.94, 2.00]
12 months	45.05	45.24	44.91	0.19	0.70	[-2.48, 0.37]	-0.14	0.70	[-1.90, 0.77]	0.33	0.83	[-2.17, 1.23]
18 months	44.73	45.52	45.18	0.79	0.68	[-1.81, 0.83]	0.45	0.74	[-1.51, 1.39]	0.34	0.80	[-1.95, 1.22]
24 months	44.45	44.32	44.60	-0.13	0.72	[-2.79, -0.04]	0.15	0.72	[-1.70, 1.13]	-0.28	0.83	[-2.65, 0.57]
30 months	43.80	44.83	43.18	1.03	0.78	[-1.58, 1.33]	-0.62	0.80	[-2.57, 0.52]	1.65	0.89	[-0.85, 2.60]
IMPORTANCE												
Baseline	36.20	35.91	35.74	-0.29	0.57	[-1.41, 0.83]	-0.46	0.57	[-1.58, 0.66]	0.17	_	_
6 months	36.05	36.57	36.51	0.52	0.45	[-0.09, 1.65]	[0.46]*	0.45	[0.00, 1.77]	0.06	0.53	[-1.24, 0.97]
12 months	35.38	35.94	35.74	0.56	0.48	[-0.12, 1.79]	0.36	0.49	[-0.14, 1.75]	0.20	0.55	[-0.99, 1.11]
18 months	36.08	36.54	35.57	0.46	0.46	[-0.19, 1.62]	-0.51	0.45	[-0.99, 0.76]	0.97	0.53	[-0.19, 1.86]
24 months	36.39	36.55	35.98	0.16	0.48	[-0.51, 1.34]	-0.41	0.45	[-0.82, 0.88]	0.57	0.52	[-0.57, 1.38]
30 months	35.73	36.11	35.10	0.38	0.45	[-0.21, 1.54]	-0.63	0.44	[-1.11, 0.66]	1.01	0.52	[-0.09, 1.91]

TIME PERIOD	CONTROL	RECURRING	LUMP-SUM	RECURRING MONTHLY PAYMENT VS. CONTROL			LUMP-SUM PAYMENT VS. CONTROL			RECURRING PAYMENT VS. LUMP-SUM PAYMENT		
				MEAN DIFFERENCE	STANDARD ERROR	95% CI	MEAN DIFFERENCE	STANDARD ERROR	95% CI	MEAN DIFFERENCE	STANDARD ERROR	95% CI
AWARENESS												
Baseline	30.62	30.73	30.57	0.11	0.48	[-0.82, 1.05]	-0.05	0.48	[-0.99, 0.89]	0.16	–	–
6 months	30.45	31.97	30.94	[1.52]***	0.40	[0.66, 2.18]	0.49	0.40	[-.23, 1.33]	1.03	0.47	[-0.06, 1.79]
12 months	29.95	31.17	30.10	[1.22]**	0.42	[0.29, 1.93]	0.15	0.42	[-0.64, 1.04]	1.07	0.50	[-0.14, 1.78]
18 months	29.85	31.21	30.03	[1.36]***	0.38	[0.52, 2.04]	0.18	0.40	[-0.53, 1.03]	[1.18]*	0.46	[0.11, 1.94]
24 months	30.13	31.09	30.13	[0.96]*	0.41	[0.01, 1.68]	0.00	0.43	[-0.77, 0.90]	0.96	0.50	[-0.18, 1.67]
30 months	29.59	30.93	29.65	[1.34]***	0.42	[0.44, 2.03]	0.06	0.42	[-0.70, 0.93]	[1.28]*	0.49	[0.15, 2.03]
RELIANCE												
Baseline	22.70	23.01	23.27	0.31	0.39	[-0.46, 1.08]	0.57	0.39	[-0.20, 1.35]	-0.26	–	–
6 months	22.82	23.75	23.22	0.93	0.33	[0.01, 1.28]	0.40	0.34	[-0.84, 0.48]	[0.53]*	0.39	[0.00, 1.56]
12 months	23.04	23.41	23.07	0.37	0.33	[-0.57, 0.71]	0.03	0.34	[-1.23, 0.13]	0.34	0.39	[-0.13, 1.39]
18 months	22.81	23.11	23.47	0.30	0.33	[-0.64, 0.64]	0.66	0.32	[-0.57, 0.67]	-0.36	0.38	[-0.84, 0.64]
24 months	22.76	23.42	23.04	0.66	0.33	[-0.29, 0.96]	0.28	0.34	[-0.96, 0.37]	0.38	0.39	[-0.10, 1.38]
30 months	22.62	22.22	23.40	-0.40	0.33	[-0.83, 0.50]	0.78	0.35	[-0.52, 0.89]	-1.18	0.39	[-1.11, 0.43]

