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INCOME RESEARCH
Social Policy & Practice
UNIVERSITY of PENNSYLVANIA

The American Guaranteed Income Studies: Tacoma, Washington

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August 2024



SUGGESTED CITATION

Flynn, K., Tandon, N., Nichols, B., Thompson, A., West, S., & Castro, A. (2024, August). *The American Guaranteed Income Studies: Tacoma, Washington*. University of Pennsylvania, Center for Guaranteed Income Research.

Front Cover Image: Tacoma, Washington skyline at night.

Inside Cover Image: Tacoma, Washington neighborhood.



The American Guaranteed Income Studies: Tacoma, Washington

Executive Summary

With a stated commitment to “dismantle poverty ... promote economic opportunity ... and improve and increase equity in the social safety net,” the City of Tacoma and the United Way of Pierce County implemented their guaranteed income (GI) demonstration, Growing Resilience in Tacoma (GRIT), in late 2021 (GRIT Core Team, n.d.). GRIT was developed with four key guiding principles: (1) invest in Asset Limited, Income Constrained, Employed (ALICE) families, who disproportionately identify as Black, Indigenous, and other people of color (BIPOC) and face inequitable financial struggle; (2) cultivate resilience and financially empower participants; (3) promote narrative change that highlights structural failures leading to poverty rather than the false notions of individual shortcomings; and (4) build support for GI and other strength-based policies that lead to an improved and more equitable social safety net (GRIT Core Team, n.d.).

In August 2021, the University of Pennsylvania’s Center for Guaranteed Income Research (CGIR) launched an open online application for the City of Tacoma’s GRIT GI demonstration. Tacomans were eligible to apply if they had income between 100% and 200% of the Federal Poverty Level; were a single parent or guardian of a child aged 0–17 or a child with a disability aged 0–21; and lived in the areas of Eastside (98404), Hilltop (98405), South Tacoma (98409), and the South End (98408), as these areas were identified through the city’s equity index as zip codes with higher proportions of ALICE residents (City of Tacoma, n.d.-a; GRIT Core Team, n.d.). Over 2,000 Tacomans applied for the GRIT program, signaling a high need in the community for an unconditional cash program for ALICE residents.

As the independent research partner, CGIR randomly selected and assigned 242 applicants into the treatment group (n=110) and the control group (n=132). Treatment group participants received \$500 per month in unconditional cash for 12 months beginning in December 2021, and control group participants did not receive the cash. As part of CGIR’s mixed-methods randomized controlled trial, treatment and control group participants were invited to participate in compensated, voluntary research activities, including both in-depth interviews and regularly administered surveys at Baseline, 6 months, 12 months as the cash ended, and 18 months (post-intervention). The GRIT evaluation was guided by the following research questions: how does GI affect participants’ quality of life and income, and what is the relationship between GI and participants’ subjective sense of self?

On average, study participants in both the treatment and control groups were in their late 30s, and the majority identified as single females with an average of 2 children and 3 household members. More than four-fifths of participants in treatment and control identified as non-Hispanic, and nearly one-third identified as White, one-third as African American, and the remaining participants as American Indian/Alaska Native, Native Hawaiian/Pacific Islander, Asian, or Other/mixed. Most participants spoke

English in the home and roughly half had a high school education or less. The average annual income for the treatment group was \$29,086 and for the control group was \$28,800.

Findings suggest that on average and compared to the control group, GI recipients experienced modest improvements in financial health outcomes throughout the course of the GI intervention, though many of these improvements were not sustained once the cash stopped. Indeed, the City of Tacoma is marked by very high costs of living given its proximity to Seattle, and housing cost burden, food insecurity, and transportation costs were high for both treatment and control groups, though treatment participants fared slightly better. And yet, despite these structural economic constraints, GI recipients experienced deeper hope and improved courage, faith, and self-transcendence compared to non-recipients. Even amid dire economic circumstances, GI functioned to create greater pathways of hope and meaning, which in turn freed participants to spend more quality time with their children. However, by the end of the GI pilot, GRIT participants still experienced heightened levels of anxiety and mental distress, suggesting that the amount and duration of the GI payments may not be adequate to negate the entrenched structural economic constraints that many ALICE Tacomans endure.

Quality of life: Compared to the control group, participants in the treatment group experienced enhanced financial health, as evidenced by improved financial well-being, an increased ability to save, and greater financial resilience in managing a \$400 emergency expense during the intervention phase. These findings were complemented by a rise in income throughout and following the demonstration, along with a reduction in income volatility after its conclusion. Both the treatment and control groups experienced high rates of housing cost burden. At baseline, 75% of treatment and 78% of control were housing cost-burdened, with expenditures exceeding over 30% of their income on housing, and subsequent analyses detected no statistically significant differences between the groups. Although the control group fared worse, both groups reported increasing concerns throughout the study about sufficient food availability, inability to consume preferred foods, consuming undesirable foods, and very low food security. Yet despite these dire circumstances exacerbated by structural economic constraints, GI recipients reported deeper levels of hope after the 6-month mark of the intervention compared to the control group. Similarly, GRIT participants experienced significant improvements compared to their non-recipient peers in the areas of courage, faith, and self-transcendence, suggesting the power of GI to create pathways of hope and meaning even in the midst of circumstances that would typically squelch these positive psychological attributes.

Structural constraints of mental health: GRIT participants had mixed experiences related to their self-reported levels of anxiety and mental distress. At Baseline, both treatment and control participants reported mild mental distress and high levels of anxiety. Although levels of mental distress and anxiety decreased 6 months into the demonstration, this observed reduction was not sustained. By the end of the intervention, mental distress was similar among the two groups, and the anxiety reported by the treatment group was higher than at Baseline. Interview data corroborated these findings, suggesting that economic constraints and structural stressors persisted even in the midst of GI receipt. However, recipients demonstrated a nuanced understanding that their stressed economic circumstances were the result of structural failures rather than individual shortcomings.

Work, childcare, and family dynamics: The treatment group was significantly more likely to be full-time employed across every time point in the study compared to the control group. Participants

reported extensive efforts to work multiple jobs, take on temporary work, and engage in the gig economy to make ends meet. In doing so, participants' time to engage with their children was constrained. The GI provided a pathway for many to experience increased time and engagement with their children, and participants described improved and deepened relationships as a result of this investment.



KEY FINDINGS - AT A GLANCE

- » Financial Health: Compared to the control group, GI recipients experienced improved financial well-being and ability to save while receiving the cash, increased income and greater ability to handle a \$400 emergency expense during and after the pilot, and decreased income volatility after the GI ended.
- » Improved Hope and Meaning Despite Dire Circumstances: GRIT participants reported increased hope, courage, faith, and self-transcendence, even amid persistent economic stressors of housing cost burden, food insecurity, and transportation costs.
- » Economic Constraints and Structural Failures: GRIT participants demonstrated a nuanced understanding of economic constraints and structural failures as contributors to poverty rather than individual shortcomings.
- » Employment and Parenting: GI recipients were more likely to be employed full-time throughout the study compared to the control group. Though they experienced the tension of balancing work-related time constraints with parenting, the GI provided opportunities for increased time and engagement with and investment in their children.

Acknowledgements

The City of Tacoma and the Center for Guaranteed Income Research (CGIR) would like to thank Mayor Michael Tubbs, the Mayors for a Guaranteed Income, and the United Way of Pierce County for their commitment and support in launching the Growing Resilience in Tacoma (GRIT) guaranteed income demonstration. Specifically, the leadership of Mayor Victoria Woodards alongside President Dona Ponepinto and Program Director Abigail Lawson of the United Way of Pierce County made this demonstration possible. The Steering Committee listed below worked collaboratively to design and oversee the implementation of GRIT. Finally, we would like to thank the study participants who contributed to the research by sharing their valuable perspectives and experiences.



**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.

GRIT STEERING COMMITTEE:

City of Tacoma, Mayor's Office	Mayors for a Guaranteed Income
Tacoma City Council	Pierce County Council
United Way of Pierce County	Coalition to End Homelessness
Sound Outreach	Metro Parks Tacoma
Greater Tacoma Community Foundation	First 5 Fundamentals
Tacoma Housing Authority	Pierce County Council
Tacoma Urban League	Washington Low Income Housing Alliance
Washington Department of Social and Health Services	Nick Federici Government Relations

GRIT FUNDERS:

Mayors for a Guaranteed Income	Verizon
City of Tacoma: American Rescue Plan funds	Greater Tacoma Community Foundation
Pierce County	Virginia Mason Franciscan Health
United Way of Pierce County	Inatai Foundation
MultiCare Health System	

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Background

With a population of over 220,000, Tacoma is the third-largest city in Washington State and the county seat of Pierce County (Pierce County, 2022). Looking out over Commencement Bay, residents have a panorama of Puget Sound and the looming Olympic Mountains, while directly north is the lush vegetation of Vashon Island. The geographic beauty of the Pacific Northwest surrounds Tacoma, providing an incongruous backdrop to a city historically known for its heavy industry, active shipping port, and close proximity to one of the nation's largest military bases (Sullivan, 2014).

Located only 30 miles south of Seattle (home of coffee houses and highly paid tech workers), this proximity has been foundational to Tacoma's growth and economic development as well as the reputation and identity of the city (Brown et al., 2005). Once described as "the city of destiny" because of its industrial potential (Sullivan, 2014), this same orientation towards industry led to the famous "aroma of Tacoma" and persistent nickname of "grit city." The grittiness indexed by this nickname refers both to the urban decay plaguing Tacoma since post-war deindustrialization and the hardworking "grit" of Tacomans themselves (Hartman, 2019). Decades-long efforts at rebranding Tacoma have been met with ambivalence by longstanding residents. Revitalization, gentrification, and related increases in the cost of living are increasingly domains of concern for Tacomans as spillover from more expensive Seattle has resulted in newcomers who are altering both the character and imaginary of Tacoma (Brown et al., 2005). The relationship between Tacoma and Seattle is so salient to local concerns around urban revitalization that a popular bumper sticker on cars around town reads, "Don't Seattle My Tacoma." Despite gentrifying pressures, Tacoma maintains its reputation as a blue-collar industrial city, and is described by the Pierce County Government as a place where "industrial activity and opportunities abound ... where available land, convenient transportation access, affordable utilities and a skilled workforce lay the foundations for success" (Pierce County, 2022).

Traditionally, the wealthier areas of the city were found northwest of downtown, while predominantly immigrant, minority, and working-class communities lived in central and south Tacoma. Gentrification and urban development have shifted this geography. The Hilltop neighborhood, a historically Black community once subjected to redlining and de facto segregation, is now one of the fastest

gentrifying neighborhoods in the country, resulting in the rapid displacement of Black families with multigenerational roots in the area (Daugherty-Brunak, 2020; Gallup, 2022). The disjuncture between gentrified “new Tacoma” and blue-collar “old Tacoma” is felt spatially throughout the city. In Tacoma’s downtown core, “new Tacoma” is characterized by coffee shops, brew pubs, and public parks, and the conversion of an EPA Superfund site into the renowned Museum of Glass (Kavage, 2004). A 5-minute walk away is the University of Washington’s Tacoma campus, built in the historic Union Station District. The campus architecture integrates modern design with the brick buildings left over from the railroad era of industrialization. The campus also happens to be built on top of a once vibrant Japanese neighborhood—dismantled and structurally forgotten (Connerton, 2009) as a result of Japanese internment during World War II.

This story of regeneration and revitalization illuminates persistent tensions between erasure and reclamation, injustice and reconciliation in Tacoma. Geographer Allen Pred (1990) writes about the ways in which space and place co-constitute processes and forms of power, acting themselves as essential components of social life. This is particularly true in Tacoma, where historical relations of power are informed by and inscribed onto the geography of the city. The city’s history frames the current context for Tacomans who are desperately struggling to maintain their place in a community that feels increasingly inaccessible, and a local government striving to create an equitable and thriving city for all of its residents.

Prior to European arrival, the areas around what is now Tacoma were populated by Indigenous peoples including the Puyallup, Nisqually, and Muckleshoot nations. In 1792, Anglo (White, English-speaking) colonizers reached the area of contemporary Tacoma and Seattle, and in 1818 the United States and Britain agreed to a 10-year joint occupancy of “the Oregon Country” (Morgan, 2018). In the 1850s, the US passed an act allowing Oregon Country settlers to claim and farm parcels of land, and in the 1870s it was announced that the transcontinental railroad would end at Tacoma (Ballantine, 2017). As perceptions of land value increased, efforts by White settlers to remove Indigenous residents formalized. Through the 1854 Treaty of Medicine Creek, the Indigenous tribes occupying land around Puget Sound were forced to cede most of their territory in exchange for a small land base and fishing rights (Ballantine, 2017). The settlers’ push for industrialization meant the fundamental transformation of the Commencement Bay tideflats from a tribal fishing area to a zone of heavy industry, and later a contaminated Superfund site. The Puyallup, Nisqually, and Muckleshoot Nations consistently fought to reclaim their land, and through a 1973 Supreme court case won recognition of their treaty rights and became natural resource co-managers with the state (Ballantine, 2017).

As the railroad terminus, Tacoma was a regional center for shipping in the Pacific, leading to significant industrial development in the region (Wilma & Crowley, 2003). The late 1800s and early 1900s saw increasing industrialization with growth in the rail and timber industries and the development of the Tacoma smelter, which produced millions of dollars’ worth of gold, silver, copper, and lead annually. The smelter became one of the largest sources for anthropogenic arsenic in the world (Sullivan, 2014), but it was also a significant driver of industry, and settlers arriving in Tacoma were attracted by the robust employment opportunities. By 1885, Tacoma’s residents were White, Black, and Indigenous, native- and foreign-born, and an estimated 700 Chinese men and women were living, working, and establishing roots in the city (Englesberg, 2014). Racial tensions stoked by fears over labor and nativist

sentiments ultimately culminated in an insurrection and the forced expulsion of every Chinese resident by a group of vigilantes, which included Tacoma's mayor at the time. The forced eviction of Chinese residents became known as the "Tacoma method" and informed the future settlement of other minority groups in the region. To this day, Tacoma is the only major city in the Pacific Northwest with no Chinatown (Wilma, 2003).

Despite this overt racialized violence, both Black and Japanese communities saw economic opportunity in Tacoma. Black migration westward was spurred by the end of the Civil War, and the first recorded Black resident of Tacoma, George Putnam Riley, purchased 67 acres of land in 1869—land which would later become the historically Black neighborhood of Hilltop (Dunkelberger, n.d.). While the population was still relatively limited, Black newcomers to Tacoma were committed to civil rights, founding an early chapter of the NAACP and the Tacoma Inter-Racial Council (Washington State Historical Society, n.d.). Japanese people also constituted a thriving immigrant community in Tacoma, and the largest foreign-born population in the state of Washington. Careful not to settle in the waterfront region that had previously been home to Chinese residents, Japanese residents instead created a vibrant community in downtown Tacoma near Union Station (Hirota, 2017). World War II was pivotal for both sets of residents. In December 1941, prominent members of the Japanese community were arrested and their assets liquidated; shortly thereafter, the community was moved east into internment camps (Hoffman & Hanneman, 2020). The mayor of Tacoma at the time became the only mayor of a major West Coast city to speak publicly on behalf of the Japanese (Nimura, 2016). The arrest and internment of Tacoma's Japanese residents occurred at the same time as an increase in Black migration to the community. New Black residents came because of the labor opportunities in shipyards and airplane factories and to serve in the armed forces at Fort Lewis (Taylor, 1978). Some of these new residents occupied the now vacant neighborhoods of interned Japanese and took over Japanese businesses (Taylor, 1978). After the war ended, only 172 of the 874 Japanese residents returned to Tacoma (Nimura, 2016). Many felt Tacoma unwelcoming, while others fell victim to the War Relocation Authority policy, which intentionally dispersed Japanese Americans across the US (Hoffman & Hanneman, 2020). What was left of the Japanese neighborhood was razed, making way for parking lots, office buildings, and the University of Washington Tacoma campus (Hoffman & Hanneman, 2020). The population growth of the Black community resulted in the "the strengthening of Black rights organizations and Black-related social service groups, and the passage of civil rights or anti-discrimination legislation at the state level" (Taylor, 1978, p. 65) but also increased racial tensions and the overcrowding of Black settlement areas—overcrowding which was exacerbated by the emergence of restrictive housing covenants across the city (Taylor, 1978).

