

Evaluation of the Bridges to Success Program

Pre-Analysis Plan

1. Introduction

More than 43 million people in the United States live in poverty and the incidence of poverty is particularly pervasive in the city of Rochester, NY. The Rochester-Monroe Anti-Poverty Initiative (RMAPI), in partnership with the New York Governor's State Anti-Poverty Task Force, is piloting an adult mentor/navigator program directed towards low-income individuals in the community. The program addresses issues identified as pervasive barriers to success for this population: a knowledge gap about available services and how to navigate them, and the need for coordinated services. This pilot program, Bridges to Success (BTOS) will examine whether providing a professional mentor/navigator program in a targeted area of concentrated poverty can increase economic mobility for program participants resulting in improved self-sufficiency.

The Wilson Sheehan Lab for Economic Opportunities (LEO) is partnering with RMAPI to evaluate the impact of the BTOS initiative through a 300-person randomized evaluation of the pilot program. Potential participants are recruited from specific high-poverty neighborhoods and invited to complete an intake form. Those that consent to be part of the study and complete an intake form are either randomized into the BTOS treatment group or the comparison sample which receives referrals to other pre-existing community services. Given the goals of the program, outcomes will focus on measures of economic stability, including labor market, housing, and financial outcomes. Results from this study will inform policy decisions to scale-up and expand the program in the city of Rochester, and will be disseminated to policy makers and providers in other regions to inform the design or replication of future anti-poverty initiatives.

2. Key Data Sources

a. Surveys

Our primary source of data will be surveys administered to clients at baseline as well as 12- and 24-months after study enrollment. The survey collects detailed information about participants' housing, childcare arrangements, employment, income, etc., which will allow us to measure a comprehensive set of economic and social outcomes. The different sections of the survey correlate loosely with the different "bridges" (such as employment, housing, or networks) around which mentors and clients devise a service plan and goals during the program. Success in each of these "bridges" areas is considered essential for building self-sufficiency and mentors have the flexibility to tailor each client's experience depending upon the client's goals and where that client was on each bridge at the start of the program. For example, a client with stable employment may primarily be interested in finding a safer neighborhood in which to live that is closer to their employer, so the primary focus of their activities is finding a better housing situation. By contrast, another client may be unemployed at study enrollment and may choose to focus initially on the employment bridge.

Prospective clients participated in an in-person interview with an intake staff member. During the interview, intake staff walked interested clients through the informed consent process. Clients interested in participating were asked to take a baseline survey on a tablet. We programmed the survey using the SurveyCTO tool,

which allows for electronic completion and submission of survey forms. All 300 study participants completed a baseline survey between January 2017 and April 2018.

The 12- and 24-month follow-up surveys are conducted as in-person interviews. Given their extensive experience conducting field interviews for similar studies, we have sub-contracted with the University of Wisconsin Survey Center to administer the 12- and 24- month follow-up surveys. Follow-up surveys mimic the baseline survey, with a few additions, including a section on cognitive skills. UWSC began fielding 12-month follow-up surveys in May of 2018. Because enrollment took place on a rolling basis, survey cases are fielded in batches so that participants complete interviews close to 12-months after their initial interview. As of November 2018, our response rate for the follow-up surveys was over 80%; we expect this response rate to hold as UWSC begins to field the final group of 12-month follow-up surveys in early 2019. Based on our previous experience working with UWSC on similar evaluations, we expect a similar response rate on the 24-month surveys as well. (Note: this pre-analysis plan was written while the 12 month follow-up survey was in the field but before the principal investigators observed any data from the follow-up.)

b. Demographic Enrollment Data from Cap60 Database

Certain enrollment, randomization and demographic information will be collected from the BTOS client database, Cap60. All study participants, including the control group, are entered into the Cap60 database upon enrollment. After a client profile is created and the client consents to participate in the study by filling out an intake survey and signing the consent form, randomization takes place and is recorded in Cap60 according to an algorithm designed by the Cap60 engineers and LEO research team. The research team will pull information on client assignment directly from Cap60.

