

COMMUNITY ADVANTAGE PANEL SURVEY
TECHNICAL SAMPLING REPORT:
Renters, 2004-2008

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Contents

1	Introduction	3
2	Survey Design and Sampling Methods	4
2.1	Overview	4
2.2	The Baseline Interview	4
2.3	Follow-Up Interviews	6
2.4	Survey Attrition	7
3	Weight Construction	11
3.1	Overview	11
3.2	Baseline Final Weights	12
3.3	Weights for Years 2-5	14
3.4	Using the Weights	14
4	Baseline CAPS Renters vs. Renters in the Current Population Survey	17
4.1	Overview	17
4.2	Data Preparation	17
4.3	Similarities and Differences	18

List of Tables

1	Renters Survey Modules and Completes by Year	5
2	Unweighted Baseline Renters Demographics	8
3	Renters Gross Response Rates by Survey Year and Cohort	9
4	Attriters vs. Non-Attriters (Renters)	10
5	Summary Statistics for Baseline Final Weights	13
6	Effect of Baseline Final Weights on Baseline Renters Demographics	16
7	Comparison of Weighted CAP and CPS Renters Demographics	20

1 Introduction

In 1998, the Ford Foundation, Self-Help, Fannie Mae, and the UNC Center for Community Capital (the Center) formed a partnership, the Community Advantage Program (CAP), to demonstrate the feasibility of extending mortgage credit to low-income and minority households. Since 2003, and with the support of the Ford Foundation, the Center has gathered panel survey data from CAP mortgage recipients and from a group of matched renters in order to evaluate this program. The product of this data collection is the Community Advantage Panel Survey (CAPS).

The information collected by the survey has varied by survey year, with the exception of the Universal Core module, which has been administered each year to collect key demographic information. Aside from the Universal Core, the primary survey modules concern the social and financial impacts of home ownership, including mortgage details, neighborhood quality, social capital, financial literacy, and wealth and asset accumulation.

This document provides a technical overview of the design of CAPS, as it pertains to the sample of matched renters.¹ This overview discusses sampling methods, selection criteria, and the construction of weights. In addition, it compares weighted summary statistics of key CAPS renter demographics with those from a comparable subset of the Current Population Survey (CPS). This comparison puts the experiences of the CAPS renters in context with respect to the national low-to-moderate income and minority population of renters in the US.

¹A separate document discusses the sample of owners and provides background on Self-Help's lending program.

2 Survey Design and Sampling Methods

2.1 Overview

The target population of the renters sample in CAPS is a set of approximately 18,640² individuals who were obtained from Genesys by RTI as potential matches with the owners being surveyed, based on location and income. In particular, renters were selected from the top 30 MSAs represented by the owners sample and screened to be comparable to the owners with respect to income and approximate neighborhood. In addition, individuals over the age of 65 and full-time students were excluded from the pool of eligible participants. For more details about the selection of the baseline renters sample and the process by which the renters were matched with owners, see [RTI \(2004\)](#). Of the 15,943 individuals who were put into calling as potential eligibles, a total of 1,530 completed the baseline interview.³

As of the beginning of 2009, five years' worth of survey data had been collected for renters. Key demographic information was collected each year via the Universal Core module, but otherwise the survey modules have varied from year to year. In particular, the table below presents an overview of the survey modules of questions that have been fielded each year and the mode of survey administration, as well as the total number of respondents who completed the survey each year.

2.2 The Baseline Interview

The baseline (Year 1) interviews were conducted by phone by RTI during the period from October 2003 to April 2004. The Year 1 survey collected information about social capital and parenting behaviors, as well as the demographic and financial information that is collected

²This number is the sum of the baseline survey weights created by RTI for the set of 1,531 renters retained in the survey following baseline.

³A total of 1,651 individuals actually completed the baseline interview, but 118 of these were subsequently excluded from the study because of the household income or age that they reported during the survey. These individuals did not meet the original screening criteria for the study. One case that did not complete was subsequently retained for later survey years, resulting in a total final sample size of 1,531.