Tacoma experienced a prolonged post-war decline prompted by deindustrialization, suburbanization, and urban divestment. Today, Tacoma continues to struggle with the lasting impacts of this decline. Efforts at revitalization have been successful in the downtown core and often occur in tandem with Superfund cleanups of industrial waste to create new parks and useable spaces for Tacoma's residents. In fact, after being demolished in the 1990s, the location of the former Tacoma smelter is now a luxury waterfront urban village. Targeted programs like "Percent for Art" have also managed to draw a thriving community of creatives to the city (Kavage, 2004). However, there are many residents who have not been included in this new Tacoma. The city's housing market, both for homeownership and rental units, is incredibly tight. Beginning in the 1950s, Tacoma introduced strict zoning laws

that limited residential construction to single-family homes. As a result, the majority of the city is low-density housing, creating a housing shortage which has driven up the price of buying a home (City of Tacoma, 2023). Responding to the urgent need for affordable housing, in 2021 the Tacoma City Council changed the zoning laws, permitting the development of higher-density housing, and the city's Affordable Housing Action Strategy is actively incentivizing the development of lower-income and affordable housing units. While rent is lower in Tacoma than in surrounding Puget Sound cities, so is the average income. Despite the efforts that have been put into increasing access to affordable housing, many Tacoman working families still struggle to afford their rent and utilities (City of Tacoma, 2016).

In Washington State, 28% of working-age households do not have incomes that cover their basic needs and instead are struggling with the “everyday crisis” of making ends meet (Kucklick et al., 2023). By the federal poverty guidelines, 10% of Washington state is living in poverty, and the social service programming landscape at both the state and federal level tends to target these residents. Economically constrained working families fall into the gap created by the disjuncture between federal poverty guidelines and the economic realities of self-sufficiency in Washington State (Kucklick et al., 2023). These households struggle to make ends meet, and the vast majority pay more than 30% of their income towards housing costs (Kucklick et al., 2023). The economic struggles of Washington state residents are not distributed equally. Likely a result of pernicious and enduring structural racism, the Latinx, American Indian, Black, and Pacific Islander households living below the Self-Sufficiency Standard is nearly double that of White households, and these statewide trends are replicated locally in Tacoma. As a result, Tacoma struggles with childhood poverty rates that are higher than in surrounding areas, and homelessness is a persistent concern. The rise of Tacomans experiencing homelessness in the past decade has been so significant that in 2017 homelessness was declared a public health emergency by the city (Needles, 2021). Since that point, homelessness has risen 40% (City of Tacoma, 2023). While a patchwork of state and city programs are working to ensure access to education, medical care, nutrition, and housing for the city's most vulnerable populations, many Tacoman working families fall through the cracks—they earn too much to receive to state benefits, but too little to achieve economic stability.

The city of Tacoma is committed to ensuring that all Tacomans have access to dignified living conditions. Recently, the city has embarked on a concerted effort to increase access to affordable housing through changing residential zoning rules and approving the construction of multi-family housing units, as well as encouraging the construction of rent-restricted units through a multifamily tax exemption program (City of Tacoma, 2023). The city has begun using the Equity Index to better understand the multiple and overlapping forms of structural inequity impacting Tacomans, particularly the predominantly minority residents living in neighborhoods of high inequity, and to prioritize investments so that all Tacomans have access to opportunity (Equity in Action, 2023). Driven by this orientation towards increasing access to opportunity and reckoning with the historical construction of disparity, the GRIT GI demonstration was implemented as a joint venture of the United Way and the City of Tacoma. GRIT GI enrolled 110 ALICE families to receive \$500 a month for one year. The demonstration was organized not only to provide cash as a tool for poverty alleviation, but also to create programming that would empower individual Tacomans through honoring their time and dignity.

Context and Demographics

As of July 2023, the Census Bureau estimated the City of Tacoma's population to be 221,776 (U.S. Census Bureau, 2022). It is the second largest city on the Puget Sound and has had significant population growth of over 10% in the last decade (U.S. Census Bureau, n.d.). This residential mobility is notable, as 4.5% of American Community Survey (ACS) respondents had moved to Tacoma within the last year from another county, and 3.9% from out of state. According to the most recent ACS, the city's population is predominantly White non-Hispanic, at 57.2%. Of the remaining residents, 12.8% identify as Mixed-race, 12.3% identify as Hispanic or Latino, 10.6% of city residents are Black, 8.7% are Asian, and 1.7% are American Indian. Thus, Tacoma has significantly more racial and ethnic diversity than nearby cities of Seattle and Portland (U.S. Census Bureau, n.d.). While lower than the rates for Washington State, Tacoma's foreign-born population, at 12%, adds to the city's diversity, and 16.6% of Tacoma residents speak a language other than English at home (U.S. Census Bureau, 2022).

Approximately 93% of civilian Tacomans who are eligible to work are employed. Of these, 78% work in the private sector, largely made up of positions in healthcare, finance and insurance, aerospace, trade, distribution, and logistics, while roughly 17% are employed in government and education. There is also a significant non-civilian workforce, with Joint-Base Lewis McChord employing roughly 54,000 people (City of Tacoma, 2020). Relatedly, 8% of Tacoma's population are veterans, outpacing the state average (U.S. Census Bureau, 2022). In terms of educational attainment, 34.9% of Tacomans aged 25 and older have achieved a Bachelor's degree, which is lower than the state average of 39.5%.

In 2022, Washington State witnessed a modest 2% increase in average annual wages, a slowdown from the previous year's 7.5% growth (Employment Security Department, 2023). Despite overall employment growth, challenges persisted in wage growth, especially affected by the technology-heavy information sector. Key sectors such as administrative services, accommodation and food services, and public administration saw the highest wage increases. While the cost of living is generally considered to be lower in Tacoma than in nearby Puget Sound cities, so is the average salary and the median household income. The median household income for Tacoma is \$80,784, roughly \$11,000 less than for the state of Washington (U.S. Census Bureau, 2022). Washington state also has the second-largest gender pay gap in the country, with women making, on average, \$18,400 less than men annually (National Partnership, 2024). Tacoma's gendered income gap is lower than the statewide average, with women earning on average \$13,000 less than their male counterparts (Neilsberg Research, 2024). Despite this movement towards gender parity, Tacoma has overall higher poverty levels than the statewide levels, with 14.2% of Tacomans living in poverty (U.S. Census Bureau, 2022).

Housing prices are lower in Tacoma than the Washington state average. The median home value in Tacoma is \$415,000, and 56.8% of the housing market is owner-occupied (U.S. Census Bureau, n.d.). With such a significant percent of residents living in rental properties, rental pricing is particularly important for the local housing context. Average rents in Tacoma, while lower than in surrounding Puget Sound cities, have been rising quickly in recent years. In 2021 Tacoma had the highest year-over-year growth in rental prices, with an 18.9% increase in costs (Regimbal, 2021). As a result of this housing and income context, 36.9% of Tacomans are spending more than one-third of their income on

housing, classifying them as housing cost-burdened (Chamber of Commerce, n.d.). The rising rental costs during the COVID-19 pandemic likely reflect the physical mobility enabled by a shift to remote and hybrid work, as residents of other Puget Sound cities found their way to Tacoma, drawn by the relatively lower costs of living. However, this emergence of a new Tacoma has brought challenges for longtime residents, who are quickly being priced out of both the rental market and homeownership. This shift is particularly evident in the communities targeted by the GRIT program—communities that are at high risk for residential displacement because they have a high share of BIPOC residents and a high level of renters (City of Tacoma, 2024). For example, the Hilltop neighborhood (included in the GRIT program) went from being 60.6% Black in 1970 to 21.5% Black in 2020, and according to the Evictions Study Map, has the highest risk of eviction in the entire city (City of Tacoma, 2024). The marked shift in racial makeup coupled with high risks for eviction are indicative of racialized displacement and the struggles currently confronting longstanding Tacomans in the face of Tacoma’s ongoing revitalization.

Table 1. Demographic Characteristics of Sample Population

Tacoma, WA		Treatment	Control
SAMPLE SIZE		132	110
AVERAGE AGE OF RESPONDENT (YEARS)		38	39
GENDER (%)	Male	14	16
	Female	85	83
	Other	1	1
HOUSEHOLDS WITH CHILDREN (%)		90	95
AVERAGE # CHILDREN IN HOUSEHOLD		2	2
AVERAGE HOUSEHOLD SIZE		3	3
ETHNICITY (%)	Non Hispanic	84	84
RACE (%)	White	33	30
	African American	30	32
	American Indian/Alaska Native	3	3
	Native Hawaiian/Pacific Islander	2	5
	Asian	8	5
	Other/Mixed	24	25
	MARITAL STATUS (%)	Single	75
Married		17	12
Partnership/in relationship		8	13
PRIMARY LANGUAGE AT HOME (%)	English	98	96
	Spanish	0	2
	Other	2	2

Tacoma, WA		Treatment	Control
EDUCATION (%)	High School or less	53	43
	Some College	1	2
	Trade/Technical School	17	17
	Associate's	20	24
	Bachelor's	7	10
	Other	2	4
ANNUAL HH INCOME (\$)	Median	\$28,800	\$28,996
	Mean	\$30,647	\$29,086

The composition of the study sample included 132 individuals in the control arm and 110 in the treatment arm. Demographically, both cohorts were characterized by a similar average age—38 years for the control and 39 for the treatment group—and household dynamics, with respondents across both groups reporting an average of two children per household, and an average household size of three individuals. All participants resided in the following zip codes: 98404, 98405, 98408, and 98409.

In terms of gender distribution, women predominated in both groups, accounting for 85% in the control and 83% in the treatment group. The majority of participants were non-Hispanic, representing 84% of the total sample. Racial demographics were predominantly White (30% control, 33% treatment) and African American (30% control, 32% treatment), with smaller representations of Asian (8% control, 5% treatment) and Mixed/other racial backgrounds.

A majority of respondents were single (75%), followed by smaller fractions being married (17% control, 12% treatment) or in a partnership or other relationship (8% control, 13% treatment). The primary household language was overwhelmingly English (98% control, 96% treatment), although a range of other languages such as Spanish, Vietnamese, and Russian were also represented. Educational attainment differed slightly between groups. In the control group, 53% had received a high school education or less and 27% had obtained an Associate's or Bachelor's degree. Comparatively, the treatment group had fewer individuals with only a high school education or less (43%) and a higher proportion holding an Associate's or Bachelor's degree (34%).

Financially, the median annual household income was closely matched between the groups: \$28,996 for treatment and \$28,800 for control, with average incomes of \$29,086 and \$30,647, respectively. Both groups reported annual wages that were substantially below the living wage required for a single household with two children in Tacoma, WA, which is estimated at \$114,134 annually (Glasmeier, 2024). This significant shortfall underscores the challenges faced by families in this region, particularly those with dependents, to meet essential living costs.

Methodology

All methods reported were reviewed and approved by the Institutional Review Board at the University of Pennsylvania. This research rests on a parallel mixed-methods randomized controlled trial (QUANT + QUAL) to answer the following research questions¹:

- » How does GI affect participants' quality of life?
- » How does GI affect participants' income and through what mechanisms?
- » What is the relationship between GI and participants' subjective sense of self?

In a parallel mixed-methods design, all quantitative and qualitative analysis are conducted separately and are not integrated into meta-inferences until within-strand analysis is complete (Tashakkori & Teddlie, 2009). As noted in the Pre-Analysis Plan (ABT Associates, 2023), this research is conceptually informed by the literature on scarcity (Mani et al., 2013), income volatility, and unconditional cash. This framework demonstrates that the experience of scarcity curtails agency and one's ability to imagine alternative pathways by psychologically and practically trapping people in a survival mode that erodes hope, creates time scarcity, and impacts health and well-being (Sayre, 2023; West et al., 2023; West & Castro, 2023).

QUANTITATIVE METHODS

A Randomized Controlled Trial design was used to evaluate the impact of the GI on the overall health and well-being of the participants. The study utilized a sample of 242 participants randomly drawn from a larger pool of approximately 2,100 applicants. Participant eligibility was restricted to specific zip codes (98404, 98405, 98408, and 98409), single-parent or guardian households, with children aged up to 17 years, or 21 years if the child was disabled. Participants were also required to have an income that fell within 100% to 200% of the federal poverty level. 110 applicants were assigned to the treatment group to receive \$500/month for 12 months. An additional 132 applicants were assigned to the control group. Data were gathered at four time intervals: Baseline (August 2021), 6 months (May 2022), 12 months (November 2022), and 18 months (May 2023), which was 6 months after the cessation of cash disbursement. All participants were compensated for their time completing the surveys. Detailed response rates are provided in the Appendix.

A standardized framework was employed to detect and manage outliers, ensuring that extreme values did not unduly influence the results. Outliers were addressed using the Winsorization method. The Multiple Imputation by Chained Equations (MICE) (Azur et al., 2011) iterative imputer was systematically employed to handle missing data across the dataset. MICE is adept at managing complex data structures and patterns, offering more accurate imputations in scenarios with significant missing data. MICE operates through a series of iterations, each employing a unique random seed

¹ A more extensive reporting of the methodology can be located in our Pre-Analysis Plan (ABT Associates, 2023), which pertains to all of the randomized controlled trials funded in whole, or part, by the Mayors for a Guaranteed Income.

to ensure a diverse range of imputation results, thereby bolstering the robustness of the imputed datasets. The imputation was conducted on specified outcome variables and selected demographics. Following the imputation process, several measures were taken to validate the accuracy and reliability of the imputed data. First, this involved evaluating the distribution analysis by comparing the data distributions of the original and imputed datasets to ensure consistency. Second, plausibility checks were performed to ensure that all imputed values fell within a valid range for each respective variable. Convergence diagnostics were also closely monitored to ensure the stability of imputed values. Finally, sensitivity analyses and model fits were conducted as supplementary validation measures. As a result of these rigorous checks, a set of imputed datasets was generated, each offering a comprehensive set of plausible values for missing data points. These datasets then formed the foundation for subsequent analyses in the study.

Following imputation, a comprehensive analytical approach was employed to assess the impact of the GI intervention across multiple validated measures. The analysis involved employing Generalized Estimating Equations (GEE) to derive regression-adjusted means, ensuring a robust analytical framework capable of accommodating the intricacies inherent in longitudinal data. The application of GEE facilitated the disentanglement of the effects of the cash transfer from other temporal and group-based variations at each time interval: Baseline, 6 months, 12 months, and 18-month follow-up. This approach not only enhanced the accuracy of the outcome assessments but also reinforced the credibility of the findings. Finally, cross-validation served as a robust methodology for comparing the performance of models trained on original versus imputed datasets, thereby validating the effectiveness of imputation strategies in preserving or enhancing the predictive power of the models. By systematically applying the same model and evaluation metrics across different folds of the data, this approach ensures a fair and unbiased assessment of how imputation influences overall model accuracy. Such comparisons are crucial for demonstrating that imputation does not introduce significant bias or noise, thereby affirming the reliability and robustness of conclusions drawn from analyses involving imputed data.

QUALITATIVE METHODS

At the midpoint of the program, July 2022, the qualitative team recruited 31 individuals to participate in a semi-structured interview. Five participants canceled, yielding a sample of 26 respondents (21 treatment and five control). Participants cited work and personal conflicts for cancellations, highlighting the complex time demands of working and caring for a family. The majority of interviews took place in-person, either at participants' homes or at a community location. Participants had the option of interviewing on Zoom to minimize COVID exposure and to accommodate complicated work and family schedules. Interviews lasted 1.5–2 hours and participants received a \$40 gift card as compensation for their time. All interviews were recorded on a DVR, professionally transcribed, de-identified, and coded.

