SEED
Stockton Economic Empowerment Demonstration

Preliminary Analysis: SEED’s First Year

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The Stockton Economic Empowerment Demonstration, or SEED, was the nation’s first mayor-led guaranteed income initiative. Launched in February 2019 by former Mayor Michael D. Tubbs, SEED gave 125 Stocktonians $500 per month for 24 months. The cash was unconditional, with no strings attached and no work requirements.

This Randomized Control Trial (RCT) pilot is being evaluated by a team of independent researchers, Dr. Stacia West of the University of Tennessee and Dr. Amy Castro Baker of the University of Pennsylvania, and funded by the Evidence for Action Program at the Robert Wood Johnson Foundation.

Our primary research questions are the following: How does guaranteed income impact income volatility? How do changes in income volatility impact psychological health and physical well-being? How does guaranteed income generate agency over one's future?

In March 2021, SEED released its preliminary findings from the first year of the experiment. These findings encompass the pre-COVID time period from February 2019 through February 2020.

Key Findings Include:

- Guaranteed income reduced income volatility, or the month-to-month income fluctuations that households face.
- Unconditional cash enabled recipients to find full-time employment.
- Recipients of guaranteed income were healthier, showing less depression and anxiety and enhanced wellbeing.
- The guaranteed income alleviated financial scarcity creating new opportunities for self-determination, choice, goal-setting, and risk-taking.

SEED sought to confront, address, and humanize some of the most pressing and pernicious problems our country faces: inequality, income volatility, and poverty. We hoped to challenge the entrenched stereotypes and assumptions about the poor, and the working poor, that paralyze our pursuit of more aggressive policy solutions. We believe that SEED provides an opportunity to imagine a more fair and inclusive social contract that provides dignity for all. Everyone deserves financial stability – SEED proves that a guaranteed income is one way to achieve it.
SEED Overview / Implementation

SEED was born out of the simple belief that the best investments we can make are in our people. In February 2019, 125 residents began receiving a guaranteed income of $500 a month for 24 months. A hand-up, rather than a hand-out, SEED sought to empower its recipients financially and prove to supporters and skeptics alike that poverty results from a lack of cash, not character.
To qualify or be considered for SEED, recipients had to be at least 18 years old, reside in Stockton, and live in a neighborhood with a median income at or below $46,033.

We chose $46,033 because it is the city’s median household income. Centering ourselves on this number allowed us to be inclusive of residents across the city while ensuring that resources reached those in need. While our selection process targeted neighborhoods at or below the median income, there was technically no limit on individual household income. Recipients from these neighborhoods could be earning more or less than $46,033 and still participate in SEED.

Based on the above criteria, our evaluation team randomly selected 4,200 residences who were invited to participate in SEED via a physical mail notice. The mailer was not addressed to any one person in the residence; rather, each household decided whether to participate and who within the household would respond. To increase accessibility, these mailers were translated into the five most commonly spoken languages in Stockton: Spanish, Tagalog, Laotian, Hmong, and Khmer.

Households who were interested in participating completed a web-based consent form that asked for demographic details. From the pool of recipients who completed this process, a total of 125 were assigned to receive the guaranteed income. Of this pool, 100 comprised the core research sample; and 25 served as a politically purposive, or storytelling cohort, or who publicly spoke about their experience with SEED. We also included an additional 5 recipients for medical attrition, in the event that an individual is no longer able to continue participating due to a pre-existing medical condition, a terminal diagnosis, catastrophic injury, or the onset of a chronic illness. Another 200 individuals were randomly assigned to our control group, or a group of Stockton residents who are participating in our compensated research activities. The table shows some demographic data of the treatment and control groups.
Disbursement

SEED’s disbursement was issued on, or close to, the 15th of every month. This was based on community feedback about how Stockton families handle household finances; large expenses, like rent, are often due at the beginning of the month and benefits, like CalFresh, rarely meet a family’s needs for the entire month. As such, a mid-month disbursement was optimal to alleviate the financial stress families face as the month progresses.

SEED’s disbursement was administered via a Focus Card, or a prepaid debit card issued in each recipient’s name and provided in partnership with the Oakland-based nonprofit Community Financial Resources. Our decision to use prepaid debit cards was driven primarily by banking behaviors in Stockton. From 2013 to 2017, approximately 9.7% of Stocktonians did not have a bank account. Given this data, we decided against issuing the disbursement via direct deposit to recipients’ personal accounts or via electronic apps such as Venmo and CashApp, which also require users to have bank accounts. We also decided against writing checks because we did not want any of the $500 stripped away by predatory check-cashing service fees. Prepaid debit cards were the most universally accessible option, and could be issued regardless of banking status and imposed zero cost on the recipients. They also offered recipients the opportunity to transfer all or some of the $500 to their preferred banking institution or financial service they know and trust.

<table>
<thead>
<tr>
<th></th>
<th>Treatment</th>
<th>Control</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Women</strong></td>
<td>69%</td>
<td>69%</td>
</tr>
<tr>
<td><strong>Kids in HH</strong></td>
<td>48%</td>
<td>53%</td>
</tr>
<tr>
<td><strong>Average Age</strong></td>
<td>45</td>
<td>40</td>
</tr>
<tr>
<td><strong>Single</strong></td>
<td>59%</td>
<td>59%</td>
</tr>
<tr>
<td><strong>Partnered</strong></td>
<td>13%</td>
<td>15%</td>
</tr>
<tr>
<td><strong>Married</strong></td>
<td>27%</td>
<td>28%</td>
</tr>
<tr>
<td><strong>White</strong></td>
<td>47%</td>
<td>44%</td>
</tr>
<tr>
<td><strong>Black/AfAm</strong></td>
<td>28%</td>
<td>33%</td>
</tr>
<tr>
<td><strong>API</strong></td>
<td>13%</td>
<td>7%</td>
</tr>
<tr>
<td><strong>Other</strong></td>
<td>12%</td>
<td>17%</td>
</tr>
<tr>
<td><strong>Hispanic/Latinx</strong></td>
<td>37%</td>
<td>36%</td>
</tr>
<tr>
<td><strong>Renters</strong></td>
<td>50%</td>
<td>65%</td>
</tr>
<tr>
<td><strong>Homeowners</strong></td>
<td>25%</td>
<td>18%</td>
</tr>
</tbody>
</table>

From 2013 to 2017, this amount of Stocktonians did not have a bank account.
Commitment to Preserving Benefits

We at SEED firmly believe that unconditional cash must supplement, rather than replace, the existing social safety net.

