

CITY OF MINNEAPOLIS GUARANTEED BASIC INCOME PILOT: SIX-MONTH RESULTS OVERVIEW

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FEDERAL RESERVE BANK
OF MINNEAPOLIS



The views expressed here are the presenters' and not necessarily those of the Federal Reserve Bank of Minneapolis or the Federal Reserve System.



SUMMARY OF SIX-MONTH RESULTS

- Early evidence from the City of Minneapolis’ guaranteed basic income (GBI) pilot shows:

Positive impacts on:

- **Food security**
- **Financial security**

Potential positive impacts on:

- **Housing stability**
- **Healthcare access**

Cannot detect (at this time) impacts on:

- **Labor supply**
- **Self-assessed well-being**
- **Psychological wellness**
- **Transportation access**
- **School/training attendance**
- **Use of low-cost credit**
- **Healthcare utilization**
- **Housing “quantity”**

*Formal outcome measures shown in **bold***

- We will report on new data through 2023–2024



TODAY'S DISCUSSION

- Provide brief background on GBI pilot
- Describe plan for evaluation
- Discuss six-month results
- Answer questions and discuss next steps



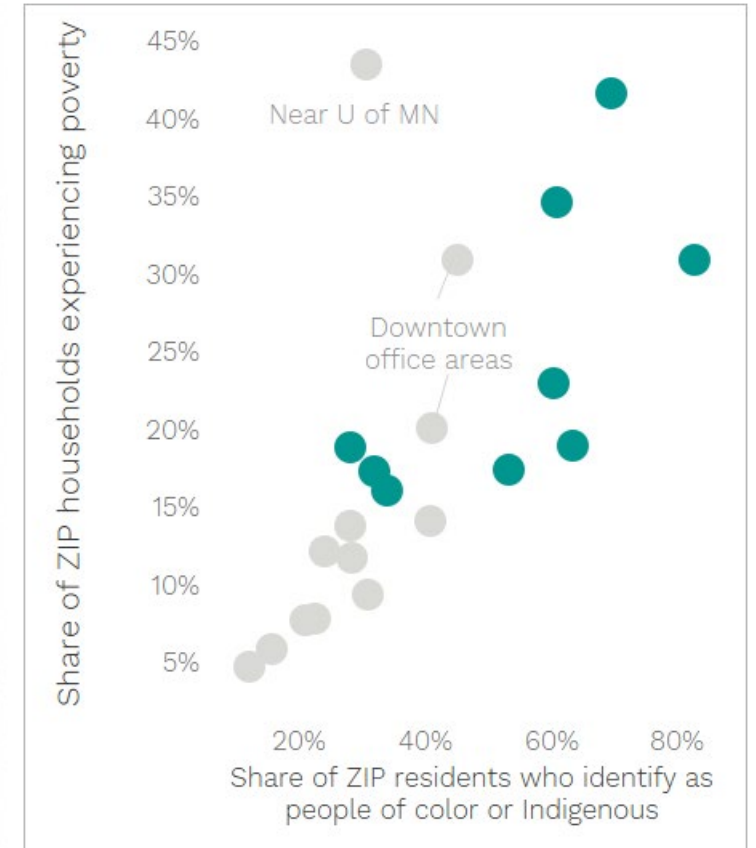
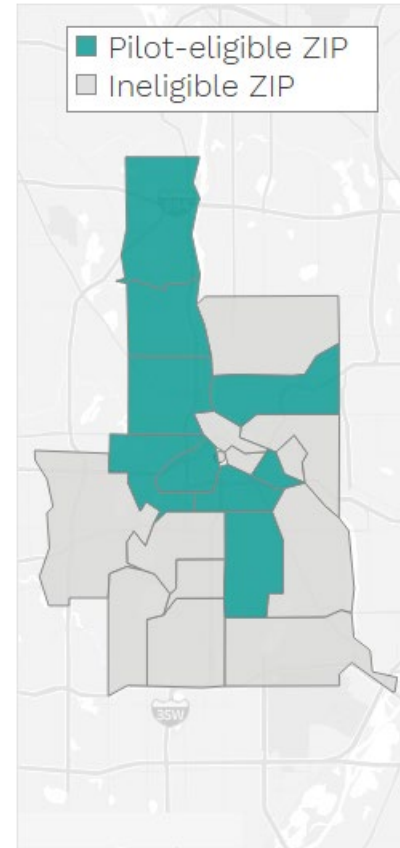


PILOT OVERVIEW

MINNEAPOLIS GBI PILOT: OVERVIEW

Basic design:

- City of Minneapolis recruited participants from community at large, through community-based organizations and advertising
- **After baseline survey, randomization, and eligibility verification** by the City:
 - **200** participants assigned to the **payment (treatment) group** to receive \$500 per month for 24 months
 - **330** participants assigned to the **survey (comparison) group** to receive compensation for taking surveys
- Surveys occur every six months (*planned*)

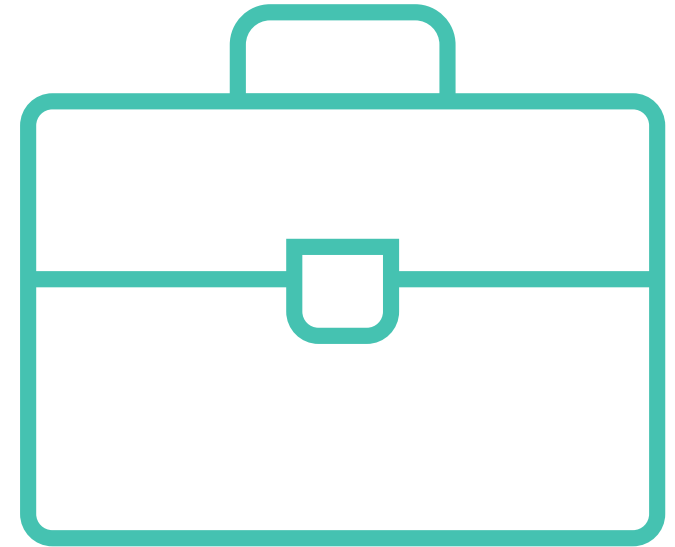


Source: Federal Reserve Bank of Minneapolis calculations using City of Minneapolis shapefile, U.S. Census Bureau TIGER/Line shapefiles, and U.S. Census Bureau American Community Survey five-year file, 2015–2019.