The interview protocol was informed by conceptual literature and included prompts on health and well-being, pooling behaviors, benefits interaction, financial decision-making, care work, ideology, program design, and policy and program take-up. As described in the Pre-Analysis Plan (ABT Associates, 2023), qualitative analysis involved blending the first five stages of Braun & Clark's (2012)

thematic analysis approach on a semantic level and using grounded theory (Charmaz, 2014) for latent themes. Thematic analysis focused on process coding to assess decision-making, strategies, and goal-setting, and values coding to assess how individual schemas reflected larger discourses on care work, finances, and employment (Saldaña, 2010). A grounded theory approach was utilized to employ focus and theoretical coding based on the literature noted prior, in tandem with inductive code generation. Recurrent, structured memo-writing occurred throughout the research process beginning with data collection through analysis. These memos included “thick descriptions” at each stage of analysis to determine how semantic and latent themes were related within the data (Ponterotto, 2006, p. 358).



Findings

1. The Impact of Guaranteed Income on Quality of Life

Summary: Tacoma is an evolving city that has historically been rooted economically in a blue-collar work tradition, with an active shipyard, industrial railroad hub, and military bases. More recently, this has been complicated by the technology industrial boom in nearby Seattle driving up the cost of living in Puget Sound. With lower housing costs and overall greater affordability relative to Seattle, Tacoma has had an influx of newcomers that has impacted the cost of living in the city. This has enhanced tensions, as wages have not kept pace with cost of living and lifelong residents struggle to get by.

Consistent with the eligibility criteria for GRIT, all participants earned between 100% and 200% of the federal poverty line, making them asset-limited, income constrained, and employed (ALICE). ALICE families are at particular risk of economic precarity as they do not earn enough to make ends meet and also interact with a safety net governed by a benefits cliff, whereby any increases to one's income can prompt loss of benefits. This pushes households on either side of the benefits cliff into poverty or near poverty (Dinan et al., 2007). GRIT participants were earning just enough income to disqualify them from most safety net programs, yet they were not earning a livable wage in the market, and as such remained trapped in financial precarity.

Findings from both surveys and interviews revealed that GRIT participants experienced only modest financial health improvements while receiving the GI, and many of these improvements were not sustained once the cash ended. Study participants reported high housing cost burden and food insecurity, and these burdens were only slightly lower for GI recipients. And yet, GI recipients more frequently reported higher levels of hope, courage, faith, and self-transcendence, suggesting that the receipt of cash improved many areas of psychological well-being despite structural economic constraints.

Case Study: Ken

Ken is the sole provider for his family. He has two children and a wife, all of whom have medical diagnoses that put them at risk due to immunocompromised systems and require a multitude of medical appointments and treatments. Though he lives in Tacoma, Ken works in King County as a tradesman. His 60-mile commute takes a toll—including the financial

strain of filling up the gas tank, keeping up with parking tickets, and an accident from which he is still physically recovering. Ken also grapples with the emotional strain on his family as he tries to manage being present for his sons and wife and juggle their medical appointments and needs. Time has become his most precious commodity.

Though Ken works hard in his official capacity, he and his family remain over 250% below the cost of living in Tacoma. They live on the edge, paycheck to paycheck, cobbling together extra jobs (often the night shift) yet constantly in debt, while still not qualifying for governmental benefits. Ken reflected, “I can’t make the basic needs. As a father in a household of four in Tacoma where the bills are so high, I can’t make ends meet.” Between his commute and the extra hours of his “2 to 3 side jobs” at any given time, Ken feels like he does not give his family what they need:

I neglect my own son, my two sons ... sometimes it takes time away from my family, which makes me a bad person. I just want to let you know that it’s not easy, and I don’t wish that. I do want to be a successful father. I’m wearing many hats as a shop steward, as a father, as an employee of an institution that I respect. But it takes a toll on our lives.

However, Ken felt that “GRIT has given me time in the day.” It enabled him to help his neighbors and to spend more time with his family, especially his children. With the GI he could do things like:

taking them to the park. I’ve been able to with the dogs. I’ve been able to go to the movies, and then it was all the birthday parties around the block. I think I was able to go to like six birthday parties. If I didn’t have GRIT, I’d be working a job. I wouldn’t be able to come home. I wouldn’t be able to come home to my 2-year-old or my 9-year-old.

Ken felt pressure to balance providing for his family with maintaining strong community ties. Receiving the GI helped ease this pressure by allowing him the time and space to share with others. He participated in shared leave policies at work to help others take the time they needed to heal. With the GI, he was also able to help his neighbors with handyman tasks without asking for money:

My wife walks around with the dogs and the kids and is like, “You need to do this, you need to help them,” and I’m like okay. I’ll be right there ... But I don’t charge them. I’m not the person to charge any money. I want to help people to survive.

Given the struggles Ken and his family face in getting by, the GRIT program provided some relief.

Trends in Annual Household Income

Findings suggest a potential stabilizing effect of the intervention on participants’ incomes, though it is important to consider the potential influence of concurrent external factors, such as the post-pandemic economic recovery, on these outcomes. At Baseline, average annual household incomes were comparable between groups: M=\$29,086 for the treatment group and M=\$30,647 for the control group. Six months post-initial disbursement, the treatment group exhibited a significantly higher mean income, with a mean difference of \$3,175, 95% CI [\$230, \$6120], while income volatility remained similar for both groups (25%). After 12 months, the treatment group continued to report higher average annual incomes, with a mean difference of \$2,130, although experiencing marginally higher volatility (29%) compared to the control group (26%). Following the cessation of the GI, at the 18-month mark, the treatment group not only sustained a higher annual income (mean difference = \$2,054) but also demonstrated lower income volatility (37% versus 42%).

Table 2. Trends in Average Annual Household Income: Treatment vs. Control

TIME PERIOD	TREATMENT	CONTROL	MEAN DIFFERENCE	STANDARD ERROR	95% CI LOWER	95% CI UPPER
Baseline	\$29,086	\$30,647	-\$1,561	\$1,405	-\$4,327	\$1,205
6 months	\$33,990	\$30,815	[\$3,175]*	\$1,503	\$230	\$6,120
12 months	\$35,111	\$32,981	\$2,130	\$1,709	-\$1,220	\$5,480
18 months	\$37,028	\$34,975	\$2,054	\$2,151	-\$1,297	\$5,404

Although the treatment group experienced increased income compared to the control group, it is critical to note that the living wage required for a single household with two children in Tacoma is estimated at \$114,134 annually (Glasmeier, 2024). With average incomes far below this measure of livability in both groups, our participants described walking a fine line between precarity and survival even with the GI. Tacoma’s history of blue-collar work translated into a class-based identity that was very much present in the current political economy of the city, coming into conflict with newcomers from King County and the gentrification that accompanied this wave of new residents.

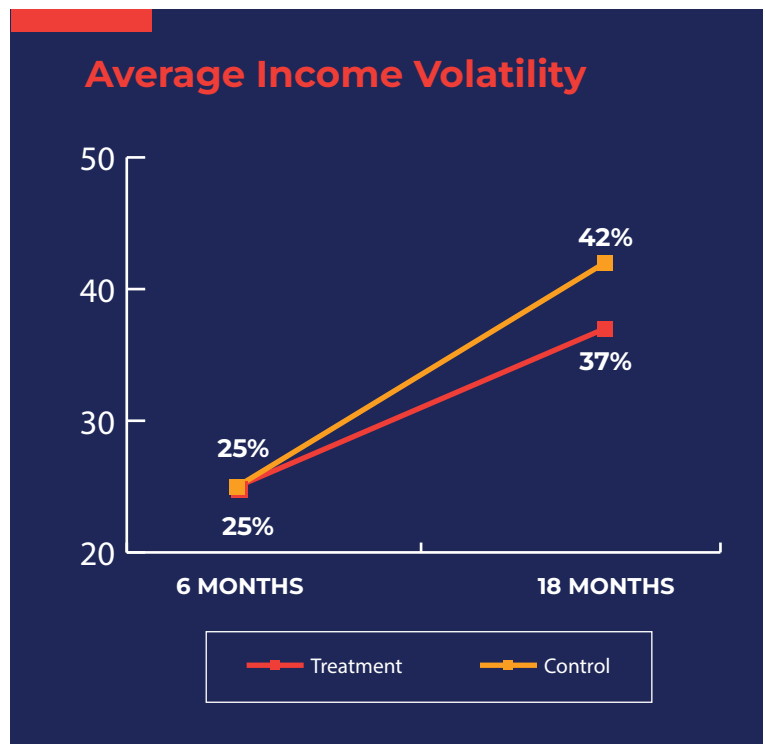
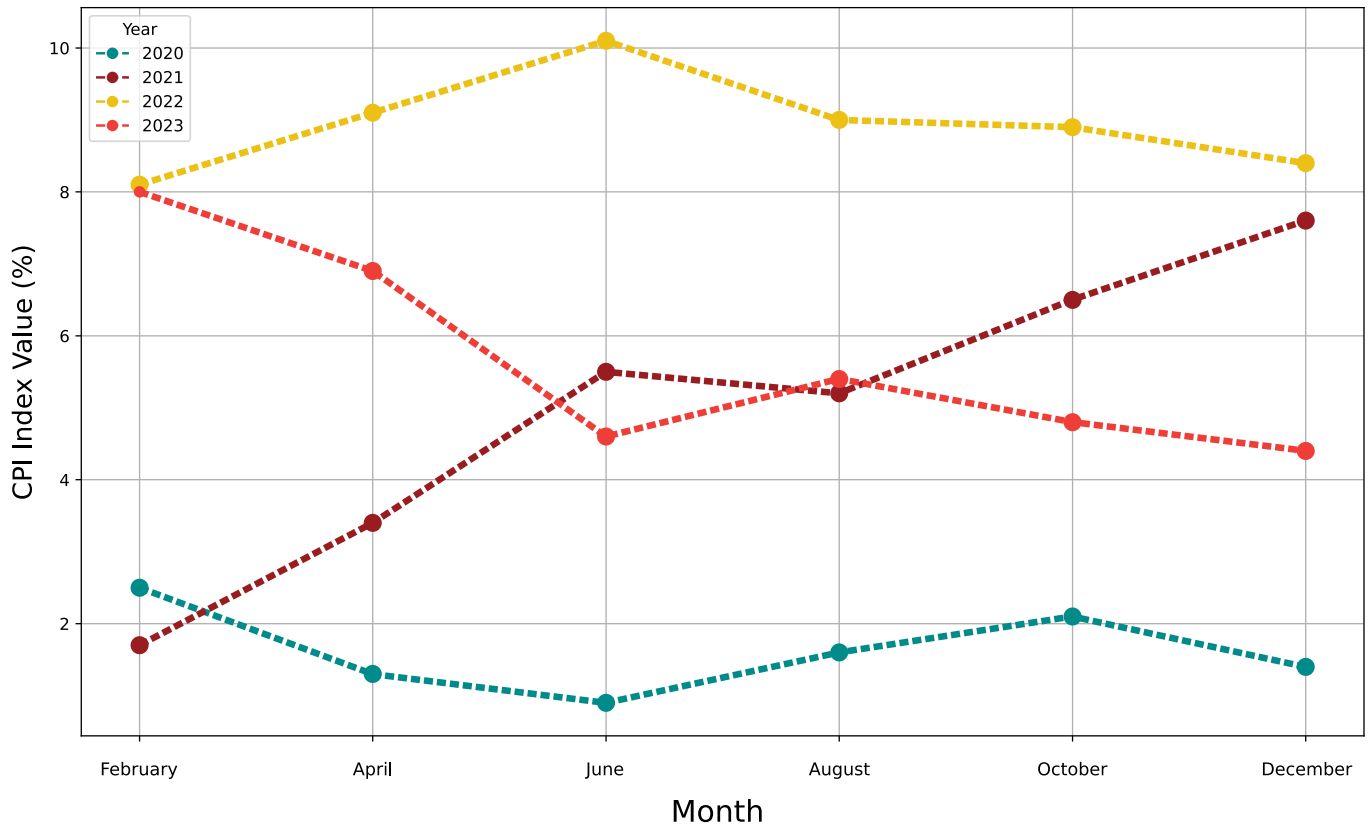


Figure 1. CPI Index for Seattle-Tacoma-Bellevue, WA (12-Month)



Source: Bureau of Labor Statistics

Given the economic context in Tacoma, participants were acutely aware of the limits of \$500 for their families. While helpful, many recipients reported that the GI could not keep up with the rising cost of living or with post-pandemic inflation. Nancy, an entrepreneur and mother, shared her perspective on how economic shifts changed the value of the GI for her family:

Well, before it was great. It's going to help me with this, it's gonna help me with that. But it shifted because, again, it really doesn't—I don't want to say it doesn't matter. I guess it does. But at the end of the day, \$500 nowadays, you can spend it within a week, not even a week. From when we started, the value of it has definitely changed. It did appear to be a lot more back then.

Nancy felt that the \$500 disappeared as quickly as it appeared in her bank account. This feeling also made participants acutely aware of how one unexpected expense could lead to precarity. Overall, the GI provided a temporary sense of security for participants in the context of gentrification, high cost of living, and the unexpected financial pressures of the pandemic and inflation.

Participants felt this tension as their household budgets tightened and they continued to teeter on the precipice of financial precarity. GRIT participants detailed strategies they had developed to get around some of the cost-of-living hurdles in Tacoma. For instance, Betty Ann, a mother of eight,

talked about buying food in bulk from Costco and using freezers so that food was not wasted in her household. Alicia and her partner prioritize so their children always have what they need, though it often means she and her partner do without. Alicia looks for free things to do with her son, like the local park, and does not socialize with her friends because she cannot afford it. At one point, Alicia was behind on her car note and so she started parking it at her friends' houses because she was nervous it would get repossessed if it were at her house. She expounded on other strategies,

my power company, I pay them every other month. So it sucks because in the second month, it's extremely expensive because 2 months in one payment is what they're asking for, but that gives me breathing room for one month. So I always juggle with feeling I'm good this month, but I have to pay this month... I signed up for rewards places to give me like money back, or if I have to go grocery shopping, I'm really getting it finding the coupons. I honestly don't know how I've been staying afloat because I don't have anybody to ask for money. I'm like, well, it is what it is ... when I did get COVID those two times, I had to use all my vacation days just to get a normal check. So now I'm like, I better not get sick because I don't have anything as a cushion for my job.

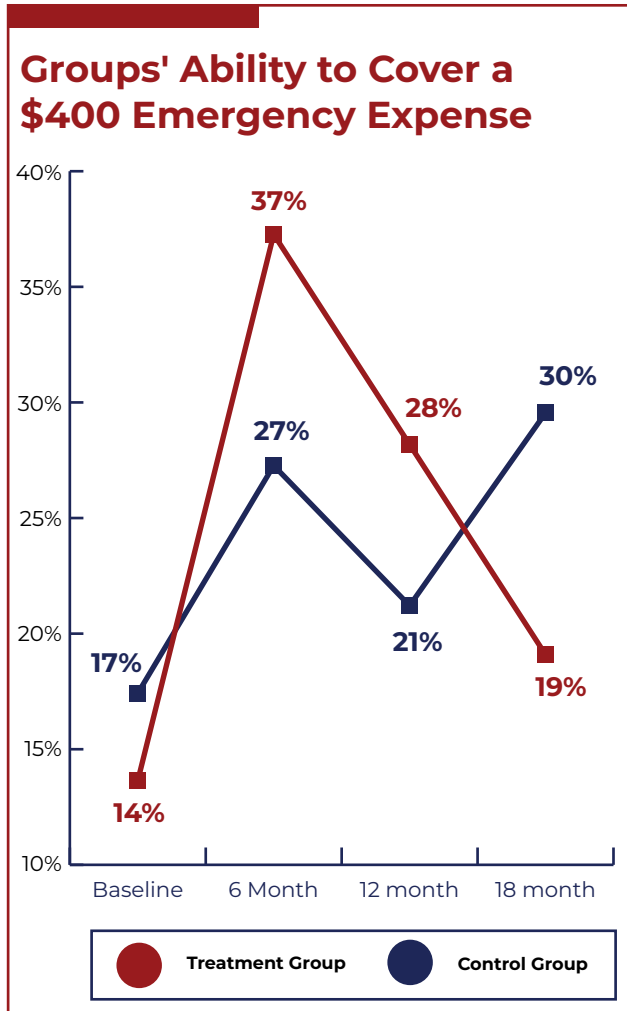
Many participants shared their perceptions on the broader economic system, feeling as though it was structured such that it perpetuates scarcity. Victoria, for example, shares that “it’s statistically proven again and again that we do not make enough money to survive in this economy.” In response to whether she is paid equitably, she states,

according to this economy, there is no way in hell ... if we would actually take into consideration the inflation and the economy and how much rent costs, let alone the food to raise children. The healthcare coverage that we don't have, it's not enough.