BTOS also collects certain demographic information about potential clients and their families as part of the enrollment process, per programmatic and agency mandates. To avoid duplicating data collection efforts and unnecessarily lengthening the enrollment and survey process, we chose to leave certain demographic fields off the survey in favor of collecting this information from the BTOS' client database, Cap60.

c. Office of Temporary and Disability Assistance (OTDA) Records

To supplement our survey results, we have signed a Data Sharing Agreement with the New York State Office of Temporary and Disability Assistance (OTDA) to link participant data to administrative records. OTDA will link participant data with the monthly dollar amount of cash assistance and/or SNAP assistance for the 24 months following study enrollment. We will use these records to measure the impact of the program on enrollment in public assistance programs. We hypothesize that enrollment in these programs will decline as participants achieve self-sufficiency.

d. Department of Labor Records

We are also in the process of signing a Data Sharing Agreement to access unemployment insurance and wage reporting records from the State of New York Department of Labor. We have requested initial and continued claims data, as well as beneficiary data (including weeks compensated, compensation amounts, and compensation dates) and wage data. We have requested this data for the ten years following enrollment into the study.

e. Testing for selective attrition

There is always a risk of selective attrition when conducting follow-up surveys. We will test for selective attrition by (1) comparing the attrition rates for the treatment and control groups and (2) performing a balance test regressing a treatment indicator on a vector of baseline characteristics among those who responded to follow-up. If there is selective attrition, we will take one of two approaches. In situations with

multiple data sources (e.g. earnings from both survey and administrative records), if only one source has differential attrition, we will use the source without differential attrition. If all available sources have differential attrition, we will compute bounds as in Lee (2009).¹

3. Hypotheses - Main Analysis

Study participants were given a baseline survey that asks respondents about their current state along seven domains: employment, education, finances, housing, health, family stability, and networks of support. This data is also collected frequently by mentors and is used to generate a “bridge” tool that allows mentors to track the progress of the clients in the treatment group. At baseline, all study participants indicated which of the seven bridge components they wanted to work on and which component was their highest priority for improvement. Although all seven components were listed by at least 6 percent of respondents as their highest priority area, the two areas with the highest priority were housing (26%) and employment (25%). The information from the baseline suggests that we need to focus on economic self-sufficiency and housing as key outcomes. In sections 1 and 2 below, we outline how we measure these critical outcomes.

More importantly, given the diverse goals of study participants, we need a way of aggregating success across these domains in order to enhance the ability to accurately measure success in the program. The diversity of goals may greatly reduce power in one particular area. Consider earnings as an outcome. One quarter of the sample is interested in earnings as a key outcome, and 60 percent list higher earnings as a goal. Therefore, we should not expect much change in earnings for 40 percent of the treatment group. Those that are mostly interested in improving health (7%) or housing (26%) or education (14%) may show no change in this outcome in the short term as they work on other areas. Likewise, someone focusing on increasing education or their job prospects may delay any change in housing until their primary goals have been achieved.

Therefore, to capture possible improvements across multiple domains in the bridge at once, we need to construct an omnibus outcome measure that identifies whether study participants improved along their primary area of interest. We do that in section C below.

A. Final Outcome: Economic Self-Sufficiency

- a. Measure: Dummy for whether earnings increased between baseline and follow-up. Variable = 1 if Follow-up earnings > baseline earnings
 - i. Measuring baseline earnings
 1. Continuous, in dollars – 0 if not working Survey: constructed using income over the last month (*earned_lastmonth* in baseline)*3
 2. DOL: mean of quarterly earnings in the 4 quarters prior to enrollment
 3. If both available, take average of survey and DOL. If one is not available, use only the one that is available.
 - ii. Measuring earnings at follow-up
 1. Continuous, in dollars – 0 if not working. Survey: constructed using income over the last month (*lastmonth_inc* in 24 month follow-up)*3
 2. DOL: where X is the median number of quarters after enrollment during which the follow-up surveys were completed, we will take the mean of quarterly earnings of the three quarters centered on X quarters post-enrollment

¹ Lee, D.S., 2009. Training, wages, and sample selection: Estimating sharp bounds on treatment effects. The Review of Economic Studies, 76(3), pp.1071-1102.