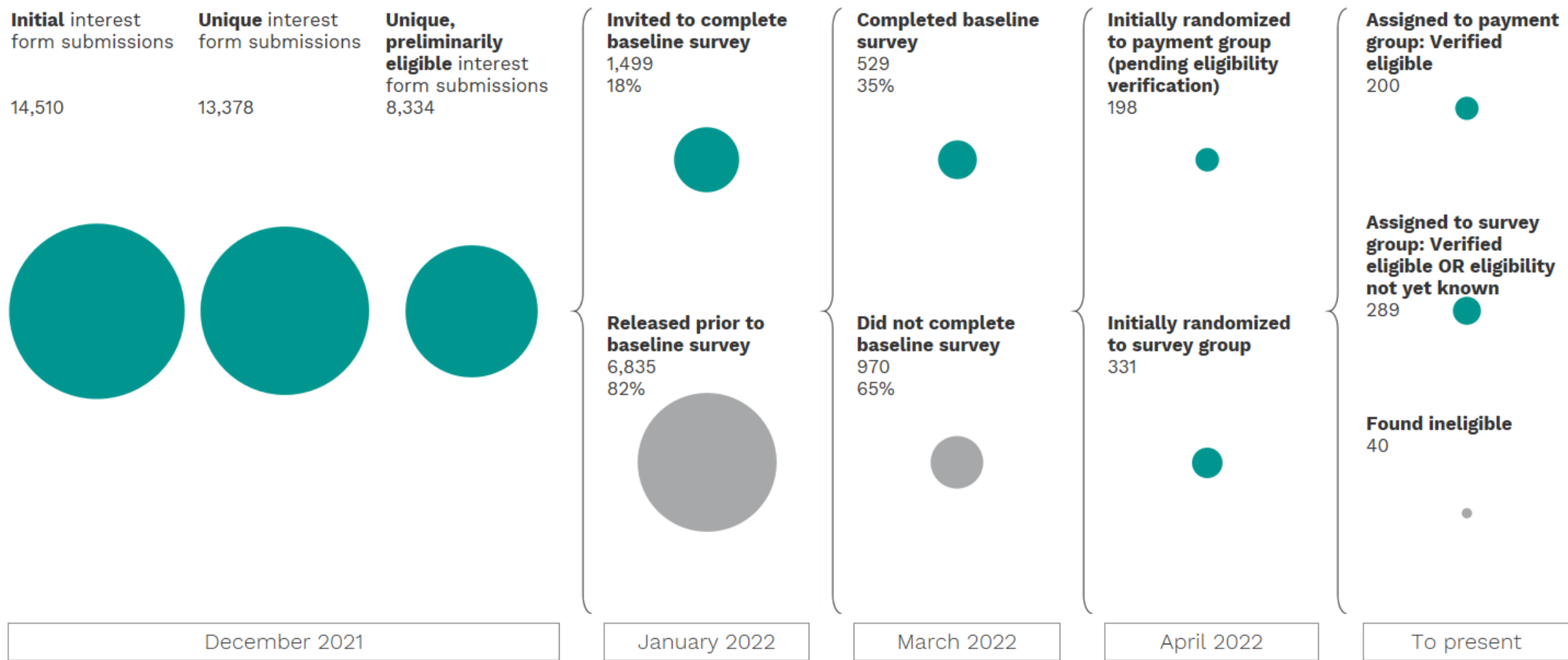
WHY THE MINNEAPOLIS FED AS PROGRAM EVALUATOR?

- Evaluation by a neutral, third-party research entity will help the City understand GBI pilot impacts
 - Methodology and results of this evaluation are applicable to other pilots
- The Minneapolis Fed is a nonpartisan institution working in the public interest
- Through its research relationship with the City, the Minneapolis Fed advances its study of policies affecting labor market dynamics in low- and moderate-income communities
 - [Community Development and Engagement Division](#)
 - [Opportunity & Inclusive Growth Institute](#)





RECRUITMENT AND RANDOMIZATION

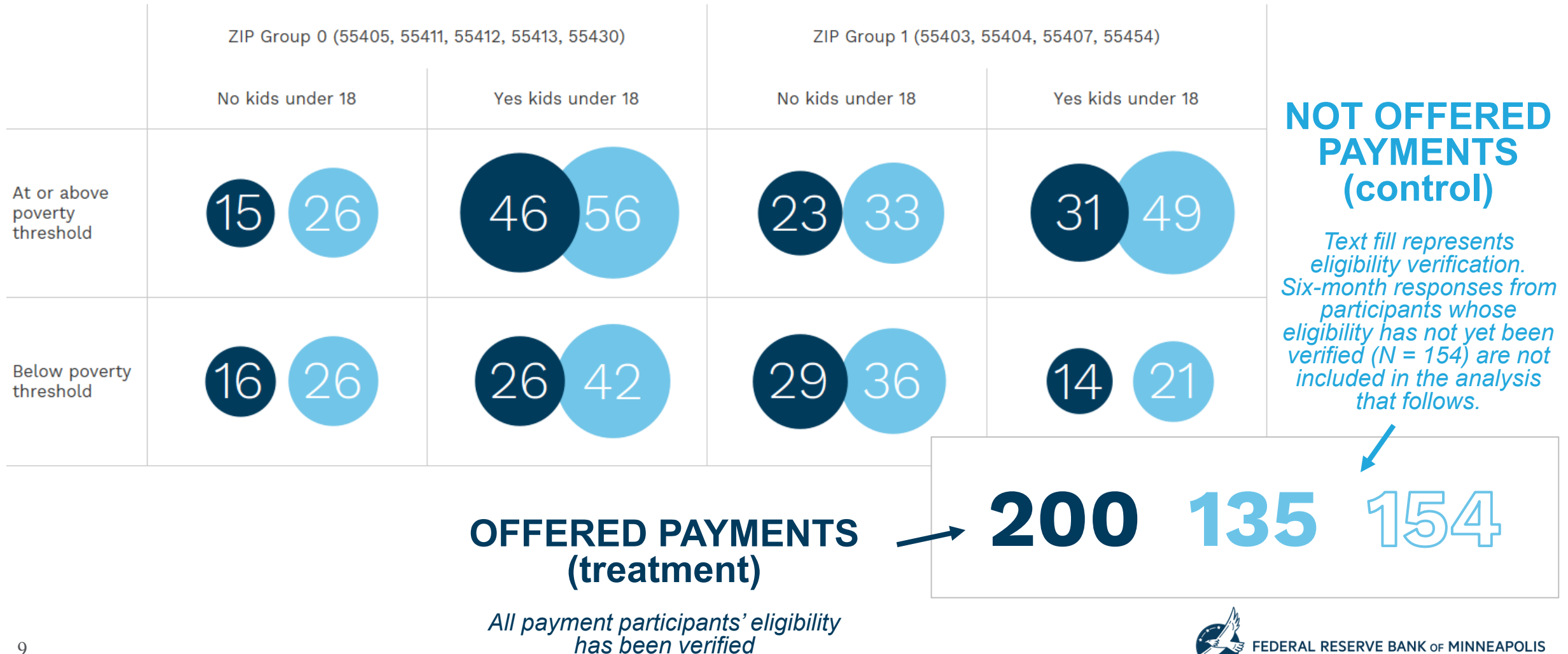


Counts (as of May 2023) reflect a duplicate baseline survey submission discovered during eligibility verification.