Table 1: Renters Survey Modules and Completes by Year

Year	Survey Year	Modules	Mode	Completes
2004	1	Social Capital, Parenting	Phone	1,530
2005	2	Savings Wealth and Assets Mortgages	In-Home	1,157
2006	3	Rising Energy Costs Financial Literacy Sense of Community	Phone	1,047
2007	4	Social Capital 2, Parenting 2 Medical Costs, Credit Scores Collective Efficacy	Phone	903
2008	5	Wealth and Assets 2 Mortgages 2, Savings 2 Housing Experiences Home Improvements Foreclosures, Stress	Phone/In-home	982

Note: The Universal Core was administered each year.

every year as part of the Universal Core module. Of the 15,943 eligible renters that RTI put into calling to be screened and then interviewed, approximately 10% were retained for follow-up in subsequent years.

Table 6 presents unweighted frequencies and proportions for this group of 1,531 renters as of baseline. Approximately 70% of the sample is female, and 45% were 41 years of age or older at the time of the interview. Whites constitute 44% of the sample, with Blacks and Hispanics representing 33% and 19%, respectively. About half of the sample had at most a high school diploma, and approximately 17% had at least a bachelor's degree. One-third of the sample was married at baseline, while one-third had never been married, and the final third were separated, widowed, divorced, or living with an unmarried partner. Sixty-three percent of the sample was employed, and nearly 75% were located in the South. Approximately half of the sample reported a household income of \$20,000 or less, with only 3% of the sample reporting an annual income of more than \$50,000.

2.3 Follow-Up Interviews

The first follow-up survey (Year 2) collected information about savings behavior, wealth and asset accumulation, and mortgages. Unlike the baseline interview, the Year 2 survey was administered in person. In particular, it was thought that an in-home collection of wealth and assets data might both make respondents more comfortable in discussing their finances and also result in more accurate data because the respondents could check their financial records during the interviews, if necessary. A total of 1,157 renters completed the Year 2 survey.

The second follow-up survey (Year 3) was conducted by phone and collected information about family experiences with energy costs, financial literacy, and sense of community. A total of 970 renters completed this survey. In conjunction with the Year 3 survey, a supplemental version of the Year 3 survey was administered by phone to those renters who had refused to complete the Year 2 survey but had not refused in a hostile manner. This supplemental, or 'soft-refusal', survey included the survey questions from Year 2 concerning savings, mortgages, and wealth and assets, in addition to the Year 3 questions, as a means of recovering these data for non-respondents. Overall, 77 renters completed this supplemental survey, leaving a total of 1,047 Year 3 completers.

The third follow-up survey (Year 4) was likewise administered by RTI over the phone and collected data about medical costs, credit scores, and collective efficacy, in addition to a second round of questions concerning social capital and parenting. These latter questions paralleled those asked in Year 1 and provide a means of assessing change over time. Of the 1,217 renters who were eligible for the Year 4 interview, 903 individuals, or 74% completed.

In Year 5, a total of 1,088 renters were determined to be eligible for the survey. To be considered eligible, renters had to have participated in at least two of the prior interviews and to have never refused participation in a hostile manner. Those renters who had previously completed the Year 2 in-home survey were interviewed in person, while the other Year-5 eligibles were given the opportunity to participate by phone. A total of 982 renters completed

the Year 5 survey, yielding a gross response rate of 90%.

Table 3 presents the gross response rates for each of these groups, measured as the number of completed interviews relative to the total number of cases initially put into calling in each year. All renter surveys were fielded by RTI.

2.4 Survey Attrition

As indicated in Table 4, those respondents who completed all five survey years (i.e., non-attriters) differ in several respects from all other survey participants (i.e., attriters). In particular, those respondents who consistently participated were more likely to be female, White or Black, and older on average. In addition, non-attriters were more likely to be divorced or never married at baseline, and more likely to be living alone. Attriters and non-attriters look similar with regard to the other key demographic distributions, including educational attainment, employment status, geographic coverage, and household income.