Financial Well-Being of Households

Despite the context of economic precarity that participants were navigating, individuals in the treatment group experienced improvements in financial well-being and resilience. These included an increased ability to save and to cover emergency expenses. At Baseline, both the treatment and control groups were comparable in terms of their average financial well-being scores: control=38.67; treatment=39.44, placing them in the Medium-Low category of the Consumer Financial Protection Bureau Well-Being Scale. Individuals in this score range typically tend to have minimal savings, are unable to cover an emergency expense, and often face material hardships and credit challenges (Consumer Financial Protection Bureau, 2015). Six months into the study, the treatment group showed a higher financial well-being score (M=40.97) relative to the control group (M=38.82). This increase was sustained at 12 months (mean difference=1.32). However, at the 18-month follow-up, the mean score for the treatment group (M=40.93) was marginally lower than for the control group (M=41.58).

There was also a discernible shift in financial well-being for both groups, with the control group showing an increase in the proportion of individuals in the High financial well-being category and



a rise in the Medium-Low category, coupled with decreases in both Low and Very Low categories. The treatment group demonstrated a slight reduction in the extremes (High and Very Low) and a substantial increase in the Medium-Low category, indicating a movement towards a more centrally distributed financial well-being status.

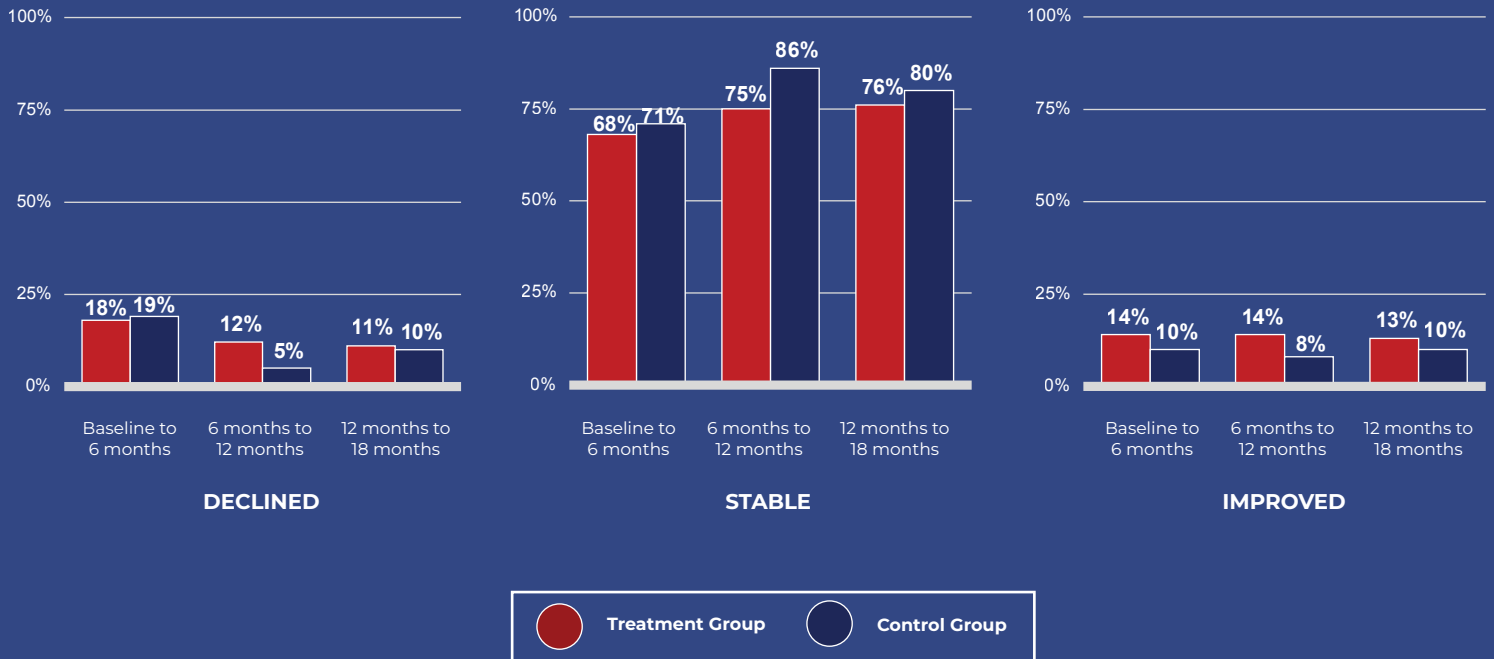
The capacity to address an emergency financial need, exemplified by the ability to afford an unforeseen \$400 expense using cash or a credit card paid in full, serves as a critical measure for evaluating household financial stability and resilience (Consumer Financial Protection Bureau, 2022). Quantitative data suggest that individuals in the treatment group exhibited significant improvements in financial resilience, particularly in their ability to manage a \$400 emergency expense. Initially, the ability to fully cover such an expense using cash or credit was similar between the treatment and control groups, recorded at 14% and 17%, respectively. However, the treatment group demonstrated a notable increase in this capacity, peaking at 37% at the 6-month period before decreasing to 28% at 12 months. The control group experienced a non-statistically significant reduction of 6 percent points during the same time period.

For some participants, the survival mindset brought on by the pandemic and subsequent inflation impacted their thoughts on long-term financial stability and savings. Margarita reflected:

I think I do think so, but it kind of goes all over the place, there's part of me that's like the world's gonna end tomorrow, like nothing matters, like everything's messed up, like you know there's part of that that's been affecting me, um, you know? Um, it's not like I've been, especially earlier in the pandemic, worried about making sure I have security and savings. I was more just like, "Let's survive today."

Indeed, GRIT participants experienced record inflation rates during the pilot and in the six months after the cash ended. Yet despite the context of the pandemic and rising cost of living, the GI was impactful for participants, allowing them to imagine different pathways. By bolstering their budgets, the GI allowed some to feel financially secure for the first time in recent memory. This security brought an ability to consider taking risks and comfort in the capacity to withstand shocks to their budgets. Participants were able to either start or stabilize savings accounts—as Margarita noted, “this is the first time I’ve had a real savings account, I’ll tell you that.” She felt this buffer against emergency costs was

Transition in Savings: Baseline to Endline



one way the GI protected her, and perhaps others in the pilot:

I also know that when big expenses come up, and [people] haven't prepared for it, they haven't planned for it. It's gonna be a lot easier to go because how quickly someone can go from stable to homeless is a huge problem. It spirals into other problems, like for someone who doesn't have the knowledge of how to budget or plan or any of that. I would say that a huge thing is knowing that this month, 500 bucks is coming, like, okay, I can fix my car this month.

Betty Ann's ability to cover shocks to her budget shifted with the pilot. She spoke about having to suddenly arrange and pay for her father's funeral before GRIT. These unexpected costs came with overwhelming guilt at what she was not able to afford. At that time, she received a bill from Tacoma Power and her energy bill was "over \$1,000! And I was like, 'What happened?! When did this happen?!' And... so, now I'm on a payment plan with them. I pay, like, \$43 a month or something for that." She sometimes felt like it was a choice between cutting down on energy or being homeless because she could not keep up with the bills from Tacoma Power. For participants, the GI provided a financial buffer for these types of unexpected costs.

Additionally, the study observed shifts in savings behaviors within both groups. At the study's onset, 14% of the treatment group and 18% of the control group reported having savings exceeding \$500.

After 6 months, a significant increase in savings ($\chi^2=6.21, p=0.04$) was observed in the treatment group (16%), while the control group saw a reduction to 11%. This pattern continued at the 12-month mark, with the treatment group at 15% and the control group further declining to 10%. Post-intervention findings indicate a decrease in savings above \$500 in the treatment group (5 percent point reduction), while the control group stabilized at approximately 12%. These observations suggest that while the treatment group demonstrated relative stability in savings during the intervention phase, this stability was not sustained following the discontinuation of the GI.

Participants talked about how the GI changed their approach to financial habits. Given that the program only lasted for one year, they wanted to maximize its benefit for their families. Many participants used the GI to tackle existing debt, with varying degrees of success. James, for example, was able to use the GI to get his debts under control. After he paid down his debt, his next goal was to start investing and saving, so that his son would have a nest egg:

It's really changed my habits as far as knowing that this is my opportunity to put something away for my son quicker. I know that you're supposed to keep your debt down first before you invest, and now that I was able to pay my cards off, I just try to live real modestly to be able to put something away quicker, because obviously this program is only a year. I know I have to try to maximize it as much as possible, and so that's the way I changed my spending habits.

Although still living paycheck to paycheck, Mary was able to save a little each month towards moving. The GI allowed her room for goal-setting that had previously felt unachievable:

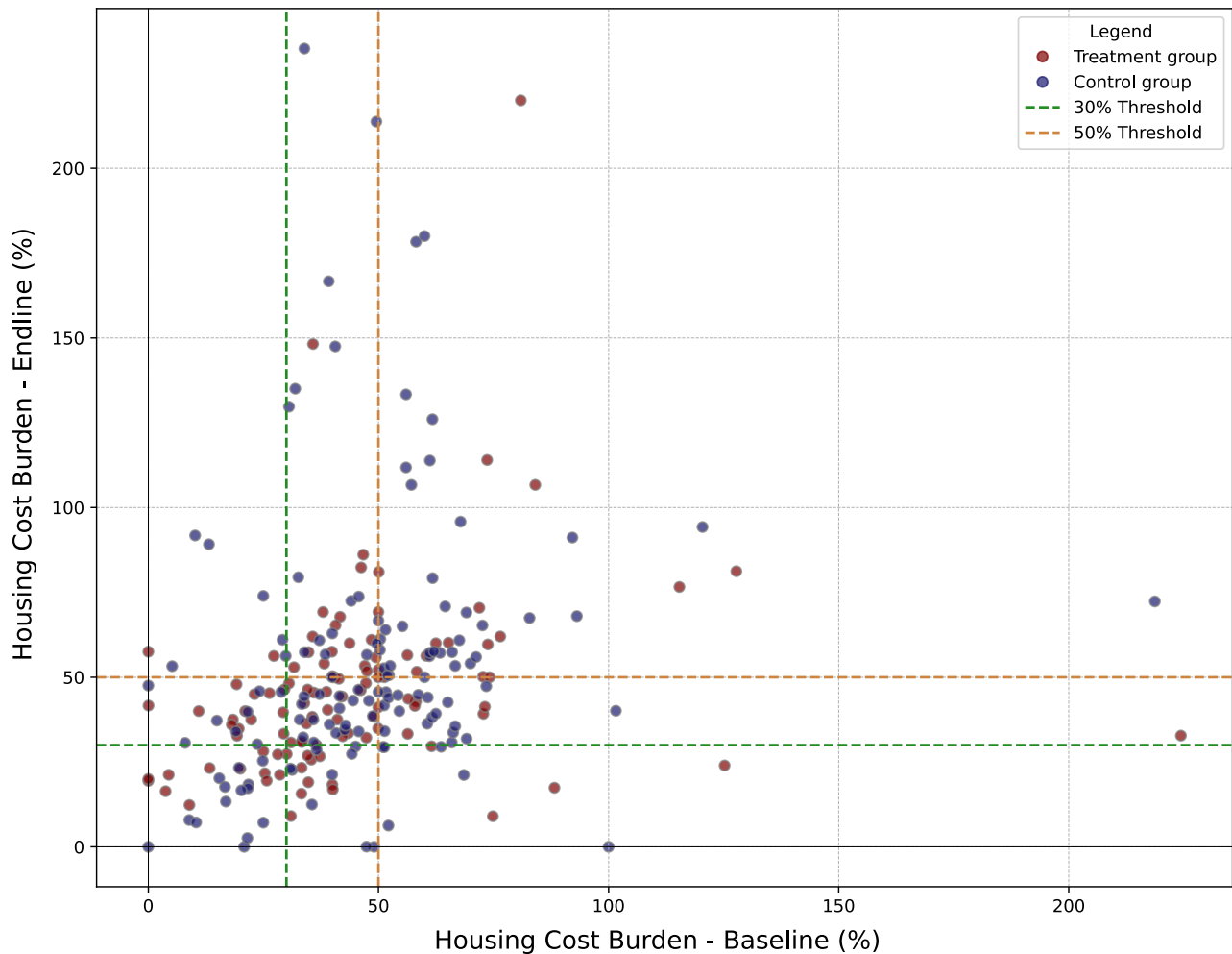
One thing I have not been doing, also I haven't done as much as I wanted to, I really want to move but I haven't been able to save money, because literally my job pays the bills [Laughs] ... and if I'm lucky, grocery. So, one thing I have been doing, I've been putting a little sum up each month, um, towards moving. So, I haven't cleaned up as much as I would like to, but I definitely have something put up now towards moving for when it's time to move. That's the good thing, because I really haven't been able to save money without [inaudible], you've been on this program, and then it's not such a stress to have to miss work.

Within the surveys, GRIT participants reported that they most frequently used the GI for housing-related expenses such as rent, mortgages, and security deposits; transportation costs, including car repairs, bus passes, and vehicle payments; childcare outlays; and routine monthly bills, such as telecommunications and utilities.

Housing

The housing market in Pierce County, including Tacoma, has experienced significant changes in recent years, marked by rising home prices and increased demand. This has largely been driven by spillover from the more expensive Seattle market. The region’s growth, partly fueled by employment opportunities, has further strained the local housing inventory. These shifts have made affordability and availability pressing issues for a broad spectrum of the population, and particularly for low-income and middle-class families. Even prior to the pandemic, a report by Pierce County Affordable Housing Workgroup highlighted the challenges of housing affordability in the region (Pierce County Affordable Housing Workgroup, 2021). Over the past decade, both housing prices and rental costs across the county have surged, with average annual increases of approximately 12% for single-family homes sold and 4% for rent. This escalation significantly exceeded the income growth experienced by many residents. As a result, the average sale price of homes more than doubled, while the average rent increased by around \$400 (Office of Policy Development and Research, 2022).

Figure 2. Change in Housing Cost Burden



Post-pandemic, according to a recent Department of Housing and Urban Development (HUD) report, housing prices increased by 16% over the 12 months ending April 2022, following a 17% increase the previous year. Additionally, rent increased by 8% during the first quarter of 2022, following an 8% increase in the first quarter of 2021 (Office of Policy Development and Research, 2022). Housing affordability is thus a critical issue in Pierce County: over one-third of people spend more than 30% of their income on housing, and over 43,000 of these spend more than half. The lack of affordable housing supply has resulted in rising costs and the need to increase housing production by 46% to meet current and future demands through 2044 (Berk Consulting, 2022). This requires significant funding to build affordable housing for low-income residents, as well as policies aimed at increasing the supply of affordable housing through changing zoning regulations.