PARTICIPANT GROUPS

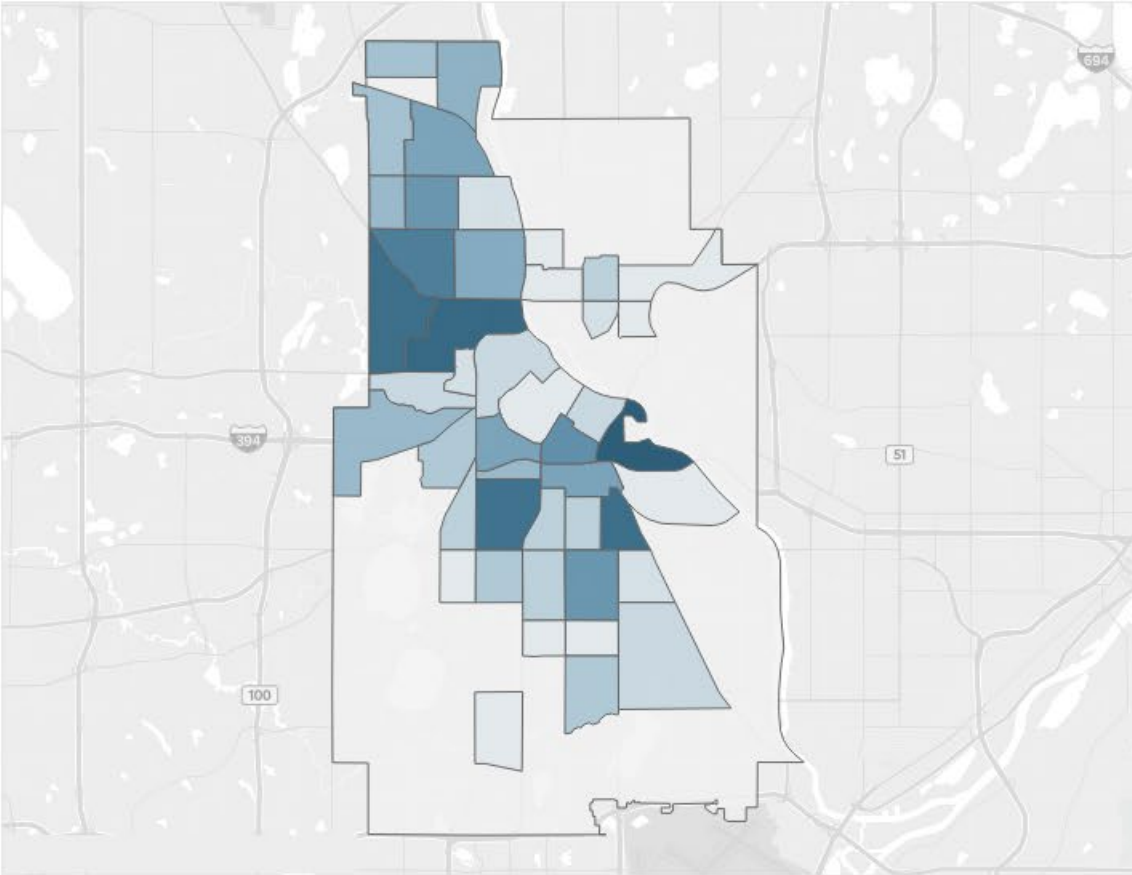
Assignment to **payment** and **survey** groups used a stratified design to protect against random imbalance and to improve statistical efficiency



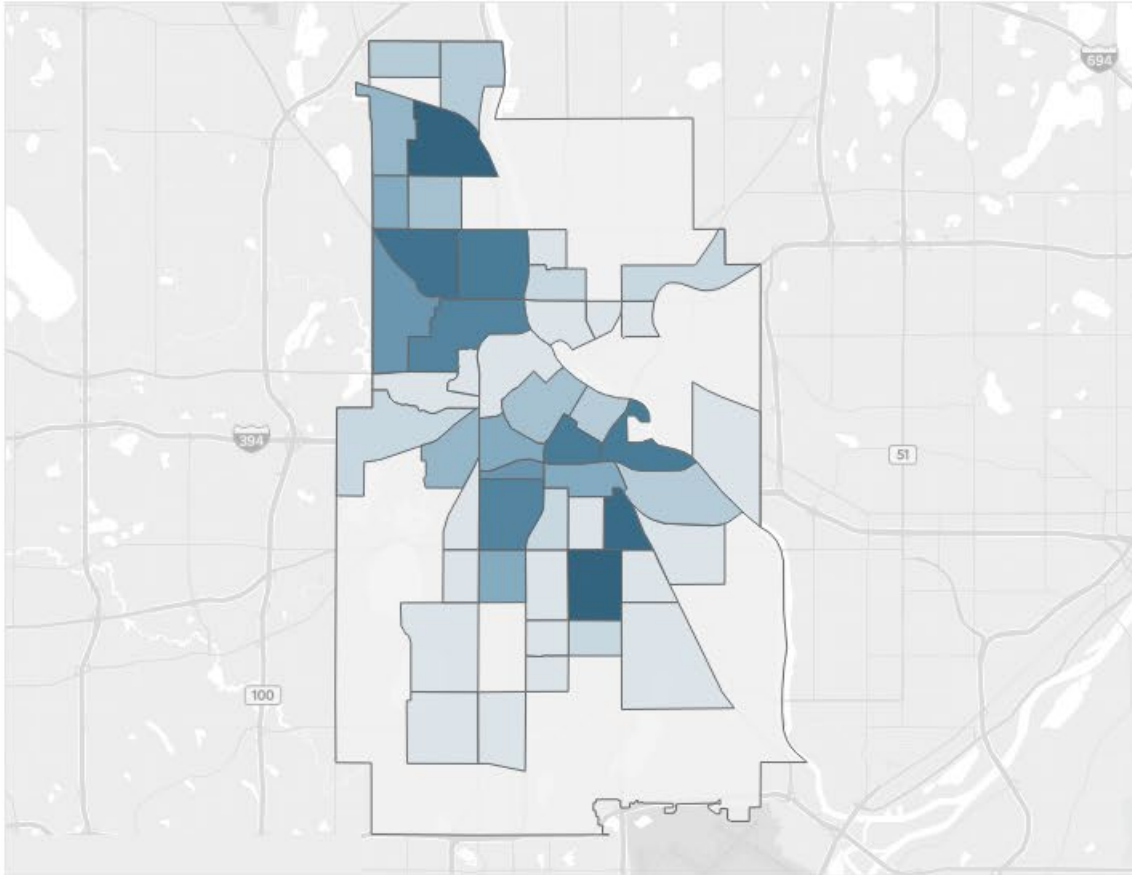


BASELINE RESPONDENTS' NEIGHBORHOODS

Participants assigned to **survey** group



Participants assigned to **payment** group



Shading shows share of group reporting living in each neighborhood on the baseline survey. Counts do not reflect later eligibility verification.