TIME PERIOD	CONTROL	RECURRING	LUMP-SUM	RECURRING MONTHLY PAYMENT VS. CONTROL			LUMP-SUM PAYMENT VS. CONTROL			RECURRING PAYMENT VS. LUMP-SUM PAYMENT		
				MEAN DIFFERENCE	STANDARD ERROR	95% CI	MEAN DIFFERENCE	STANDARD ERROR	95% CI	MEAN DIFFERENCE	STANDARD ERROR	95% CI
AFFIRMATION OF MEANING AND VALUE												
Baseline	13.88	14.03	13.88	0.15	0.17	[-0.18, 0.49]	0.00	0.17	[-0.33, 0.34]	0.15	_	_
6 months	13.59	13.90	13.62	0.31	0.13	[-0.09, 0.41]	0.03	0.14	[-0.24, 0.31]	0.28	0.15	[-0.16, 0.43]
12 months	13.40	13.92	13.59	[0.52]**	0.13	[0.11, 0.60]	0.19	0.14	[-0.10, 0.46]	0.33	0.15	[-0.15, 0.46]
18 months	13.50	13.76	13.45	0.26	0.15	[-0.19, 0.40]	-0.05	0.15	[-0.35, 0.24]	0.31	0.18	[-0.19, 0.51]
24 months	13.54	13.60	13.73	0.06	0.15	[-0.39, 0.22]	0.19	0.15	[-0.11, 0.47]	-0.13	0.18	[-0.64, 0.08]
30 months	13.44	14.00	13.42	[0.56]***	0.14	[0.13, 0.68]	-0.02	0.16	[-0.34, 0.26]	[0.58]**	0.17	[0.09, 0.76]
ACCEPTANCE												
Baseline	13.46	13.18	13.59	-0.28	0.23	[-0.73, 0.17]	0.13	0.23	[-0.33, 0.57]	-0.41	_	_
6 months	13.52	13.40	13.52	-0.12	0.16	[-0.15, 0.47]	0.00	0.18	[-0.47, 0.22]	-0.12	0.20	[-0.11, 0.68]
12 months	13.70	13.62	13.98	-0.08	0.20	[-0.19, 0.59]	0.28	0.18	[-0.22, 0.48]	-0.36	0.22	[-0.36, 0.47]
18 months	14.12	13.81	13.65	-0.31	0.19	[-0.41, 0.34]	[-0.47]***	0.21	[-1.00, -0.20]	[0.16]**	0.23	[0.12, 1.04]
24 months	13.94	13.88	13.96	-0.06	0.20	[-0.18, 0.60]	0.02	0.24	[-0.60, 0.36]	-0.08	0.26	[-0.16, 0.83]
30 months	14.17	14.03	14.33	-0.14	0.20	[-0.22, 0.54]	0.16	0.21	[-0.36, 0.43]	-0.30	0.23	[-0.34, 0.55]

