



Technical Report Series

National Survey of Mortgage Originations

Technical Report 2.2

November 17, 2017

This document was prepared by Robert B. Avery, Mary F. Bilinski, Tim Critchfield, Ian H. Keith, Ismail E. Mohamed, Forrest W. Pafenberg, Saty Patrabansh, Jay D. Schultz, and Claudia E. Wood. It is an update of Technical Report 2.0 originally posted on August 27, 2015 and Technical Report 2.1 posted on December 22, 2016.

Table of Contents

1.	Introduction.....	1
2.	Development of the Survey	3
3.	Detailed Survey Sample Frame and Timeline	4
4.	Survey Logistics.....	5
5.	Survey Response Analysis.....	6
6.	Usable Survey Responses	9
7.	Cleaning, Editing, and Imputing Responses	10
8.	Sample Non-Response Weights.....	12
9.	Sampling Error.....	14
	Appendix A. NSMO Questionnaire Changes, Waves 1-11	A-1
	Appendix B. NSMO Unweighted Frequency Counts, Waves 1-11.....	B-1

1. Introduction

The National Mortgage Database project is a multi-year project being jointly undertaken by the Federal Housing Finance Agency (FHFA) and the Consumer Financial Protection Bureau (CFPB). The project is designed to provide a rich source of information about the U.S. mortgage market based on a five percent sample of residential mortgages. The project has three primary components: (1) the National Mortgage Database (NMDB®); (2) the quarterly National Survey of Mortgage Originations (NSMO); and (3) the annual American Survey of Mortgage Borrowers (ASMB).

The NMDB® enables FHFA to meet the statutory requirements of section 1324(c) of the Federal Housing Enterprises Financial Safety and Soundness Act of 1992, as amended by the Housing and Economic Recovery Act of 2008, to conduct a monthly mortgage market survey. Specifically, FHFA must, through a survey of the mortgage market, collect data on the characteristics of individual mortgages, including those eligible for purchase by Fannie Mae and Freddie Mac and those that are not, and including subprime and nontraditional mortgages. In addition, FHFA must collect information on the creditworthiness of borrowers, including a determination of whether subprime and nontraditional borrowers would have qualified for prime lending.¹

For CFPB, the NMDB® project supports policymaking and research efforts and help identify and understand emerging mortgage and housing market trends. The CFPB uses the NMDB®, among other purposes, in support of the market monitoring called for by the Dodd-Frank Wall Street Reform and Consumer Protection Act, including understanding how mortgage debt affects consumers and for retrospective rule review required by the statute.

FHFA and CFPB considered existing databases but determined that none sufficiently support the above objectives.² The NMDB®, as it nears steady state, is a de-identified loan-level database of closed-end first-lien residential mortgages. It: (1) is representative of the market as a whole; (2) contains detailed, loan-level information on the terms and performance of mortgages, as well as characteristics of the associated borrowers and properties; (3) is continually updated; (4) has an historical component dating back before the financial crisis of 2008; and (5) provides a sampling frame for the NSMO and ASMB.

The core data in the NMDB® are drawn from a random 1-in-20 sample of all closed-end first-lien mortgage files outstanding at any time between January 1998 and the present in the files of Experian, one of the three national credit repositories.³ The use of a sampling frame substantially reduces the privacy risk associated with any data collection. By contrast, a universal registry can present challenges for privacy since it is known that a particular loan must

¹ FHFA interprets the NMDB® project as a whole, including the NSMO, as the “survey” required by the Safety and Soundness Act. The statutory requirement is for a monthly survey. Core inputs to the NMDB®, such as a regular refresh of credit-repository data, occur monthly, though the NSMO does not.

² For a fuller description of the NMDB®, including a discussion of existing sources and their limitations, see NMDB® Technical Report 1.2 at <https://www.fhfa.gov/PolicyProgramsResearch/Programs/Pages/National-Mortgage-Database.aspx> and <https://www.consumerfinance.gov/data-research/research-reports/technical-reports-national-survey-of-mortgage-borrowers-and-national-mortgage-database/>.

³ Experian was chosen through a competitive procurement process to assist in creating the NMDB®.

be in the dataset. However, for a 1-in-20 sample, the odds are 95 out of 100 that a particular loan is not in the database. In addition, the sample used is large enough to support almost all types of statistically valid analyses but small enough to manage logistically, thus dramatically reducing both contract and personnel costs.

