# SURVEY OF CONSUMER EXPECTATIONS Housing Survey - 2015 

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## Outline

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## Technical Notes

(1) Household heads in the SCE panel were invited to participate in the internet-based housing survey during February 2015.
(2) Of 1383 eligible respondents, 1205 ( $87.1 \%$ ) participated in the survey, of whom 861 (71.5\%) were current homeowners.
(3) Only selected questions are presented.
(1) The general layout of each slide is such that we show the question wording, the summary statistics for that question, and the relevant sub-sample to whom the question was directed.
(0 All continuous outcomes reported in the chart packet are winsorized at the top/bottom $2.5 \%$. An exception is made for "bounded" questions such as those asking for a "percent chance," since only responses ranging from 0 to 100 were accepted by the online survey.
(0) All statistics reported are unweighted.

## Demographic Characteristics

## Demographics

|  | Full Sample | Renters | Owners |
| :--- | :---: | :---: | :---: |
| Observations | 1205 | 344 | 861 |
| Fraction of Sample (\%) |  | 28.5 | 71.5 |
|  |  |  |  |
| Age | 51.1 | 46.8 | 52.9 |
|  | $(31.2)$ | $(53.4)$ | $(14.8)$ |
| Male (\%) | 52.4 | 49.1 | 53.7 |
| Retired (\%) | 22.7 | 10.8 | 27.5 |
| Married or Living with Partner (\%) | 66.3 | 48.8 | 73.3 |
| Education: College Degree or Higher (\%) | 52 | 45.6 | 54.5 |
| White (\%) | 81 | 73.1 | 84.1 |
| Region: Midwest (\%) | 20.8 | 20.9 | 20.8 |
| Region: Northeast (\%) | 15.5 | 15.1 | 15.7 |
| Region: South (\%) | 39.4 | 37.5 | 40.1 |
| Region: West (\%) | 24.3 | 26.5 | 23.4 |
| Tenure in Town/City, Years | 19.2 | 13.8 | 21.4 |
|  | $(16.5)$ | $(14.4)$ | $(16.8)$ |
| Unemployed (\%) | 4.1 | 5.5 | 3.5 |
| Have You Ever Owned a Home? (\%) | 36.9 | 36.9 | . |
| Own home that is not primary residence (\%) | 14.5 | 5.5 | 18 |
| Has been foreclosed on before (\%) | 5.7 | 11.9 | 3.3 |

Note: Mean reported for continuous outcomes (those variables not marked with a \%); standard dev. in parentheses.

## Household Income

Which category represents the total combined pre-tax income of all members of your household (including you) during the past 12 months?
Please include money from all jobs, net income from business, farm or rent, pensions, interest on savings or bonds, dividends, social security income, unemployment benefits, Food Stamps, workers compensation or disability benefits, child support, alimony, scholarships, fellowships, grants, inheritances and gifts, and any other money income received by members of your household who are 15 years of age or older.

|  | Full Sample |  | Renters |  | Owners |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
|  | Freq | Pct | Freq | Pct | Freq | Pct |
| $<\$ 10 \mathrm{k}$ | 33 | 2.8 | 22 | 6.5 | 11 | 1.3 |
| $\$ 10 \mathrm{k}-20 \mathrm{k}$ | 95 | 8.0 | 46 | 13.5 | 49 | 5.8 |
| $\$ 20 \mathrm{k}-30 \mathrm{k}$ | 134 | 11.2 | 59 | 17.3 | 75 | 8.8 |
| $\$ 30 \mathrm{k}-40 \mathrm{k}$ | 105 | 8.8 | 41 | 12.0 | 64 | 7.5 |
| $\$ 40 \mathrm{k}-50 \mathrm{k}$ | 100 | 8.4 | 32 | 9.4 | 68 | 8.0 |
| $\$ 50 \mathrm{k}-60 \mathrm{k}$ | 107 | 9.0 | 29 | 8.5 | 78 | 9.2 |
| $\$ 60 \mathrm{k}-75 \mathrm{k}$ | 177 | 14.8 | 44 | 12.9 | 133 | 15.6 |
| $\$ 75 \mathrm{k}-100 \mathrm{k}$ | 151 | 12.7 | 31 | 9.1 | 120 | 14.1 |
| $\$ 100 \mathrm{k}-150 \mathrm{k}$ | 168 | 14.1 | 23 | 6.7 | 145 | 17.0 |
| $\$ 150 \mathrm{k}-200 \mathrm{k}$ | 63 | 5.3 | 8 | 2.3 | 55 | 6.5 |
| $\$ 200 \mathrm{k}+$ | 60 | 5.0 | 6 | 1.8 | 54 | 6.3 |
| Total | 1193 | 100.0 | 341 | 100.0 | 852 | 100.0 |

Note: Question asked in Monthly SCE.

## Credit Score

What would you say is your credit score?

|  | Full Sample |  | Renters |  | Owners |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
|  | Freq | Pct | Freq | Pct | Freq | Pct |
| $<620$ | 103 | 8.6 | 70 | 20.3 | 33 | 3.8 |
| $620-679$ | 120 | 10.0 | 57 | 16.6 | 63 | 7.3 |
| $680-719$ | 144 | 12.0 | 56 | 16.3 | 88 | 10.2 |
| $720-760$ | 267 | 22.2 | 65 | 18.9 | 202 | 23.5 |
| $>760$ | 446 | 37.0 | 51 | 14.8 | 395 | 45.9 |
| Don't Know | 124 | 10.3 | 45 | 13.1 | 79 | 9.2 |
| Total | 1204 | 100.0 | 344 | 100.0 | 860 | 100.0 |

## Liquid Savings

If you added up all the money in the following accounts that you and your family members have invested in, which category represents how much they would amount to?

- Checking or savings accounts
- Money market funds
- CDs (Certificates of Deposit)
- Government/Municipal Bonds or Treasury Bills
- Stocks or bonds in publicly held corporations, stock or bond mutual funds, or investment trusts

|  | Full Sample |  | Renters |  | Owners |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
|  | Freq | Pct | Freq | Pct | Freq | Pct |
| $<\$ 2,000$ | 295 | 24.9 | 159 | 46.9 | 136 | 16.1 |
| $\$ 2,000-\$ 10,000$ | 199 | 16.8 | 66 | 19.5 | 133 | 15.7 |
| $\$ 10,000-\$ 50,000$ | 231 | 19.5 | 56 | 16.5 | 175 | 20.7 |
| $\$ 50,000-\$ 250,000$ | 264 | 22.3 | 39 | 11.5 | 225 | 26.6 |
| $>\$ 250,000$ | 195 | 16.5 | 19 | 5.6 | 176 | 20.8 |
| Total | 1184 | 100.0 | 339 | 100.0 | 845 | 100.0 |

## Non-Housing Debt

Which category represents your current total outstanding debt, excluding all housing debt (such as mortgage debt, and home equity loans and lines of credit)? This would, for example, include outstanding carried-over balances on credit cards (including retail cards), student loans, auto loans, and other personal loans.

|  | Full Sample |  | Renters |  | Owners |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
|  | Freq | Pct | Freq | Pct | Freq | Pct |
| Less than $\$ 500$ | 251 | 20.9 | 53 | 15.4 | 198 | 23.2 |
| $\$ 500$ to $\$ 999$ | 58 | 4.8 | 16 | 4.7 | 42 | 4.9 |
| $\$ 1,000$ to $\$ 1,999$ | 64 | 5.3 | 15 | 4.4 | 49 | 5.7 |
| $\$ 2,000$ to $\$ 4,999$ | 109 | 9.1 | 40 | 11.6 | 69 | 8.1 |
| $\$ 5,000$ to $\$ 9,999$ | 114 | 9.5 | 39 | 11.3 | 75 | 8.8 |
| $\$ 10,000$ to $\$ 19,999$ | 177 | 14.8 | 60 | 17.4 | 117 | 13.7 |
| $\$ 20,000$ to $\$ 29,999$ | 122 | 10.2 | 32 | 9.3 | 90 | 10.5 |
| $\$ 30,000$ to $\$ 49,999$ | 121 | 10.1 | 35 | 10.2 | 86 | 10.1 |
| $\$ 50,000$ to $\$ 99,999$ | 101 | 8.4 | 31 | 9.0 | 70 | 8.2 |
| $\$ 100,000$ or more | 82 | 6.8 | 23 | 6.7 | 59 | 6.9 |
| Total | 1199 | 100.0 | 344 | 100.0 | 855 | 100.0 |

## Zip Code Home Price Expectations

## Estimate of Current Price for Typical Home in Zip

Consider a typical home (house/apartment) in your zip code. What is your best guess of the value of such a home as of today?
(By value, we mean how much that typical home would approximately sell for today.)

|  | Summary |  | Percentile |
| ---: | :---: | :---: | :---: |
| Mean | 244191.4 | $25 \%$ | 130000.0 |
| Std. Dev. | 168051.5 | $50 \%$ | 200000.0 |
|  |  | $75 \%$ | 300000.0 |
| N | 1201 |  |  |

## Past Perceived Home Price Change

You indicated that you estimate the current value of a typical home in your zip code to be $X$ dollars (see previous question). Now, think about how the value of such a home has changed over time. What do you think the average value of such a home was one and five years ago?

|  | Percentile |  |  |  |  |  |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  | Mean | Std. Dev. | $25 \%$ | $50 \%$ | $75 \%$ | N |
| Past Perceived Change, 1yr | 5.0 | 8.2 | 0.0 | 3.2 | 8.0 | 602 |
| Past Perceived Change, 5yrs | 2.0 | 4.4 | -0.5 | 2.1 | 4.6 | 602 |

Note: Question seen by $1 / 2$ of sample only. Values are percent change, annualized (100 $=$ $100 \%) . T$ Year annual percent change constructed as

$$
\left(\frac{\text { Estimate of Current Price for Typical Home in Zip }}{\text { Past Perceived Home Price, } T \text { Years Ago }}\right)^{(1 / T)}-1
$$

See previous slide for more information on "Estimate of Current Price for Typical Home in Zip."