3. E.g. If the median time between enrollment and follow-up is 26 months, we will take the mean of quarterly earnings for the 8th, 9th, and 10th quarters after enrollment.
 - iii. If both available, take average of survey and DOL. If one is not available, use only the one that is available.
 1. Measuring earnings at 12 months
 2. Continuous, in dollars – 0 if not working
 3. Survey: constructed using income over the last month (*lastmonth_inc* in 12 month follow-up)*3
 4. DOL: quarterly earnings in the 4th quarter after the enrollment quarter
 5. If both available, take average of survey and DOL. If one is not available, use only the one that is available.
 - b. Hypothesis: expect increase
- B. Final Outcome: Housing Quality
- a. Measure
 - i. Survey subjective rating question: “How would you rate your current home as a place to live? Would you say it is excellent, very good, good, fair, or poor?” (*housing_sit* in follow-up)
 - ii. Outcome will be an indicator of being above the control group median value for this subjective rating.
 - b. Hypothesis: expect increase
- C. Intermediate Outcome: Progress on “Bridge” Tool
- a. The outcome is a dummy indicating better than average progress in the area indicated by the person as their primary goal at baseline.
 - b. Measure 1: based on subjective rating
 - i. Survey: ordinal rating of subjective progress (*lastyr_goal*) on primary goal at baseline (*goals_pickone*)
 - ii. Outcome is a dummy for having a rating better than median of the control group
 - c. Measure 2: based on direct measurements in chosen area
 - i. Survey: identifies primary goal at baseline (*goals_pickone*)
 - ii. If primary goal is missing for a person, the outcome is a weighted average of all domains, weighting by the full-sample proportions of the primary goal.
 - iii. Use outcomes from the area matching their goal (see below)
 - d. Measurement for each bridge component
 - i. **Bridge: Employment**
 1. Measure: Respondent Monthly Earnings Increased over Baseline
 2. Earnings
 - a. Average of Survey and Department of Labor, if both available
 - b. Survey: Constructed using monthly income as above
 - c. DOL: constructed using quarterly earnings as above
 3. Outcome is dummy for follow-up earnings > baseline earnings
 - ii. **Bridge: Education**
 1. Measure: Education level and level enrolled
 2. Education Level: Bachelor’s, Associate’s/Some College/Professional Certificate, Job Training Certificate beyond HS, HS/GED, and less than HS/GED (*school_level* in baseline and follow-up)

3. Enrolled in school or vocational program (*enrolled* in baseline and follow-up)
 4. Outcome is dummy for increase in education level since baseline OR enrolled in school at follow-up
- iii. **Bridge: Financial Management**
1. Measure: Net Assets
 2. Savings
 - a. Sum of checking accounts, savings accounts, and money market accounts (*acct_money_amt* and *acctcats* in baseline and *acct_money* and *acctcats* in follow-up)
 3. Debt - subtract from savings to calculate net assets
 - a. Sum of credit card debt, student loan debt, medical or legal debt, car debt, and other loans (*debt_amt*, *debtcats*, *eduloan_amt*, *debtcats_eduloan*, *medlegal_amt*, *debtcats_medlegal*, *veh_loan_amt*, *cardebts_cats*, *loans_amt*, *other_debtcats* in baseline and follow-up)
 4. Outcome is dummy for increase in net assets since baseline
- iv. **Bridge: Health**
1. Measure: Self-rating of Health
 2. Subjective survey question: “In general, would you say that your health is poor, fair, good, very good, or excellent?” (*health* in baseline and follow-up)
 3. Index: 1 = poor, 5 = excellent
 4. Outcome is dummy for increase in self-rating of health since baseline
- v. **Bridge: Housing**
1. Measure: Respondent rating of housing quality
 2. Survey subjective rating question: “How would you rate your current home as a place to live? Would you say it is excellent, very good, good, fair, or poor?” (*housing_sit* in follow-up)
 3. Index: 1 = poor, 5 = excellent
 4. Outcome will be an indicator of being above the control group median value for this subjective rating
- vi. **Bridge: Family Stability/Care**
1. Measure: Children in School or Daycare
 2. Survey – Combination of number of children in household, School enrollment for children in household, and answers to childcare questions.
 3. Outcome is dummy equal to 1 if (1) No children in household; (2) All children enrolled in School; (3) Household children enrolled in childcare.
- vii. **Bridge: Networks of Support**
1. Calculate z-score of each variable:
 - a. # orgs/clubs you belong to (*orgs_amt* in baseline and follow-up)
 - b. # people you could borrow \$ from (*borrow_num* in baseline, *borrow_amt* in follow-up)
 - c. # close friends (*closefri_num* in baseline, *closefri* in follow-up)
 - d. # close relatives (*closerel_num* in baseline, *close_rel* in follow-up)
 - e. do you belong to a church (*yesno_relig* in baseline and follow-up)
 - f. in last 2 weeks # neighbors spoken to (*neigh_num* in baseline and follow-up)
 - g. in last 2 weeks # of church members spoken to (*yes_relig_num* in baseline, *yes_relig* in follow-up)
 2. Add z-scores to create index