A random 1-in-20 sample of mortgages newly reported to Experian is added each quarter. Mortgages are followed in the NMDB® database until they terminate through prepayment (including refinancing), foreclosure, or maturity. Information from credit repository files on each borrower associated with the mortgages in the NMDB® sample is collected from at least one year prior to origination to one year after termination of the mortgage. The information on borrowers and loans available to the FHFA, CFPB, or any other authorized user of the NMDB® data is de-identified and does not include any directly identifying information such as borrower name, address, or Social Security number.

The NSMO survey is designed to complement the NMDB® by providing information, particularly related to mortgage shopping, that is not available in the database. The survey is voluntary, and its target universe is newly originated closed-end first-lien residential mortgages and their associated borrowers. To achieve this objective, the NSMO draws its sample from mortgages that are part of the NMDB® which draws its sample from the same target universe of new loans.

Beginning with loans originated in 2013, a simple random sample of about 6,000 loans per quarter is drawn from loans newly added to the NMDB® for the NSMO. At present, this represents a sampling rate of 1-in-15 from the NMDB® (or 1-in-300 from all originations since the NMDB® itself is a 1-in-20 sample of loans).⁴

This technical report provides background details on development of the NSMO. The second section discusses the development of the survey questionnaire, including the approval granted by the Office of Management and Budget (OMB) as required by the Paperwork Reduction Act. The third section discusses the survey sampling frame and timeline, and the fourth section discusses the logistics of conducting the survey.

The fifth section presents an analysis of survey responses for the first seven waves of survey mailout. The sixth section explains how the usable population for analysis is derived. The seventh section describes the data cleaning, editing, and imputation processes used to refine the usable survey dataset. The eighth section discusses the construction of nonresponse-adjusted sample weights. The ninth section of the document discusses sampling error of the survey.⁵

⁴ As of this writing, the NSMO is currently in the field with Wave 16. Data in this document represent Waves 1 through 11.

⁵ There are two Appendices to this document. Appendix A presents the survey cover letters and the NSMO questionnaire including changes in the questions that have occurred over time. Appendix B presents un-weighted frequency responses for all questions for the first 11 waves of the survey.

2. Development of the Survey

In reaction to the financial crisis of 2008, Freddie Mac developed a pilot version of what has become the NSMO. The pilot was administered as a mail survey to about 1,500 individuals drawn from data maintained by Experian, one of the three national credit repositories. The pilot used a sample frame similar to that currently used by the NSMO. The pilot survey response rate of 12 percent was much lower than hoped.

To improve the response rate, Freddie Mac retained the services of Don A. Dillman, of Washington State University, a leading expert in mail survey methods. Dr. Dillman focused on improving the survey response rate by changing: (1) the contacting strategy; (2) the participation incentives; (3) the communication strategy; and (4) the questionnaire format. His changes were incorporated into a second pilot survey in February 2011 that sampled new Freddie Mac purchase and refinance loans, and this second pilot survey had a vastly improved response rate of 60 percent.

In the fall of 2012, Freddie Mac conducted a third pilot survey targeting a representative national sample of new 2011 mortgage borrowers drawn from Experian files. The response rate for this survey was about 45 percent.

The improvements instituted in the later pilot surveys confirmed the effectiveness of using credit reporting agency records as the survey sampling frame as well as the effectiveness of the questionnaire and methodology.

The questionnaire for the NSMO draws heavily on the questionnaires piloted by Freddie Mac and leverages the input of an advisory group of industry experts from government, non-profits, advocates, trade groups, and academia that Freddie Mac convened when creating their questionnaires. This group played a significant role in ensuring that the NSMO provided information of interest to policy-makers, researchers, and data analysts.

The NSMO focuses on topics such as mortgage shopping behavior, mortgage closing experiences, and other information that cannot be obtained from other sources, such as borrowers' expectations regarding house price appreciation and experiences of critical household financial events (for example, unemployment spells, large medical expenses, or divorce). In general, borrowers are not asked to provide mortgage terms in the questionnaire, since these fields are available in the Experian data. However, the survey collects selected details about the mortgage to compare borrower's views with those of credit and administrative records and to verify that the credit repository records and survey responses pertain to the same mortgage.

By interagency agreement between FHFA and CFPB, FHFA led the production of the NSMO.⁶ This included seeking public comments concerning information collection as required by the Paperwork Reduction Act. On April 25, 2013, FHFA published in the *Federal Register* a 60-day Notice of Submission of Information Collection for Approval from the OMB. No comments were received for this notice. Subsequently, on July 1, 2013, FHFA published a 30-day Notice

⁶ An interagency agreement between FHFA and CFPB was signed on September 12, 2012 where the costs of the survey and the development of the NMDB® are to be shared equally between the two agencies.

of Submission of Information Collection for Approval from OMB indicating that FHFA had received no comments during the 60-day comment period.