As such, SEED took a series of steps, based on conversations with legal counsel, social service administrators, institutional review boards, and other cash transfer pilots, to protect against potential benefits losses. These steps were supplemented by research recruitment and sampling decisions that maximized self-determination in protecting benefits (Castro Baker, West, Samra, & Cusack, 2020).

Where possible, the SEED team pursued waivers that exempted the guaranteed income from being included in benefits eligibility calculations. For example, we secured a waiver for CalWorks, a welfare-to-work program that provides cash aid and services to eligible families, by working closely with the San Joaquin County Human Services Agency. This waiver exempts SEED disbursements from consideration as income for all CalWorks services, including supportive services (child care, transportation, and counseling/therapy) and family stabilization (intensive case management).

There were, however, limits on which benefits could be preserved through the waiver process. To ensure no harm, SEED provided individualized benefits counseling during the onboarding process. This benefits counseling detailed exactly how the additional $500 might impact the other benefits so that potential SEED recipients could make informed decisions prior to enrolling in the study.

While we were confident that we took every step available to minimize the impact of guaranteed income receipt on other benefits through productive partnerships with local agencies, we also know to prepare for the unexpected. For that reason, SEED established a Hold Harmless Fund to reimburse recipients for any unanticipated benefits losses.

Trust drove program implementation, take-up, and interaction with the debit card. Mistrust impacted whether or not people opened the recruitment mailers, completed their on-boarding appointment, moved money off the card into cash or another institution, and believed that the money was truly theirs. People like Mary feared an undisclosed catch and likened it to frightening prior misbehavior by companies, like the time her employer made mistakes with coworkers’ paychecks and asked them to pay it back after the money had been spent. Several recipients described ripping up and tossing the recruitment mailer, only to pull it out of the garbage after reading about SEED elsewhere. Spouses, more frequently women, responded to the mailer when their partner refused to or mistook it for a predatory scam.

In many cases, recipients articulated that although they mistrusted the idea of money with no strings attached, their decision to respond was driven by the strain of their current financial situation. Variations on Jackie’s comment that, “the money came right in time” were replete in early interviews and reflected the constant state of financial precarity many were living with prior to SEED. Recipients struggled to reconcile their mistrust in SEED with the reality of constant financial strain. As illustrated by Monica’s experience, it took several months of consistent payments and relationship building to outweigh fear and mistrust. Even after she had received two payments, attended an in-person session for enrollment, and regularly spoke with SEED staff on the phone, she still remained fearful when meeting in person.

Stocktonians’ experiences with risky lending, institutional disinvestment, and lack of trust is far from unique. Rather, it is a common feature of American financial life in communities locked out of upward mobility for decades, while simultaneously being targeted for wealth extraction and risk (Castro Baker, 2014; Saegert, Fields, & Libman, 2009; Servon, 2017). The human connection with staff embedded in the Stockton model (Castro Baker, West, Samra, Cusack, 2020), and the consistency of communication from program staff functioned as key pathways for building enough trust to facilitate program take-up.

Recruitment:
“[A SEED staff member] came to my job personally...I told my coworkers, ‘I gotta meet somebody outside, like they’re coming, I just got to get something from them. If I don’t come back in, come look for me.’”

Onboarding:
“I was thinking ‘I hope it works...I’m probably not even going to get it,’ you know, and I was so anxious because I had a disconnection for the water within two days and I wouldn’t get paid for four. I kept crying waiting to see if the debit card would load. I didn’t know if we’d have water.”

Two Payments In:
“[A SEED staff member] came to my job personally...I told my coworkers, ‘I gotta meet somebody outside, like they’re coming, I just got to get something from them. If I don’t come back in, come look for me.’”

2 Pseudonym. Per the IRB, all names included in this manuscript are pseudonyms for confidentiality. Recipients identified by their first and last names are members of the political purposive (storytelling) sample N=25 who consented to share their experiences publicly through the duration of the pilot. Their qualitative data remains separate from the main treatment group.
The key questions driving this experiment are:

1. How does GI impact income volatility?
2. To what degree do changes in income volatility alter financial wellbeing, psychological distress, and physical functioning?
3. How does GI generate agency over one’s future?

We hypothesized that the GI intervention would lead to reductions in monthly income volatility and provide greater income sufficiency, which would in turn lead to reduced psychological stress and improved physical functioning. We used a mixed methods randomized control trial (RCT) with participatory action research design to answer these questions. Participatory Action Research (PAR) groups, alongside an objective to create new conversations around deservedness and inequality, led to the inclusion of analyses of how individuals used the $500. All research activities were approved by the Institutional Review Boards of the University of Tennessee-Knoxville and the University of Pennsylvania.

Approach
The research approach included three strands: (1) parallel quant + qual, (2) sequential (quant → qual → quant) and (3) community based PAR. Research activities are ongoing through September 2021.