3. Outcome is whether index increased between baseline and follow-up

4. Hypotheses - Exploratory

- A. Separate components of the Bridge areas
 - a. We will show results for each bridge area separately and explore additional outcomes within bridge areas that show significant changes
 - b. See very end of document
- B. Mechanisms
 - a. Executive control, goal-setting
 - i. Bridges to Success focuses on setting, pursuing, and reaching goals. One important question is whether participation in Bridges builds the cognitive skills that support pursuit of goals. Thus the follow-up survey will include a cognitive test known as the "dots mixed cognitive task." The goal of this task is to measure the respondent's ability to resist automatic responses to stimuli. The respondent sees a blank screen and waits for a "dot" to appear. The dot is either green or red. The respondent is told to press a key on the right when it is green and on the left when it is red. This task would be straightforward except that the dot changes location. Sometimes it appears on the right and sometimes on the left. It turns out that most people have difficulty pressing a key on the right when the green dot appears on the left side of the screen because the color and location cues conflict. A well-established measure of executive control is how much slower and less accurate people are in responding to these "non-congruent" trials versus congruent trials where the cues match (e.g. green dot on the right). An example of this task can be found here: https://www.psychtoolkit.org/experiment-library/touch_simon.html. Instructions that will be given to clients during this portion of the test are included in the Attachments section of this protocol.
 - ii. In follow-up: Response time (*cogt[test number]_time*) and error rates (*cogt[testnumber]_x*)
 - b. Hope Index: Pathways sub-score (sum of *hope1*, *hope3*, *hope5* in baseline and follow-up), Agency sub-score (*hope2*, *hope4*, *hope6* in baseline and follow-up), total Hope score is sum of these sub-scores
 - c. Connections to other services - BTOS proposed to help clients navigate a complicated system of social services to better access community resources. At follow-up respondents were asked a series of questions related to which goal areas they have received help on from programs other than BTOS. They were also asked about which agencies provided help.
 - i. Participation in intensive case management program
 1. Participation with any in past year (*Org_Inv*)
 2. Frequency of contact (max of *Org_Freq*)
 3. Time since last had contact with one organization (minimum of *Org_con*)
 4. Type of contact (*Org_contype*)
 - ii. Non-government assistance in past year
 1. For housing (*hous_assist*)
 2. For family (*fam_assist*)
 3. For physical health (*phys_assist*)
 4. For mental health (*mental_assist*)
 5. For education (*ed_assist*)
 6. For employment (*emp_assist*)
 7. For finances (*fin_assist*)

C. Consumption

- a. Monthly food costs – Expect to increase
 - i. Survey – Food costs
 1. Sum of monthly expenses on groceries, takeout, and eating out (constructed using *food_amt*, *food_amt_freq*, *avg_eatout_amt*, *eatout_amt_freq* in baseline, *food_amnt_a*, *food_amnt_u*, *avg_eatout_a*, *avg_eatout_u* in follow-up)
 - ii. Continuous, in dollars
- b. Food pantry use – Expect decrease
 - i. Survey – Last month, did you or anyone in your household receive food from food pantry? (*food_pantry* in baseline and follow-up)
 - ii. Dummy: 1=Yes; 0 = No
- c. Total consumption without rent – Expect to increase
 - i. Survey – Monthly expenses on the following items
 1. Food costs (constructed using *food_amt*, *food_amt_freq*, *avg_eatout_amt*, *eatout_amt_freq* in baseline, *food_amnt_a*, *food_amnt_u*, *avg_eatout_a*, *avg_eatout_u* in follow-up)
 2. Cellphone and TV costs (*teleserv_amt* in baseline, *teleserv* in follow-up)
 3. Car costs: sum of monthly lease payments and gas expenses (constructed using *lease_amt*, *cardebts_lease* in baseline and follow-up) and monthly gas expenditures (*yes_gas_amt* in baseline, *gas_amt* in follow-up)
 4. Utilities costs (*heat_amt* in baseline, *heatamt* in follow-up)
 5. Childcare costs (constructed using *childcare_amt*, *pay_frequency_childcare* in baseline and follow-up)
 6. Paid to support others (constructed using *supmoney_amt*, *wmy* in baseline, *supmoney_a*, *supmoney_u* in follow-up)
 7. Other costs: transportation (*othertrans_amt* in baseline and follow-up)
 - ii. Continuous – Sum of consumption components
- d. Total consumption with rent – Expect increase
 - i. Survey – Monthly expenses on the above items plus:
 1. Rent (*rent_amt* in baseline, *rentamt* in follow-up)
 2. Mortgage (*mort_month_amt* in baseline and follow-up)
 - ii. Continuous – Sum of consumption components