Following these *Federal Register* notices, OMB reviewed the FHFA application and approved the request in December 2013, assigning the NSMO a control number of 2590-0012 with an expiration date of December 31, 2016. In April 2014 FHFA published a revised System of Records notification in the *Federal Register* extending the system of records entitled “National Mortgage Database Project” to cover the NSMO. A second revision of the System of Records notification was published in the *Federal Register* in August 2015.

After obtaining OMB approval, FHFA modified an existing contract with Experian, which subcontracted the survey administration through a competitive process to Westat, a nationally-recognized survey vendor. Fair Credit Reporting Act (FCRA) rules dictate that the survey process, because it utilizes borrower names and addresses drawn from credit reporting agency records, must be administered through Experian in order to maintain consumer privacy.⁷

The NMDB® development staff consulted with Experian, Westat, and the Freddie Mac advisory group between December 2013 and February 2014 to finalize the survey questionnaire and supporting materials. The initial survey wave was mailed out in April 2014, and a new wave of the survey has been conducted each quarter since.

Initial analysis of data from the first three waves of the survey in the spring of 2015 resulted in the addition and removal of some questions. In addition, the wording of several questions was modified. These revisions were incorporated into the seventh wave of the survey, which was conducted in the summer of 2015.

3. Detailed Survey Sample Frame and Timeline

Following the update of the NMDB® at the end of each quarter, FHFA randomly selects 6,000 of the closed-end first-lien mortgage loans newly added to the NMDB® for the NSMO.⁸ At present this represents about a 1-in-300 sampling rate from the population of such loans as a whole. Loans are selected at random from mortgages newly reported to Experian with the additional conditions that the mortgage be reported to Experian within a year of origination and that the borrowers have not been selected for an earlier NSMO survey.

After the sample is selected, Experian eliminates any potential respondents who have opted out of previous surveys or are deemed not to have useable addresses or names. Industry guidance (Metro 2® Industry Standards for Credit Reporting) requires that servicers must supply a billing address for each borrower on a trade line (including mortgages). Experian generally uses these

⁷ The Fair Credit Reporting Act (FCRA), Public Law No. 91-508, was enacted in 1970, and substantially amended since, to promote accuracy, fairness, and the privacy of personal information assembled by credit reporting agencies (CRAs). The Act's primary protection requires that CRAs follow “reasonable procedures” to protect the confidentiality, accuracy, and relevance of credit information. To do so, the FCRA establishes a framework of requirements for credit report information that include rights of data quality (right to access and correct), data security, use limitations, requirements for data destruction, notice, user participation (consent), and accountability.

⁸ For a fuller description of how loans are selected for the NMDB®, see NMDB® Technical Report 1.2.

borrower billing addresses as the survey mailing addresses. However, where there are multiple addresses and borrowers associated with a survey sample loan, Table 1 presents the rules for selecting the borrower(s) and address to which the survey is mailed. The survey is sent to no more than two borrowers who share a common address. FHFA and CFPB never receive the names or addresses chosen for the survey. Only Experian and Westat, as Experian's subcontractor, have access to this information.

Table 1. Rule for Best Address		
Number of Borrowers	Same or Different Address	Resulting Survey Recipient
1	Not Applicable	One borrower with Experian's associated best address
2	Same	Two borrower names with one common best address
2	Different	The one borrower and associated best address with the lowest number of open mortgages
>2	Same	Two borrowers with one common best address that has the highest number of trade lines reported
>2	Different	The one borrower and associated best address with the lowest number of open mortgages

4. Survey Logistics

The survey implementation strategy includes four respondent contacts over a seven-week period:⁹

- Week 1 Printed questionnaire, cover letter, and cash incentive (entire survey sample population)
- Week 2 1st reminder letter (entire survey sample population)
- Week 5 2nd reminder letter, printed questionnaire, and additional cash incentive (sampled borrowers who have not responded by Week 4)
- Week 7 3rd reminder letter, which includes the due date for returning the questionnaire, to close the communication loop (sampled borrowers who have not responded by Week 6)

Participation in the survey is voluntary, and respondents are assured the confidentiality in their responses. The first and the third contacts contain a printed survey questionnaire and a five dollar cash incentive which respondents are free to keep regardless of whether they return the

⁹ Changes made to the survey questionnaire are provided in Appendix A.

questionnaire. The mailings and printed questionnaires detail how respondents can also complete the survey online in either English or Spanish using instructions and a unique “survey PIN number” provided in the questionnaire packet. To date, one quarter of survey responses are completed online.