Table 2: Unweighted Baseline Renters Demographics

Variable Name	Renters	
	n	%
Sex		
Male	454	29.7
Female	1,075	70.3
Age		
18-25 years old	282	18.9
26-30 years old	206	13.8
31-35 years old	172	11.5
36-40 years old	157	10.5
41-45 years old	197	13.2
46-50 years old	156	10.4
51-60 years old	214	14.3
61 years old or more	109	7.3
Race		
White	665	44.0
Black	491	32.5
Hispanic	287	19.0
Other	67	4.4
Education attainment		
11th grade or less	313	20.5
High school graduate/GED	500	32.7
Some 2-year college	242	15.8
2-year degree	113	7.4
Some 4-year college	99	6.5
Bachelors degree	188	12.3
Some graduate school	8	0.5
Graduate degree	62	4.0
Vocational or other license	4	0.3
Marital status		
Partner or Companion	143	9.9
Married	405	28.1
Widowed	60	4.2
Divorced	310	21.5
Separated	90	6.3
Never Married	432	30.0
Household size		
1	500	32.7
2	402	26.3
3	267	17.5
4	211	13.8
5+	150	9.8
Employment status		
Working	956	62.5
Looking for Work (Unemployed)	180	12.2
Retired	77	5.0
Out of Labor Force	310	20.3
Geographic coverage		
Midwest	212	13.9
Northeast		
South	1,135	74.1
West	184	12.0
Income		
Less than \$20,000	775	51.5
\$20,000-25,000	180	12.0
\$25,000-30,000	226	15.0
\$30,000-40,000	186	12.4
\$40,000-50,000	91	6.1
\$50,000 or more	46	3.1

Note: The income buckets are upward inclusive.

Table 3: Renters Gross Response Rates by Survey Year and Cohort

Survey Year	Cohort	Initial Eligibles	Completes	Response Rate
1	2004 Phone	15,943	1,530	10%
2	2005 In-home	1,531	1,157	76%
3	2006 Phone	1,158	970	84%
	2006 Soft Refusals Phone	330	77	23%
4	2007 Phone	1,217	903	70%
5	2008 Phone	75	55	73%
	2008 In-home	1,013	927	92%

Table 4: Attriters vs. Non-Attriters (Renters)

Variable Name	Attriters		Non-Attriters	
	n	%	n	%
Sex**				
Male	254	33.3	199	26.0
Female	509	66.7	568	74.1
Age**				
18-25 years old	165	22.6	117	15.4
26-30 years old	115	15.7	91	11.9
31-35 years old	94	12.9	78	10.2
36-40 years old	77	10.5	80	10.5
41-45 years old	95	13.0	102	13.4
46-50 years old	60	8.2	96	12.6
51-60 years old	92	12.6	122	16.0
61 years old or more	33	4.5	76	10.0
Race**				
White	300	39.6	366	47.9
Black	219	28.9	275	36.0
Hispanic	196	25.9	98	12.8
Other	42	5.6	25	3.3
Education attainment				
11th grade or less	179	23.5	134	17.5
High school graduate/GED	240	31.5	260	33.9
Some 2-year college	115	15.1	127	16.6
2-year degree	50	6.6	63	8.2
Some 4-year college	58	7.6	41	5.4
Bachelors degree	84	11.0	104	13.6
Some graduate school	6	0.8	2	0.3
Graduate degree	27	3.5	35	4.6
Vocational or other license	4	0.5	0	0.0
Marital status**				
Partner or Companion	88	13.1	55	7.2
Married	228	33.8	177	23.1
Widowed	23	3.4	37	4.8
Divorced	108	16.0	202	26.4
Separated	47	7.0	43	5.6
Never Married	180	26.7	252	32.9
Household size**				
1	196	25.7	304	39.6
2	205	26.9	197	25.7
3	152	19.9	115	15.0
4	113	14.8	98	12.8
5+	97	12.7	53	6.9
Employment status				
Working	485	63.6	471	61.5
Looking for Work (Unemployed)	104	13.6	82	10.7
Retired	24	3.2	53	6.9
Out of Labor Force	150	19.7	160	20.9
Geographic coverage				
Midwest	104	13.6	108	14.1
Northeast	0	0	0	0
South	551	72.1	584	76.1
West	109	14.3	75	9.8
Income				
Less than \$20,000	370	50.1	405	52.9
\$20,000-25,000	78	10.6	102	13.3
\$25,000-30,000	119	16.1	107	14.0
\$30,000-40,000	105	14.2	81	10.6
\$40,000-50,000	42	5.7	49	6.4
\$50,000 or more	25	3.4	21	2.8

Note: * p-value is less than 0.05, ** p-value is less than 0.01.
The income buckets are upward inclusive.