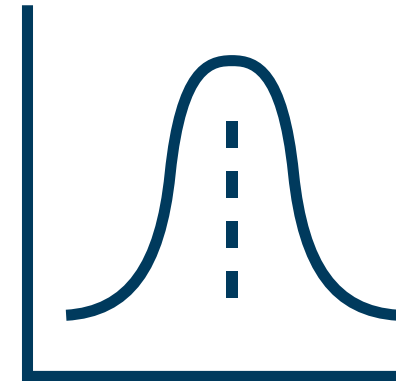


PLAN FOR EVALUATION

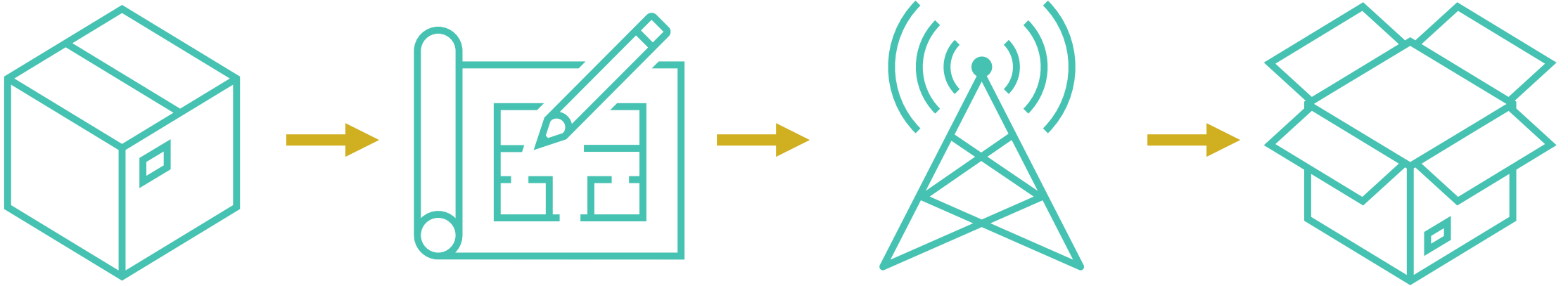


CHALLENGES FOR THE GBI EVALUATION

- **Survey attrition: many survey group households left the study**
 - Six-month response rates: treatment (84%) vs. control (42%)
 - Payment and survey *respondents* differed at baseline
 - Comparing payment/survey respondents may not reflect the effect of GBI
 - Our solutions are to compare:
 - Respondents with similar age, education, and baseline income
 - Respondents with similar baseline outcome values
 - The *change* in outcomes between baseline and follow-up
- **Small sample size: funding constraints**
 - We can only draw strong conclusions when treatment effects are much bigger than random fluctuations in outcomes. Small samples created wider fluctuations.
 - May find nothing, even if GBI matters. Impossible to study sub-groups.
 - Our solutions are:
 - Outcome “indexes” (combine several survey items to measure a concept, rather than relying on single items)
 - Stratification (assign GBI within similar participant groups to ensure comparability)
 - False discovery adjustments (protect against mistaking large random fluctuations for treatment effects)



THE PRE-ANALYSIS PLAN



- **Pre-analysis plan specified in detail how analysis would be conducted—before analysis was conducted**
 - Pre-analysis plan registration is essential to the credibility of randomized controlled trials
 - Feedback on this study’s methodological choices provided by four external reviewers
 - Published on American Economic Association and Minneapolis Fed websites
- **What we committed to doing**
 - Use several pre-specified approaches to estimating average effects of GBI on its recipients, and to ensure that “significant” findings are not due to chance



HIGHLIGHTS OF THE PRE-ANALYSIS PLAN

Formal analysis

- Six measures: indices reflecting bundles of related questions
- Fewer measures → Lower chance of false findings
- More stringent adjustments → Lower chance of false findings

1. Labor Supply Index
2. Housing Stability Index
3. Financial Security Index
4. Well-Being Index
5. Food Security *(USDA Food Security Survey Module)*
6. Psychological Wellness *(Kessler 10)*

Units are baseline standard deviations

Exploratory analysis

- Thirteen measures, some bundled and some individual
- Less stringent analytical methods, but affords flexibility to assess particular questions of interest

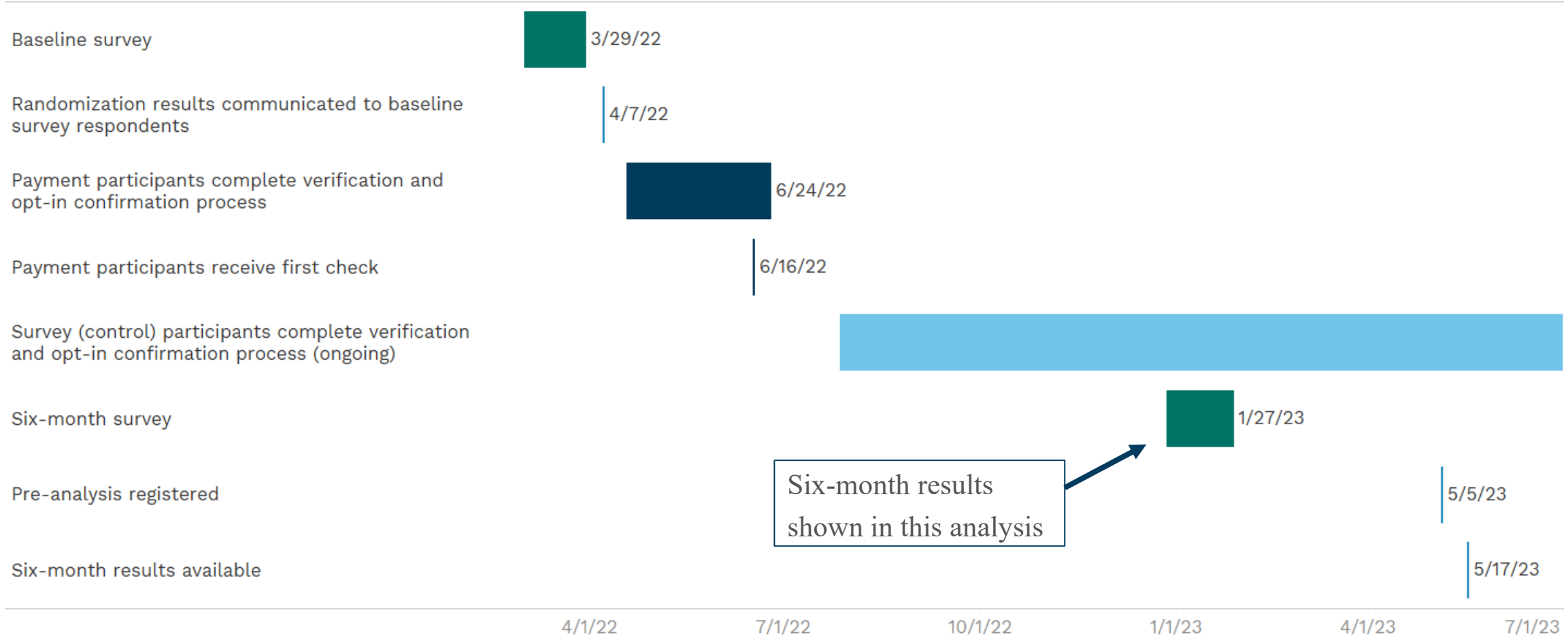
- | | |
|--------------------------------|----------------------------------|
| 1. Current Employment | 8. School/Training Attendance |
| 2. Works Multiple Jobs | 9. Housing Quantity Index |
| 3. “The \$400 Question” | 10. Use of Low-Cost Credit Index |
| 4. Hourly Wage | 11. Healthcare Access Index |
| 5. Financial Support to Others | 12. Healthcare Utilization Index |
| 6. Housing Stability Screener | 13. Relative Household Income |
| 7. Transportation Access | <i>(annual only)</i> |