A substantial proportion of participants from both the treatment and control groups reported experiencing severe housing cost burdens, dedicating per HUD's definition nearly half of their monthly incomes to housing expenses (U.S. Department of Housing and Urban Development, n.d.). Approximately 75% of the treatment group and 78% of the control group were spending over 30% of their monthly income on housing. Despite this context, individuals in the treatment group consistently displayed a reduced cost burden compared to those in the control group throughout the duration of the study. Initially, both groups faced comparable cost burdens ($M=46.04$ for treatment and $M=47.33$ for control). However, as the study progressed, disparities between the two groups widened, evidenced by mean differences of -5.69 at 6 months, -4.17 at 12 months, and -6.66 at 18 months, although these variations did not reach statistical significance. The proportion of severely cost-burdened households was consistently lower in the treatment group, fluctuating between 25% at the study's outset to 33% at the conclusion of the demonstration, compared to the control group (45% at Baseline to 42% at the program's end). Furthermore, the correlation between housing cost burdens intensified over time, especially from the 6-month mark to the end of the demonstration, suggesting that once households encountered significant housing costs, the situation often persisted, particularly within the control group.

Given the context of housing in Tacoma,² with market pressures from new residents and an overall lack of affordable buying and rental options, it is perhaps unsurprising that participants consistently noted the difficulty of finding affordable, safe housing in the city. Many participants talked about the cost of housing as an obstacle to both homeownership and finding adequate housing to meet their families' needs (i.e. safety of surrounding neighborhoods, appropriate space for their family size). Stephanie grew up in the Pacific Northwest and moved to Tacoma from the Midwest when her partner got a job. While they had rented homes in the Midwest, they decided it was better to pay a mortgage than to pay rent. They looked in King County, where her husband was working, but the prices were too high so they started looking in Tacoma:

2 Legacies of racist housing policies, including redlining and racially restrictive covenants, play a large role in current-day housing and asset-building challenges. In 1970, about one-third of the Black population in Pierce County, and one-quarter of the Latino and Asian populations, were associated with the military and lived at Fort Lewis. At that time, the county population was approximately 93% White (Civil Rights & Labor History Consortium, n.d.). As of the 2022 Census, the population in Tacoma is 61.3% White, 12.3% Latino, 10.6% Black, 8.7 % Asian, and 1.7% American Indian (U.S. Census Bureau, n.d.). These population counts reflect the histories of segregation and racist policies that have influenced homeownership and wealth-building today.

The price difference between Pierce County and King County was different for sure. We felt like this house was completely remodeled when we bought it. We could have probably got a house that needed a lot of work over in King County, where we're used to, or we could hop across to Pierce County, where it was a little cheaper.

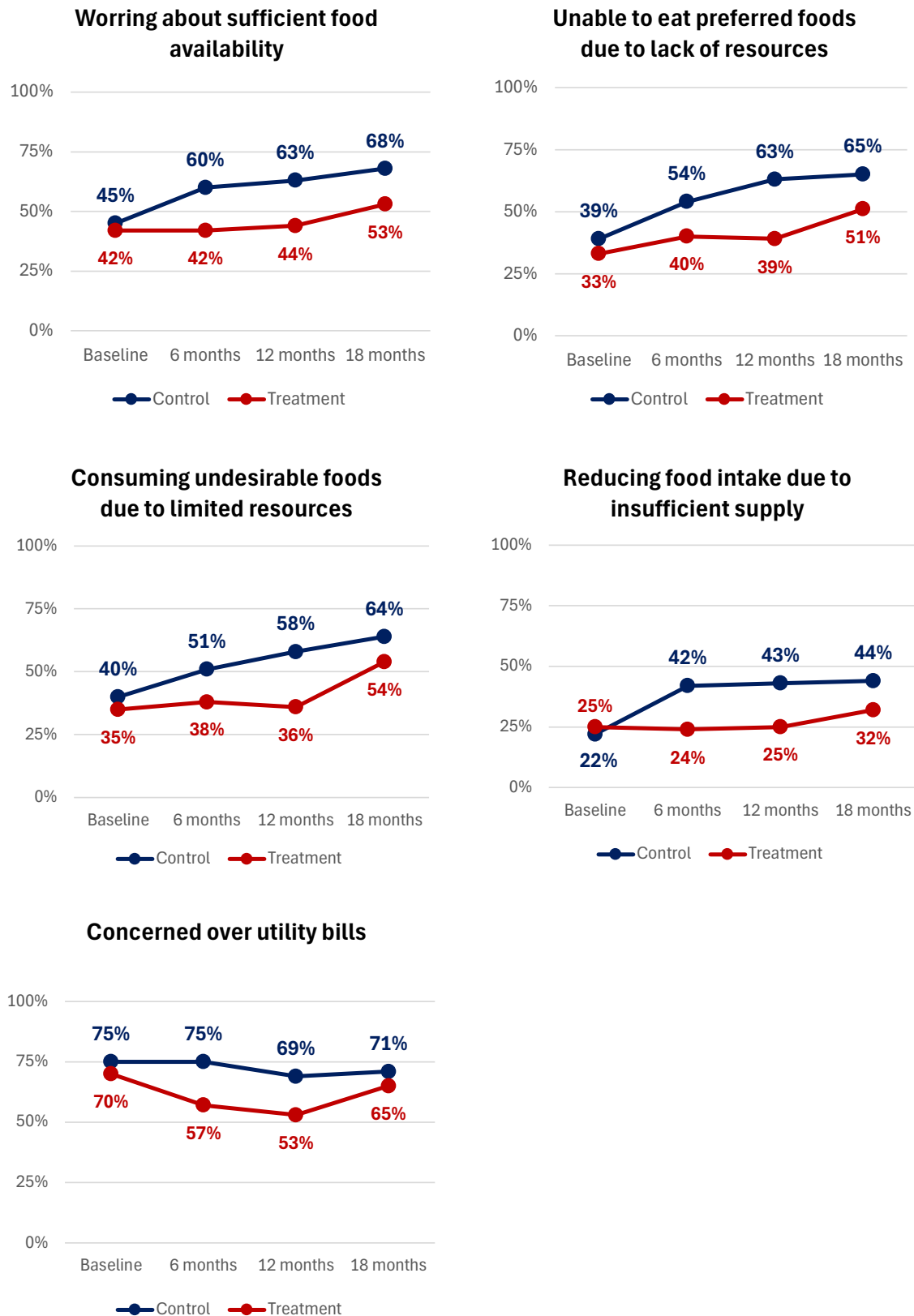
They purchased their house a few years ago and felt lucky about the timing because “this house is twice as expensive if we were to buy it right now, which is crazy.” Ultimately, Stephanie felt content owning something: “I feel like our house is small, and Tacoma is kind of crazy, but at least we have something.”

Participants in both treatment and control groups reported an average of one housing move during the demonstration. However, by the study's conclusion, a greater proportion of the treatment group reported transitioning into higher-quality homes (50.91%) and more desirable neighborhoods (26.36%) compared to the control group (46.97% and 22.73%, respectively). Additionally, average utility costs exceeding \$400 per month were 3 percentage points higher for the control group. Given the difficulties in finding quality affordable housing, these small gains are worth noting, although they occurred against a much broader context of dispossession.

Many participants conveyed their sense of rootedness in Tacoma, making it a harder choice to leave even if housing was becoming more and more costly. Long-term residents, like James, saw the changes in Tacoma over their lifetimes: gentrification, cost of living, and shifts in employment have drastically altered spaces. James noted his love for Tacoma, saying he felt “like this area is very unique compared to like other parts of the country as far as the people,” though he noted, “I feel like it's definitely changed.” Like other participants, James felt the positive and negative impacts of the gentrification happening around him. While the changes had the potential to create economic growth, he was also seeing an increasing number of homeless individuals and felt this was due to “mental health issues, affordable housing, and drug issues, which are part of the mental health issue, those three main things are definitely hurting society the most.” James was able to find housing during the pandemic but, because his wages are not keeping up with the cost of living, has been in a cycle with eviction letters, whereby he pays it off before the building's management files the paperwork.



Figure 3. Changes in Household Food Insecurity over the Pilot Period



For some participants, Tacoma was where they felt accepted and seen. Even if they were not lifelong residents, they felt it was their home. This was true for Payton, and while the cost of living increased, she felt that it was something she could deal with in exchange for feeling accepted as a bi-racial woman and for her children to be accepted:

I do think it's expensive to live here. I think that's the reason why my mom wants to leave so much. I feel like I've noticed it more though, in the last few years, than I did before. The pay doesn't match the cost of living.

Payton felt like owning a home was a milestone she had yet to hit and, thus, felt like she was behind. A signature piece of achieving the American Dream, homeownership signals that you have made it:

I don't know, it's hard, because as I'm getting older, I want to be more established, as far as having your own home, having your career, like making sure that things are as you planned, as much as you can. And, just in the last couple of years, I've really been wanting to get my credit score better to buy a house. I wanna be able to do that and have all my ducks in a row and I just think Tacoma is just so expensive... So I don't know, I think I've seen it more in the last few years or just more aware of it in the last few years, especially with my kids getting older, and I feel like there are places that you feel you should be at a certain age and I don't feel like I've hit those milestones.

Participants also discussed finding quality housing in relation to subsidized housing and safety. Betty Ann noted:

This house, for instance, is not worth what this house is. I'm also subsidized. So, if I wasn't subsidized, there's no way I could afford this house, nor would I... It's falling apart. Like, we're constantly—the house is slanted. It's on a lean. And it was bad for my back. We ended up buying me a bed that goes up and down, because... it's on a tilt.

Like other participants, Betty Ann had safety concerns related to her housing and felt that segregation in the city was both along race- and class-based lines. She talked about witnessing gentrification in process in her neighborhood and the razing of houses to build townhomes, ultimately isolating her neighborhood as it became surrounded by wealthier enclaves.

Outside of [that neighborhood] are homeowners. Homeowners! And they let you know it: they could have a fenced yard, they have pools, they could use their water spigots. Our water spigots were locked with these things—our kids couldn't play with water guns, they were not allowed to use water, waste water at all. But the homeowners had green grass, they had sprinklers going back and forth. Our kids were like, "oh..." and they made you feel like you're less than.

Gentrification represented wealth, inequity, and, for many participants, the loss of the core of their city. Kay discussed this:

I mean you have gentrification, the cost is just ridiculous. You have people that have spoiled it for other people, like, you have a landlord that doesn't want to rent to a certain demographic or a certain person, because of past experiences. I think all of that plays a part in finding affordable housing in Tacoma.

This sentiment was echoed by Anthony, who after a series of crises lost his home and became homeless:

Being homeless, I met a lot of homeless people and I see now how widespread it is. It's a weird feeling when you come from one side, and then I was working and I used to pass these people holding signs. You think one way or the other, and then to be amongst them and hear their story, it's just like, "Oh wow."

Anthony compared his current rent to what he had previously been paying for his mortgage. "I just know that rents are out of control. It's amazing what I was paying for my mortgage, when I did have a home with my family, and that's rent now, \$1,700." Anthony felt that as long as rent and cost of living continued to outpace standard of living in Tacoma, facing homelessness could be anyone's fate

The combination of enormous housing cost and lack of affordable housing meant that eviction remained a present threat for many Tacomans. Eviction rates remained constant across both groups, underscoring the persistent risk among vulnerable populations. The treatment group, which generally reported a 5 percent point higher incidence of rental assistance, also exhibited lower eviction rates, with a 2 percent point reduction, particularly evident at the 12- and 18-month marks. Although eviction rates declined from the Baseline to the end of the program for both groups, this trend may reflect a combination of improved economic conditions, more stable housing situations, or broader access to rental assistance, rather than the causal impact of GI alone.

Food Security

Overall, both groups showed heightened food insecurity and financial worries as the study progressed. This was perhaps due to the context of the pandemic, which placed pressure on food distribution systems from grocery stores to food pantries across the country, and subsequent inflation that impacted food costs in particular.

Although both groups experienced food insecurity, the control group consistently reported higher levels of food insecurity across various measures. The percentage of control group participants expressing concerns about sufficient food availability rose from 45% at the study's onset to 68% by its conclusion. In contrast, the treatment group's similar concerns grew less substantially, from 42% to 53% during the same timeframe. Additionally, the inability to consume preferred foods due to resource constraints climbed from 39% to 65% in the control group, versus a more modest increase from 33% to 51% in the treatment group. Concerns about consuming undesirable foods due to limited resources also escalated in the control group, from 40% initially to 64% by the study's end, compared to a rise from 35% to 54% in the treatment group.

Regarding very low food security—defined as having to reduce food intake due to insufficient supply (Economic Research Service, n.d.)—the control group saw an increase from 22% to 44%, whereas the treatment group reported a rise from 25% to 32%. Meanwhile, both groups maintained significant concerns over utility bill payments—an accompanying marker of food insecurity—albeit with a marginal decline in the treatment group’s concern over time. Anxiety remained markedly high within the control group, slightly decreasing from 75% to 71%, while the treatment group’s anxiety slightly reduced from 70% to 65%.

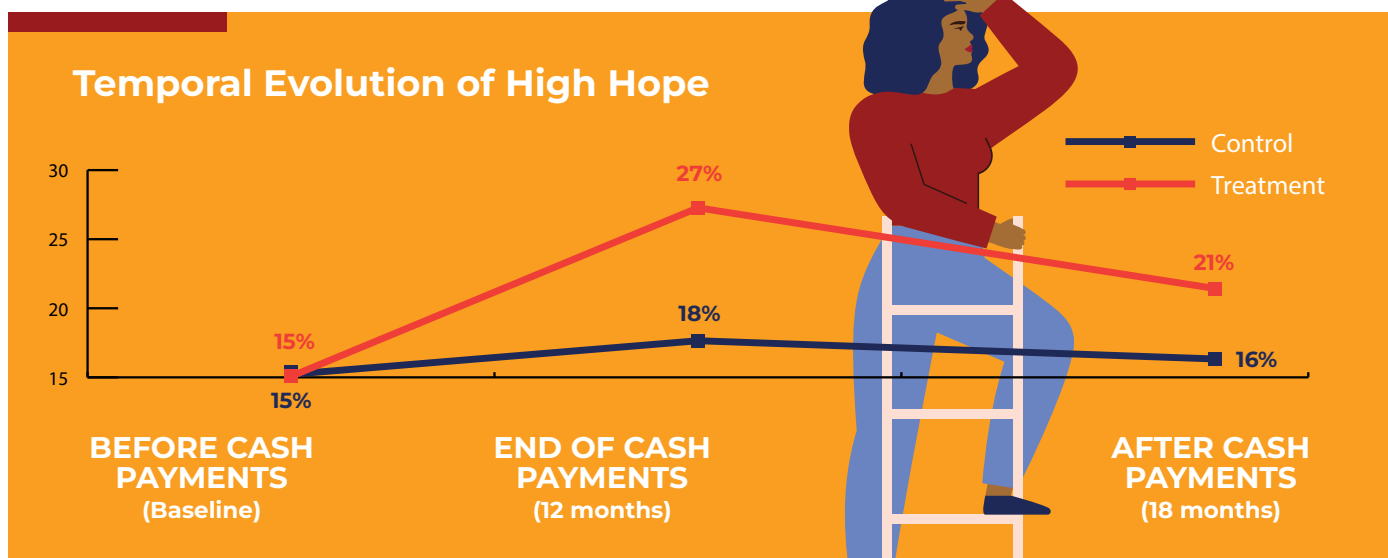
Hope, Belonging, Transcendence, and Agency

Within the context of Tacoma, participants were constrained by an economic system in which they were not earning livable wages while also not qualifying for safety net programs. As such, they were trapped in an eddy of financial precarity. Furthering this alienation, participants were on average 38 years old, making many of them too old to build an entirely new career within a constrained market and too young to benefit from governmental support that will onset with retirement.