3 Weight Construction

3.1 Overview

The sampling weights for the renters who completed CAPS have been constructed using standard survey weighting methodology. The weighting process involves four major steps:

- Construct the base weights. These weights take into account the probability that an individual was asked to participate in the survey.
- Construct the non-response weights. These weights correct for some of the bias that may be present in substantive survey variables as a result of differences in the attributes of respondents and non-respondents.
- Construct the post-stratification weights. These weights correct for some of the bias that may result from under-coverage in the surveyed sample relative to a larger target group of individuals to whom the results should ideally be generalizable.
- Construct the final weights as the product of the base weights, the non-response weights, and the post-stratification weights.

Specifically, RTI constructed weights for the renters who completed the baseline interview. These weights incorporate selection probabilities as well as non-response and post-stratification corrections. We construct weights for subsequent years of data collection based on survey responses and on baseline weighted population totals that we derive from the baseline final weights.

In constructing the non-response weights for survey Years 2-5, we use a logistic regression to estimate response propensities. In constructing the post-stratification weights for these years, we use a weighting class approach.⁴

⁴For discussions of common approaches to weighting, see [Biemer and Christ \(2008\)](#) and [Kalton and Flores-Cervantes \(2003\)](#).

3.2 Baseline Final Weights

RTI created the baseline sampling weights for the renters using a weighting class approach in which each weighting class represented a county or group of counties. In addition, the baseline weights were adjusted to account for differences in selection probabilities arising from variation in availability, eligibility, and cooperation of renters that were potential survey participants. Specifically, the RTI Final Report for survey Year 1 describes the weight construction details as follows:

The renter panel members were selected at different probabilities (across the owners) depending on the availability, eligibility, and cooperation of potential renters. To minimize unequal weighting effect (from extreme weights), weighting classes were formed. Each weighting class consists of either a single county or two or more adjacent counties. All weighting computation was performed independently within weighting classes. Analysis weights were computed in several stages:

- *The sampling weight is computed as the ratio of the count of available potential renters and the count of released potential renters. The count of available potential renters was obtained from Genesys from listed households with renter/owner codes of 0 or 1 and estimated incomes of \$50,000 or less in the same Census tract as the owners.*
- *Using the status codes of the released potential renters, the potential renters can be classified as*
 - *cases with unknown household status (cannot be determined if case is a household, business, or other nonhousehold),*
 - *known business or other nonhousehold (such as pay phone),*
 - *known household but unknown eligibility status,*
 - *known ineligible household,*
 - *known eligible household but no completed interview, or*

– *known eligible household with completed interview.*

- *Adjust sampling weight for unknown household status by the ratio of weight-sum for total number of cases and the weight-sum of cases with known household status.*
- *Adjust weight of known households with known eligibility by ratio of weight-sum of known households and the weight-sum of households with known eligibility.*
- *Adjust households with completed interviews by the weight-sum of households with known eligibility and the weight-sum of households with completed interview.*

Summary statistics for the baseline final weights for all renters retained in the renters sample are presented below.

Table 5: Summary Statistics for Baseline Final Weights

Statistic	Value
N	1,531
Sum	18,640
Minimum	3.2
Maximum	116.7
Mean	12.2
Median	9.2
Standard Deviation	10.9
Variance Inflation Factor ($F = 1 + CV^2$)	1.8

The effect of the baseline weights on renters baseline demographics can be seen in Table 6. Specifically, the weights increase the proportions of males, minorities, and employed or married individuals in the sample, as well as mean annual income. The weights induce a decrease in the mean age and in the proportion of individuals living in the Midwest. Relative income and educational attainment remain largely unchanged.

3.3 Weights for Years 2-5

As it is impossible to decompose the various components of the baseline final weights provided by RTI into the various components that correspond to sampling probability, non-response, and post-stratification based on primary sampling units, we treat the baseline final weights provided by RTI as the base weights in weighting the data for Years 2-5. Let w_{Bi} denote the base weight for individual i .

To create non-response weights for Years 2-5, we derive response propensity scores based on respondent gender, race, age, and marital status. These demographic variables were selected for inclusion in the logistic non-response regression because they are systematically related to attrition in the survey, as indicated in section 2.4. The non-response weight for each individual is the inverse of his estimated response propensity. Let w_{NRiYj} denote the non-response weight for individual i in survey year(s) j .