Mail surveys are processed for four weeks after the third reminder letter, so the field period comprises 12 weeks in total. It takes between five and six weeks to draw the new NMDB® sample, identify and combine duplicative records, draw the NSMO sample, process it at Experian, and print the survey materials. Thus, the survey cycle typically begins six weeks after the end of a quarter and extends about four weeks into the next quarter.

All returned questionnaires and any non-delivered mail are sent directly to Westat and not to FHFA, CFPB, or Experian. All survey responses received by Westat are purged of any information related to the name of the borrower, address of the borrower, or name of any financial institution. This is done to maintain the de-identified confidential nature of the data and to ensure that the survey responses cannot be connected to a name or address.

During the first eight weeks of each cycle, Experian maintains a NSMO call center to address any questions by respondents. This call center also allows respondents to “opt out” of the survey and future surveys. Both FHFA and CFPB describe the survey on their websites so that respondents can independently verify the legitimacy of the survey. The agency officials signing the cover letter (Sandra Thompson at FHFA and David Silberman at CFPB) are identified on the websites as senior employees of their respective agencies.

Once the active phase of a survey cycle ends, it takes about 25 days for Westat to scan and edit returned questionnaires, combine them with on-line responses, and create an electronic data file. This file is delivered to the NMDB® development staff through Experian. It takes an additional eight weeks to complete additional processing of survey responses, to create preliminary sample weights, and to assemble a preliminary user data file.

The timeline described above applies to each quarterly data release. Because some loans take longer than six months to be reported to the repositories, a data file fully representative of a calendar year will generally not be available until December of the following year.

5. Survey Response Analysis

As described in the previous section the NSMO typically samples 6,000 new originations each quarter. However, in 2014, the first year of the survey, FHFA conducted modified versions of the first three waves in April, June, and September. Wave 1 (April) included a sample of 15,000 mortgages. This was a catch up period to cover cases originated in 2013 and newly reported to Experian in the archives for June, September and December 2013. For this first wave, 1.5 percent or 218 survey invitations were not delivered, resulting in a net delivered population of 14,782 (see Table 2). The survey was in the field for 11 weeks and yielded 5,793 completed surveys, with 173 borrowers opting out of the survey and the remaining 8,816 not returning a

questionnaire. If the undelivered survey invitations are treated as ineligible, this represented a 39.2 percent response rate (5,793/14,782).

Table 2. Survey Return Analysis

Survey Wave	Estimated Newly Reported Mortgages	Average Sampling Weight	Surveys Mailed	Postal Non-Delivery	Surveys Delivered	Surveys Completed				Opt-Out
						Total	By Mail	Online English	Online Spanish	
1	6,963,150	464.21	15,000	218	14,782	5,793	4,410	1,360	23	169
2	888,420	296.14	3,000	37	2,963	1,076	858	214	4	31
3	1,685,760	280.96	5,992	110	5,882	2,073	1,534	524	15	40
4	1,527,736	263.63	5,795	86	5,709	2,020	1,496	514	10	53
5	1,465,371	247.32	5,925	126	5,799	2,089	1,567	520	2	39
6	1,057,938	238.92	4,428	38	4,390	1,489	1,133	353	3	31
7	2,182,968	296.64	7,352	147	7,205	2,494	1,744	744	6	39
8	1,933,374	326.97	5,913	99	5,814	1,899	1,305	587	7	24
9	1,726,675	292.31	5,907	155	5,752	1,824	1,230	584	10	42
10	1,490,494	253.27	5,885	98	5,787	1,765	1,148	607	10	36
11	1,642,906	278.27	5,904	172	5,732	1,733	1,097	627	9	21
Total	22,564,792	317.37	71,101	1,286	69,815	24,255	17,522	6,634	99	525
<i>Percent of Mailed Surveys</i>			<i>100.0%</i>	<i>1.8%</i>	<i>98.2%</i>	<i>34.1%</i>	<i>24.6%</i>	<i>9.3%</i>	<i>0.1%</i>	<i>0.7%</i>

Wave 2 (June) included 3,000 surveys and was for mortgages that were originated in 2013 and newly-reported to Experian between January and March 2014. The postal non-delivery rate for this wave was somewhat lower than for the first wave at 1.2 percent. The questionnaire for this survey was the same as that used for the first wave except that, as described in the next section, a critical clarification was added to the initial survey filter question. The overall response rate for Wave 2 was 36.3 percent, resulting in 1,076 completed questionnaires. There were 31 borrowers who opted out of the survey.