Strand I:
Parallel quant + qual. Baseline quantitative data were collected three months prior to the random assignment to groups that occurred in February 2019, and were collected at three intervals post-randomization. Participants also completed brief monthly SMS surveys to measure income and mental health changes. A purposive qualitative sample of 50 participants were selected to participate in 1:1 semi-structured interviews to determine how decision-making about the $500 was weighed alongside existing network responsibilities and safety net thresholds.
Strand II A:
Sequential (quant → qual → quant); Strand II utilized early quantitative measures on coping, income volatility, and agency to generate a nested purposive qualitative sample determining how participants interpret changes associated with GI. The aim was to understand the strategies, processes, and sense of agency over one’s future associated with the intervention. The sequential component captured the lived experiences of income volatility alongside coping strategies and health behaviors. It consisted of semi-structured interviews with a purposive sample of the treatment and control group. Interview protocols were informed by a social stress process model and existing economic insecurity, coping mechanisms, and network literature. Thematic analysis of themes associated with the aforementioned domains (Braun & Clark, 2006; Tashakkori & Teddlie, 2008) informed the development of a narrowly focused quantitative text-based inquiry that occurred monthly (Hall, Cole-Lewis, & Bernhardt, 2015).

Strand II B:
Mixed-methods integration of quantitative and qualitative data from year one generated new research questions that we were unable to answer with the existing data set. Therefore, an additional sequential step of purposive interviewing was added in year two. These research activities are currently ongoing.

Quantitative Measurement
Income volatility data were measured monthly through self-reporting via SMS. The health indicators of physical functioning and psychological distress were measured quantitatively via the SF-36 and the Kessler 10 (RAND Corporation, 2018; Kessler et al., 2002) within the longitudinal survey every six months and qualitatively through in-depth interviews. Data on financial wellbeing, including employment and ability to cover a $400 emergency, were collected via self-reporting in the quantitative survey at six month intervals.

Quantitative Analysis
Given the preliminary nature of this report, basic descriptive and inferential statistics are presented for quantitative data. Additional statistical analyses will be conducted, per the pre-analysis plan,³ at the conclusion of the study and will be presented in a final report. In quantitative analyses of Strands I & II, income volatility was calculated by the coefficient of variation, as used by the U.S. Financial Diaries study. To determine the coefficient of variation, we divided the standard deviation of monthly income by the mean of monthly income (Morduch & Siwicki, 2017). Between and within subjects effects of the SF-36 and Kessler 10, our measures of psychological distress and physical functioning, were tested with a t-test at baseline in December 2018 and in February 2019. Descriptive statistics were calculated for employment changes and financial wellbeing. In qualitative analyses of Strands I & II, thematic analysis informed by structural coding was used to capture social network relationships and decision pathways were used alongside value/affect coding (Saldana, 2009) to determine how participants interpret receipt of cash in the context of stigma and shame ordinarily associated with accessing benefits (Keene, Cowan, & Castro Baker, 2015).

Qualitative Methodology

There were three stages of qualitative data collection and analysis in year one: open-ended questions on the baseline survey, semi-structured interviews after intake, and semi-structured interviews throughout the first year with members of the treatment group. Interviews were also conducted with the control group and are part of ongoing research activities. All qualitative methodology was theoretically rooted in a social stress model with a specific focus on scarcity and strain (Mani, Mullainathan, Shafir, & Zhao, 2013; Shah, Mullainathan, & Shafir, 2012).

Stage 1:

Open-ended questions were included in the initial baseline survey before recruitment respondents were randomized into treatment and control. The prompts were informed by the literature on deservedness, shame, and blame associated with the safety net (Baumberg, 2016; Seccombe, James, & Walters, 1998; Tach & Edin, 2017). These open-ended sections were designed to (1) guide protocol development for the semi-structured interviews, (2) guide text-based data collection, (3) start identifying household decision-making patterns, and (4) determine how guaranteed income may be interpreted differently than safety net benefits. Responses (N=478) were recursively coded in Dedoose following Braun & Clark’s (2006) five phases of thematic analysis. This included three rounds of comparative coding using descriptive codes for substance (Saldana, 2009), emotion codes capturing decision-making (Goleman, 1995), and values codes reflecting public discourse literature.

Stage 2:

After respondents were randomized into treatment and control, SEED program staff invited potential members of the treatment group for 1:1 intake sessions in a community-based setting. All recipients who enrolled into the treatment group received invitations to participate in a semi-structured interview as a component of SEED’s implementation. Thirty-six consented. Interviews were 15-20 minutes long to minimize participant fatigue, digitally recorded, and professionally transcribed. The protocol incorporated questions on general demographics, trust, social networks, program uptake, and decision-making. Thematic analysis at the semantic level was conducted in Dedoose following the same phases used in stage one (Braun & Clark, 2006). The codes used in this phase represented an extended version of those used in stage one. The additions included architectural codes capturing sequence and decision-making, and revised value codes capturing one’s perspective of public discourse on deservedness (Saldana, 2009).

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4 Open-ended questions were also asked during text-based data collection. These will not be reported on until the conclusion of the study as they are part of ongoing research activities.

Stage 3:
All members of the treatment group were invited to participate in a semi-structured interview approximately halfway through the first year of treatment. This included targeted outreach to those who indicated prior or current experiences with the social safety net to ensure adequate representation from that group. Recruitment ceased when the target sample of 50 was reached. The aim of stage three was to understand the strategies, processes, adaptations, and sense of agency over one’s future associated with guaranteed income. Interviews were digitally recorded, professionally transcribed verbatim, and lasted one to three hours depending on how people answered questions. Most were interviewed in their homes, but some elected to interview in a community-based setting to maximize privacy. Two individuals elected to do their interviews over the phone when personal plans changed at the last minute. Constant comparative memo-writing occurred throughout the entire interview and analysis process (Charmaz, 2014; Strauss, 1987). The interview protocol incorporated prompts on process, meaning-making, strategies, pooling of material and immaterial resources, trust, and social networks. The original 5 stage thematic analysis (Braun & Clark, 2006) that was employed in stages 1 and 2 was altered during codebook development based on the first two stages of analysis and early quantitative signals. In keeping with the iterative aspect of a mixed-methods approach (Tashakkori & Teddlie, 2008; Teddlie, Tashakkori, & Johnson, 2008), we adjusted our approach to incorporate grounded theory for latent analysis (Charmaz, 2014) alongside thematic analysis at the semantic level. This methodological approach was chosen when analysis in stage 1 and 2 indicated that recipients were experiencing guaranteed income as an unfolding phenomenon that lacked common language and shared understanding (Charmaz, 2014). The final codebook included process codes, values codes, focus coding (Thornberg, Perhamus, & Charmaz, 2014), and theoretical coding (Glaser, 1978; Charmaz, 2014). All coding occurred in Dedoose.
Aggregate Spending

Each month, aggregate spending data were collected from the prepaid debit card to determine how recipients spent the $500. Those data were categorized into merchant category codes (MCC) that corresponded to the transaction type. For example, Costco had a MCC of “wholesale clubs” and was categorized as “sales or merchandise.” Safeway had a MCC of “supermarket” and was categorized as “food.”