Yet, receipt of the GI nevertheless worked to increase participants’ sense of courage, faith, and self-transcendence, components of tragic optimism. Tragic optimism measures a sense of meaning in life and connectedness with humanity in dire situations with no discernable end point (Leung, 2019; Leung et al., 2021). For participants stuck in financial precarity, there is no foreseeable end to their economic struggles. However, the GI made participants feel seen, validating their lived experience and providing a pathway to self-transcendence, a necessary antecedent to hope.

Indeed, participants reported significant and sustained improvements in specific psychological attributes, such as courage, faith, and self-transcendence, within the treatment group over the study period. Distinct trends were observed in the analysis of Affirmation of Meaning and Values. Participant survey data indicated a gradual increase in the treatment group’s scores from Baseline to the end of the intervention, with a significant positive change observed at 18 months (95% CI[0.09, 0.99]). For Acceptance, the results displayed varied impacts across the time period, with a notable significant increase by 18 months (95% CI[-0.05, 1.16]). For Courage, there was a significant improvement by 12 months (95% CI[0.54, 1.45]), which persisted into 18 months, indicating sustained growth. For Faith, the data showed a significant improvement beginning from 6 months (95% CI[1.08, 3.20]) and continuing through 12 and 18 months, suggesting enhanced spiritual well-being. Finally, for Self-Transcendence, by the end of the pilot, the treatment group exhibited significant improvement (95% CIkj[0.26, 1.83]), highlighting growth in their sense of connection beyond the self. These findings suggest that the GI fostered significant growth in personal values and psychological strength.

Additionally, the study explored perceptions of hope, comparing the treatment and control groups across the study period. Findings suggest a significant and sustained increase in the percentage of participants reporting high levels of hope from the 6-month period onwards. This indicates a potential shift towards deeper levels of hopefulness among treatment group participants over time. At the same time, the treatment group consistently reported lower percentages of general and moderate hopefulness compared to the control group. At Baseline, the treatment group reported



lower levels of general hopefulness (38.36%) compared to the control group (52.17%), yet a slightly higher percentage reported feeling moderately hopeful (46.58% vs. 32.61% in the control group). Both groups exhibited similar levels of high hope. However, the dynamics shifted over time. By the 6-month evaluation, the treatment group experienced a notable increase in the high hope category (21.43%), surpassing the control group's 12.37%. This trend continued at the 12-month assessment, with the treatment group's high hope increasing further to 27.27%, compared to 17.65% in the control group. By the 18-month mark, while the general hopefulness in the treatment group decreased to 29.76%, the percentage of participants with high hope (21.43%) remained higher than in the control group (16.33%).

Although GI participants experienced improved hope, courage, faith, and self-transcendence compared to the control group, no statistically significant differences were found across the measures of Importance, Awareness, and Reliance between the groups throughout the study period. For the measure of Importance, the estimated mean differences ranged from -0.19 to 0.72. For Awareness, the values ranged from -0.49 to 0.63. In the case of Reliance, estimated mean differences varied from -0.45 to 0.07. The study also analyzed the effects of the GI on participants' Agency and Pathway measures. Initial findings revealed that the estimated impacts for the Agency measure ranged from -0.15 to 0.72, with no significant effects observed across all time points. Similarly, Pathway measures showed estimated impacts ranging from 0.23 to 0.87, but again, no significant effects were detected. The total scores across the time period showed estimated impacts ranging from 0.46 to 0.95, yet none reached statistical significance.

Consistent with the survey findings above related to improved hope, courage, faith, and self-transcendence, GRIT participants described the feeling of freedom and relief that came from the GI. By giving participants some relief from financial stress, they were free to imagine possibilities for themselves and to hope for a better future. For participants like Victoria,

it just helps give us that relief, that breath that we need. Hopefully going back to school, maybe moving out of the area. I mean, at least being able to dream, I mean we can't even do that. We are literally stuck where we are.

When given the space to dream, participants began to use the GI to reclaim their time and build their sense of agency.

For some, spending the GI on things outside of basic needs came with a sense of guilt. Margarita talked about working on this with a therapist, dubbing it her “self-care.” She sought to change her mindset so that she did not feel guilty spending the cash on herself or on experiences for her family:

It takes a while I think. I do think just being able to, at moments, say it's ok to choose this, I'm not too broke, it's okay when it comes to the dentist, vacation... But it's still just even getting to the point where I'm prioritizing something that I need... it's like a little bit of just freedom and peace.

For others, GRIT helped them take control over some aspect of their life, which in turn built up their agency. Mary had the confidence to apply for a new apartment after building up savings with GRIT:

I put up at least 100 a month. Since then, that's definitely gonna help [Laughs] with paying to get into the place, but I'm like, “Okay, I got a couple more months where I have that money there. If there's anything I need as far as refurbishing the place.” So, I definitely thought about that too. Like, “Okay, how many more months I've got left with that.” Okay. So, I got a few more months where I ain't gotta worry.

For Alicia, this meant moving to a safer place, something she did not have the resources to do prior to the pilot:

Because of COVID, there was an encampment outside of my house. I could literally walk down the stairs of my old apartment and they were sleeping right there. It wasn't safe. I was attacked twice coming home, and once with my child, and so I was able to, I think within the first three months, I was able to use it [the GI] for other bills to save up my check from work and I was able to move right away.

Reflecting on the impact of GI on this move, Alicia said, “It was amazing. I've never had this type of help before without strings attached.”

For some participants, a sense of increased agency also contributed to the ability to take new employment risks. Through GRIT, Alicia gained the confidence to switch jobs, which meant starting at a lower pay scale as she worked her way up. This new job would offer more stability, but without GRIT she would not have been able to handle the drop in wages at the onset. As she explained:

I'm like, okay, well, it says you're eligible for a raise within a 3-month period. So as long as I'm doing what I'm supposed to do, then I'm eligible. I use the money to help with that decrease in pay.

Similarly, Stephanie was empowered to seek out different employment because of the unconditional

cash from GRIT. First, she used the GI to access therapy to help work through the prospect of leaving her longtime bartending job. Her therapist helped her consider the changes that would come—exchanging work-life balance, time spent with her infant, and being able to pay bills for a better mindset. Her first switch was working with airplane mechanics, but she quickly knew that it was not a good fit. The schedule was too demanding for a new mother, and the pay was not enough to sustain her family, so she went back to bartending but at a different establishment. Reflecting on how the GI made her feel safe enough to take those risks, Stephanie said:

I love that feeling of that safety net, it just takes a little bit of that pressure off, and anything that takes the pressure off, I'm a fan of. But no, now I think about that and I'm like okay, but again that's kind of why I felt the hurry. If you're gonna switch your job, do it now. Okay, it's not working, like you don't have the luxury to wait, I don't want to wait months cause I would rather use the guaranteed income to do anything that's gonna help me like move forward, essentially.

However, the time-limited nature of GRIT put hard boundaries on the goals participants were able to achieve. Still, they imagined what could be if the program were extended. Victoria, for example, spoke about being “stuck” in her current situation. If the program were extended, she imagined taking steps to get out of her current line of work, such as going to vocational school. She explains, “Professionally I am stuck without, like, higher education, or even just moving out of this field, this company, honestly would be great. Maybe just room for growth—it would help me be able to at least try those avenues.” She referred to the short-term nature of GI funds as a barrier to her employment goals, “It’s been great thinking ahead. But also, it’s very hard because I know it’s gonna end and I’m not gonna have that cushion and that relief.”

Still, knowing that the cash had the potential to create opportunities gave participants the freedom to prioritize it as needed during the pilot. James, for example, felt the cash offered a sense of peace:

It was like a huge sigh of relief. I immediately paid off a bunch of credit card debt, and then I just started calculating the next month, and there's different things I'll be able to do, and like how I'll be able to quickly get back on my feet.

The opportunity to invest in themselves contributed to participants having hope for their futures—hope that is essential to economic mobility. Bob, an immigrant who settled in Tacoma, likened this to the American Dream,

that's my American dream, you know, to come and live a sustainable life that I can live happily, enjoy the freedom of liberty that this country possesses as the champion of democrats in the whole world. So that's my dream, you know, and I'm—I'm living in—in that dream and even this opportunity, that GRIT, you know, income thing, it's all part of the American dream. Like, give people the freedom and liberty to live a decent life.

2. Structural Constraints on Mental Health

Summary: The GI temporarily allowed recipients the capacity to explore alternate pathways, experience some reduction in stress, and enjoy an increased sense of self-determination. However, the GI was not a panacea for enduring structural stresses and constraints. Although the treatment group recorded a temporary upswing in psychological well-being and decrease in stress, the broader context of environmental stressors prevailed long-term, and the magnitude of these benefits was not sustained.

Case Study: Payton

Payton is a single mom to two children and has lived in Tacoma since she was 12 years old. Her mother is an active support for Payton, along with a co-worker and her co-parent. Growing up in a single-parent household impacted her ideas about personal finances; having watched her mom struggle to get by led to Payton internalizing this anxiety at a young age:

I think because of how my mom was when I was younger, I'm always scared that once I take a breath that something's gonna happen... I have anxiety about money and I think that comes from my mom feeling like she didn't have enough or, you know, it was only one income and not enough. She had housing and was still stressed about this stuff.

Payton also talked about how this played out behaviorally, "It feels like I'm hoarding this stuff to try to give it a good usage or whatever. But I have this thing of I'm never gonna have enough." She felt comfortable spending money on her children, never wanting them to think that they could not have the popular brands or be afraid to ask for things they needed. But she struggled with spending money on herself, even for essentials:

But then when it comes to me, I'm like, I don't really need that. And I think that comes from my mom too. Like she never made it seem like a thing to spend, you know, when we needed stuff to spend stuff. But I don't know, I think it's hard to get out of a certain mindset that you've had since, you know, you were little.

Payton recognized that her mindset could be damaging long-term, and she worried about her children internalizing her struggles just as she had her mother's anxiety. Although she saw the GRIT program as providing an emergency fund for her family, she also wanted to do something for herself and her family.

I think I fought with myself about what to do with the money, because you don't want to just splurge it, and be like okay, I have an extra \$500 coming in this month. At the same time being okay with saying, I'm gonna sign my kids up for this and that this summer, and give them something that I may not have been able to give them in the past. It might sound like a splurge, but it's something I feel they should be able to have too.

Ultimately, Payton decided to use some of the money to travel with her children to a destination wedding. It will be their first time out of the country, an experience that she is grateful GRIT was able to provide to her and her children.

In terms of psychological well-being, survey findings suggest that although the GI was initially effective in reducing mild mental distress and anxiety, its benefits, particularly regarding anxiety, did not persist in the long term. Measured by the Kessler Psychological Distress Scale (Kessler et al., 2003), quantitative analysis indicated that Baseline scores for both the control and treatment groups were above the threshold (M=23.42 for control and M=23.16 for treatment), indicating that the sample started in a state of mild mental distress and high levels of anxiety. By the 6-month follow-up, the treatment group showed a notable decrease in both the overall Kessler score (mean difference=-1.26) and anxiety levels (mean difference=-0.37) compared to the control group, suggesting the treatment's efficacy. However, while the reduced psychological distress was somewhat sustained at 12 months, the benefits on anxiety began to diverge; by 18 months, the treatment group's anxiety levels increased beyond Baseline, while overall distress levels showed no significant difference from the control (mean difference=-0.02).

Regarding perceived stress, survey results suggest that the GI produced an initial significant reduction in stress, with some effects persisting up to 18 months, albeit with diminished magnitude over time. Specifically, quantitative data from the Perceived Stress Scale (Cohen et al., 1983) found that both groups exhibited comparable levels of stress, with the treatment group slightly higher (M=7.95) than the control group (M=7.83). By the 6-month mark, a significant reduction in stress was observed in the treatment group (M=6.90) compared to the control (M=7.95). This effect appeared to taper slightly by the 12-month follow-up, though with the treatment group maintaining reduced stress levels (M=6.93) compared to the control (M=7.20). By 18 months, the treatment group continued to report lower stress levels (M=6.91) compared to the control (M=7.42), indicating a sustained, moderate reduction in stress.

The toll that scarcity and financial precarity took on participants' mental well-being, despite the GI intervention, was pervasive in the qualitative data. Participants discussed the sometimes crushing amount of financial stress they were under. Carrying the cognitive load of their households, juggling bills, and figuring out ways to survive greatly impacted their mental health. For some recipients, the GI helped ease stress and improve time for self.

Margarita described how living in financial precarity impacted her day-to-day mindset of constantly

feeling like she was underwater. For her, the GI helped relieve some of this stress:

It's really good. It's a little bit of a mind F because I do get to these points where I'm like, like, "Okay, I can breathe, I can plan, I have time." It's not the rush, but then sometimes I think I get too much of that sense of urgency, like, well I have money now, but I'm not going to take care of everything. Yeah, so I'm thinking it takes more time than I thought to get to a good mindset about it, you know, because there's just a lot of fear around money for me, yeah. [Laughs]

The GI also allowed Margarita the time and emotional energy to seek out therapy, although paying out of pocket presented other challenges:

I'm in between therapists, and it's a nightmare. It's gonna take me all year. That's another thing I have to budget for because I don't have Medicaid anymore. It's no longer something covered. So that's been really hard. But my last therapist who I did have was like, "You're good." Um, it's not like that. I'm definitely looking for a therapist. Yeah, if, that is another cost out of pocket that I've had to really try to figure out.

Jackie felt a large benefit of the GI was having the ability to build in time to decompress. Having struggled with depression and anxiety, Jackie knew that time to recharge was important for her self-care, but it was a near impossibility prior to GRIT. She describes how she feels after a long day at work:

I want to sit in silence for at least an hour and just breathe and not—because like I said, I suffered from anxiety and depression, so I have to take a moment just to re-energize. I would say the benefit of having that money is that I can pick up something to eat, come home, and do that. And that, of course, is a big, big deal when it comes to dealing with anxiety and depression. You have to have a moment of pause and relief to be able to get your health back to where it needs to be so that you can be productive.

Although findings suggest that the GI contributed to an initial reduction in stress, mental stress, and anxiety, qualitative data underlines the broader environmental stressors that complicated that impact in the long term.

3. Work, Childcare, and Family Dynamics

Summary: For many GRIT participants, the GI served as a financial buffer that augmented low wages and created increased opportunities for participants to spend time and more deeply engage with their children. As ALICE individuals, the majority of GI recipients were employed full-time throughout the study period. GRIT participants discussed the mismatch between their low-waged jobs and the increased cost of living as a structural problem rather than an individual failure. Many participants worked multiple jobs, accepted temporary positions while looking for higher-paid work, or supplemented their income through gig economy jobs to support themselves and their families. Further, many participants reported a reliance on personal vehicles for daily transport, adding to the expenses associated with Tacoma's high cost of living. These financial stressors impacted participants' caregiving, as they sought to balance work opportunities with quality family time. However, the GI served protectively, freeing many recipients to spend more time with their children, which in turn allowed recipients to strengthen their familial relationships and increase engagement with their children.

Case Study: Betty Ann

Betty Ann is a mom, partner, daughter, and lifelong resident of Tacoma. She works full-time as a medical assistant, though because of her caregiving responsibilities, she does not always get full-time hours. In order to make ends meet, she takes on extra work through the gig economy, giving her flexibility around her full-time position. After the death of her father, Betty Ann took on caring for her mother, both financially and practically. She felt the immense pressure of being the caretaker for her mother, partner, and eight children, two of whom are foster youth. She is simultaneously running two households and, though her partner supports her, a large portion of the cognitive load is hers alone.

I do this [Betty Ann makes a conductor hand motion] and then everybody else just moves, it's literally like I'm orchestrating. There's no way I could do all this by myself. I actually—I do get overwhelmed though, because I do orchestrate everything by myself.

Her partner lives at her mother's home and takes care of immediate needs there while she focuses on their household and the children. Betty Ann is financially responsible for both households:

My significant other, he does financially make sure that I'm okay, but this household is my burden. So, he makes sure that it gets done, but, financially, he's not really obligated too much here, because he also helps my mom.