## Past Perceived Home Price Changes for Zip Code vs. Realized HPI

Comparison to realized values of CoreLogic HPI*:

|  | Percentile |  |  |  |  |  |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  | Mean | Std. Dev. | $25 \%$ | $50 \%$ | $75 \%$ | N |
| Past Perceived Change, 1yr | 5.0 | 8.2 | 0.0 | 3.2 | 8.0 | 602 |
| Past Perceived Change, 5yr | 2.0 | 4.4 | -0.5 | 2.1 | 4.6 | 602 |
| Realized HPI Change, 1yr | 4.7 | 5.2 | 1.6 | 4.6 | 7.9 | 603 |
| Realized HPI Change, 5yr | 2.4 | 3.0 | 0.2 | 2.2 | 4.4 | 603 |

Note: Question seen by $1 / 2$ of sample only. Values are percent change, annualized (100 = $100 \%$ ). HPI $T$ year annual percent change constructed as

$$
\left(\frac{\text { CoreLogic HPI Today }}{\text { CoreLogic HPI, } T \text { Years Ago }}\right)^{(1 / T)}-1
$$

See previous slide for more information on annualized past perceived home price changes.
*HPI values at the one- and five-year horizons are matched, in decreasing order of preference, to a respondent's zip code, county, and state HPI. A zip or county HPI match exists for approximately $92 \%$ of the sample.

## Past Perceived Home Price Changes for Zip Code by

 Quintile of Realized HPI Change, One-Year Horizon One year perceived home price changes by quintile of realized percent change in HPI over past one year (First Quintile $=$ smallest or most negative change).|  | Percentile |  |  |  |  |  |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  | Mean | Std. Dev. | $25 \%$ | $50 \%$ | $75 \%$ | N |
| First Quintile, 1 yr | 4.3 | 8.3 | 0.0 | 2.5 | 7.1 | 118 |
| Second Quintile, 1 yr | 5.0 | 6.8 | 0.0 | 3.5 | 8.5 | 124 |
| Third Quintile, 1 yr | 5.6 | 8.8 | 0.0 | 4.2 | 9.1 | 111 |
| Fourth Quintile, 1 yr | 5.4 | 9.0 | 0.0 | 3.5 | 7.7 | 118 |
| Fifth Quintile, 1 yr | 4.7 | 8.3 | 0.0 | 2.8 | 8.3 | 131 |
| Total | 5.0 | 8.2 | 0.0 | 3.2 | 8.0 | 602 |

Note: Question seen by $1 / 2$ of sample only. Values are percent change, annualized ( $100=$ $100 \%$ ). See previous slides for more information on

- Annualized past perceived home price changes.
- Annualized past realized HPI home price changes.


## Past Perceived Home Price Changes for Zip Code by

 Quintile of Realized HPI Change, Five-Year Horizon Five year perceived home price changes by quintile of realized percent change in HPI over past five years (First Quintile $=$ smallest or most negative change).|  | Percentile |  |  |  |  |  |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  | Mean | Std. Dev. | $25 \%$ | $50 \%$ | $75 \%$ | N |
| First Quintile, 5 yr | 0.7 | 4.3 | -2.8 | 1.1 | 3.3 | 127 |
| Second Quintile, 5 yr | 1.4 | 4.1 | -0.6 | 1.6 | 3.4 | 125 |
| Third Quintile, 5 yr | 1.7 | 4.1 | 0.0 | 2.1 | 4.2 | 108 |
| Fourth Quintile, 5 yr | 2.4 | 3.9 | 0.4 | 2.6 | 4.9 | 124 |
| Fifth Quintile, 5 yr | 3.9 | 4.9 | 1.3 | 3.9 | 7.0 | 118 |
| Total | 2.0 | 4.4 | -0.5 | 2.1 | 4.6 | 602 |

Note: Question seen by $1 / 2$ of sample only. Values are percent change, annualized ( $100=$ $100 \%$ ). See previous slides for more information on

- Annualized past perceived home price changes.
- Annualized past realized HPI home price changes.


## Expected Future Annual Price Changes in Zip

You estimated the current value of a typical home in your zip code to be $X$ dollars (see earlier question). Now, we would like you to think about the future value of such a home.
What do you think the average value of a home in your zip will be one and five years from today?

| Percentile |  |  |  |  |  |  |
| :---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  | Mean | Std. Dev. | $25 \%$ | $50 \%$ | $75 \%$ | N |
| Exp. Future Change in Zip, 1yr | 4.4 | 6.1 | 0.6 | 3.0 | 6.7 | 602 |
| Exp. Future Change in Zip, 5yrs | 2.9 | 2.8 | 1.3 | 2.4 | 4.0 | 602 |

Note: Question seen by $1 / 2$ of sample only. Values are percent change, annualized ( $100=$ $100 \%)$. $T$ Year annual percent change constructed as

$$
\left(\frac{\text { Exp. Future Home Price in Zip, } T \text { Years From Today }}{\text { Estimate of Current Price for Typical Home in Zip }}\right)^{(1 / T)}-1
$$

See previous slide for more information on "Estimate of Current Price for Typical Home in Zip."

## Expected Future Price Changes in Zip over 1 Year by

 Quintile of Past Perceived Changes over 1 YearOne year expected future home price changes by quintile of past perceived home price changes over past one year (First Quintile $=$ smallest or most negative change).

|  | Percentile |  |  |  |  |  |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  | Mean | Std. Dev. | $25 \%$ | $50 \%$ | $75 \%$ | N |
| First Quintile, 1yr | 4.1 | 7.5 | 0.0 | 1.7 | 6.7 | 203 |
| Second Quintile, 1yr | 1.7 | 1.7 | 0.6 | 1.2 | 2.5 | 38 |
| Third Quintile, 1yr | 3.5 | 4.0 | 1.8 | 2.9 | 4.5 | 137 |
| Fourth Quintile, 1yr | 4.2 | 4.6 | 2.0 | 3.9 | 6.7 | 109 |
| Fifth Quintile, 1yr | 7.0 | 6.6 | 2.9 | 6.1 | 10.0 | 115 |
| Total | 4.4 | 6.1 | 0.6 | 3.0 | 6.7 | 602 |

Note: Question seen by $1 / 2$ of sample only. Values are percent change, annualized (100 $=$ $100 \%$ ). See previous slides for more information on

- Annualized past perceived home price changes.
- Annualized expected future home price changes.

Unequal numbers of observations across quintiles arise from bunching of responses at the boundaries of each quintile.

## Expected Future Price Changes in Zip over 5 Years by

 Quintile of Past Perceived Changes over 5 YearsFive year expected future home price changes by quintile of past perceived home price changes over past five years (First Quintile $=$ smallest or most negative change).

|  | Percentile |  |  |  |  |  |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  | Mean | Std. Dev. | $25 \%$ | $50 \%$ | $75 \%$ | N |
| First Quintile, 5yr | 3.8 | 3.6 | 1.8 | 3.5 | 5.9 | 121 |
| Second Quintile, 5yr | 2.0 | 2.2 | 0.8 | 1.5 | 2.4 | 122 |
| Third Quintile, 5yr | 2.2 | 2.0 | 1.2 | 1.9 | 2.9 | 122 |
| Fourth Quintile, 5yr | 2.7 | 2.1 | 1.6 | 2.5 | 3.7 | 118 |
| Fifth Quintile, 5yr | 4.0 | 3.2 | 2.4 | 3.5 | 5.5 | 119 |
| Total | 3.0 | 2.8 | 1.3 | 2.4 | 4.0 | 602 |

Note: Question seen by $1 / 2$ of sample only. Values are percent change, annualized (100 $=$ $100 \%$ ). See previous slides for more information on

- Annualized past perceived home price changes.
- Annualized expected future home price changes.

Unequal numbers of observations across quintiles arise from bunching of responses at the boundaries of each quintile.