Consistently, the largest spending category each month was food, followed by sales/merchandise, which were likely also food purchases at wholesale clubs and larger stores like Walmart and Target. Other leading categories each month were utilities and auto care or transportation. Less than 1% of tracked purchases were for tobacco and alcohol. The table below shows the percentages of tracked disbursements in each spending category, starting with the first disbursement in February 2019 and ending one year later.

<table>
<thead>
<tr>
<th>Category</th>
<th>Month</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Feb 19</td>
</tr>
<tr>
<td>Food</td>
<td>38.11%</td>
</tr>
<tr>
<td>Sales/Merchandise</td>
<td>24.20%</td>
</tr>
<tr>
<td>Utilities</td>
<td>11.78%</td>
</tr>
<tr>
<td>Auto Care</td>
<td>9.25%</td>
</tr>
<tr>
<td>Services</td>
<td>6.70%</td>
</tr>
<tr>
<td>Transportation</td>
<td>3.02%</td>
</tr>
<tr>
<td>Insurance</td>
<td>0.55%</td>
</tr>
<tr>
<td>Medical</td>
<td>2.23%</td>
</tr>
<tr>
<td>Self Care/Recreation</td>
<td>3.97%</td>
</tr>
<tr>
<td>Education</td>
<td>1.95%</td>
</tr>
<tr>
<td>Donation</td>
<td>0.25%</td>
</tr>
<tr>
<td><strong>Monthly Avg</strong></td>
<td><strong>100.00%</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Category</th>
<th>Month</th>
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<tbody>
<tr>
<td></td>
<td>Sep 19</td>
</tr>
<tr>
<td>Food</td>
<td>39.37%</td>
</tr>
<tr>
<td>Sales/Merchandise</td>
<td>22.55%</td>
</tr>
<tr>
<td>Utilities</td>
<td>11.23%</td>
</tr>
<tr>
<td>Auto Care</td>
<td>10.77%</td>
</tr>
<tr>
<td>Services</td>
<td>5.30%</td>
</tr>
<tr>
<td>Transportation</td>
<td>0.34%</td>
</tr>
<tr>
<td>Insurance</td>
<td>2.90%</td>
</tr>
<tr>
<td>Medical</td>
<td>3.29%</td>
</tr>
<tr>
<td>Self Care/Recreation</td>
<td>3.18%</td>
</tr>
<tr>
<td>Education</td>
<td>0.59%</td>
</tr>
<tr>
<td>Donation</td>
<td>0.47%</td>
</tr>
<tr>
<td><strong>Monthly Avg</strong></td>
<td><strong>100.00%</strong></td>
</tr>
</tbody>
</table>
Transfer Patterns
Over the year, approximately 40% of the money loaded to the prepaid debit card was either transferred to a pre-existing bank account or withdrawn as cash. Analysis of narrative data indicates that these patterns are attributable to rational financial behavior. The way people moved money off of the card reflected their prior experiences in the market and prior strategies for avoiding risk while managing household needs. Participants described four reasons for transferring the money off of the debit card. First, some preferred relying on existing relationships with financial institutions that they already utilized for household budgeting and paying bills. This prompted some to transfer a portion of the money to their primary account, allowing them to manage all income in a single place. Second, others exchanged the $500 for cash, allowing them to pay rent, divide commonly held bills among family members, or for covering other bills to local payees that do not accept electronic payments. Third, a pervasive lack of trust in financial services in the community and prior experience with predatory actors motivated some to quickly remove money from the card. Stockton, like many racially and ethnically diverse communities, has a concentration of predatory financial services, like payday lenders, embedded in non-white and lower income neighborhoods (Mapping Financial Opportunity, 2020). The community experience of ongoing wealth extraction, both through those services as well as the foreclosure crisis, have rightly primed the community to be wary of any financial services; and, while SEED was created in coordination with community members, and widely publicized by the Mayor’s Office, many recipients still worried the program was a scam. Finally, prior to SEED’s launch, Ontario’s basic income program was cancelled two years early and covered extensively by the press (Frazee, 2018). Recipients feared that if Ontario could end abruptly, then SEED might follow suit.

Pooling Behaviors, Time Scarcity, and Prioritizing Self
Semi-structured interviews highlighted patterns in pooling behaviors and shifts in time among families and social networks in ways that the aggregate data masks. Pooling references the ways households combine and allocate income and resources toward expenses within the home, but the vast majority of pooling research focuses on married or intimate cohabiting partners (Lyngstad, Noak, & Tufte, 2010; Vogler 2005; Vogler, Wiggins & Brockman, 2006). In this research, we extended our analysis beyond pooling among couples to include social ties participants self-identified as members of their reciprocal pooling network, which is far more reflective of how many get by. Although the majority of SEED recipients interviewed chose to keep their participation anonymous from their friends and family, a small minority chose to tell their partners, spouses, parents, or a close confidant. Regardless of whether or not someone kept their participation silent, their pooling networks shaped decision-making pathways and strategies. The $500 spilled into their extended networks in material and immaterial ways that alleviated financial strain across fragile networks and generated more time for relationships. For those with more financially stable family networks, less pooling behavior occurred.