Units vary by outcome measure





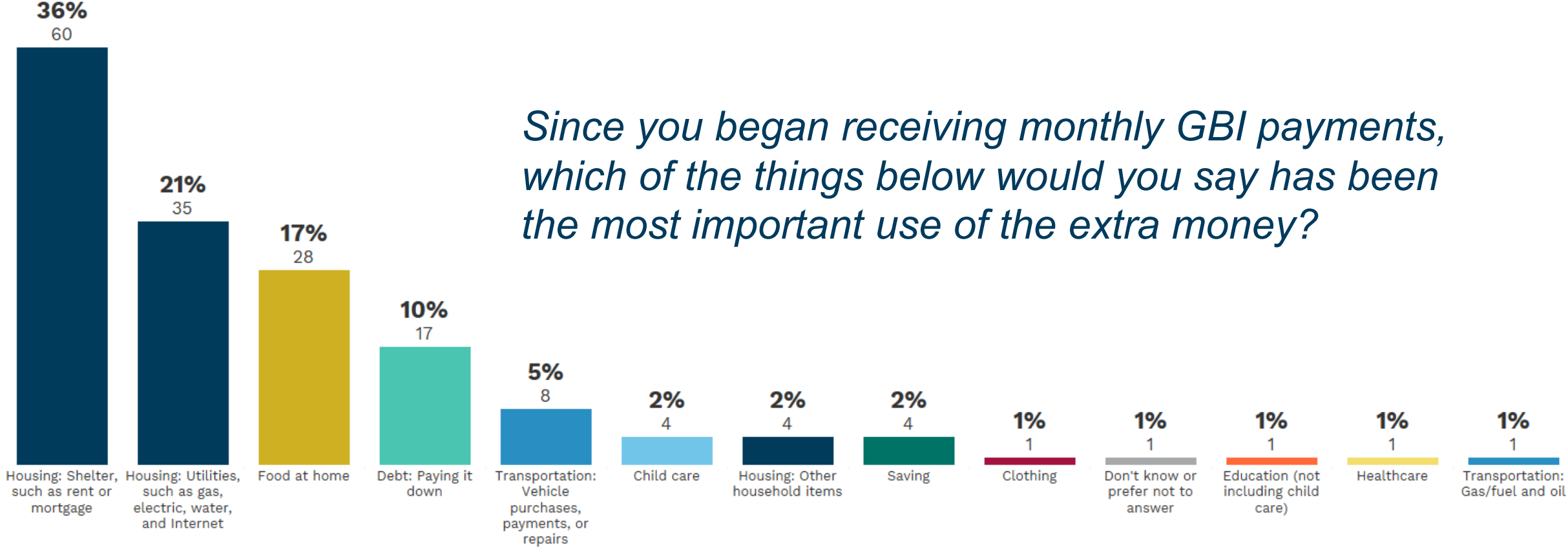
EVALUATION TIMELINE TO PRESENT





RESULTS FROM SIX-MONTH SURVEY

SIX-MONTH RESULTS

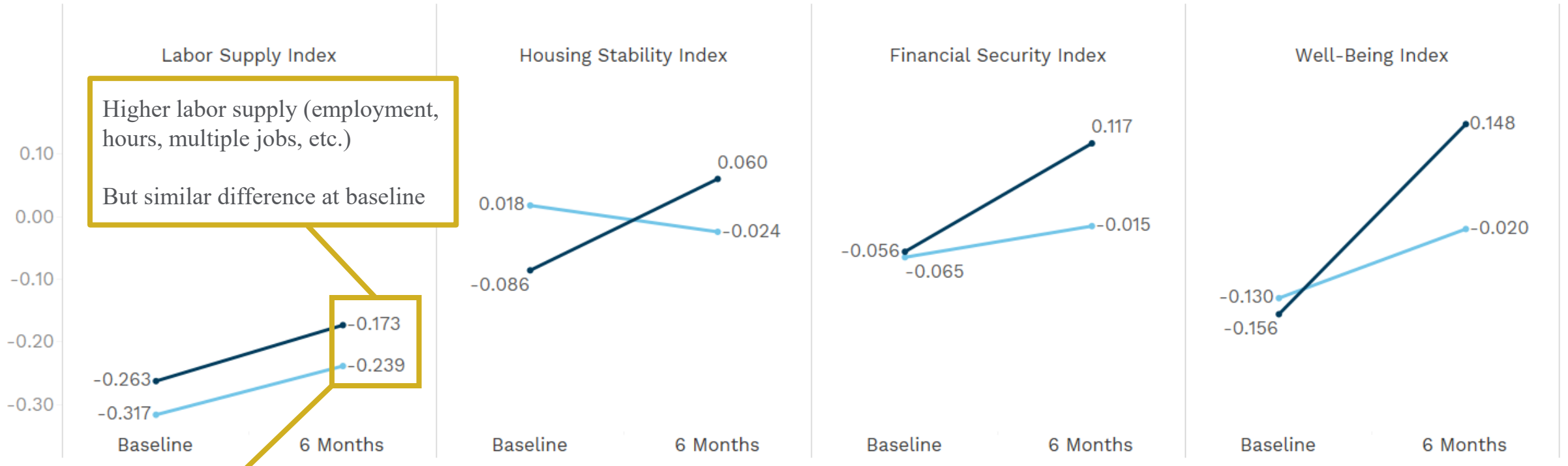


SIX-MONTH RESULTS

Formal outcomes (preliminarily tested): Index measures

Includes participants who both responded to the six-month survey and who had been verified as study-eligible at that time; future results may show small changes

■ Payment group
■ Survey group



Higher labor supply (employment, hours, multiple jobs, etc.)
But similar difference at baseline

-0.173
-0.239

Adjusted estimates show no effect.
Small *and* insignificant differences.