## Uncertainty about Future Home Prices, One-Year

## Horizon

You estimated the current value of a typical home in your zip code to be $V$ dollars (see question). What do you think is the percent chance that the value of such a home one year from today will be less than $\$ X$, between $\$ X$ and $\$ V$, between $\$ V$ and $\$ Y$, or more than $\$ Y$ ?
$X=0.95 \times($ Estimate of Current Price for Typical Home in Zip)
$V=1.00 \times($ Estimate of Current Price for Typical Home in Zip) $Y=1.10 \times($ Estimate of Current Price for Typical Home in Zip)

|  | Percentile |  |  |  |  |  |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  | Mean | Std. Dev. | $25 \%$ | $50 \%$ | $75 \%$ | N |
| $<\mathrm{X}$ | 10.9 | 15.6 | 0.0 | 5.0 | 15.0 | 603 |
| Between X and V | 28.7 | 24.2 | 10.0 | 25.0 | 40.0 | 603 |
| Between V and Y | 48.0 | 28.5 | 25.0 | 50.0 | 70.0 | 603 |
| $>\mathrm{Y}$ | 12.4 | 15.6 | 0.0 | 10.0 | 20.0 | 603 |

Note: Question seen by $1 / 2$ of sample only. Values are in percent $(100=100 \%)$. See previous slide for more information on "Estimate of Current Price for Typical Home in

## Uncertainty about Future Home Prices, Five-Year

## Horizon

What do you think is the percent chance that the value of such a home five years from today will be less than $\$ X$, between $\$ X$ and $\$ V$, between $\$ V$ and $\$ Y$, or more than $\$ Y$ ?
$X=0.9 \times($ Estimate of Current Price for Typical Home in Zip)
$V=1.0 \times$ (Estimate of Current Price for Typical Home in Zip)
$Y=1.2 \times($ Estimate of Current Price for Typical Home in Zip)

|  | Percentile |  |  |  |  |  |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  | Mean | Std. Dev. | $25 \%$ | $50 \%$ | $75 \%$ | N |
| $<\mathrm{X}$ | 7.8 | 13.2 | 0.0 | 5.0 | 10.0 | 603 |
| Between X and V | 20.0 | 19.6 | 5.0 | 15.0 | 30.0 | 603 |
| Between V and Y | 52.2 | 27.6 | 30.0 | 50.0 | 75.0 | 603 |
| $>\mathrm{Y}$ | 20.0 | 23.1 | 3.0 | 10.0 | 25.0 | 603 |

Note: Question seen by $1 / 2$ of sample only. Values are in percent $(100=100 \%)$. See previous slide for more information on "Estimate of Current Price for Typical Home in Zip."

## Rents: Current Levels and Expected Changes

If this typical home in your zip code could be rented, what do you think the average monthly rent of such a home (excluding utilities) would be today, one year from today, and five years from today?

Perceived Current Rent

|  | Summary | Percentile |  |
| ---: | ---: | ---: | ---: |
| Mean | 1394.3 | $25 \%$ | 800.0 |
| Std. Dev. | 780.0 | $50 \%$ | 1200.0 |
|  |  | $75 \%$ | 1700.0 |
| N | 1200 |  |  |

Expected Future Changes

|  | Percentile |  |  |  |  |  |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  | Mean | Std. Dev. | $25 \%$ | $50 \%$ | $75 \%$ | N |
| Exp. Average Monthly Rent in 1yr | 6.4 | 5.9 | 0.0 | 5.6 | 10.0 | 1198 |
| Exp. Average Monthly Rent in 5yrs | 4.2 | 2.6 | 2.4 | 3.7 | 5.9 | 1198 |

Note: Values in "Expected Future Changes" table are percent change, annualized (100 = $100 \%)$. $T$ Year annual percent change constructed as

$$
\left(\frac{\text { Expected Average Monthly Rent, } T \text { Years from Today }}{\text { Estimate of Average Monthly Rent, Today }}\right)^{(1 / T)}-1
$$

## Current and Expected Price-to-Rent Estimates

Ratio of estimated price to estimated yearly rental price for average home in zip:

|  | Percentile |  |  |  |  |  |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  | Mean | Std. Dev. | $25 \%$ | $50 \%$ | $75 \%$ | N |
| Today | 14.7 | 5.9 | 10.8 | 13.9 | 17.1 | 599 |
| 1 Year from Now | 14.7 | 6.4 | 10.4 | 13.5 | 17.2 | 599 |
| 5 Years from Now | 14.3 | 6.5 | 10.0 | 12.8 | 17.2 | 599 |

Note: Ratio constructed using Estimate of Current Price for Typical Home in Zip, Expected Future Home Prices in Zip, and Estimate and Expectations of Monthly Rent as follows

- Ratio today:

$$
\frac{\text { Estimate of Current Price for Typical Home in Zip }}{12 \times \text { Estimate of Current Average Monthly Rent in Zip }}
$$

- Ratio $T$ years from Now

Expected Future Home Price in Zip, $T$ Years from Now
$12 \times$ Expected Future Average Monthly Rent in Zip, $T$ Years from Now

## Investment Value of Homes in Zip

If someone had a large sum of money that they wanted to invest, would you say that relative to other possible financial investments, buying property in your zip code today is

|  | Freq. | Percent |
| ---: | ---: | ---: |
| Very good investment | 220 | 18.3 |
| Somewhat good investment | 534 | 44.3 |
| Neither good nor bad as an investment | 330 | 27.4 |
| Somewhat bad investment | 102 | 8.5 |
| Very bad investment | 19 | 1.6 |
| N | 1205 |  |

## Investment Value, Now vs. Future

Do you think that buying property in your zip code is a better investment idea today than it will be a year from today?

|  | Freq. | Percent |
| ---: | ---: | ---: |
| Much Better | 135 | 11.2 |
| Somewhat Better | 421 | 35.0 |
| Neutral | 586 | 48.7 |
| Somewhat Worse | 55 | 4.6 |
| Much Worse | 7 | 0.6 |
| N | 1204 |  |

## General Questions for Both Owners and Renters

## Future Moving Plans

3yr Moving Probability: We would now like you to think about your future moving plans. What is the percent chance that over the next 3 years you will move to a different primary residence?

1yr Moving Probability: And looking at the more immediate future, what is the percent chance that over the next 12 months you will move to a different primary residence?

|  | Mean | Std. Dev. | $25 \%$ | $50 \%$ | $75 \%$ | N |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 1yr Moving Probability* | 20.0 | 31.0 | 0.0 | 4.0 | 25.0 | 1198 |
| 3yr Moving Probability | 34.1 | 35.9 | 1.0 | 20.0 | 60.0 | 1198 |

Note: "1yr Moving Probability" is only asked if "3yr Moving Probability" $\geq 5 \%$.
*For those who answer $<5 \%$ for "3yr Moving Probability," the probability at the 1 year horizon is imputed by setting the 1 year value equal to the 3 year probability.

## Main Reasons for Not Moving

What would be your main reason for not moving to a different primary residence over the next 3 years?

|  | Freq. | Percent |
| ---: | ---: | ---: |
| I like my current home, or no reason to move | 566 | 60.3 |
| Weak economy/job market | 23 | 2.5 |
| Have not saved enough | 53 | 5.7 |
| Difficult to qualify for mortgage | 31 | 3.3 |
| Difficult to find a new place to move into | 24 | 2.6 |
| I cannot get the price I want for my current home | 54 | 5.8 |
| I cannot sell my home for enough to cover my mortgage | 10 | 1.1 |
| Children in school | 43 | 4.6 |
| Closeness to family | 35 | 3.7 |
| Age/health | 61 | 6.5 |
| Other | 38 | 4.1 |
| N | 938 |  |

Note: Question only asked to those respondents whose 3yr Moving Probability (see previous slide) is less than $70 \%$.

## Probability of Moving to Same Town/City

If you were to move to a different primary residence over the next 3 years, what is the percent chance that this home would be in your current town/city?

|  | Summary | Percentile |  |
| ---: | ---: | ---: | ---: |
| Mean | 44.5 | $25 \%$ | 10.0 |
| Std. Dev. | 35.4 | $50 \%$ | 50.0 |
|  |  | $75 \%$ | 80.0 |
| N | 817 |  |  |

Note: Question only asked to those respondents whose 3yr Moving Probability (see previous slide) is greater than or equal to $5 \%$.

## Probability of Buying Given Move

And if you were to move to a different primary residence over the next 3 years, what is the percent chance that you would buy (as opposed to rent) your new home?

|  | Summary | Percentile |  |
| ---: | ---: | ---: | ---: |
| Mean | 63.7 | $25 \%$ | 40.0 |
| Std. Dev. | 35.1 | $50 \%$ | 75.0 |
|  |  | $75 \%$ | 98.0 |
| N | 817 |  |  |

Note: Question only asked to those respondents whose 3yr Moving Probability (see previous slide) is greater than or equal to $5 \%$.

## Main Reasons for Renting over Buying

Which of the following are reasons you would rent and not purchase a home if you were to move over the next three years?

|  | Freq | Pct |
| :--- | ---: | ---: |
| I don't make enough money | 136 | 37.4 |
| I don't have enough money saved up, or I have too much debt | 148 | 40.7 |
| My credit is not good enough | 96 | 26.4 |
| I am worried about my or my spouse's job security | 44 | 12.1 |
| I am concerned housing prices might fall | 22 | 6.0 |
| It is more affordable to rent than buy | 83 | 22.8 |
| I don't want to tie my money up in a house | 73 | 20.1 |
| I don't want to, or can't be tied-down to a certain area | 87 | 23.9 |
| I don't want the upkeep of ownership | 122 | 33.5 |
| I can live in a better neighborhood or in a nicer home by renting | 45 | 12.4 |
| Would likely not stay in the new home very long | 51 | 14.0 |
| Age/health reasons | 90 | 24.7 |
| Other | 34 | 9.3 |
| N | 364 | . |

Note: Respondents could select multiple reasons.
Question only asked to those respondents whose 3yr Moving Probability is greater than or equal to $5 \%$, and whose Probability of Buying Given Move is less than $70 \%$.