The most common spillover shifts participants described surrounded food and unpaid care work. As reflected in the aggregate spending data, the majority of money spent on the debit card surrounded food. The narrative data highlighted patterns of how families stretched this food to patch holes in the safety net and their networks. Participants regularly described finally being able to afford enough food to cover their household for the entire month, when they previously ran out when monthly food stamps limits were met or when they did not receive enough hours at work. Before SEED, these households would then either shift the quality of food they purchased or borrowed from family and friends who were also running low.

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Sarah is a woman in her 60s who works as a CNA. She spends a large portion of her time caring for her brother, who sustained a traumatic brain injury after an accident. Sarah’s brother was able to buy a property with two small houses for him and Sarah with a lump sum payment he received after the accident. Since then, he has experienced severe mental health symptoms, such as paranoia and insomnia. She is responsible for making sure he takes his medication and helping him maintain personal hygiene, as well as staying on top of household duties like getting groceries and paying the mortgage and utility bills. When her brother’s symptoms are particularly severe, Sarah has to miss work to stay home with him and make sure he is safe because she is the only person he trusts. At times, Sarah has had to miss work for up to a week to care for her brother, which drastically affects the amount of money she sees on her paycheck. While receiving the $500, Sarah has used SEED to help her siblings buy school clothes for their children and to help her daughter-in-law pay for car-insurance. However, no one in her network knows she is participating in SEED and using the money to assist them. The $500 has given Sarah the opportunity to start considering how to balance her own needs with her deep-seated belief in the importance of giving. Her goal for the SEED funds is to start a savings account, potentially get a working car, and put some money away for herself in case of an emergency.

In other words, stabilizing food security in just one house with the $500 generated echoes of food security for those they ordinarily borrowed from. The $500 also assisted recipients with stretching resources across their networks to cover the needs of aging or ill family members, material needs such as school or sports equipment, and transportation to and from doctor’s appointments they would otherwise skip. Unsurprisingly, these strategies were more commonly utilized by women who traditionally bear most of the burden of unpaid care work (Abramovitz, 2018).

Narrative analysis also highlighted how freedom from constant preoccupation with scarcity spending shifted how recipients utilized their time, functioned in relationships, and participated in meaningful activities that Jake describes as “normal things that a lot of people take for granted.” While these trends remain invisible in the aggregate spending data, participants regularly articulated that the $500 generated time and funds to participate in American life in ways they would be unable to otherwise. Nicole described her time changing this way,

“I’m able to read and write my poetry, and spend time with my Mom...You have time. More time to use your imagination, decorate, take time with cleaning, try out recipes, watch a nice movie with someone, call your loved ones and give them encouragement. Everyone needs encouragement.”

Parents articulated newfound time and ability to engage with their children in small, but normal rights of passage that generated dignity and quality of life. “Watching tv with my kids instead of yelling,” “I can breathe and do homework with them,” “take your kids to the movies,” “be able to say yes to the ice cream instead of no. My kids have always heard no.”
Penelope is a middle-aged woman who lives with her husband. She has a daughter in her mid-twenties who lives and works in Sacramento. Her family moved to Stockton from the Bay Area when she was in her late teens. Penelope lived in Sacramento as a single-mother while her daughter was growing up, and moved back to Stockton in 2016 when she got married. She uses the $500 to make credit card payments and support her 78-year-old father, who lives nearby in Stockton in a fairly upscale neighborhood. Penelope remarks that people might assume her father is well-off due to where he lives, however, he is struggling to pay off his late-wife’s medical bills with his limited social security income and retirement funds. Penelope and her father cared for her mother from the time she was diagnosed with a chronic illness in 2006 until her death in 2015. Penelope was responsible for bathing her mother and taking her to appointments. She says her mother “trusted her with her life” while she was battling her illness. While she said caring for her mother felt “automatic” and “natural,” the experience was difficult, and especially tough for her father, which meant that Penelope shouldered the majority of care taking responsibilities. Penelope worked in the medical field for a long time. She held both administrative and clinical positions as a nurse and later pharmacy technician. When a back injury she sustained administering CPR was further compounded by a car accident, Penelope was forced to stop working due to debilitating chronic pain. She is currently receiving permanent disability benefits. Penelope makes the minimum payment on her own bills so that she can help her father pay for his expenses. She comments that if she knew she would be receiving the $500 forever, she would give the entire payment to her father. She describes her family as a “circle” when it comes to sharing resources and says that they will show up for each other in turn when there is a financial emergency. Caring for others is a large part of Penelope’s personal and professional identity and the $500 has enabled her to feel more comfortable engaging in the resources sharing that were central to her life before SEED.

The expansion of time and the ability to afford things like birthday cakes and spending time with friends socially when they otherwise could not were common refrains that highlight how financial scarcity generates time scarcity within households and relationships.
Preliminary Analysis: SEED’s First Year

Jake

“I would still survive without this money but it, it makes life bearable.”

 Jake is a man in his early 30s who works as a manager at a wholesale supply company in Stockton. He regularly works 12-14 hours a day; however, he still struggles to make ends meet. He was born and raised in Stockton and has experienced the increased cost of living firsthand - his first apartment was around $600 a month and now he pays $1,300 - $1,400 in rent. He primarily devotes the $500 to his monthly truck payment. Previously, he was spending most of his income on bills, but the introduction of the $500 and the single burden of the car payment that it alleviated has given him more breathing room financially. Jake feels less worried about spending time and money on social outings with friends, whereas in the past, he would watch other people go and stay home so that he didn’t have to be “that person with no money out there.” He says the biggest impact of the $500 for him has been the opportunity to do more “just normal things that a lot of people take for granted” like going out for dinner with his mom or buying her a birthday present. Jake works long hours in order to pay his bills, which, before the $500, meant that his time and budget for doing anything but surviving was limited. While he still works the same long hours, SEED has allowed Jake to participate in more of the small social rituals that make life meaningful. For Jake, the $500 eased some financial pressure, and in turn, created more space for relationships and activities that have improved his quality of life.