5. Sub-Group Analysis

We are interested in determining whether the intervention is relatively more impactful for certain populations relative to others. This is particularly relevant because of the resource-intensive nature of the intervention; given its expense it may be important to target the intervention towards the population most likely to benefit from it.

A. Sub-Group Analysis 1: Race/Ethnicity

- a. Black = Self-identified as black; Other = everyone else

B. Sub-Group Analysis 2: Gender – Males vs. Females

- a. Female = Self-identified as female; Male = Self-identified as male

C. Sub-Group Analysis 3: Single Moms

- a. How we define single moms:
 - i. Female
 - ii. Child under 18 in household
 - iii. No spouse present in household

D. Sub-Group Analysis 4: Age

- a. Above vs. below the median age at baseline

E. Sub-Group Analysis 5: Predicted outcomes (thirds)

- a. For each outcome, we construct predict the outcome in the control group using a regression of the baseline value of the outcome, baseline earnings, gender, marital status dummies, race dummies, ethnicity dummies, education dummies, month of interview dummies, and months between baseline and follow-up dummies. We then predict the outcome for all observations using observed characteristics and the coefficients from that regression. We finally split the sample into thirds based on that index and test for heterogeneous effects in the three groups. To avoid endogenous stratification we compute these statistics with a repeated split sample procedure as in Abadie, Chingos, and West (2018, RESTAT).

6. Data Analysis

A. Estimates

For continuous outcomes, we will estimate treatment effects by OLS using the following regression:

$$Y_i = \alpha_0 + T_i\beta_0 + X_i\gamma_0 + i$$

Y_i is the outcome. T_i is an intent-to-treat dummy indicating the random assignment of person i . In the case of non-compliance, T_i takes on the value of the original random assignment. X_i is a vector of covariates (see below), and i is an error term. The estimated treatment effect is β_0 .

For dichotomous outcomes, we will estimate a logit equation by maximum likelihood:

$$\log(\Pr[Y_i=1]/\Pr[Y_i=0]) = \alpha_1 + T_i\beta_1 + X_i\gamma_1$$

We will then compute mean marginal effects based on the estimated coefficients.

B. Covariates

We plan to include the following list of covariates in our regressions:

- i. Value of dependent variable at baseline, if available
- ii. Gender – 1= female; 0 otherwise
- iii. Baseline respondent earnings – Continuous, in dollars
- iv. Marital status at baseline – 1= Married; 0 otherwise
- v. Set of mutually exclusive race dummies: Black, White, Other
- vi. Hispanic – 1=Yes; 0=No
- vii. Set of mutually exclusive baseline education dummies:
 - 1. Less than HS/GED
 - 2. HS diploma or GED
 - 3. Some college or certificate
 - 4. Associate's degree or higher
- viii. Set of mutually exclusive dummies for month of baseline interview

- ix. Set of mutually exclusive dummies for months between baseline and follow-up (for survey-based dependent variables only)

C. Standard Errors

We will use simple heteroscedasticity-robust standard errors.

D. Multiple Hypothesis Testing

We have limited our primary outcomes to a causal chain with one outcome per domain, making multiple hypothesis testing less of a concern. Nonetheless, we will report classic p-values. This provides the reader with full information that they can use to make MHT corrections if they desire.

E. Variables with Limited Variation

Questions for which 95% of control group observations have the same value within the relevant sample will be omitted from analysis and will not be included in any indicators or hypothesis tests. Questions with a non-response rate of 90% or higher will be omitted from analysis.