## Buy Non-Primary Home

What is the percent chance that over the next 3 years you will buy a home that you would NOT use as your primary residence (meaning you would use it as a vacation home, or as an investment property, etc.)?

|  | Summary | Percentile |  |
| ---: | ---: | ---: | ---: |
| Mean | 9.3 | $25 \%$ | 0.0 |
| Std. Dev. | 19.1 | $50 \%$ | 0.0 |
|  |  | $75 \%$ | 10.0 |
| N | 1198 |  |  |

## Use for Second Home

If you were to buy such a home over the next 3 years, what would you most likely use it as?

|  | Freq. | Percent |
| ---: | ---: | ---: |
| Vacation/Second home | 204 | 38.1 |
| Investment Property | 252 | 47.0 |
| Residence for Family Member | 61 | 11.4 |
| Other | 19 | 3.5 |
| N | 536 |  |

Note: This question is only asked to those respondents who answer Prob. Buy New Non-Primary 3yr with a probability greater than 0 .

## Mortgage Rate Estimates

Items in table and corresponding question:

- Current Self Rate Estimate: Assume that you applied for a 30-year fixed-rate mortgage today. What mortgage rate do you think you would qualify for?
- Current Average Rate Estimate: What do you think the average interest rate (for all borrowers) on a new 30-year fixed-rate mortgage is as of today?

|  | Percentile |  |  |  |  |  |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  | Mean | Std. Dev. | $25 \%$ | $50 \%$ | $75 \%$ | N |
| Exp. Self Rate | 4.5 | 2.0 | 3.5 | 4.0 | 5.0 | 1018 |
| Exp. National Rate | 5.0 | 2.4 | 3.8 | 4.0 | 5.0 | 1203 |

Note: 183 respondents selected "Would not qualify at any rate."
Freddie Mac Primary Mortgage Market Survey rate (link) was between 3.59 and $3.80 \%$ over the time period the survey was fielded (Feb. 01-28).

## Mortgage Rate Expectations

What do you think the average interest rate on a 30-year fixed-rate mortgage will be: one year from today and three years from today?

|  | Percentile |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
|  | Mean | Std. Dev. | $25 \%$ | $50 \%$ | $75 \%$ | N |
| Exp. Mortgage Rate Change, 1yr | 0.47 | 0.96 | 0.00 | 0.25 | 1.00 | 1203 |
| Exp. Mortgage Rate Change, 3yr | 1.6 | 1.8 | 0.5 | 1.0 | 2.0 | 1202 |

Note: Expected rate change computed as
(Expected Average Rate in T years) - (Current Average Rate Estimate)

For more information on "Current Average Rate Estimate", see previous slide.

## Uncertainty about Future Mortgage Rates, 1yr

What do you think is the percent chance that one year from today average interest rate on a 30-year fixed-rate mortgage will be

- $<X \%$, where $X=$ (Current Ave. Rate Estimate) $-1 \%$.
- Between $X \%$ and $V \%$, where $V=$ (Current Ave. Rate Estimate).
- Between $V \%$ and $Y \%$, where $Y=($ Current Ave. Rate Estimate $)+2 \%$.
- > Y\% .

| Percentile |  |  |  |  |  |  |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  | Mean | Std. Dev. | $25 \%$ | $50 \%$ | $75 \%$ | N |
| Lower by at least 1 percentage point | 9.5 | 14.8 | 0.0 | 5.0 | 10.0 | 1202 |
| Between -1 and 0 percentage points | 40.5 | 28.1 | 20.0 | 40.0 | 55.0 | 1202 |
| Between 0 and +2 percentage points | 39.8 | 28.0 | 20.0 | 38.0 | 50.0 | 1202 |
| Higher by 2 percentage points or more | 10.1 | 14.9 | 0.0 | 5.0 | 15.0 | 1202 |

Note: Values are in percent $(100=100 \%)$. See previous slides for Current Ave. Rate Estimate and Expected Ave. Rate in T Years

## Rate Type Recommendation

If a friend of yours sought your advice about taking out a fixed-rate mortgage or an adjustable-rate mortgage today, would you recommend a fixed-rate mortgage or an adjustable-rate mortgage?
(An adjustable-rate mortgage is one where the interest rate of the mortgage can change over the life of the loan, depending on market interest rates.)

|  | Freq. | Percent |
| ---: | ---: | ---: |
| Definitely Fixed Rate | 752 | 62.4 |
| Likely Fixed Rate | 260 | 21.6 |
| Make No Recommendation | 178 | 14.8 |
| Likely Adjustable | 14 | 1.2 |
| Definitely Adjustable | 1 | 0.1 |
| N | 1205 |  |

## Credit Conditions

Current Credit Conditions: Compared to 12 months ago, do you think it is generally harder or easier these days for people to obtain a mortgage?

Expected Credit Conditions: Looking ahead, do you think that 12 months (and 3 years) from now it will generally be harder or easier for people to obtain a mortgage than it is currently?

|  | 1yr ago |  | 1yr hence |  | 3yrs hence |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
|  | Freq | Pct | Freq | Pct | Freq | Pct |
| Much Harder | 89 | 7.4 | 50 | 4.1 | 58 | 4.8 |
| Somewhat Harder | 329 | 27.3 | 274 | 22.7 | 312 | 25.9 |
| Equally Easy/Hard | 525 | 43.6 | 624 | 51.8 | 491 | 40.7 |
| Somewhat Easier | 252 | 20.9 | 252 | 20.9 | 320 | 26.6 |
| Much Easier | 10 | 0.8 | 5 | 0.4 | 24 | 2.0 |
| Total | 1205 | 100.0 | 1205 | 100.0 | 1205 | 100.0 |

## Expected Economic Conditions

Do you think that 12 months from now (and 3 years from now) economic conditions in your town/city will be better or worse than they are currently?

|  | 12 Months from Now |  | yyrs From Now |  |
| :--- | ---: | ---: | ---: | ---: |
|  | Freq | Pct | Freq | Pct |
| Much worse | 12 | 1.0 | 22 | 1.8 |
| Somewhat worse | 183 | 15.2 | 192 | 15.9 |
| Unchanged | 465 | 38.6 | 273 | 22.7 |
| Somewhat better | 524 | 43.5 | 667 | 55.4 |
| Much better | 20 | 1.7 | 51 | 4.2 |
| Total | 1204 | 100.0 | 1205 | 100.0 |

## Perceived Underwater Status, Own Zip

Please indicate your best guess as to what percentage of all homeowners with a mortgage in your zip code owe more on their home than what it is worth now?

|  | Summary | Percentile |  |
| ---: | ---: | ---: | ---: |
| Mean | 29.0 | $25 \%$ | 10.0 |
| Std. Dev. | 24.0 | $50 \%$ | 20.0 |
|  |  | $75 \%$ | 45.0 |
| N | 1201 |  |  |

Note: Values in percent ( $100=100 \%$ )

## Foreclosure History

Have you ever entered foreclosure on a home you owned (or currently own)?

|  | Freq. | Percent |
| ---: | ---: | ---: |
| No | 796 | 92.0 |
| Yes | 69 | 8.0 |
| N | 865 |  |

Note: Question asked to current owners and renters who indicate that they have previously owned a home.

## Reasons for Foreclosure

Which of the following were factors in your home being foreclosed?

|  | Freq | Pct |
| :--- | ---: | ---: |
| Health issues/medical bills | 18 | 26.1 |
| A disability | 14 | 20.3 |
| Job loss/unemployment | 39 | 56.5 |
| Reduction in income | 27 | 39.1 |
| Death of a spouse | 1 | 1.4 |
| Separation or divorce | 19 | 27.5 |
| Increase in monthly mortgage payment due | 14 | 20.3 |
| Decline in home value | 16 | 23.2 |
| Other | 10 | 14.5 |
| Total | 69 | 100.0 |

Note: Respondents could select multiple reasons.
Question only asked to those respondents who have entered foreclosure on a home they own or have owned.

## Short Sale History

Have you ever sold a home you owned in a short sale?
A short sale is where the seller of a home arranges with their mortgage lender to accept a price that's less than the amount they owe on the property. As part of this arrangement, the lender typically agrees to forgive the rest of the loan.

|  | Freq. | Percent |
| ---: | ---: | ---: |
| No | 839 | 97.0 |
| Yes | 26 | 3.0 |
| N | 865 |  |

## Reasons for Short Sale

Which of the following were factors in your home being short sold?

|  | Freq | Pct |
| :--- | ---: | ---: |
| Health issues/medical bills | 3 | 11.5 |
| A disability | 0 | 0.0 |
| Job loss/unemployment | 9 | 34.6 |
| Reduction in income | 10 | 38.5 |
| Death of a spouse | 0 | 0.0 |
| Separation or divorce | 5 | 19.2 |
| Increase in monthly mortgage payment due | 4 | 15.4 |
| Decline in home value | 9 | 34.6 |
| Other | 6 | 23.1 |
| Total | 26 | 100.0 |

Respondents could select multiple reasons.
Note: Question only asked to those respondents who have sold a home they owned in short sale.