Finally, women who spend much of their life and time performing unpaid care work within their networks described how the twin forces of alleviating financial stress alongside an infusion of time allowed them to prioritize themselves in ways they ignored for years. In many cases this was reflected in expected ways such as catching up on dental work and preventative medical care. However, it also unexpectedly provided newfound freedom to hear and center their own needs, desires, and wants in ways that improved their quality of life - fixing one’s own car instead of someone else’s; money for spending time with friends instead of diverting everything for children or extended kin. Mona bought diapers for her grandchildren and an adequate amount of feminine hygiene products for the first time in months. Like many, she ordinarily bypassed meeting her basic hygiene for her grandkids. Bunny purchased new shoes for herself while paying someone to mow her grass rather than having to do it under a blazing Central Valley sun with health limitations. What stands out when women describe these spending shifts is how clearly they articulate it as focusing on themselves because they desire to after spending extensive time and money caring for others for free. These women are listening to and prioritizing their own desires and well-being because it is something they crave on its own. This stands in stark contrast to engaging in self-care so one can perform yet more care work at the expense of their own well-being and sense of self. In Sarah’s words, she can “focus more on myself….To focus on me and get everything I need to be paid in full,” while Bunny says, “I want to make myself happy more. I want to be more for myself.”
Real Madrid is a 42-year-old immigrant. He came to the United States in 2016 from his war-torn hometown in the Middle East and North Africa (MENA) region by way of another Arab country, joining his family that sought refuge in Stockton, California before him in 2001. For Real Madrid, navigating the “American life” underscores a conflict between suitable employment that carries dignity and pride, and the hardships of living in scarcity and lack of “straight” or honest work that pays a survival wage. As the primary caregiver for his disabled father and sister, he was soon faced with either taking part in illicit work or joining college to get a degree in real estate, a field in which he has about 25 years of experience back home but cannot practice here. Real Madrid took the risk of enrolling as a full-time student to earn a certificate in Real Estate relying entirely on his father’s Supplemental Security Income (SSI), sister’s food stamps, and the financial aid and student loans for which he was eligible as the only sources of income and financial support. One day, while on his daily commute to run some errands using public transportation, since he does not have a car or a driver’s license, he heard about SEED on the radio and decided to respond to SEED’s letter accordingly. Getting the USD 500 on a monthly basis helped him to focus his attention on “having a decent job” after completing his graduation requirements while taking care of his family. It ensured that the plans for his vocational trajectory are being embraced, polished, and executed. SEED not only enabled him to stay in school and acquire his anticipated certificate, it also allowed him to continue his education after applying for an Associate Degree in Business Administration.

Income Volatility and Financial Wellbeing

One year into the program, the treatment group demonstrated less month-over-month income volatility than those in the control group. The control group experienced nearly 1.5x more income volatility than the treatment group - the treatment group’s income fluctuated by 46.4% monthly while the control group experienced a 67.5% monthly income fluctuation. These findings are consistent with findings from the U.S. Financial Diaries, which reported greater month over month volatility for lower-income households (Hannagan & Morduch, 2015). In addition, we find that households receiving the intervention were better positioned over time to cover a $400 unexpected expense with cash or a credit card paid in full than the control group. At the start of the program, only 25% of recipients would pay for an unexpected expense with cash or a cash equivalent. One year in, 52% of those in the treatment group would pay for an unexpected expense with cash or a cash equivalent. Comparatively, 25% of the control group would pay for an unexpected expense at baseline with cash or a cash equivalent. One year in, only 28% of those in the control group would pay for an unexpected expense with cash or a cash equivalent. The treatment group was in a more stable financial position than the control group one year after receiving guaranteed income, as shown by Real Madrid’s story.

At the start of the program, only 25% of recipients would pay for an unexpected expense with cash or a cash equivalent. One year in, 52% of those in the treatment group would pay for an unexpected expense with cash or a cash equivalent.
Psychological distress and physical functioning

The Kessler 10 is a widely used instrument that measures psychological distress based on questions about anxiety and depression. Scores can range from 10 to 50, with higher scores indicating more severe psychological distress. Scores less than 20 indicate a person is likely to be well, and scores 20-24 indicate a mild mental health disorder (Kessler et al., 2002). T-tests of the Kessler 10 indicate the treatment group reported lower incidence of anxiety and depressive symptoms than the control group at the fourth observation beginning in February 2020, one year after randomization. At the first observation, the treatment (M=21.28, SD=9.03) and control (M=20.72, SD=8.97) group scores on the Kessler 10 were not significantly different [t(303)=.541, p=.58].

At observation four, mean scores for the control group were M=21.15, (SD=10.55) and M=18.43 (SD=8.66) for the treatment group, indicating a nearly significant change [t(184)=-1.92, p=.056]. The effect size for this change, measured as Cohen's $d$, was -.282, a relatively small effect.

When the control group was compared to themselves as a baseline, there was no significant change in scores on the Kessler 10 [t(86)=14.85, p=.012], energy over fatigue [t(186)=7.30, p=.023], emotional wellbeing [t(191)=7.70, p=.022], and pain [t(189)=7.87, p=.047] when compared to the control group. Effect sizes in this comparison were slightly larger than detected in the Kessler 10. Cohen's $d$ for emotional health was .370, .335 for energy over fatigue, .332 for emotional wellbeing, and .283 for pain. Jim & Pam, a couple in the treatment group, share their story about the interaction between financial strain and emotional and mental health.

The Short Form Health Survey 36, developed by the RAND corporation, is a widely used instrument to measure overall health and wellbeing. It includes 8 subscales: physical functioning, role limitations due to physical health, role limitations due to emotional problems, energy and fatigue, emotional well-being, social functioning, pain, and general health (Hays & Shapiro, 1992; Stewart et al., 1992). The scores range from 0 to 100, with 100 representing better health. At baseline, there was no significant difference in the treatment and control groups' scores on any of the 8 subscales.