8. Further Planned Exploratory Analysis:

A. Employment

- a. Employed – survey and DOL
 - i. Survey: *working_yesno* in baseline and follow-up
 - ii. Dummy: 1 if yes; 0 if no
- b. Hours worked – survey
 - i. Average weekly hours worked (*hours_worked_week* in baseline, *hours_worked_year* in follow-up)
- c. Wage rate – survey
 - i. Hourly wage, constructed from *pay_amt* and *pay_frequency* in baseline and follow-up
- d. Receives TANF – survey and OTDA
 - i. Survey - Last month, how much money did you receive from TANF? (*tanfamt* in baseline and follow-up)
 - ii. Dummy: 1 if amount is greater than 0, 0 if not
- e. Receives SNAP – survey and OTDA
 - i. Survey - Last month, how much money did you receive from SNAP? (*snapamt* in baseline and follow-up)
 - ii. Dummy: 1 if amount is greater than 0; 0 if not
- f. Amount of TANF – survey and OTDA
 - i. Survey - *tanfamt* in baseline and follow-up
- g. Amount of SNAP – survey and OTDA
 - i. Survey - *snapamt* in baseline and follow-up
- h. Total Income - survey
 - i. Sum of earnings and income from TANF, SNAP and any other income sources

B. Education

- a. Enrolled in school - Expect increase
 - i. Survey - If enrolled, at what level or grade were you enrolled? (*level_enrolled* in baseline and follow-up)
 - ii. Separate dummies for enrolled in HS, enrolled in college, and enrolled in vocational school: 1 if yes; 0 if no. 0 if not enrolled
- b. HS/GED completed - Expect increase
 - i. Survey - What is the highest level of school you have completed? (*school_level* in baseline and follow-up)
 - ii. Dummy: 1 if high school/GED or higher; 0 if no

- c. College completed - Expect increase
 - i. Survey - What is the highest level of school you have completed? (school_level in baseline and follow-up)
 - ii. Dummy: 1 if associate's degree or higher; 0 if not
 - d. Professional certificate completed - Expect increase
 - i. Survey - professional certification or state/industry license (cert_license in baseline and follow-up)
 - ii. Dummy: 1 if yes; 0 if not
- C. Financial management
- a. Savings amount – Expect increase
 - i. Survey – Total amount of savings in bank accounts (constructed using acct_money_amt and acctcats in baseline, acct_money and acctcats in follow-up)
 - ii. Continuous, in dollars – 0 if no account
 - b. Have checking or savings account – Expect increase
 - i. Survey – Has savings accounts (yesno_acct in baseline and follow-up)
 - ii. Dummy: 1 if Yes; 0 if No.
 - c. Have savings = 3 (or 2, or 1) months' expenses – Expect increase
 - i. Survey – Amount in accounts and total monthly consumption
 - 1. Sum of total amount in bank accounts (constructed using acct_money_amt and acctcats in baseline, acct_money and acctcats in follow-up)
 - 2. Monthly consumption calculated as described in 3.b.iii.4. Includes rent
 - ii. Dummy: 1= Savings / 3 > monthly living expenses; 0 otherwise
 - d. Total household monthly income
 - i. Survey - Sum of all income sources including earned income, benefits, child support, and gifts
 - 1. Earned income: household income from past year, divided by 12 (constructed using total_hh_amt and total_income cats in baseline, total_hh_income and total_income cats in follow-up)
 - 2. Benefits: Money received from SNAP, TANF, SSI, SSA, WIC, and unemployment insurance last month (snap_amt, tanf_amt, ssi_amt, ssa_amt, wic_amt, ui_amt in baseline, snapamt, tanfamt, ssiamt, ssaamt, ui_wcamt in follow-up)
 - 3. Child support: Money received in child support last month (childsup_amt in baseline and follow-up)
 - 4. Gifts/other: Amount received in gifts/other income (ff_gifts_amt, other_income_amt in baseline, ff_gifts, other_income in follow-up)
 - ii. Continuous, in dollars
 - e. Used Payday Loans in Last 12 Months - Expect Decrease
 - i. Survey – Used Payday loans (yesno_payday in baseline and follow-up)
 - ii. Dummy: 1 if Yes; 0 if No
 - f. Used Payday Loans More than Once in Last 12 Months – Expect Decrease
 - i. Survey – Used Payday Loans > 1 (times_payday in baseline and follow-up)
 - ii. Dummy: 1 if Yes; 0 if No. 0 if never used a payday loan.
 - g. Rolled Over a Payday Loan – Expect decrease
 - i. Survey – Rolled over a payday loan (rollover in baseline and follow-up)
 - ii. Dummy: 1 if Yes; 0 if No. 0 if never used a payday loan.
 - h. Total Debt – Expect Decrease
 - i. Survey – Sum of credit card debt, student loan debt, medical or legal debt, car debt, and other loans (debt_amt, debtcats, eduloan_amt, debtcats_eduloan, medlegal_amt, debtcats_medlegal, veh_loan_amt, cardebts_cats, loans_amt, other_debtcats in baseline and follow-up)