## Homeowner Section

## Purchase Year

What year did you buy your current primary residence?

|  | Summary | Percentile |  |
| ---: | ---: | ---: | ---: |
| Mean | 2000 | $25 \%$ | 1995 |
| Std. Dev. | 14 | $50 \%$ | 2003 |
|  |  | $75 \%$ | 2010 |
| N | 860 |  |  |

## Expected Tenure in Residence

When you moved to your primary residence, how long did you expect to stay in this home?

|  | Freq. | Percent |
| ---: | ---: | ---: |
| $<2 \mathrm{yrs}$ | 9 | 1.0 |
| $2-3 \mathrm{yrs}$ | 23 | 2.7 |
| $4-5 \mathrm{yrs}$ | 76 | 8.8 |
| $6-7 \mathrm{yrs}$ | 29 | 3.4 |
| $8-10 \mathrm{yrs}$ | 77 | 8.9 |
| $>10 \mathrm{yrs}$ | 366 | 42.5 |
| No specific time frame | 281 | 32.6 |
| N | 861 |  |

## Expected Future Tenure in Residence

How many more years do you expect to stay in this home as of today?

|  | Freq. | Percent |
| ---: | ---: | ---: |
| $<2 \mathrm{yrs}$ | 104 | 12.1 |
| $2-3 \mathrm{yrs}$ | 77 | 9.0 |
| $4-5 \mathrm{yrs}$ | 104 | 12.1 |
| $6-7 \mathrm{yrs}$ | 47 | 5.5 |
| $8-10 \mathrm{yrs}$ | 120 | 14.0 |
| $>10 \mathrm{yrs}$ | 408 | 47.4 |
| N | 860 |  |

## Purchase Price

What did you pay for this home?

|  | Summary |  | Percentile |
| ---: | ---: | ---: | ---: |
| Mean | 178326.8 | $25 \%$ | 85000.0 |
| Std. Dev. | 132558.5 | $50 \%$ | 145000.0 |
|  |  | $75 \%$ | 235000.0 |
| N | 835 |  |  |

## Down Payment

How much was your down payment?

|  | Percentile |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
|  | Mean | Std. Dev. | $25 \%$ | $50 \%$ | $75 \%$ | N |
| Down Payment Amount | 39233 | 58823 | 3800 | 16000 | 50000 | 828 |

As a fraction of the purchase price:

|  | Percentile |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
|  | Mean | Std. Dev. | $25 \%$ | $50 \%$ | $75 \%$ | N |
| Down Payment Fraction | 0.21 | 0.26 | 0.03 | 0.12 | 0.25 | 829 |

Note: Down payment fraction constructed using Down Payment amount and Purchase Price (see previous slide):

Down Payment Amount<br>Purchase Price

## Current Home Price Estimate

What do you think your home would sell for today?

|  | Summary | Percentile |  |
| ---: | :---: | :---: | :---: |
| Mean | 245038.6 | $25 \%$ | 123500.0 |
| Std. Dev. | 180862.7 | $50 \%$ | 190000.0 |
|  |  | $75 \%$ | 300000.0 |
| N | 860 |  |  |

## Perceived Annual Change in Home Price Since Purchase

Perceived percent annual home price change since purchase:

|  | Summary | Percentile |  |
| ---: | ---: | ---: | ---: |
| Mean | 2.7 | $25 \%$ | 0.4 |
| Std. Dev. | 4.0 | $50 \%$ | 2.0 |
|  |  | $75 \%$ | 4.2 |
| N | 826 |  |  |

Note: Values are percent change, annualized ( $100=100 \%$ ). Values constructed using Purchase Year, Purchase Price, and Current Home Price Estimate:

$$
\left(\frac{\text { Current Home Price Estimate }}{\text { Purchase Price }}\right)^{\frac{1}{(2015-\text { Purchase Year })}}-1
$$

## Expected Future Annual Price Changes for Own Home

Please think about the current and future value of your home, under the assumption that you don't make any investments in your home other than regular maintenance/repairs. What do you think your home would sell for one year from today and five years from today?

|  | Percentile |  |  |  |  |  |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  | Mean | Std. Dev. | $25 \%$ | $50 \%$ | $75 \%$ | N |
| Exp. Future Annual Price Change, 1yr | 2.8 | 4.2 | 0.0 | 2.2 | 4.5 | 859 |
| Exp. Future Annual Price Change, 5yrs | 2.0 | 2.5 | 0.9 | 1.9 | 3.1 | 858 |

Note: Values are percent change, annualized $(100=100 \%) . T$ Year annual percent change constructed as

$$
\left(\frac{\text { Exp. Future Own Home Price, } T \text { Years From Today }}{\text { Current Home Price Estimate }}\right)^{(1 / T)}-1
$$

See previous slide for more information on "Current Home Price Estimate."

## Chance of Selling

What is the percent chance that you will put your primary residence up for sale in the next 12 months?

|  | Summary | Percentile |  |
| ---: | ---: | ---: | ---: |
| Mean | 14.6 | $25 \%$ | 0.0 |
| Std. Dev. | 25.5 | $50 \%$ | 3.0 |
|  |  | $75 \%$ | 15.0 |
| N | 854 |  |  |

## Probability of Investing in Own Home

What do you think is the percent chance that, over the next 12 months and 3 years, you will make any investments in your home (such as remodeling, additions, upgrades, landscaping, but not including regular maintenance and repairs) costing more than $\$ 5000$ total?

Percentile

|  | Mean | Std. Dev. | $25 \%$ | $50 \%$ | $75 \%$ | N |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Prob. Invest, 1yr* | 27.3 | 31.3 | 2.0 | 10.0 | 50.0 | 857 |
| Prob. Invest, 3yrs | 42.6 | 35.9 | 10.0 | 40.0 | 75.0 | 857 |

Note: "Prob. Invest 1yr" only asked if Prob. Invest, $3 \mathrm{yr} \geq 5 \%$.
*For those who answer < $5 \%$ for "Prob. Invest 3yr," the 1 year horizon is imputed by setting the 1 year value equal to the 3 year probability.

## Past Investment in Home

Over the past 3 years, did you make any investments in your home (such as remodeling, additions, upgrades, landscaping, but not including regular maintenance and repairs)?

|  | Freq. | Percent |
| ---: | ---: | ---: |
| No | 336 | 39.0 |
| Yes | 525 | 61.0 |
| N | 861 |  |

## Size of Investment in Home

Approximately how much did you spend on investments in your home (not including regular maintenance and repairs) over the past 3 years?

|  | Summary | Percentile |  |
| ---: | ---: | ---: | ---: |
| Mean | 13281.3 | $25 \%$ | 3000.0 |
| Std. Dev. | 17305.3 | $50 \%$ | 8000.0 |
|  |  | $75 \%$ | 15000.0 |
| N | 524 |  |  |

Note: Question only asked to those who have invested in the past 3 years (see previous slide).

## Outstanding Loans

Do you (or your spouse/partner) have any outstanding loans against the value of your home, including all mortgages, home equity loans and home equity lines of credit?

|  | Freq. | Percent |
| ---: | ---: | ---: |
| Yes, mortgage(s) only | 484 | 56.3 |
| Yes, HELOC only | 41 | 4.8 |
| Yes, both mortgage(s) and HELOC | 73 | 8.5 |
| No | 262 | 30.5 |
| N | 860 |  |

Note: Question asked to all respondents who own their primary residence.

## Probability of an Additional Loan

What is the percent chance that over the next 12 months, you will apply for an additional loan on your primary residence?

|  | Summary | Percentile |  |
| ---: | ---: | ---: | ---: |
| Mean | 5.0 | $25 \%$ | 0.0 |
| Std. Dev. | 13.6 | $50 \%$ | 0.0 |
|  |  | $75 \%$ | 3.0 |
| N | 857 |  |  |

Note: Question asked to all respondents who own their primary residence, including those who currently have no outstanding loans against their home.

## Reasons for an Additional Loan

If you do end up taking out an additional loan on your primary residence over the next 12 months, what would you use it for?

|  | Freq | Pct |
| :--- | ---: | ---: |
| To make renovations or improvements to the home | 89 | 63.1 |
| To help pay my other debt, such as credit card debt, auto loans, | 31 | 22.0 |
| student loans, or medical bills <br> To pay for cost of college, education, or training for members of <br> my household (including myself) | 11 | 7.8 |
| To make the down payment on a second home or investment | 15 | 10.6 |
| property |  |  |
| To pay for a car | 8 | 5.7 |
| To pay for traveling or vacation | 2 | 1.4 |
| To pay for other large purchases | 1 | 0.7 |
| To invest in my own (or my family's) business, or to start a new | 6 | 4.3 |
| business |  |  |
| To make other financial investments (for instance, buy stocks) | 5 | 3.5 |
| To pay for my regular living expenses | 8 | 5.7 |
| To help a family member | 4 | 2.8 |
| To put in a savings account | 1 | 0.7 |
| Other | 12 | 8.5 |
| Total | 141 | 100.0 |

Note: Respondents could select multiple uses. Question only asked to those respondents whose Probability of an Additional Loan in the next 12 months is greater than or equal to $10 \%$.