To create post-stratification weights, we use weight classes to adjust the weighted population totals so that they are comparable to the weighted baseline renters sample with respect to race and relative income. Let w_{PSiYj} denote the post-stratification adjustment for individual i in year(s) j .

The final weight w_i for each individual in a given survey year or years following baseline is then defined as

$$w_i = w_{Bi} * w_{NRiYj} w_{PSiYj}$$

3.4 Using the Weights

The final survey weights are designed to reduce any bias in the survey data that may be related to demographic and lending measures and to unit non-response. These survey weights do not address any bias that may result from item missing data in specific survey questions. Therefore, we recommend that researchers multiply-impute any item-missing data in their subsample of interest prior to applying the weights. For discussions of multiple imputation and other methods of dealing with item non-response, see [Rassler and Riphahn \(2006\)](#), [Little](#)

(2003), and Graham, Olchowski, and Gilreath (2007).

Table 6: Effect of Baseline Final Weights on Baseline Renters Demographics

Variable Name	Unweighted		Weighted	
	N	Mean	Sum Weights	Mean
Sex	1,529		18,618	
Male		0.30		0.33
Female		0.70		0.67
Age	1,493	39.13	18,101	38.65
18-25 years old		0.19		0.19
26-30 years old		0.14		0.14
31-35 years old		0.12		0.13
36-40 years old		0.11		0.12
41-45 years old		0.13		0.12
46-50 years old		0.10		0.10
50-60 years old		0.14		0.13
> 60 years old		0.07		0.07
Race	1,510		18,379	
White		0.44		0.38
Black		0.33		0.36
Hispanic		0.19		0.23
Other		0.04		0.04
Education attainment	1,529		18,617	
11th grade or less		0.20		0.22
High school graduate/GED		0.33		0.30
Some 2-year college		0.16		0.16
2-year degree		0.07		0.07
Some 4-year college		0.06		0.07
Bachelors degree		0.12		0.13
Some graduate school		0.01		0.01
Graduate degree		0.04		0.04
Marital status	1,440		17,627	
Partner or Companion		0.10		0.09
Married		0.28		0.31
Widowed		0.04		0.04
Divorced		0.22		0.20
Separated		0.06		0.06
Never Married		0.30		0.31
Household size	1,531		18,640	
1		0.33		0.31
2		0.26		0.26
3		0.17		0.17
4		0.14		0.14
5+		0.10		0.11
Employment status	1,529		18,618	
Working		0.63		0.65
Looking for Work (Unemployed)		0.12		0.14
Retired		0.05		0.04
Out of Labor Force		0.20		0.18
Geographic coverage	1,531		18,640	
Midwest		0.14		0.10
Northeast		0.00		0.00
South		0.74		0.72
West		0.12		0.17
Income	1,504	20,850	18,340	22,328
<=\$20,000		0.55		0.50
\$20,001-30,000		0.27		0.27
\$30,001-40,000		0.11		0.13
\$40,001-50,000		0.05		0.07
> \$50,000		0.02		0.03
Relative Income	1,504	0.35	18,340	0.36
<= 50% AMI		0.79		0.78
51-80% AMI		0.18		0.19
81-100% AMI		0.02		0.02
> 100% AMI		0.01		0.01

4 Baseline CAPS Renters vs. Renters in the Current Population Survey

4.1 Overview

In this section, we compare the weighted sample of renters who completed baseline to the weighted Current Population Survey (CPS) for May 2003, as this administration of the CPS falls roughly at the median of the baseline interview dates of the owners to which these renters are matched.

Because the sample of CAPS renters was intended to be representative of renters who are matched to CAPS owners, we subset the CPS using criteria similar to those that were used to define the CAPS owners sample. This filtering allows us to more readily compare the respondents of the two surveys with respect to key demographic attributes. The largest differences between the CAPS renters and the CPS renters involve geographic coverage, gender, employment status, and marital status.

4.2 Data Preparation

The Current Population Survey is a survey of 50,000 households that is conducted monthly by the Census Bureau and the Bureau of Labor Statistics. The survey is designed to be representative of the non-institutionalized civilian population in the US, and it collects information about demographics and other household characteristics in order to provide an integrated picture of the US labor force and its experiences.