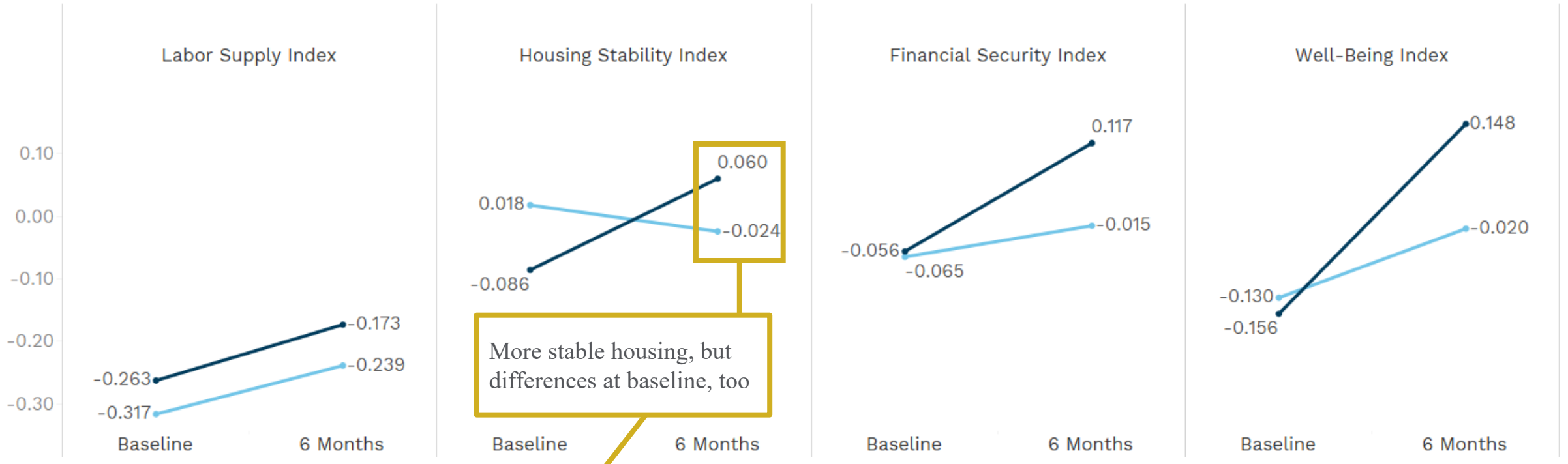
Smaller than Stockton's one-year findings

SIX-MONTH RESULTS

Formal outcomes (preliminarily tested): Index measures

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More stable housing, but differences at baseline, too

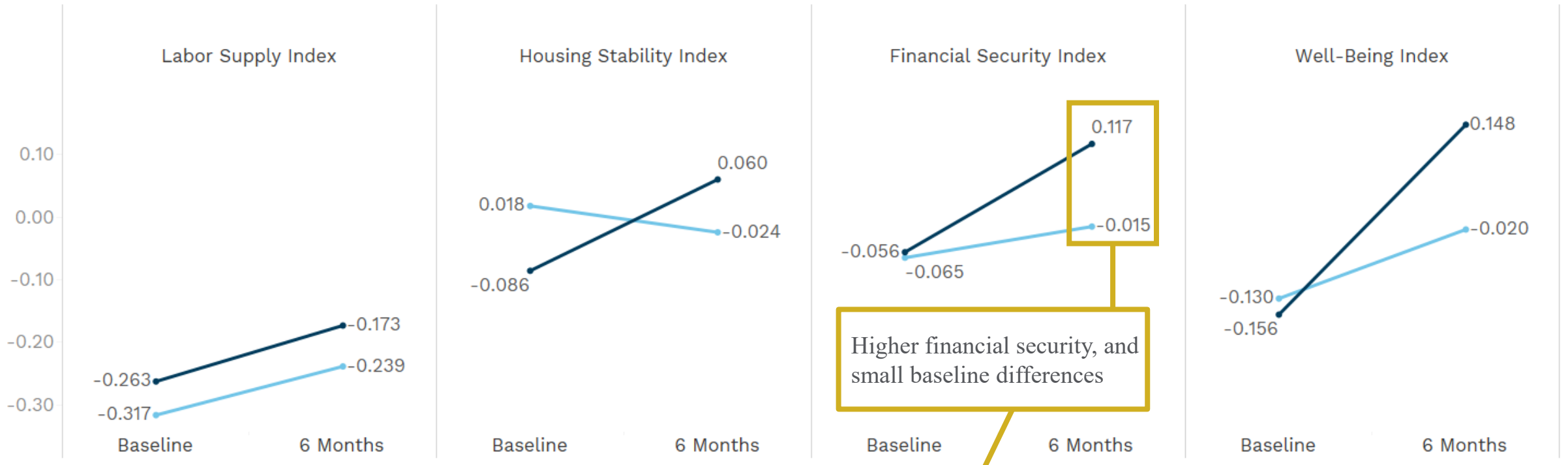
Adjusted estimates are mixed and depend on our methods.
GBI is associated with reports of more stable housing, but we cannot (currently) conclude this is due to GBI.