One year after receiving the guaranteed income, the treatment group showed statistically significant differences in emotional health
Pam and Jim are a couple in their late 20s/early 30s who have lived in Stockton for most of their lives. They have three school age children, two of whom have been diagnosed with developmental delays. Jim recently completed his bachelor's degree in criminal justice and hopes to work with youth in programs aimed at preventing them from entering the criminal justice system. Pam and Jim save money to take their kids on vacation twice a year. In fact, after some trips to a theme park one of their sons, who was previously non-verbal, started memorizing maps and socializing more. Pam says, “now he does not stop talking (laughs).” Pam and Jim have struggled with the restrictions of the social safety net. Jim likens the process of applying for and receiving benefits to jumping through “fire hoops.” They received benefits like cash assistance and MediCal on and off depending on their employment situation, which made it difficult for them to build a strong financial foundation as their eligibility for benefits would change when they started to earn more income through work. Around the same time that they began participating in SEED, they were approaching the 48-month lifetime limit for cash assistance and Jim was finishing school and looking for jobs. He says, “We had our backs against the wall.” Stress about their financial situation and their childcare responsibilities contributed to a growing feeling of anxiety and they both started having panic attacks (though Pam says “not at the same time luckily”). They primarily use the SEED funds to pay down their credit card bills. Since receiving the $500, they report that their anxiety has greatly decreased and they do not fight as much as a couple. In Pam’s words “I had panic attacks and anxiety. I was at the point where I had to take a pill for it. And I haven’t even touched them in awhile. I used to carry them on me all the time.”
Agency, Risk Taking, and Freedom

The final research question regarding how guaranteed income may generate agency over one’s future was categorized into two domains: 1) changes in employment and risk taking, and 2) freedom from forced vulnerability, which we conceptualize as circumstantially coerced trust or dependence in people, social ties, or systems out of necessity and lack of choice. In February 2019, 28% of recipients had full-time employment. One year later, 40% of recipients were employed full-time. In contrast, the control group saw only a 5% increase in full-time employment over the same one-year period - 32% of those in the control group were employed full-time in February 2019; one year later, 37% of control group participants were employed full-time. Though these findings cannot point to larger labor market trends, when integrated with qualitative data, they do lend insight into how individuals leveraged the $500 monthly payment to improve employment prospects.

Shifts in employment patterns were tied to removing material barriers to full-time employment and removing time and capacity limits created by scarcity and precarity. Material barriers included the ability to reduce the number of part-time shifts or gig work in order to apply for stronger positions. This included completing internships, training, or coursework that lead to full-time employment or promotions, or reallocating resources in a way that facilitates seeking better job prospects. For example, one man in his mid 30s had been eligible for a real estate license for more than a year, but could not afford taking the time off work to complete it. With the $500, he says that his life was “converted 360 degrees... because I have more time and net worth to study... to achieve my goals.”

As reflected in the spending data, financial scarcity generates time scarcity. Simply put, when every dollar of wage work is allocated for bills before it is earned, most cannot afford to skip work or take necessary steps toward better employment structurally trapping them regardless of individual effort. While these constraints are widely studied as

Preliminary Analysis: SEED’s First Year

Chelsea spent most of her adult life in Stockton, is a mother of two young children and laments that she worked hard to find an apartment that felt both safe and affordable, only to have the landlord continue increasing the rent. She escaped an abusive marriage a couple years ago, and is the sole provider for her children. She notes that had something like SEED came along sooner in her life, she would have been able to leave that abusive relationship several years earlier. In addition to being a Mom, she works full-time plus frequent overtime to make ends meet. When she first learned she would be receiving the $500, she planned to use the money to get a few months ahead on her daycare payments for her two kids since daycare is a major expense. However, just before the first payment, Chelsea’s car blew its engine. Chelsea had been living paycheck to paycheck and had limited options for securing transportation to get to work, so Chelsea took on a costly title loan on a car so she could keep getting to her job. When that car broke down, Chelsea had no savings or viable option for buying even a used car, and ended up leasing a car so she could get back to work as soon as possible.

By the time disbursement began, Chelsea had to make a new plan of immediately putting the Guaranteed Income each month toward making payments for both the broken down car that sits useless, and the car she is currently leasing and driving to work. Chelsea explains that after making those monthly car payments, and using her salary to cover other expenses, the $500 provides enough that there is a little left over each month. Chelsea uses that small amount of “leftover” SEED money each month to do special little outings with her kids, like taking them to see a movie or go to a water park—fun activities that previously would have seemed frivolous or irresponsible on her shoestring budget. Chelsea explains that having this new freedom to spend even a small amount of the $500 on occasional outings with her children is a special newfound joy.

“I stayed in a bad marriage for longer than I should have because I didn’t have the funds or the means to leave.”
limits for saving and asset building (Sherraden et al., 2015), these findings indicate that it may also limit how workers react to local job markets.

The alleviation of constant financial strain also generated increased bandwidth for goal-setting and risk-taking, both of which were previously limited by scarcity. In Kent’s words guaranteed income means, “you can take so much risk...The only reason I got the internship was because of me taking the risk of having to quit a job before and knowing that I have that money. I could sustain myself until this new opportunity came around, and I was able to take it.” However, the burden of unpaid care work created a ceiling on risk-taking for some women supporting networks with significant needs left unmet by the market and safety net. In some cases, the strategies people used for survival were explicitly articulated and readily described. But, more often than not, people spent so many years battling scarcity that resilient survival strategies functioned as implicit ways of being and getting by. Recipients carried these strengths into SEED and, as bandwidth increased, capacity for risk-taking, new goal-setting pathways, and some freedom from forced vulnerability emerged. For more than 100 years, the social science literature has established that one way those living on the economic margins survive is by relying on strong networks and social ties (Eden & Lein, 1997; Engels, 1892; Du Bois, 1899; Kornblum, 1974; Raudenbush, 2016; Stack, 1974). While the experience of poverty does not guarantee the presence of a strong network (Offer, 2012; van Eijek, 2010), and strength of ties for escaping rather than surviving poverty remains a matter of debate (Desmond, 2012), we do know that drastic increases in poverty, austerity, and rising inequality constrain choice and undermine formation of strong social ties (Small & Gose, 2020). The narrative data underscored these dynamics and illustrated how living with constant financial strain creates forced vulnerability, dependence, and trust in people you may not want to engage with or in systems that invite unwanted surveillance into your household. As one Mom put it, “poverty means lack of choice. You’re forced in ways you don’t want to be.” Or, as Jada describes, feeling compelled by circumstance to “choose” between terrible options. In her case this means “opting” to live in unsafe housing she calls a “cave” with broken appliances, constant vermin, and an absentee landlord rather than living in a nicer place with family members whose presence invites more unpaid care work and difficult relationships.