Because the target population of the CPS is considerably more broad than that of CAPS, and because the head-of-household is the survey respondent for CAPS, we restrict the CPS to the reference person of each household where the reference person is a renter. The reference person is identified as the person whose name is on the rental lease for that household. In addition, we exclude full-time students and respondents over the age of 65, as efforts were

made to exclude such individuals from the CAPS pool. Finally, we further subset the CPS to include only those households that meet a simplified version of the Self-Help charity criteria that was applied to CAPS owners as a qualifying condition for participation in CAP. In particular, the CPS household income must be no greater than 80% of the area median income (AMI) at the MSA level or be no greater than 115% of the AMI if the respondent is a minority. Thus, the analysis below considers how similar the CAPS renters are to this refined sample of CPS renters.

4.3 Similarities and Differences

Table 7 below provides demographic proportions for the CAPS renters who completed the baseline interview and renters in the CPS. Relative to the CPS renters, the CAPS renters are more likely to be female (67% vs. 58%), less likely to be White (38% vs. 44%) and more likely to be Black (36% vs. 25%). However, the proportions of Hispanics in these two samples are roughly comparable.

In addition, CAPS renters tend to be slightly older and more educated than CPS renters. About 42% of CAPS renters were 41 years of age or older when interviewed, compared to 37% for the CPS. The CAPS renters are 4 percentage points less likely to not have completed high school. Moreover, 52% of CAPS renters had completed at least some college, compared with 42% of CPS renters.

Interestingly, CAPS renters were slightly less likely to be employed (64% vs. 69%) but nearly twice as likely to be unemployed. In particular, it appears that the CAPS renters who were not working were more likely to be looking for work, while comparable CPS renters were more likely instead to have opted out of the labor force.

The income and household size distributions are similar for both CAPS renters and CPS renters, though the former are more likely to have a second household member in addition to the survey respondent. On a related note, CAPS renters were more likely to be married (41% vs. 28%) and less likely to have separated or never been married than their counterparts in

the CPS.

Overall, the greatest difference between CAPS renters and CPS renters concerns geographic coverage. Over 72% of CAPS renters are located in the South, compared with 35% of CPS renters. Moreover, 19% of CPS renters come from the Northeast, while none of the CAPS renters do.

Table 7: Comparison of Weighted CAP and CPS Renters Demographics

Variable Name	CAP ($N = 18,639$) %	CPS ($N = 18,870,391$) %
Sex		
Male	32.7	42.4
Female	67.3	57.6
Age		
18-25 years old	18.7	17.2
26-30 years old	14.4	15.9
31-35 years old	12.8	15.9
36-40 years old	12.1	14.1
41-45 years old	12.5	11.6
46-50 years old	9.8	8.8
50-60 years old	13.5	12.4
61 years old or more	6.8	4.2
Race		
White	37.8	44.2
Black	35.6	24.6
Hispanic	22.8	23.6
Other	3.8	7.6
Education attainment		
11th grade or less	19.9	23.4
High school graduate/GED	28.1	35.0
Some college or associate degree	32.1	26.6
Bachelor's degree or higher	19.8	15.0
Marital status		
Married	41.3	28.0
Widowed	3.7	3.0
Divorced	19.3	20.8
Separated	6.4	10.0
Never Married	29.3	38.2
Household size		
1	31.4	36.2
2	26.5	18.7
3	17.4	17.7
4	13.5	14.4
5+	11.2	13.0
Employment status		
Working	64.5	68.8
Looking for Work (Unemployed)	13.5	7.3
Retired	4.2	2.3
Out of Labor Force	17.7	21.6
Geographic coverage		
Midwest	10.2	19.7
Northeast	0.0	18.8
South	72.4	34.9
West	17.4	26.6
Income		
Less than \$20,000	47.2	46.9
\$20,000-25,000	11.8	12.1
\$25,000-30,000	15.3	11.9
\$30,000-40,000	14.0	17.3
\$40,000-50,000	7.4	6.2
\$50,000 or more	4.4	5.5

Note: The income buckets are upward inclusive.

Note: All differences are statistically significant with $p < 0.05$.

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