- ii. Continuous, in dollars – 0 if no debt
- i. Has Credit Card Debt – Expect decrease
 - i. Survey - Do you or anyone in your household have credit card debt? (yesno_debt in baseline and follow-up)
 - ii. Dummy: 1 if Yes; 0 if no. 0 if no credit card.
- j. Amount of Credit Card debt – Expect decrease
 - i. Survey – Amount of credit card debt (constructed using debt_amt and debtcats in baseline and follow-up)
 - ii. Continuous, in dollars. 0 if no debt or no credit card.
- k. Household uses budget to determine spending – expect increase
 - i. Survey – Does your household use a budget to determine spending? (yesno_budg in baseline, budg in follow-up)
 - ii. Dummy: 1=yes; 0=no

D. Health

- a. Chronic Health condition – Expect decrease
 - i. Survey – Do you have a chronic health condition that prevents you from attending work or school? (chronic_help in baseline and follow-up)
 - ii. Dummy: 1= Yes; 0 = No
- b. ER Visits in Last Year (Own Health) – Expect decrease
 - i. Survey – How many times have you gone to the ER over the past 12 months? (num_er_visits in baseline, er_visits in follow-up)
 - ii. Continuous, in # of visits
- c. Number of doctor visits in last year – Not sure if we expect increase/decrease
 - i. Survey – How many times have you seen a doctor in a doctor’s office in the past year? (num_doc_visits in baseline, doc_visits in follow-up)
 - ii. Continuous, in # of visits
- d. Have a usual doctor’s office for health – Expect increase
 - i. Survey – Do you have a usual place you go to for health services? If yes, is it a clinic, doctor’s office, emergency room, after care, or some other place? (health_goto and health_location in baseline, health_goto and health_loc in follow-up)
 - ii. Dummy: 1 if Usual health place is Doctor’s office or Clinic; 0 Otherwise
- e. Saw a doctor in the last year about their own health – Expect increase
 - i. Survey – About how long has it been since you last saw a doctor or other health care professional about your own health, including doctors seen in a hospital? Has it been never, 6 months or less, between 6 months and a year, more than a year but less than 2 years, more than 2 years but less than 5 years, or more than 5 years ago? (health_lastvisit in baseline and follow-up)
 - ii. Dummy: 1 if seen doctor in last 12 months; 0 otherwise
- f. Saw a Dentist in the last year – Expect increase
 - i. Survey – About how long has it been since you’ve last seen a dentist? (dentist_lastvisit in baseline and follow-up)
 - ii. Dummy: 1 if seen dentist in last 12 months; 0 otherwise
- g. Delayed getting medical care because couldn’t afford care or did not have insurance - Expect decrease
 - i. Survey - In the past 12 months, were you or anyone in your household delaying in getting medical care? What was the main reason? (treatment_delay and med_delay_reason in baseline and follow-up)
 - ii. Dummy: 1 if yes; 0 if no. 0 if not delayed in getting treatment