## Questions for Homeowners with Debt

## Total Outstanding Home Loan Balances

Approximately, what is the total amount of outstanding loans against your primary residence as of today, including all mortgages and home equity loans?

|  | Summary | Percentile |  |
| ---: | ---: | ---: | ---: |
| Mean | 150995.9 | $25 \%$ | 75000.0 |
| Std. Dev. | 107463.4 | $50 \%$ | 128500.0 |
|  |  | $75 \%$ | 200000.0 |
| N | 596 |  |  |

Note: Question only asked to those homeowners who have outstanding loans (see previous slide).

## Perceived Equity in Home

Loan to Value (LTV):

|  | Summary | Percentile |  |
| ---: | ---: | ---: | ---: |
| Mean | 62.8 | $25 \%$ | 44.4 |
| Std. Dev. | 27.4 | $50 \%$ | 65.8 |
|  |  | $75 \%$ | 85.0 |
| N | 594 |  |  |

Note: Values are in percentages $(100=100 \%)$. Constructed using Total Outstanding Home Loan Balances and Current Home Price Estimate:

$$
\text { LTV }=100 \times\left(\frac{\text { Outstanding Loan Balances }}{\text { Current Home Price Estimate }}\right)
$$

A total of 36 respondents indicate that they have negative equity (that is, LTV $>100$ ).
The table above excludes the 262 respondents who own their home but indicate that they have no outstanding home loans.

## Monthly Loan Payments

Approximately, how much do you pay per month in total on all outstanding loans against your primary residence (including all mortgages and home equity loans)?

|  | Summary | Percentile |  |
| ---: | ---: | ---: | ---: |
| Mean | 1310.2 | $25 \%$ | 706.0 |
| Std. Dev. | 833.1 | $50 \%$ | 1100.0 |
|  |  | $75 \%$ | 1700.0 |
| N | 594 |  |  |

Note: Question only asked to those homeowners with outstanding loans.

## Loan Payments as a Fraction of Household Income

Annual loan payments as a percent of annual household income:

|  | Summary | Percentile |  |
| ---: | ---: | ---: | ---: |
| Mean | 21.9 | $25 \%$ | 12.0 |
| Std. Dev. | 18.5 | $50 \%$ | 17.3 |
|  |  | $75 \%$ | 24.7 |
| N | 591 |  |  |

Note: Question only asked to those homeowners with outstanding loans. Values in percent ( $100=100 \%$ ), constructed using Monthly Loan Payments and annual Household Income

$$
100 \times \frac{12 \times \text { Monthly Loan Payments }}{\text { Household Income }}
$$

To get a continuous measure of household income, we take the midpoint of household income intervals (see previous question). For the highest interval, we set the continuous measure equal to the lower bound.

## History of Missed Payments

During the past 12 months, did you miss two or more payments on any outstanding loans against your primary residence (including all mortgages and home equity loans)?

|  | Freq. | Percent |
| ---: | ---: | ---: |
| No | 582 | 97.5 |
| Yes | 15 | 2.5 |
| N | 597 |  |

Note: Question only asked to those homeowners with outstanding loans.

## Reasons for Missing Payments

Which of the following are reasons you missed two or more payments on loans against your home?

|  | Freq | Pct |
| :--- | ---: | ---: |
| Health issues or medical bills | 5 | 33.3 |
| A disability | 2 | 13.3 |
| Job loss or unemployment | 5 | 33.3 |
| Reduction in income | 9 | 60.0 |
| Death of a spouse | 1 | 6.7 |
| Separation or divorce | 0 | 0.0 |
| Increase in monthly mortgage payment due | 3 | 20.0 |
| Decline in home value | 2 | 13.3 |
| Accidentally forgot to pay | 0 | 0.0 |
| To get lender to modify loan | 5 | 33.3 |
| Other | 4 | 26.7 |
| Total | 15 | 100.0 |

Note: Respondents could select multiple reasons.

## Risk of Missing Current Payments

What do you think is the percent chance that over the next 12 months you will miss two or more payments on any outstanding loans against your home?

|  | Summary | Percentile |  |
| ---: | ---: | ---: | ---: |
| Mean | 3.7 | $25 \%$ | 0.0 |
| Std. Dev. | 11.3 | $50 \%$ | 0.0 |
|  |  | $75 \%$ | 2.0 |
| N | 596 |  |  |

Note: Question only asked to those homeowners with outstanding loans.

## Hypothetical Risk of Missing Higher Payments

If your monthly payment was 50 percent higher than it is today, what do you think would be the percent chance that over the next 12 months you would miss two or more payments on any outstanding loans against your home?

|  | Summary | Percentile |  |
| ---: | ---: | ---: | ---: |
| Mean | 21.2 | $25 \%$ | 0.0 |
| Std. Dev. | 30.6 | $50 \%$ | 5.0 |
|  |  | $75 \%$ | 30.0 |
| N | 595 |  |  |

Note: Question only asked to those homeowners with outstanding loans.

## Consideration of Stopping Payments

You mentioned that the total amount of outstanding loans against your primary residence as of today is $\$ X$ (from previous question), while you think the house would sell for $\$ Y$ (from previous question). That is, you owe more on the home than you think it could sell for. Over the past 12 months, have you considered no longer making your monthly payments on loans against your home?

|  | Freq. | Percent |
| ---: | ---: | ---: |
| No, absolutely not | 28 | 75.7 |
| Yes, considered but did not stop | 4 | 10.8 |
| Yes, seriously considered but did not stop | 1 | 2.7 |
| Yes, actually did stop | 4 | 10.8 |
| N | 37 |  |

Note: Question only asked of those respondents who indicate that they have negative equity (see previous slide).

## Reasons for Stopping Payments

Why did you not stop making your mortgage payments?

|  | Freq | Pct |
| :--- | ---: | ---: |
| I like my home and don't want to lose it | 24 | 72.7 |
| The lender can come after my other belongings if I stop making | 10 | 30.3 |
| payments |  |  |
| House prices will recover and my home will eventually be worth | 14 | 42.4 |
| more than the debt on the home |  |  |
| Not making payments will negatively affect my credit score | 21 | 63.6 |
| The cost of having to move to a different home is too high if I | 8 | 24.2 |
| stop making payments | 19 | 57.6 |
| I think it is morally wrong to stop making payments | 4 | 12.1 |
| Not making payments will negatively affect the community | 5 | 15.2 |
| Other | 33 | 100.0 |

Note: Respondents could select multiple reasons. Question only asked if respondent did not stop making payments (see previous slide).

## Chance of Future Foreclosure

What is the percent chance that over the next 12 months you will face foreclosure or lose your home through a repossession?

|  | Summary | Percentile |  |
| ---: | ---: | ---: | ---: |
| Mean | 2.4 | $25 \%$ | 0.0 |
| Std. Dev. | 8.6 | $50 \%$ | 0.0 |
|  |  | $75 \%$ | 1.0 |
| N | 596 |  |  |

Note: Question only asked to those respondents with outstanding loans.

## Type of Mortgage Rate

In the next few questions, we will ask you about the mortgage on your primary residence. If you have more than one mortgage on your primary residence, please consider the one with the largest balance when answering these questions.

Is the interest rate of your mortgage adjustable/floating (meaning it can change over the life of the loan) or fixed?

|  | Freq. | Percent |
| ---: | ---: | ---: |
| Adjustable/Floating | 34 | 6.3 |
| Fixed | 509 | 93.7 |
| N | 543 |  |

Note: Question only asked to those respondents who currently have a mortgage.

## Current Mortgage Rate

And what is the current interest rate on your mortgage?

|  | Summary | Percentile |  |
| ---: | ---: | ---: | ---: |
| Mean | 4.3 | $25 \%$ | 3.5 |
| Std. Dev. | 1.3 | $50 \%$ | 4.0 |
|  |  | $75 \%$ | 4.9 |
| N | 555 |  |  |

Note: Values in percent $(100=100 \%)$. Question only asked to those respondents who currently have a mortgage.

## Refinance History

Have you ever refinanced the mortgage on your primary residence?

|  | Freq. | Percent |
| ---: | ---: | ---: |
| No | 240 | 43.1 |
| Yes | 310 | 55.7 |
| Don't Know | 7 | 1.3 |
| N | 557 |  |

Note: Question only asked to those respondents who currently have a mortgage.

## Refinance Year

When did you last refinance your mortgage?

|  | Freq. | Percent |
| ---: | ---: | ---: |
| Last 6 mos | 10 | 3.2 |
| 6 mos to 1 yr ago | 14 | 4.5 |
| 1 yr to 2 yrs ago | 70 | 22.6 |
| 2yrs to 3yrs ago | 74 | 23.9 |
| 3yrs to 5yrs ago | 75 | 24.2 |
| 5yrs to 7yrs ago | 29 | 9.4 |
| More than 7yrs ago | 38 | 12.3 |
| N | 310 |  |

Note: Question only asked to those respondents who have refinanced their mortgage (see previous slide).