SIX-MONTH RESULTS

Formal outcomes (preliminarily tested): Index measures

Includes participants who both responded to the six-month survey and who had been verified as study-eligible at that time; future results may show small changes

- Payment group
- Survey group



Adjusted estimates are strong, precise, and do not depend on methods

SIX-MONTH RESULTS

Formal outcomes (preliminarily tested): Index measures

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Improved “well-being,” small baseline differences, but noisier data

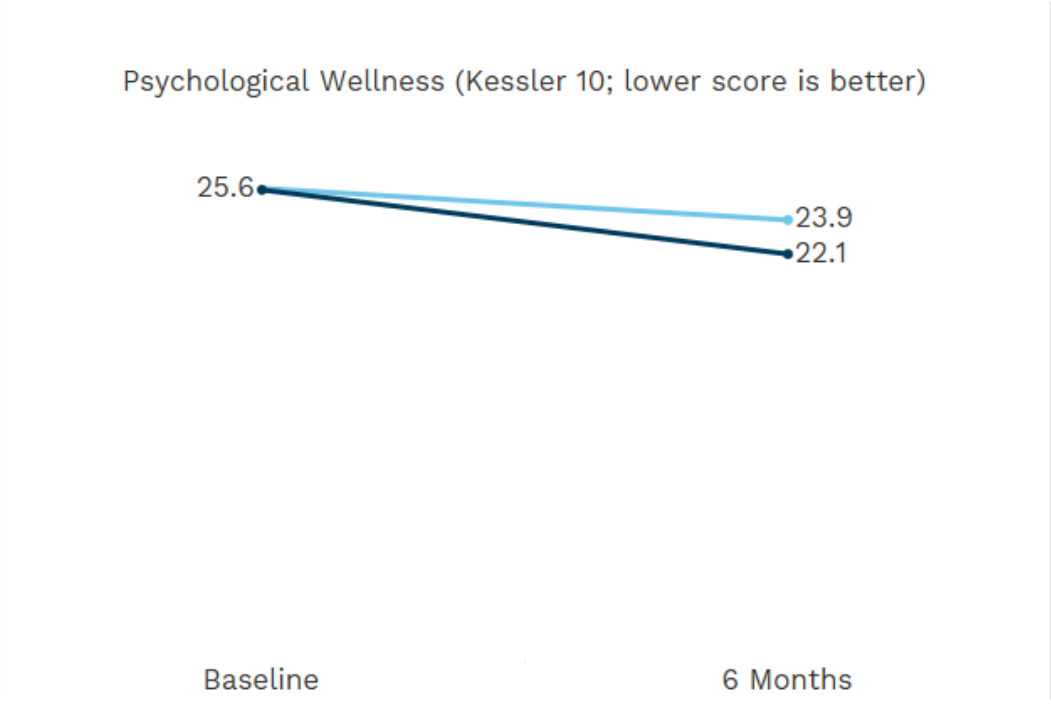
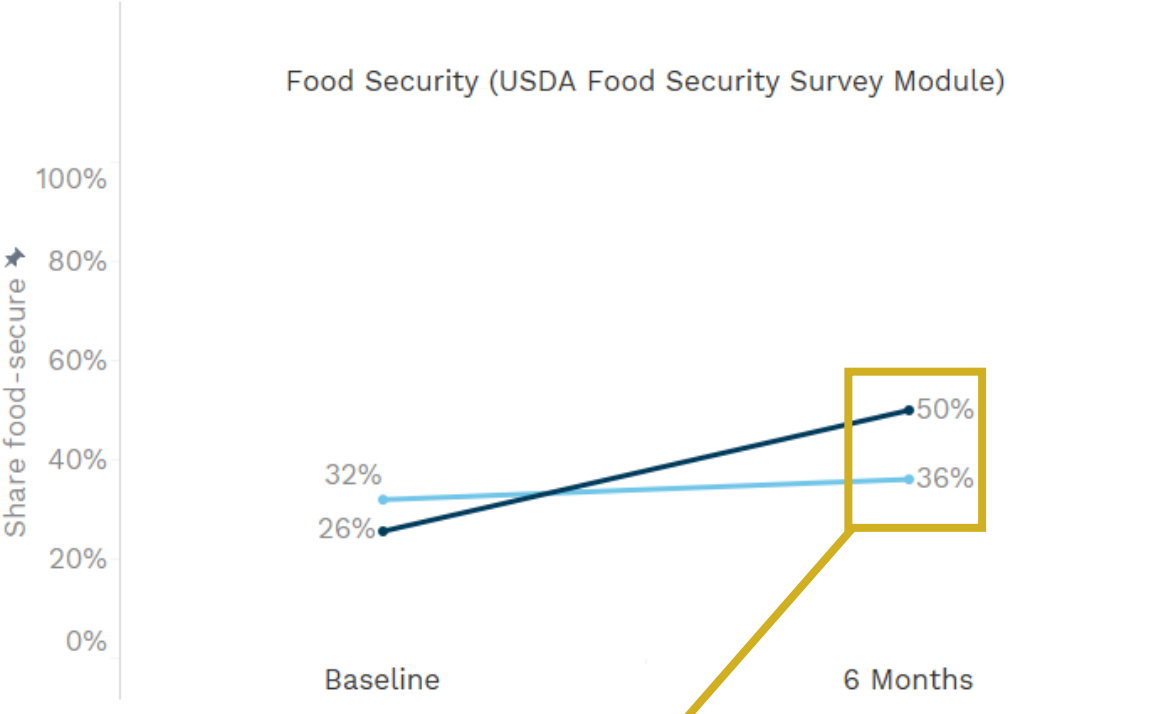
Adjusted estimates are large, but insignificant.
GBI is associated with better reported well-being, but we cannot separate this from random fluctuations in reporting.

SIX-MONTH RESULTS

Formal outcomes (preliminarily tested): Other measures

Includes participants who both responded to the six-month survey and who had been verified as study-eligible at that time; future results may show small changes