- h. Health insurance – Expect increase
 - i. Survey – Do you have health insurance? (health_insurance in baseline and follow-up)
 - ii. Dummy: 1 if yes; 0 if no
- E. Housing
 - a. Owns, pays mortgage or pays full rent – Expect increase
 - i. Survey – Do you currently own the place where you live, rent it, pay some amount towards rent, live free with a family/relative, or live in some other arrangement? (live_sit in baseline and follow-up)
 - ii. Dummy – 1 if Owns, Rents, ; 0 otherwise
 - b. Unit damage
 - i. Survey questions
 - 1. Currently, are any of the windows in your home boarded up or broken? (windows in follow-up)
 - 2. In the last 12 months, did water ever leak into your house or apartment from the outside? (leak in follow-up)
 - 3. Last year, during the winter of 2016-17, did your MAIN heating equipment break down? (heating in follow-up)
 - ii. Dummy – 1 if leak in past 12 months; 0 otherwise
 - iii. Dummy – 1 if heating breakdown in past 12 months; 0 otherwise
 - iv. Dummy – 1 if broken windows; 0 otherwise
 - c. Subjective home quality
 - i. Survey – How would you rate your current home as a place to live? Would you say is is excellent, very good, good, fair, or poor? (housing_sit in follow-up)
 - ii. Dummy – 1 if rating better than median of control group
 - d. Neighborhood characteristics
 - i. Survey - 1-5 ratings of neighborhood overall, crime, and schools
 - 1. How much of a problem is serious crime in your neighborhood? Would you say it is not a problem, a small problem, a medium-size problem, a large problem, or a huge problem? (housing_sit2 in follow-up)
 - 2. How would you rate the quality of schools in your neighborhood? Would you say they are excellent, very good, good, fair or poor? (housing_sit3 in follow-up)
 - 3. How would you rate your neighborhood as a place to live? Would you say that it is excellent, very good, good, fair, or poor? (housing_sit4 in follow-up)
 - 4. Dummy – 1 if rating better than median of control group; repeat for all three ratings
 - ii. Neighborhood characteristics from outside sources
 - 1. Use Census block group of of address at follow-up (or tract if data unavailable by block group); merge on outside data
 - 2. Crime (local police incident reports)
 - 3. Poverty rate, median rent, fraction black, fraction bachelor's degree or more (ACS)
 - e. Moved in the last year – direction unknown
 - i. Survey – Last move date (last_move_month and last_move_year in baseline, last_move_m and and last_move_y in follow-up)
 - ii. Dummy: 1=Moved in Last Year; 0= Otherwise
 - f. Evicted in the last year – Expect decrease
 - i. Survey – Last move date, (last_move_month and last_move_year in baseline, last_move_m and and last_move_y in follow-up); For your last move, were you evicted? (yesno_evict and yesno_evict_lastmove in baseline, yesno_evict in follow-up)

- ii. Dummy: 1=Moved in Last Year & Yes to one of the eviction questions; 0= Otherwise
- g. Independent living - expect increase
 - i. Survey - Questions about the number of children, seniors, and total people living in a household (calculated using total_in_household, number_kids, number_seniors in baseline, hh_tot, hh_kids, hh_seniors in follow-up)
 - ii. Dummy = 0 if total number in household, not counting seniors and children, is greater than 2; 1 if otherwise
- F. Family Stability/Care
 - a. Calculate z-score of each variables
 - i. Childcare issues is reason for not working (reason_nowork in baseline and follow-up)
 - ii. Childcare is reason for most recent work absence (reason_absence in baseline and follow-up)
 - iii. Number of children's absences from school (times_absent in baseline and follow-up)
 - iv. Childcare is reason for delay in medical treatment (med_delay_reason in baseline and follow-up)
 - v. Total monthly cost of dependent care including children, adult dependents, and elderly (childcare_amt, pay_frequency_childcare, eldercare_amt, pay_frequency_eldercare, adultcare_amt, pay_frequency_adultcare in baseline and follow-up)
 - vi. Goal area is family stability or primary goal is family stability (goals_fam and goals_pickone in baseline and follow-up)
 - vii. Family-related legal issues (marital or custody dispute) (legal_matters in baseline and follow-up)
 - b. Add z-scores to create index
 - c. Outcome is whether index increased between baseline and follow-up
- G. Networks of Support
 - a. Calculate z-score for each variable
 - i. # orgs/clubs you belong to (orgs_amt in baseline and follow-up)
 - ii. # people you could borrow \$ from (borrow_num in baseline and follow-up)
 - iii. # close friends (closefri_num in baseline, closefri in follow-up)
 - iv. # close relatives (closerel_num in baseline, close_rel in follow-up)
 - v. do you belong to a church (yesno_relig in baseline and follow-up)
 - vi. # neighbors spoke in to in last 2 weeks (neigh_num in baseline and follow-up)
 - vii. # church members spoken to in last 2 weeks (yes_relig_num in baseline, yes_relig in follow-up)
 - viii. Add z-scores to create index
 - b. Outcome is whether index increased from baseline to follow-up