In contrast, chosen vulnerability and interdependence hinges on agency, self-determination, and authentic trust in the ties you actively choose and rely on. Once basic needs were met and scarcity dampened, participants described small, but meaningful pathways out of reciprocal ties of vulnerability they desired freedom from in favor of chosen vulnerability and authentic trust defined by choice and a sense of safety. Unlike forced vulnerability that can invite surveillance and constrained dependence, Callie describes chosen trust, interdependence or vulnerability as, “putting your all into something and not having to worry about something happening to you from it.” This included the ability to reduce asking for money or resources from friends and family that people had strained or difficult relationships with, and to limit time in and with relationships they remained in under duress. While limited, these findings indicate the potential for guaranteed income to bolster self-determination and a sense of agency.
Implications

For Replication and Practice
As additional guaranteed income programs emerge across the country, SEED serves as a human-centered model to follow. Guaranteed income demonstrations, for reasons mentioned elsewhere, serve as an exercise in trust. To build trust with participants, SEED maintained constant communication and put a premium on establishing relationships between staff and recipients. SEED staff employed a number of methods, including phone calls, text messages, emails, physical mail, and, if needed, in-person home visits. We maintained a two-way channel of communication: (1) the SEED team sent a message prior to each disbursement and research activity, and (2) recipients reached out to the team with questions about their debit cards, or even to share messages about how they were using the $500 disbursement. Communication was more frequent with those in the storytelling cohort, with staff inquiring about media interest and sharing coverage. Further, program staff not only ensured the completion of research activities, but also checked in on recipient well-being and positioned themselves as a resource for recipients as they approached recertification for other benefits.

SEED also centered recipient agency and self-determination. As such, we practiced ongoing consent with recipients across all aspects of the program and recipients were, at any point, allowed to leave the program. For example, participation in research activities is highly encouraged and incentivized through compensatory gift cards, but no aspect of the research is mandatory and members of all groups may choose to exit the research at any time. For those in the storytelling cohort, ongoing consent also entails choosing how frequently they engage with the media and which opportunities they accept. Guaranteed income programs using a RCT evaluation may benefit from approaching control group engagement with the same care and attention as treatment group engagement, beginning during the earliest phases of planning. SEED sought to ensure that all participants in the demonstration understood their role in the success of the pilot. Messaging and communication that consistently highlights and reinforces control group participation as equally important to the treatment group, as well as clear communication about the group assignment process, and the impact of control group data collection activities, may help participants feel ownership over the process and agency, regardless of which group they are assigned.

Finally, guaranteed income pilots must elevate community voice. Key design decisions, including disbursement mechanism and timing, were made in consultation with members of the Stockton community who were familiar with economic insecurity. In doing so, SEED designed a program that was responsive to Stockton’s unique needs and landscape. Activities like town halls, public data releases, also promoted program transparency and ensured that Stockton residents knew that research was being conducted in tandem with, rather than on, the community.
For Policy
The first year findings of SEED are promising, showing a causal connection between guaranteed income and financial stability, and mental and physical health improvement. The mixed methods RCT approach not only allowed SEED to detect these quantitative effects, but to understand how guaranteed income operates alongside the existing social safety net, how recipients maximized the $500 under extreme resource constraints, and how guaranteed income may promote individual freedom and agency.

Yet, guaranteed income is not a cure all for the consistent, market-driven obstacles that prevent many American households from achieving stability and health.

We found that the $500 made making rent payments, covering childcare, and taking care of medical needs more bearable for recipients, but it was not nearly enough to cover the exorbitant costs of these necessities.

This means that guaranteed income should not be considered as a singular approach for household stability, but rather as one policy option to be implemented alongside others to shore up market failures. Additional policies to implement alongside a guaranteed income include: protection against predatory financial actors and instruments like caps on adjustable interest, second-chance banking, third-party targeting of financially vulnerable populations, and exorbitant fines and fees from the criminal justice system; address the unique barriers that women face in the market through paid family leave and universal child care; mitigating the cost of housing through rental assistance, tenant protections, and increased supply of housing; and ensure that labor is fairly compensated through a higher minimum wage. All policies should help build an economy that works for everyone, and is rooted in equity for traditionally marginalized populations.

The COVID-19 pandemic has highlighted the need for a comprehensive safety net reform. Households are struggling more than ever to meet competing demands of online schooling, high risk work environments, and devastating losses of family members and friends. Guaranteed income may be immediately realized as recurring cash payments to allow families to mitigate infection risk and weather pandemic related income loss.

For Research
Additional research on guaranteed income is forthcoming, which will help refine policy options. There are a number of domestic guaranteed income pilots that launched around the same time as SEED, including Open Research’s large multi-city pilot, Springboard to Opportunity’s Magnolia Mother’s Trust, and the multi-city Baby’s First Years project. While each of these studies were launched with similar hypotheses, that guaranteed income may stabilize families and improve wellbeing, there were no modern studies of guaranteed income in the US to predicate those hypotheses. These data presented in this report should be considered a preliminary insight into how guaranteed income may improve financial stability, health, and psychological outcomes. It should serve as a launching point not only for the final report of SEED, but for other communities running or preparing to pilot guaranteed income.

6 The most recent RCTs of guaranteed income conducted in the US were the Negative Income Tax Experiments, which concluded in 1982.