Scheduling medical appointments for her partner, her mother, and her children, as well as meetings with teachers and social workers, takes a toll on her mental well-being. Her reprieve comes when she is at work, because “it’s just like, the anxiety goes up to make sure that he’s [her partner] taken care of, and then when I get to work, that’s when I breathe, you know.” Betty Ann is religious, and her community is very important to her. Her faith helped her to find meaning in the chaos, and gave her reassurance that she, and her family, would ultimately be okay.

By providing a financial cushion, GRIT allowed Betty Ann to carve out time for her family and her community. She dedicates time to participating in charitable work with her mosque, bringing her older children with her, modeling the values she wants to pass on to them. She and her partner were able to spend more time together with the children, taking them on trips over the weekends, “making adventures” for them, as she calls it. This ability to be present for her family with the immensity of the cognitive load of running two households would not have been possible without the buffer provided by GRIT.

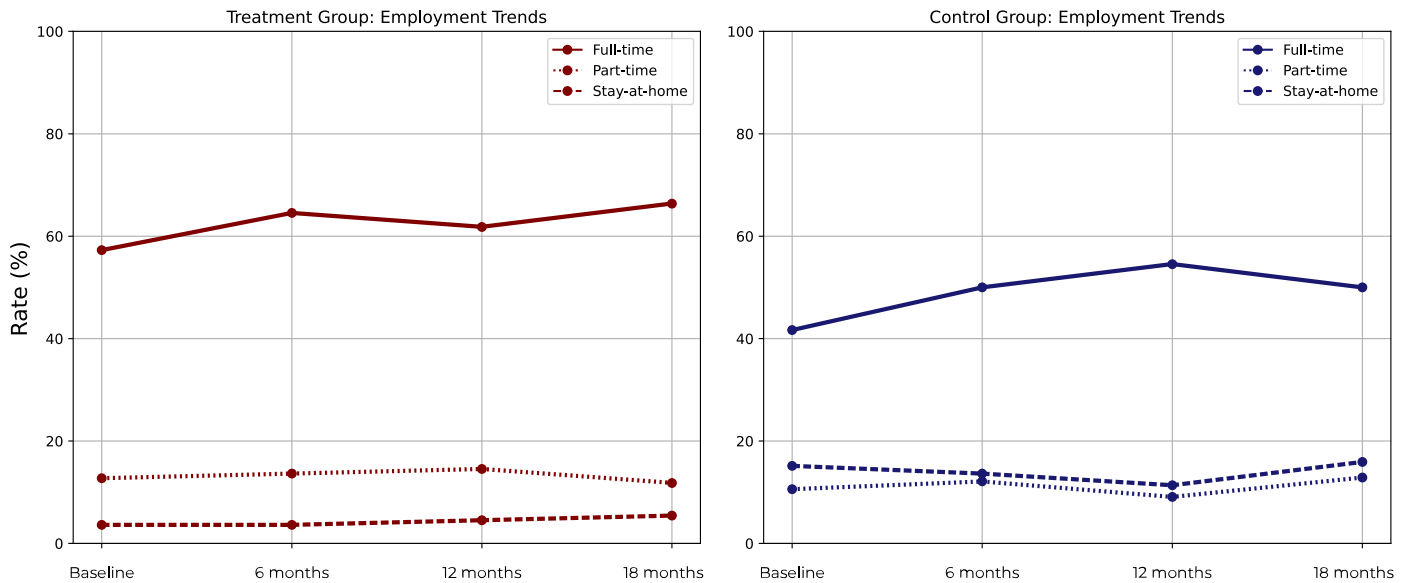
Employment

The distinctive economic environment of Washington state, characterized by unemployment rates that often exceed the national average due to the seasonal dynamics of its resource-based industries (Turek et al., 2023), sets a relevant stage for evaluating the impact of the GI on employment outcomes. While the state’s pronounced seasonal employment fluctuations create a unique context, Pierce County, including Tacoma, is not entirely insulated from these trends. The presence of the Port of Tacoma, Joint Base Lewis-McChord, and healthcare as major employers provides a degree of economic stability that might not be present in the more heavily resource-dependent areas of the state. However, sectors like construction and tourism in the county exhibit seasonal employment trends, contributing to the overall employment dynamics in the area.

Analysis of the self-reported employment status shows that compared to the control group, the treatment group cohort was significantly more likely to be employed across every time point evaluated. At Baseline, 57% of the treatment group was employed full time compared to 42% in the control group, a difference that was statistically significant ($\chi^2=5.24$, $p=0.02$). This trend of the treatment group demonstrating a higher percentage of full-time employment compared to the control group persisted throughout the study period: 65% vs. 50% at 6 months ($\chi^2=4.59$, $p=0.03$), 62% vs. 55% at 12 months, and 66% vs. 50% at 18 months. Additionally, data from churn analysis demonstrated stability

of full-time employment within the treatment group (63%) over time relative to the control group (52%). Part-time and seasonal work shifted in both groups from 9% to 15%, while the proportion of participants who identified as stay-at-home parents or caregivers remained almost 10 percent points higher in the control cohort relative to the treatment group across all time periods. For those unemployed and looking for work, both groups saw a decline from Baseline (18% for control vs. 17% for treatment) to post-intervention (4% for control vs. 5% for treatment).

Figure 4. Trends in Employment Status



Tacoma has a proud history and identity that is tied to blue-collar work. The industries that once thrived in Tacoma have slowly faded, along with the ability to balance wage earning with cost of living. Among participants, there was an undertone of feeling that in the new Tacoma, scarcity was perpetuated by inequity. People were examining their structural context and understanding that not surviving or thriving in their environment was not an individual failure—that they were economically stuck in place.

Contributing to this feeling of entrenchment were the many roles and jobs participants were forced to take on to make ends meet. For example, Ken worked full-time and took on multiple side jobs. He was also a proud union steward, describing this role as “very easy to represent and I’m still struggling to pay bills, utilities, make ends meet, put food on the table for me and my sons.” He sometimes waited in the Home Depot lot for paid side gigs, an experience he likened to that of immigrants who also frequented the lot:

And I hate to say this. It’s just wages off of Home Depot, as if I was an illegal immigrant. I have social security. I do work ... but at the same time, I was trying to survive for me and my family.

Prior to the onset of GRIT, Jackie took on temporary positions while looking for work and subsidized these wages with gig economy jobs, like driving for Uber: “I was working as an Uber driver just to make the rent. We were kind of just barely making it, so to speak. When we started receiving the money, it did offer a little bit of a cushion.” Participants discussed the inherent difficulty of balancing multiple jobs with spending time with their families. For many participants, GRIT offered a reprieve, giving them the cushion they needed to reclaim their time.

Because GRIT participants were ALICE families, they often did not qualify for social safety net benefits. Participants reflected on feeling as though they were on their own when they needed help, and the stigma they felt traditional benefits programs carried. James discussed how the stigma associated with receiving benefits, being viewed as poor and lazy, prohibits some people in need from accessing them. James relayed how this stigma applied to him, someone with a college degree still struggling to get off the street:

I feel like people view them [people receiving benefits] as being lazy or just taking advantage of the system, and I'm like, well, that's not necessarily the case for everybody. A lot of them have disabilities or things like that that prevent them from being able to make a reliable or stable income. And I'm in the position where I could probably benefit from assistance, I have a degree and everything, and I'm still kind of struggling to not be homeless on the street in this market.

For many participants, being a part of GRIT was the first time they received financial help. They saw the potential of GI to both ameliorate their financial stress and aid them in escaping their economic entrenchment.

Transportation

Tacomans by and large relied on personal transportation to get around, including commuting to and from work. Quantitative findings from the demonstration revealed a predominant reliance on personal vehicles among participants from both groups, with more than nine in 10 primarily utilizing this mode of transport. Conversely, alternative modes such as trains, buses, walking, and biking were chosen by only a minor segment of the respondents. Approximately two-thirds of individuals in both cohorts reported ease in accessing educational institutions or workplaces, as well as retail outlets and healthcare services. These findings indicate a significant preference for using personal vehicles for daily transport, which may reflect a combination of infrastructural, cultural, and personal preference factors.

Financial constraints also emerged as a notable barrier to transportation access. Participants highlighted the cost of gasoline and vehicle maintenance and repair expenses as substantial challenges. To further complicate mobility, issues such as concerns for personal safety were identified as impediments by some. This encompassed situations such as individuals experiencing domestic violence who were restricted from leaving their homes, or those living in unsafe neighborhoods. Lastly, difficulties in accessing or utilizing public transport, along with challenges stemming from

homelessness or unstable living situations, were also identified as significant obstacles.

Participants described the impact that transportation related to employment had on their families. Some cited the sheer cost of gas and car maintenance. For instance, Alicia's partner commuted outside of Tacoma for work. When evaluating their weekly budgets, there were times her partner "had to call off of work because he works out of town. We couldn't afford the gas to get him there because he gets paid on his day off, but he couldn't afford the gas without the pay." Participants like Alicia were balancing the cost of commuting with unpredictable hours and, often, unpredictable wages. These challenges impacted their families and their role as caregivers.

Childcare and Household Dynamics

Caregiving, whether for children or older generations, was both a source of joy and stress for participants. Raising families in the economic context of Tacoma, participants worried about providing everything their children needed and balancing time spent working versus quality time with their families. Payton talked about the stress of parenting in scarcity: "I feel like regardless of what your income is, you never know if you're doing everything right... And so, not necessarily being stable financially or feeling stable financially, that adds a layer on top of it."

The complexities of balancing work and family time were also reflected in the survey data. Quantitative findings suggested the presence of parental engagement and commitment to family time across treatment and control—both groups recorded eating dinner as a family an average of four days a week, for instance. However, data from the childcare domain suggested the control group demonstrated higher engagement levels in physical activities and discussions about time management, possibly showing more consistent family interaction. The treatment group showed varied engagement levels across different activities. Notably, both groups showed similar levels of storytelling and engagement in creative activities, with slight increases over time. The observed lower engagement in home activities such as arts and crafts among the treatment group could be due to their higher rates of full-time employment or their children's increased participation in after-school enrichment programs. Increased engagement in extracurricular activities could diminish the necessity or opportunity for family-based engagement, as time spent in structured external environments replaces home interaction. This trend might reflect a strategic choice by families to optimize children's developmental experiences outside the home. Data on various after-school programs revealed distinct patterns of childcare engagement and parental choice, as well as differential participation rates between treatment and control groups. At Baseline, the treatment group showed slightly higher participation in specific programs like MetroPark, Champions, TUL, and ArtsLive, while the control group had a slightly higher participation in the YMCA, PCC, and Experiential Learning programs. This general trend of participation rates in both groups remained consistent as time progressed.

The relationship between time and economic scarcity is such that the more financial precarity individuals face, the more demands they have on their time. Working more hours, taking on roles in the gig economy to fill in gaps, worrying about bills, the stress of parenting, and the cognitive load of juggling household responsibilities all take a toll on well-being.

This was reflected in household dynamics, as caregivers struggle to balance paid labor with unpaid care and household responsibilities. Quantitative findings assessed changes in the Household CHAOS Scale over time (Matheny et al., 1995). At Baseline, the treatment group exhibited slightly lower levels of household chaos (M=28.62) compared to the control group (M=29.68). By the 6-month follow-up, levels of household chaos were nearly identical in both groups (M=29.45 for treatment vs. M=29.51 for control). This trend of minimal difference continued at the 12-month mark (mean difference=-0.09), though at the 18-month evaluation, the treatment group reported a slight increase in household chaos (M=29.71) compared to the control group (M=29.39). These findings suggest that while initial differences in household chaos were present, the intervention did not lead to sustained improvements over time; instead, there was a slight increase in chaos levels in the treatment group at the study's conclusion.

Receipt of GI, by providing a financial buffer, allowed participants to quiet some of this stress. In turn, participants were able to be emotionally present, investing in their relationships with their children through time. Jackie felt that receiving GRIT helped to strengthen her relationship with her adult daughter. As a single mom, Jackie always felt she was doing what she could to take care of her daughter, making sure her needs were met. However, she felt that GRIT had helped her to build a different relationship,

we will go have dinner together and we actually spend time, just one-on-one time doing something that's—it doesn't require a task or a chore, so to speak... I would say since we've received the benefits, we've been able to do that, and it's given me a different perspective because before, I was mom and I had to make sure she was okay and help her with her homework and see how everything's going at school and make sure she has shoes and clothes, winter clothes, summer clothes. Now, um, I can sit and talk to my daughter and get to know her as a person, as an adult that she's becoming. That's, uh, very interesting, very interesting. The relationship has changed.

Similarly, Anthony came into GRIT having a strained relationship with his children after a series of personal hardships and a divorce. He started working as a handyman, using the money from GRIT to buy tools and invest in his business which, in turn, led to more jobs and a greater sense of stability for him. This sense of stability paired with the steady payments from GRIT gave him the confidence to rebuild and reinvest in his relationship with his children. He said:

I had that money, I can count on that, you know, I can always tell them you know, I'll give it to you on the 14th, you know, I'll give it to you on the 15th, you know, I've done that a couple of times you know where you know, they had a birthday or something, and I said, "No, I got you this for now. But you know on the 15th, I'm gonna get you something." And they say, "Don't worry about it." And I say, "No, no, no, I'm gonna do it." And so I know I can say that to them.

Additionally, he felt proud of the example he was setting for his children by building up his business: "I feel like I'm in a better leadership position for them."

Limitations

While this study provides valuable insights into the impacts of the GI on individuals' health and overall well-being, several limitations must be acknowledged to appropriately interpret and generalize the findings.

First, the study's participant pool, which comprised 242 respondents selected from approximately 2,100 applicants, was limited to Tacoma residents who were single (unmarried) caregivers of children up to age 18 (or 21 if the child had a disability), residing within the 98404, 98405, 98408, and 98409 zip codes. Additionally, income limits for eligible participants were set between 100% and 200% of the federal poverty level. This specific demographic focus of the study limits the generalizability of the findings to other populations or regions, particularly those with different socio-economic backgrounds. The requirement for participants to be single caregivers of at least one child under 18 years old (or 21 if the child had a disability) adds a specific dimension to the study. While this provides valuable insights into this demographic, it may not represent the situations of other groups, such as childless individuals, married caregivers, or those with older children.

Second, the study utilized the Multiple Imputation by Chained Equations (MICE) technique to address missing data. Although MICE is recognized for its robust approach in managing missing data, it is crucial to acknowledge that all imputation methods, MICE included, introduce some level of uncertainty. Despite thorough validations, the imputed data might not flawlessly reflect the true underlying distributions and patterns. This inherent limitation of data imputation should be carefully considered in the analysis and interpretation of the results.

Finally, it is important to note that this study was conducted as the country was emerging from the COVID-19 pandemic. The residual impacts of the pandemic, such as the pervasive uncertainty, grief from loss, and the withdrawal of social safety net policies, likely influenced participants' mental health and stress levels. Moreover, the economic recovery phase post-pandemic introduced additional stressors, including changes in employment and income levels, which could have affected participants' responses and perceptions. These factors were not directly controlled for in the study design. Therefore, the unique socio-economic conditions present at the time of the study could significantly influence the applicability and relevance of the findings to different times or settings, limiting their generalizability.

Discussion

The backdrop against which the City of Tacoma implemented its GI demonstration pilot, GRIT, provides an important contextual framework through which the findings from this evaluation study can best be understood.