## Refinancing Consequences

When you last refinanced, how did the terms of your mortgage change?

|  | Freq | Pct |
| :--- | ---: | ---: |
| Lower rate | 283 | 91.3 |
| Balance increased | 63 | 20.3 |
| Term increased | 22 | 7.1 |
| Term decreased | 68 | 21.9 |
| Floating to fixed | 17 | 5.5 |
| Fixed to floating | 12 | 3.9 |
| Changed servicer | 75 | 24.2 |
| Other | 15 | 4.8 |
| Total | 310 | 100.0 |

Note: Respondents could select multiple options. Question only asked to those respondents who have refinanced their mortgage (see previous slide).

## Use for Proceeds

You indicated that you increased the balance on your mortgage when you last refinanced. What did you use this money for?

|  | Freq | Pct |
| :--- | ---: | ---: |
| Use toward the down payment on some other home | 0 | 0.0 |
| To pay for refinancing fees and other fees | 14 | 22.2 |
| To make renovations or improvements to the home | 29 | 46.0 |
| To help pay my other debt, such as credit card debt, auto loans, <br> student loans, or medical bills <br> To pay for college, education, or training for members of my | 30 | 47.6 |
| household (including myself) | 6 | 9.5 |
| To make the down payment on a second home or investment | 3 | 4.8 |
| property |  |  |
| To pay for a car or other large purchases | 5 | 7.9 |
| To pay for traveling or vacation | 1 | 1.6 |
| To invest in my own (or my family's) business, or to start a new | 3 | 4.8 |
| business |  |  |
| To make other financial investments (for instance, buy stocks) | 2 | 3.2 |
| To pay for my regular living expenses | 4 | 6.3 |
| To help a family memeber | 2 | 3.2 |
| Put it into my savings | 1 | 1.6 |
| Other | 5 | 7.9 |
| Total | 63 | 100.0 |

Note: Question only asked to those respondents who increased the balance of their mortgage (see previous slide).

## Monthly Payment Change Upon Refinance

As a result of refinancing your mortgage, how did your required monthly payment change?

|  | Freq. | Percent |
| ---: | ---: | ---: |
| Increased | 71 | 22.9 |
| Unchanged | 47 | 15.2 |
| Decreased | 185 | 59.7 |
| Don't Know | 7 | 2.3 |
| N | 310 |  |

By approximately how much did your monthly payment change?

|  | Summary |  | Percentile |
| ---: | ---: | ---: | ---: |
| Mean | -80.1 | $25 \%$ | -200.0 |
| Std. Dev. | 252.8 | $50 \%$ | -100.0 |
|  |  | $75 \%$ | 0.0 |
| N | 298 |  |  |

Note: Question only asked to those respondents who refinanced their mortgage. The table of monthly payment changes includes those respondents whose monthly payment did not change, in which case the change is recorded as $\$ 0$.

## Use for Savings Upon Refinance

What did you do with the $\$ X$ (see previous question) you no longer had to spend on your monthly mortgage payment after the refinancing?

|  | Freq | Pct |
| :--- | ---: | ---: |
| Paid down some of the balance of my mortgage | 33 | 18.1 |
| Paid down other debt (e.g. on credit cards, auto loans, student | 57 | 31.3 |
| loans, or medical bills) |  |  |
| Used it to finance a large purchase (e.g. a car) | 4 | 2.2 |
| Used it to make renovations or improvements to the home | 15 | 8.2 |
| Used it to pay for other expenses | 91 | 50.0 |
| Used it to purchase financial assets (e.g. stocks) | 4 | 2.2 |
| Other | 7 | 3.8 |
| Nothing / put it into my savings | 26 | 14.3 |
| Total | 182 | 100.0 |

Note: Question only asked to those respondents whose monthly mortgage payment decreased upon refinancing (see previous slide).

## Probability of Refinancing

What is the percent chance that over the next 12 months you will refinance the mortgage on your primary residence?

|  | Summary | Percentile |  |
| ---: | ---: | ---: | ---: |
| Mean | 12.2 | $25 \%$ | 0.0 |
| Std. Dev. | 20.2 | $50 \%$ | 2.0 |
|  |  | $75 \%$ | 11.0 |
| N | 553 |  |  |

Note: Question only asked to those respondents who currently have a mortgage.

## Probability of Refinancing Given Lower Rates

If instead available mortgage rates were 1 percentage point lower than what lenders are offering today, what would be the percent chance that you would refinance the mortgage on your primary residence over the next 12 months?

|  | Summary | Percentile |  |
| ---: | ---: | ---: | ---: |
| Mean | 34.5 | $25 \%$ | 2.0 |
| Std. Dev. | 32.6 | $50 \%$ | 25.0 |
|  |  | $75 \%$ | 60.0 |
| N | 552 |  |  |

Note: Question only asked to those respondents who currently have a mortgage.

## Reasons for Refinancing

If you do end up refinancing over the next 12 months, what would be your reasons for doing so?

| Lower the interest rate on my mortgage, and thus my monthly | Freq | Pct |
| :--- | ---: | ---: |
| payment | 86.4 |  |
| Increase the balance on my mortgage (cash out some of the eq- | 12 | 6.3 |
| uity in my home) |  |  |
| Pay off part of the balance on my mortgage | 21 | 11.0 |
| Reduce the term of my mortgage (for instance, change from a | 51 | 26.7 |
| 30-year to a 15-year mortgage) |  |  |
| Increase the term of my mortgage (for instance, change from a | 6 | 3.1 |
| 15-year to a 30-year mortgage) |  |  |
| Change from an adjustable/floating rate mortgage to a fixed-rate | 9 | 4.7 |
| mortgage | 2 | 1.0 |
| Change from a fixed-rate mortgage to an adjustable/floating rate | 2 |  |
| mortgage | 15 | 7.9 |
| Change my mortgage servicer | 15 | 7.9 |
| Combine multiple liens into a single mortgage | 25 | 13.1 |
| Consolidate non-mortgage debt | 11 | 5.8 |
| Other | 191 | 100.0 |

Note: Question only asked to those respondents whose Probability of Refinancing in the next 12 months is greater than $10 \%$.

## Reasons for Not Refinancing

If you do not end up refinancing over the next 12 months, what would be your reasons for that?

|  | Freq | Pct |
| :--- | ---: | ---: |
| The savings on my monthly payment would not be worth it | 288 | 52.6 |
| Too time consuming / too much hassle | 155 | 28.3 |
| I am planning to sell my home soon | 86 | 15.7 |
| The upfront monetary cost is too large | 149 | 27.2 |
| The balance on my mortgage is too low to refinance (it is almost | 38 | 6.9 |
| paid off) |  |  |
| Don't want to take out a new long-term loan | 124 | 22.6 |
| Don't trust mortgage lenders / I'm afraid to be taken advantage of | 29 | 5.3 |
| Would not get approved because the value of my home is too low | 31 | 5.7 |
| relative to my mortgage balance |  |  |
| Would not get approved because I don't have a good enough credit | 42 | 7.7 |
| record |  | 38 |
| Would not get approved because I don't have sufficient income at | 6.9 |  |
| the moment | 220 | 40.1 |
| I am satisfied with the terms of my current mortgage | 30 | 5.5 |
| Other | 548 | 100.0 |

Note: Question only asked to those respondents whose Probability of Refinancing in the next 12 months is less than or equal to $90 \%$.

## HELOC Balances

Approximately, how much of the total amount of outstanding loans against your primary residence is in the form of home equity loans/lines of credit?

|  | Summary | Percentile |  |
| ---: | ---: | ---: | ---: |
| Mean | 54674.3 | $25 \%$ | 18000.0 |
| Std. Dev. | 59595.6 | $50 \%$ | 35000.0 |
|  |  | $75 \%$ | 68000.0 |
| N | 113 |  |  |

## HELOC Uses

You indicated that you have home equity loans/lines of credit on your home. What did you use these for?

|  | Freq | Pct |
| :--- | ---: | ---: |
| Use toward the down payment on the home | 6 | 5.3 |
| To make renovations or improvements to the home | 68 | 59.6 |
| To help pay my other debt, such as credit card debt, auto loans, | 39 | 34.2 |
| student loans, or medical bills |  |  |
| To pay for college, education, or training for members of my | 4 | 3.5 |
| household (including myself) |  |  |
| To make the down payment on a second home or investment | 6 | 5.3 |
| property |  |  |
| To pay for a car or other large purchase(s) | 18 | 15.8 |
| To pay for traveling or vacation | 6.3 |  |
| To invest in my own (or my family's) business, or to start a new | 13 | 11.4 |
| business | 5 | 4.4 |
| To make other financial investments (for instance, buy stocks) | 3 | 2.6 |
| To pay for my regular living expenses | 4 | 3.5 |
| To help a family member | 7 | 6.1 |
| Other | 3 | 2.6 |
| Have not used it, or put into my savings | 114 | 100.0 |

## Renter Questions

## Beginning of Lease

In what year did you start renting your current primary residence?