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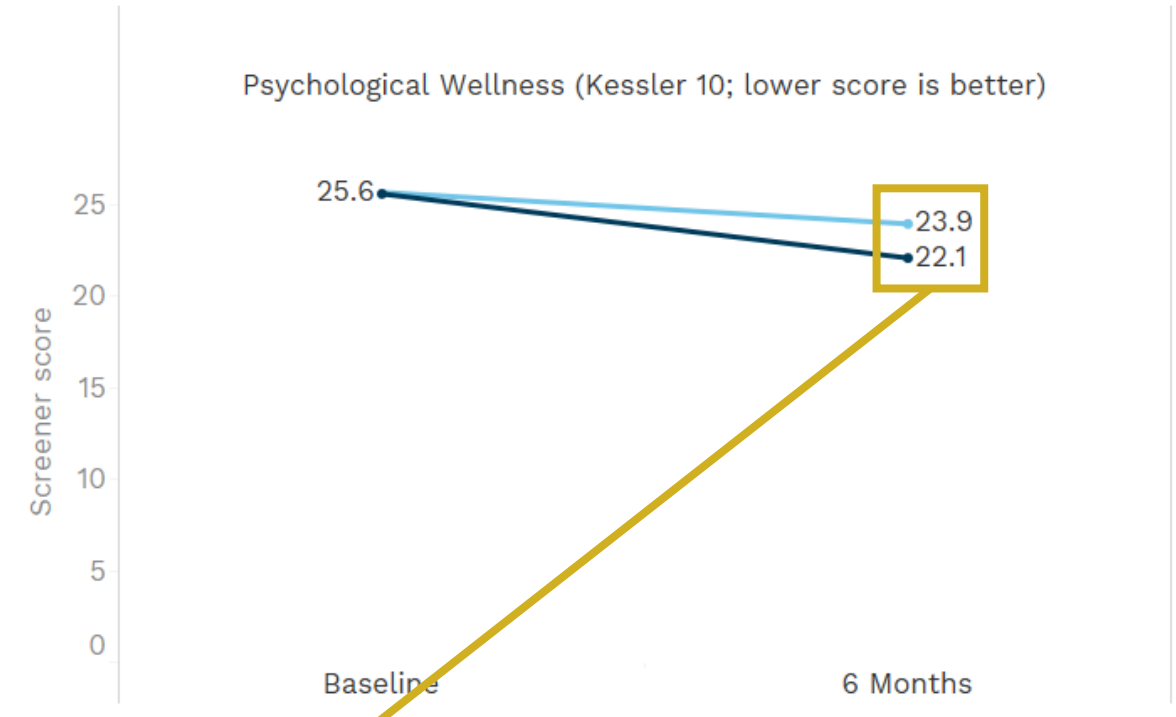
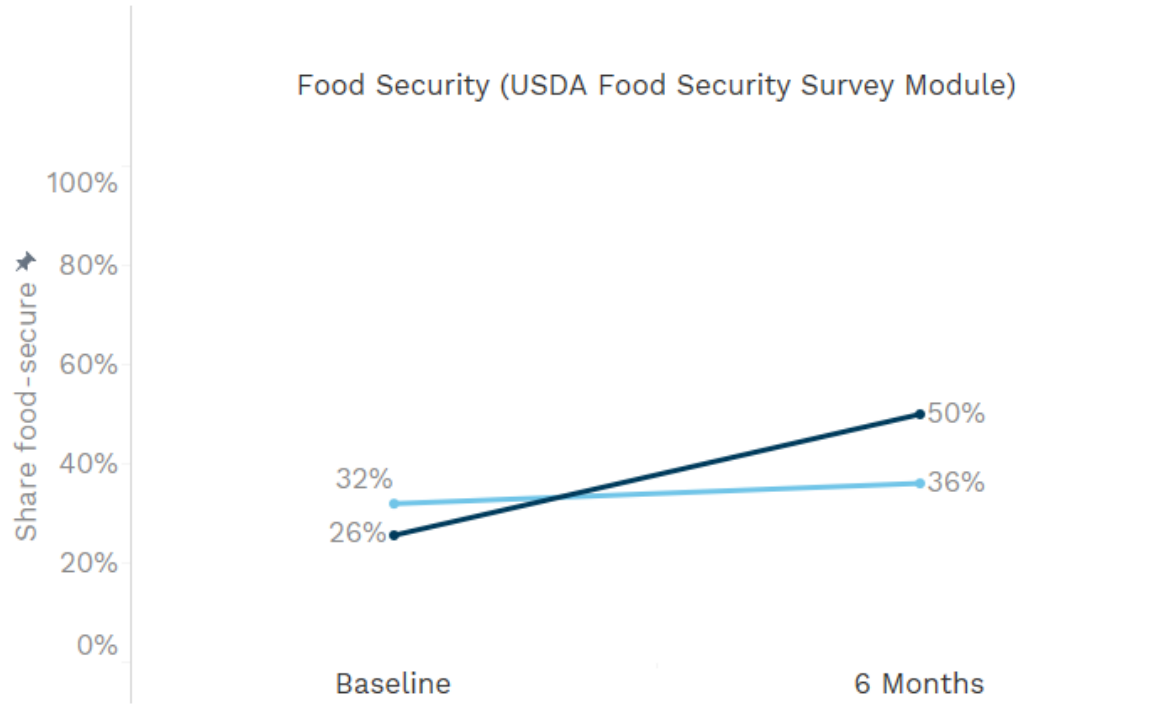
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SIX-MONTH RESULTS

Formal outcomes (preliminarily tested): Other measures

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No significant effects at six months.
Payments are associated with less psychological distress, but we cannot conclude that GBI is the cause.

Estimates are about half of what Stockton found at one year



SUMMARY OF SIX-MONTH EXPLORATORY RESULTS

1. Very little to conclude (statistically) because these measures are noisier
2. Bigger changes in people's **assessment** of their own life than in **choices** they make:
 - “**Would you** be able to cover a \$400 emergency expense?”
 - Estimates are positive, but not statistically significant
 - “**Do you** share financial resources with anyone outside your household?”
 - Estimates are also positive—but a tenth as large, and also not statistically significant



SUMMARY OF SIX-MONTH EXPLORATORY RESULTS

1. Very little to conclude (statistically) because these measures are noisier
2. Bigger changes in people's **assessment** of their own life than in **choices** they make:
 - “Have you gone without [healthcare services] **because of financial constraints**?”
 - Some estimates are large and “marginally significant”
 - “Have you **used** [healthcare services]?”
 - Estimates are much smaller and not significant



SUMMARY OF SIX-MONTH EXPLORATORY RESULTS

1. Very little to conclude (statistically) because these measures are noisier
2. Bigger changes in people's **assessment** of their own life than in **choices** they make:
 - **Behaviors** may take time to change, however:
 - Safe credit use (avoiding costly ways to access credit and capital, such as payday loans)
 - Housing “quantity” (size or cost of housing, or making planned moves)
 - Attending school or training programs (hard to study because we didn't target younger adults)





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PLAN FOR ONGOING EVALUATION

TIMELINE FOR REMAINDER OF GBI EVALUATION

- **Pre-analysis plan governs the next steps**
 - Results from 12-month survey expected in September 2023
 - Results from 18-month survey expected in March 2024
 - Results from 24-month survey expected in September 2024
 - Will administer a 36-month follow-up survey, if possible
- **Effects will likely change over time:**
 - Changes in labor market conditions
 - Changes in other programs and policies
 - Lagged effects of prior payments
 - Cumulative payment may be important, i.e., effects build over time
 - Families take time to respond to earlier payments



ANTICIPATED DELIVERABLES

- **Room for adjustment in exploratory analysis**
 - Core analysis fully pre-specified in evaluation plan
 - But the plan allows exploratory analysis that is labeled as such
 - Will consult with the City to learn about any evolving evaluation questions
- **Anticipated deliverables**
 - Periodic presentation and written materials delivered to the City
 - Survey instruments and pre-analysis plan posted on Minneapolis Fed website
 - Article(s) posted on Minneapolis Fed website
 - Eventual submission to academic journal