The City of Tacoma serves as an exemplar in terms of its public commitment to acknowledging historic and structural racism and using data to make intentional investments that promote equity and racial justice. Ten years ago, in the 2014 National Community Survey, nearly three in four Tacoman

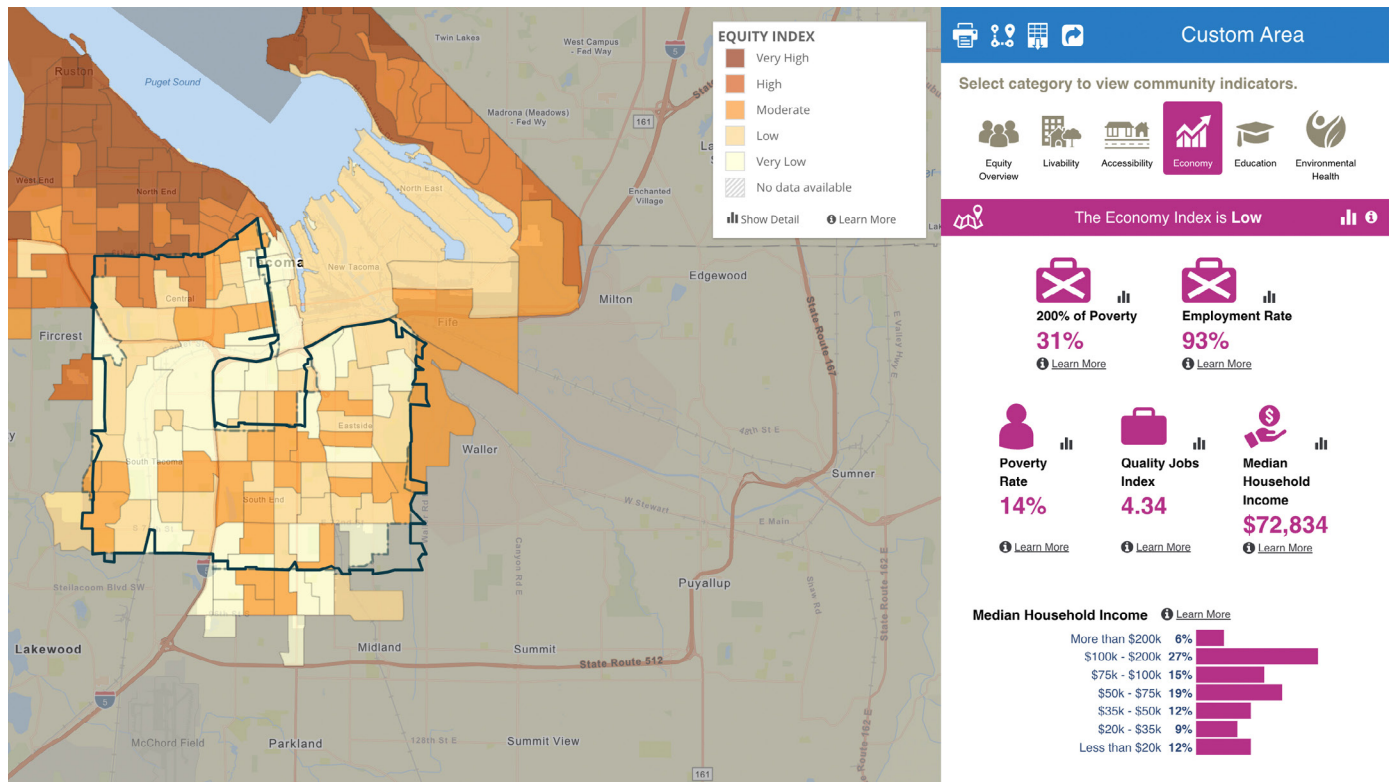
respondents (71%) said that the work to “expand access to city services and infrastructure to people of different races/ethnicities, disability and income levels” was “essential” or “very important” (City of Tacoma, n.d.-b). During that same year, the City of Tacoma’s Office of Equity and Human Rights (OEHR) was created after unanimous support by Tacoma’s City Council. As part of their work, OEHR developed the Equity Index to transparently portray the geographic distribution of the city’s community indicators of livability, accessibility, economy, education, and environmental health so that the city can more intentionally prioritize investments aimed at mitigating historic and structural disparities while maximizing opportunities, particularly for the BIPOC community. According to a Kirwan Institute Research Report (Sweeney & Outrich, 2018):

Just under 50% of white Tacoma residents live in high or very high opportunity communities while only 18% of the Black population, 31% of the Asian population, 24% of the Hispanic population, a mere 16% of the Native American population and 23% of all other races/ethnicities. What may be most striking is that 40% of Blacks, 37% of Hispanics, and 35% of Native Americans live in very low opportunity communities, indicating that Tacoma, while diverse, experiences a good deal of racial and ethnic residential segregation. (p. 7)

Indeed, since the creation of the Equity Index, the City of Tacoma has used its Equity Index to inform the equitable distribution of microloans and grants to more minority- and women-owned companies, and in 2021 there was a 333% increase in dollars received by Black-owned businesses (Equity in action, 2023). Of the grants awarded that year, more than half went to minority-owned businesses. Likewise, the Tacoma Fire Department used the Equity Index to select low- or very-low opportunity areas to prioritize life-saving CPR trainings. And finally, the City of Tacoma uses its Equity Index to determine equitable infrastructure investments, such as the upgrade of nearly 290,000 water and power meters.

Using its Equity Index, the city limited eligibility for the GRIT pilot to four zip codes with low scores across the domains of equity, livability, economy, education, and environmental health. In contrast, the Equity Index indicates that these same domains all have high equity scores across the full City of Tacoma. The map below displays the area of the four zip codes where GRIT participants resided (i.e., 98404, 98405, 98408, 98409) as outlined in black alongside the economic measures from Tacoma’s Equity Index.

Figure 5. City of Tacoma's Equity and Economy Indices: Zip Codes 98404, 98405, 98408, 98409



(Source: City of Tacoma, n.d.-a)

It is helpful to interpret the findings from the GRIT study in light of Tacoma’s broader historic and structural context as well as more recent city efforts to address these harms over the past decade. Given that the city made an intentional decision to implement its GI demonstration in a community with the most inequity across multiple indicators of well-being, it is not surprising that GRIT participants experienced only modest improvements in financial health, many of which were not sustained. The increased income for GI recipients was not enough to offset other financial stressors. Indeed, GI recipients reported high housing cost burden, food insecurity, and transportation costs while struggling to find employment that yielded a livable wage. Market constraints, exacerbated in the four zip codes where GRIT participants lived, require deep and multi-faceted intervention over time to yield meaningful and sustained change. Though GI offers a promising strategy to improve financial health, greater dosage and duration may be needed to see sustained change in geographic areas with prolonged structural and historic inequity. Such persistent environmental challenges, combined with the more recent trends of gentrification and skyrocketing costs of living on the outskirts of Seattle, create the need for more bolstered interventions to promote economic mobility compared to other GI study sites with less inequity and fewer structural economic constraints. Similarly, it is understandable that GI recipients reported higher levels of anxiety and stress given their financial precarity in the context of their economic environment.

And yet, the City of Tacoma, under the leadership of Mayor Victoria Woodards, serves as an example of public government taking accountability and committing to reversing the effects of historic and structural racism and disinvestment. Speaking of its Equity Index, the city states (City of Tacoma, n.d.-c):

We are still feeling the effects of decades of intentional disinvestment that harmed communities of color at disproportional rates. To transform into an antiracist city and reverse the inequities caused by the negative impacts of racist policies, practices and zoning, will take diligence, persistent determination, and intentional antiracist management of investment... The Equity Index is a data-driven tool to see where your projects, policies, programs or services can have the largest impact on addressing inequity and where investment can provide the biggest improvement in factors that impact life outcomes.

In the context of a city that publicly acknowledges its past structural harms, Tacoman GI recipients articulated a deep understanding of the structural constraints of capitalism, giving language to the failures of systems rather than individual shortcomings as causes of poverty. In the face of these structural economic barriers, GRIT participants still experienced deeper hope and improved courage, faith, and self-transcendence, markers not typically associated with harm. The public provision of unconditional cash with no strings attached from the City of Tacoma showed recipients that they were seen by power and valued as people apart from their identities in a broken labor market. The GI gave recipients meaning and the ability to improve social connections, particularly with their children.

In contrast to toxic positivity, which suggests that people should maintain a positive mindset regardless of the circumstances, the framework of tragic optimism suggests that people can experience a sense of hope, meaning in life, and purpose beyond themselves while fully acknowledging, and even experiencing, the presence of dangers, harm, or suffering (Leung, 2019; Leung et al., 2021). In the case of GRIT participants, they verbalized the harms they experienced from capitalism but saw the multiple pathways and possibilities created by the GI as a mechanism of hope, which occurred alongside increased courage, faith, and self-transcendence. Castro et al. (2021) suggest that one's capacity for hope is influenced by the hope that those around one experience, including structural and contextual factors such as the presence of hope in social supports and networks as well as in formal systems and institutions. Thus, when institutions such as city governments foster hope and trust in people through mechanisms like GI, the conditions to create new pathways associated with economic mobility may be present. The investment of GRIT as well as the extension of GRIT 2.0 reflects the trust and value the City of Tacoma and its leadership place on residents who are Asset-Limited, Income-Constrained, and Employed. The experiences and perspectives of GRIT recipients shed light on the potential protective pathways by which GI may operate. Such pathways for opportunity may be further strengthened by the city's continued commitment to increased structural investments and a bolstered safety net alongside the unconditional cash.

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:**

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Appendix A

Table 3. Sample Attrition

Time period	Treatment	Control	Overall Attrition (in %)	Differential Attrition
Baseline	110	132		
6 months	102	99	16.94	17.73
12 months	99	106	15.29	9.70
18 months	94	96	21.49	12.73

Appendix B

Table 4. Comparative Analysis of Select Outcome Measures: Control vs. Treatment Groups

Outcome	Control Group	Treatment Group	Mean Difference	95% Lower CI	95% Upper CI	Standard Error
Financial Well-Being						
Baseline	38.67	39.44	0.76	-1.40	2.93	0.79
6 months	38.82	40.97	2.16	-0.16	4.47	0.86
12 months	41.88	43.20	1.32	-1.07	3.71	0.28
18 months	41.58	40.93	-0.65	-3.05	1.74	0.61
Perceived Stress Levels						
Baseline	7.83	7.95	0.12	-0.65	0.89	0.39
6 months	7.95	6.90	[-1.06]**	-1.83	-0.29	0.39
12 months	7.20	6.93	-0.26	-1.07	0.54	0.41
18 months	7.42	6.91	-0.51	-1.31	0.29	0.40
Kessler Psychological Distress						
Baseline	23.42	23.16	-0.25	-2.52	2.02	1.15
6 months	23.29	22.03	-1.26	-3.04	0.52	0.91
12 months	22.62	22.05	-0.57	-2.49	1.35	0.97
18 months	22.93	22.95	0.02	-1.90	1.94	1.04
CHAOS						
Baseline	29.68	28.62	-1.06	-3.08	0.95	0.71
6 months	29.51	29.45	-0.05	-1.60	1.50	0.79
12 months	29.43	29.34	-0.09	-1.77	1.58	0.86
18 months	29.39	29.71	0.32	-1.35	1.20	0.83

Outcome	Control Group	Treatment Group	Mean Difference	95% Lower CI	95% Upper CI	Standard Error
Affirmation of Meaning and Value						
Baseline	13.69	13.46	-0.23	-0.75	0.30	0.27
6 months	13.21	13.63	0.42	-0.08	0.93	0.26
12 months	13.51	13.70	0.28	-0.17	0.73	0.24
18 months	13.40	13.94	[0.54]**	0.09	0.99	0.23
Acceptance						
Baseline	13.87	13.44	-0.43	-1.07	0.19	0.32
6 months	14.08	14.28	0.20	-0.38	0.79	0.30
12 months	14.33	14.23	-0.09	-0.70	0.52	0.31
18 months	14.30	14.86	0.55	-0.05	1.17	0.32
Courage						
Baseline	12.04	11.81	-0.23	-0.68	0.23	0.23
6 months	11.89	12.31	[0.42]*	0.01	0.84	0.21
12 months	12.27	13.27	[1.00]*	0.54	1.45	0.23
18 months	11.75	12.29	[0.54]*	0.09	1.00	0.25
Faith						
Baseline	33.78	33.48	-0.30	-2.04	1.44	0.89
6 months	32.05	34.19	[2.14]***	1.09	3.20	0.54
12 months	32.80	34.43	[1.62]***	0.51	2.73	0.57
18 months	32.98	34.58	[1.6]**	0.48	2.72	0.57
Self-Transcendence						
Baseline	25.07	24.67	-0.40	-1.61	0.37	0.39
6 months	24.53	25.11	0.58	-0.09	1.25	0.34
12 months	24.66	24.87	0.21	-0.57	0.99	0.41
18 months	23.89	24.94	[1.05]**	0.26	1.83	0.40

Outcome	Control Group	Treatment Group	Mean Difference	95% Lower CI	95% Upper CI	Standard Error
Average General Health						
Baseline	59.17	62.18	3.02	-2.78	8.81	2.11
6 months	58.94	58.30	-0.64	-4.15	2.89	1.79
12 months	57.99	55.80	-2.19	-6.33	1.95	2.11
18 months	55.72	54.48	-1.23	-5.33	2.86	2.09
SF-36 Health Limits						
Baseline	77.12	79.36	2.24	-3.85	8.34	3.11
6 months	76.67	74.03	-2.64	-8.41	3.14	2.95
12 months	76.46	77.85	1.39	-4.31	2.91	2.91
18 months	74.41	76.03	1.62	-4.04	7.27	2.88
SF-36 Physical						
Baseline	59.85	62.05	2.20	-8.18	12.57	5.29
6 months	66.62	57.69	-8.93	-19.06	1.20	5.17
12 months	56.72	60.53	3.81	-7.49	15.09	5.76
18 months	60.23	57.97	-2.25	-12.77	8.26	5.37
Adult Hope - Agency						
Baseline	20.90	21.62	0.72	-0.65	2.09	0.72
6 months	21.36	21.21	-0.15	-1.28	0.99	0.58
12 months	21.97	22.17	0.20	-0.99	1.38	0.60
18 months	21.51	21.67	0.17	-1.02	1.35	0.61
Adult Hope - Pathway						
Baseline	22.58	22.81	0.23	-1.05	1.50	0.65
6 months	22.67	23.55	0.87	-0.26	2.01	0.58
12 months	23.72	24.47	0.75	-0.35	1.86	0.56
18 months	23.71	24.00	0.29	-0.82	1.39	0.58

Outcome	Control Group	Treatment Group	Mean Difference	95% Lower CI	95% Upper CI	Standard Error
Adult Hope - Total						
Baseline	43.48	44.42	0.94	-1.47	3.56	1.23
6 months	44.03	44.76	0.73	-1.17	2.62	0.97
12 months	45.69	46.64	0.95	-0.10	2.90	0.99
18 months	45.22	45.68	0.46	-1.49	2.40	1.05
Adult Mattering - Awareness						
Baseline	29.58	30.21	0.63	-0.98	2.43	0.87
6 months	30.38	30.36	-0.01	-1.74	1.36	0.79
12 months	30.79	20.30	-0.49	-1.29	1.65	0.75
18 months	30.88	30.79	-0.09	-1.50	1.44	0.73
Adult Mattering - Importance						
Baseline	35.17	35.89	0.72	-0.98	2.43	0.87
6 months	35.70	35.51	-0.19	-1.74	1.36	0.79
12 months	35.67	35.86	0.18	-1.29	1.65	0.75
18 months	34.59	34.56	-0.03	-1.50	1.44	0.73
Adult Mattering - Reliance						
Baseline	23.71	23.54	-0.17	-1.33	1.00	0.60
6 months	23.98	24.06	0.07	-0.95	1.10	0.52
12 months	24.30	24.17	-0.13	-1.11	0.85	0.50
18 months	24.25	23.80	-0.45	-1.43	0.53	0.51

Footnotes:

Baseline Mean: Adjusted average score prior to any intervention

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

Difference: The Mean difference between the treatment and control groups

Standard Error: Indicates the precision of the impact estimates

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

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

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