|  | Summary | Percentile |  |
| ---: | ---: | ---: | ---: |
| Mean | 2009 | $25 \%$ | 2009 |
| Std. Dev. | 7 | $50 \%$ | 2012 |
|  |  | $75 \%$ | 2014 |
| N | 344 |  |  |

## Expected Tenure in Residence

When you moved to your primary residence, how long did you expect to stay in this home?

|  | Freq. | Percent |
| ---: | ---: | ---: |
| $<1 \mathrm{yr}$ | 15 | 4.4 |
| $1-2 \mathrm{yrs}$ | 71 | 20.6 |
| $2-3 \mathrm{yrs}$ | 71 | 20.6 |
| $4-5 \mathrm{yrs}$ | 51 | 14.8 |
| $6-7 \mathrm{yrs}$ | 17 | 4.9 |
| $8-10 \mathrm{yrs}$ | 10 | 2.9 |
| $>10 \mathrm{yrs}$ | 25 | 7.3 |
| No specific time frame | 84 | 24.4 |
| N | 344 |  |

## Current Monthly Rent

How much is the total monthly rent for your home (regardless of whether you pay the whole amount yourself or you split it with others)?

|  | Summary | Percentile |  |
| ---: | ---: | ---: | ---: |
| Mean | 986.8 | $25 \%$ | 600.0 |
| Std. Dev. | 653.2 | $50 \%$ | 850.0 |
|  |  | $75 \%$ | 1210.0 |
| N | 341 |  |  |

## Annual Rent as a Fraction of Household Income

Annual monthly rent payments as a percent of annual household income:

|  | Summary | Percentile |  |
| ---: | ---: | ---: | ---: |
| Mean | 36.1 | $25 \%$ | 14.6 |
| Std. Dev. | 42.5 | $50 \%$ | 22.9 |
|  |  | $75 \%$ | 36.0 |
| N | 339 |  |  |

Note: Values in percent ( $100=100 \%$ ), constructed using Current Monthly Rent* and annual Household Income

$$
100 \times \frac{12 \times \text { Current Monthly Rent }}{\text { Household Income }}
$$

To get a continuous measure of household income, we take the midpoint of household income intervals. For the highest interval, we set the continuous measure equal to the lower bound.
*Ratio likely biased upwards as "Current Monthly Rent" (see previous slide) corresponds to the total rent for the unit, regardless of whether payments are split with roommates or other non-family members living in the unit.

## Monthly Rent at Move-In

How much was your monthly rent when you first moved to this home?

|  | Summary | Percentile |  |
| ---: | ---: | ---: | ---: |
| Mean | 895.5 | $25 \%$ | 492.0 |
| Std. Dev. | 726.5 | $50 \%$ | 700.0 |
|  |  | $75 \%$ | 1050.0 |
| N | 240 |  |  |

## Change in Rent Since Move-In

Estimated annualized rent increases for primary residence since move-in:

|  | Summary | Percentile |  |
| ---: | ---: | ---: | ---: |
| Mean | 1.2 | $25 \%$ | 0.0 |
| Std. Dev. | 2.2 | $50 \%$ | 0.4 |
|  |  | $75 \%$ | 2.3 |
| N | 233 |  |  |

Note: Values are percent change, annualized ( $100=100 \%$ ). Values constructed using Current Monthly Rent, Monthly Rent at Move-In, and Beginning of Lease:

$$
\left(\frac{\text { Current Monthly Rent }}{\text { Monthly Rent at Move-In }}\right)^{\frac{1}{2015-\text { Beginning of Lease }}}-1
$$

## Expected Future Rent Change

What do you think the rent for the home you are currently in will be one year and five years from today?

|  | Percentile |  |  |  |  |  |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  | Mean | Std. Dev. | $25 \%$ | $50 \%$ | $75 \%$ | N |
| Exp. Annual Rent Change, 1yr | 4.7 | 7.3 | 0.0 | 1.6 | 6.3 | 329 |
| Exp. Annual Rent Change, 5yrs | 3.4 | 2.8 | 1.5 | 2.8 | 4.6 | 329 |

Note: Values are percent change, annualized $(100=100 \%) . T$ Year annual percent change constructed with Current Monthly Rent as follows:

$$
\left(\frac{\text { Exp. Future Monthly Rent, } T \text { Years From Today }}{\text { Current Monthly Rent }}\right)^{(1 / T)}-1
$$

## Unable to Make Rent Payments

Were you unable to make a rent payment over the past 12 months?

|  | Freq. | Percent |
| ---: | ---: | ---: |
| No | 316 | 91.9 |
| Yes | 28 | 8.1 |
| N | 344 |  |

Note: Question only asked to respondents who rent their primary residence.

## Reasons for Missed Payments

Which of the following are reasons you were unable to make a rent payment?

|  | Freq | Pct |
| :--- | ---: | ---: |
| Health issues/medical bills | 5 | 17.9 |
| A disability | 4 | 14.3 |
| Job loss/unemployment | 10 | 35.7 |
| Reduction in income | 7 | 25.0 |
| Death of a spouse | 1 | 3.6 |
| Separation or divorce | 0 | 0.0 |
| Increase in rent | 2 | 7.1 |
| Accidentally forgot to pay | 0 | 0.0 |
| Other | 11 | 39.3 |
| Total | 28 | 100.0 |

Note: Question only asked to those respondents who have missed a rent payment (see previous slide).

## Chance of Missing Payments

What do you think is the percent chance that over the next 12 months you will be unable to make a rent payment?

|  | Summary | Percentile |  |
| ---: | ---: | ---: | ---: |
| Mean | 10.4 | $25 \%$ | 0.0 |
| Std. Dev. | 19.3 | $50 \%$ | 1.0 |
|  |  | $75 \%$ | 10.0 |
| N | 339 |  |  |

Note: Question only asked to respondents who rent their primary residence.

## Ease of Obtaining Financing

If you wanted to buy a home today, do you think it would be easy or difficult for you to obtain a home mortgage?

|  | Freq. | Percent |
| ---: | ---: | ---: |
| Very easy | 19 | 5.5 |
| Somewhat easy | 46 | 13.4 |
| Neither | 59 | 17.2 |
| Somewhat difficult | 112 | 32.6 |
| Very difficult | 108 | 31.4 |
| N | 344 |  |

Note: Question only asked to respondents who rent their primary residence.

## Home Ownership Among Renters

Have you ever owned a home?

|  | Freq. | Percent |
| ---: | ---: | ---: |
| No | 217 | 63.1 |
| Yes | 127 | 36.9 |
| N | 344 |  |

If yes, do you still own that home?

|  | Freq. | Percent |
| ---: | ---: | ---: |
| No | 108 | 85.0 |
| Yes | 19 | 15.0 |
| N | 127 |  |

## Reasons for Renting

You indicated that you had previously owned a primary residence. Why are you now renting your primary residence?

|  | Freq | Pct |
| :--- | ---: | ---: |
| Renting better fits my needs in terms of the unit/location I could | 15 | 13.4 |
| get |  |  |
| Renting better fits my household's needs right now | 29 | 25.9 |
| Renting is a better financial deal | 13 | 11.6 |
| I cannot currently afford to buy a home | 33 | 29.5 |
| I moved to a different area and was unable to find a home of my | 11 | 9.8 |
| liking that I could own | 18 | 16.1 |
| I do not want to make a long-term commitment | 14 | 12.5 |
| I lost my previous home through foreclosure or short sale, and |  | 14.3 |
| don't want to buy a home again | 16 | 14.3 |
| I lost my previous home through foreclosure or short sale, and | 17.0 |  |
| have not been able to obtain a mortgage to buy a home again | 19 | 17 |
| Change in household composition (e.g. divorce) | 112 | 100.0 |
| Other |  |  |

Note: Question only asked to renters who had previously owned their primary residence.
Respondents could select multiple reasons.

## Preferences for Owning Over Renting

Assuming you had the financial resources to do so, would you like to own instead of rent your primary residence?
(By primary residence, we mean the place where you usually live.)

|  | Freq. | Percent |
| ---: | ---: | ---: |
| Strongly prefer owning | 157 | 45.6 |
| Prefer owning | 78 | 22.7 |
| Indifferent renting/owning | 43 | 12.5 |
| Prefer renting | 46 | 13.4 |
| Strongly prefer renting | 20 | 5.8 |
| N | 344 |  |

## Chance of Owning in the Future

What do you think is the percent chance that you will own a primary residence at some point in the future?

|  | Summary | Percentile |  |
| ---: | ---: | ---: | ---: |
| Mean | 56.2 | $25 \%$ | 20.5 |
| Std. Dev. | 36.1 | $50 \%$ | 60.0 |
|  |  | $75 \%$ | 90.0 |
| N | 340 |  |  |

## Timeline of Owning in the Future

At what point in the future do you think you will own a primary residence? Please provide us with your best guess.

|  | Freq. | Percent |
| ---: | ---: | ---: |
| Less than 1 year | 23 | 8.2 |
| 1-2 years | 43 | 15.3 |
| $3-5$ years | 108 | 38.4 |
| $5-10$ years | 83 | 29.5 |
| More than 10 years | 24 | 8.5 |
| N | 281 |  |