				RECURRING MONTHLY PAYMENT VS. CONTROL			LUMP-SUM PAYMENT VS. CONTROL			RECURRING PAYMENT VS. LUMP-SUM PAYMENT		
TIME PERIOD	CONTROL	RECURRING	LUMP-SUM	MEAN DIFFERENCE	STANDARD ERROR	95% CI	MEAN DIFFERENCE	STANDARD ERROR	95% CI	MEAN DIFFERENCE	STANDARD ERROR	95% CI
COURAGE												
Baseline	12.29	12.61	12.25	0.32	0.18	[-0.03, 0.67]	-0.04	0.18	[-0.39, 0.31]	0.36	_	_
6 months	12.13	11.90	12.29	[-0.23]***	0.15	[-0.85, -0.25]	0.16	0.14	[-0.07, 0.47]	[-0.39]***	0.17	[-1.09, -0.40]
12 months	12.02	12.09	12.24	0.07	0.16	[-0.56, 0.06]	0.22	0.15	[-0.05, 0.53]	[-0.15]**	0.18	[-0.86, -0.14]
18 months	12.31	12.49	12.26	0.18	0.15	[-0.44, 0.14]	-0.05	0.16	[-0.31, 0.30]	0.23	0.18	[-0.50, 0.19]
24 months	12.24	12.22	12.19	[-0.02]*	0.17	[-0.67, -0.02]	-0.05	0.17	[-0.35, 0.32]	0.03	0.21	[-0.73, 0.08]
30 months	12.21	12.41	12.38	0.20	0.16	[-0.42, 0.19]	0.17	0.15	[-0.11, 0.49]	0.03	0.18	[-0.64, 0.05]
FAITH												
Baseline	36.11	36.71	35.72	0.60	0.45	[-0.27, 1.47]	-0.39	0.45	[-1.26, 0.48]	0.99	_	_
6 months	35.21	35.42	35.40	0.21	0.33	[-1.06, 0.25]	0.19	0.31	[-0.05, 1.15]	0.02	0.39	[-1.73, 0.18]
12 months	35.13	35.42	35.67	0.29	0.34	[-0.97, 0.36]	[0.54]**	0.35	[0.22, 1.59]	[-0.25]***	0.40	[-2.03, -0.44]
18 months	35.81	36.10	35.41	0.29	0.34	[-0.97, 0.35]	-0.40	0.34	[-0.66, 0.65]	0.69	0.41	[-1.14, 0.48]
24 months	35.70	35.96	35.58	0.26	0.38	[-1.05, 0.39]	-0.12	0.40	[-0.52, 1.02]	0.38	0.49	[-1.55, 0.38]
30 months	35.37	36.09	35.51	0.72	0.35	[-0.61, 0.78]	0.14	0.37	[-0.16, 1.28]	0.58	0.42	[-1.22, 0.43]

TIME PERIOD	CONTROL	RECURRING	LUMP-SUM	RECURRING MONTHLY PAYMENT VS. CONTROL			LUMP-SUM PAYMENT VS. CONTROL			RECURRING PAYMENT VS. LUMP-SUM PAYMENT		
				MEAN DIFFERENCE	STANDARD ERROR	95% CI	MEAN DIFFERENCE	STANDARD ERROR	95% CI	MEAN DIFFERENCE	STANDARD ERROR	95% CI
SELF-TRANSCENDENCE												
Baseline	24.29	24.25	24.07	-0.04	0.32	[-0.67, 0.60]	-0.22	0.32	[-0.85, 0.42]	0.18	_	_
6 months	23.91	23.42	23.75	-0.49	0.24	[-0.93, 0.01]	-0.16	0.24	[-0.40, 0.53]	-0.33	0.28	[-0.10, 0.00]
12 months	23.78	23.53	24.12	-0.25	0.25	[-0.67, 0.27]	[0.34]*	0.25	[0.07, 1.08]	[-0.59]***	0.29	[-1.36, -0.22]
18 months	24.32	24.11	23.89	-0.21	0.24	[-0.62, 0.28]	-0.43	0.26	[-0.75, 0.29]	0.22	0.30	[-0.55, 0.62]
24 months	24.06	23.30	24.15	[-0.76]***	0.27	[-1.27, -0.20]	0.09	0.30	[-0.26, 0.93]	[-0.85]***	0.34	[-1.71, -0.39]
30 months	23.91	23.73	23.88	-0.18	0.25	[-0.64, 0.33}	-0.03	0.26	[-0.33, 0.70]	-0.15	0.30	[-0.93, 0.24]

Footnotes:

Baseline Mean: Adjusted average score prior to any intervention

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

Estimated Impact: The Mean difference between the treatment and control groups

Bootstrapped Standard Error: Indicates the precision of the impact estimates

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

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