For Wave 3 (August), Westat mailed out 6,000 surveys representing mortgages that were originated in 2013 and reported to Experian between March and June 2014 within a year of origination as well as any mortgages originated in 2014 and reported to Experian between January and June 2014. The postal non-delivery rate for this third wave was somewhat higher than Waves 1 and 2 at 1.8 percent, or 110 sample cases. The overall response rate for the third wave was 35.2 percent, resulting in 2,073 completed questionnaires, and 42 borrowers opted out of the survey.

The fourth wave, mailed in November 2014, and the sample was the first that is comparable to subsequent surveys. It was comprised of any mortgage newly reported to Experian in the quarter just ended (July to September 2014) that was reported within a year of origination. It also represented the initial wave where Experian eliminated potential sample cases deemed to not have legitimate addresses or names prior to mailing. This resulted in a sample of 5,795 cases. Other than slight changes to two questions, the questionnaire was unchanged from prior waves. The response rate for this wave was similar to that of Waves 2 and 3. There was a fairly constant

low percentage of the sample that was non-deliverable or elected to opt out of the survey. This confirms that Experian's methodology for choosing the best mailing address has been working well.

The fifth wave, mailed in February 2015, followed the same process as the fourth wave and the questionnaire was unchanged between waves four and five. A total of 5,925 questionnaires were mailed out to borrowers associated with mortgages first reported to Experian between October and December 2014.

The sixth wave, mailed on May 2015 to mortgagees newly reported to Experian between January and March 2015, used the same questionnaire as the third and fourth waves. Because major revisions were anticipated for the questionnaire used with the seventh and later waves, however, all respondents selected for the sixth wave whose mortgages were originated in 2015 were held back, and surveys for these cases were mailed concurrently with the seventh wave in August 2015. As a result, all respondents reporting on mortgages originated in 2015 received the same questionnaire.

The seventh wave, mailed in August 2015, was the first to use the revised questionnaire. Question changes reflected issues highlighted in the initial cleaning and editing process for waves 1–4. Details of the questionnaire changes are given in Appendix A. Wave 7 consisted of three samples drawn independently. The first were 1,236 respondents selected for Wave 6 with loans originated in 2015. The second were 4,981 respondents with mortgages newly reported to Experian between April and June 2015 (the normal quarterly sample frame). Finally a special oversample of 1,142 borrowers residing in “remote rural” counties as defined using a USDA criteria with 2014 loan originations reporting to Experian within a year of origination was selected.¹⁰ Each subsample was assigned a different sample weight.

The eighth, ninth and tenth waves followed the same process as the fourth and the fifth waves. All three waves used the same questionnaire as the seventh wave. The eighth wave questionnaire was mailed in November 2015 to 5,913 borrowers associated with mortgages newly reported to Experian between July and September 2015. The ninth wave questionnaire was mailed in February 2016 to 5,907 borrowers with mortgages newly reported to Experian between October and December 2015. The tenth wave questionnaire was mailed in May 2016 to 5,885 borrowers with mortgages newly reported to Experian between January and March 2016.

The eleventh wave, mailed in August 2016, was used a slightly revised questionnaire. Question changes reflected issues highlighted in the cleaning and editing process for waves 5-7. Details of the questionnaire changes are given in Appendix A. The eleventh wave questionnaire was mailed in August 2016 to 5,904 borrowers with mortgages newly reported to Experian between April and June 2016.

¹⁰ See <http://www.ers.usda.gov/data-products/rural-urban-continuum-codes/documentation.aspx> for the USDA definition of “rural” used for this sample.

6. Usable Survey Responses

Returned questionnaires and on-line responses were evaluated to determine the usable responses. Table 3 below summarizes the results of this analysis and illustrates the four criteria for rejecting a completed questionnaire.

Table 3. NSMO Usable Population											
Survey Wave	Returned	Duplicate or Ineligible	Answered No to Q1	Did Not Finish Survey	Wrong Loan	Useable	2013 Loan	Normal 2014 Loan	Remote Rural 2014 Loan	2015 Loan	2016 Loan
1	5,793	61	746	129	218	4,639	4,639	0	0	0	0
2	1,076	11	85	16	40	924	924	0	0	0	0
3	2,073	23	112	36	64	1,838	497	1,341	0	0	0
4	2,020	154	89	48	65	1,664	11	1,653	0	0	0
5	2,089	32	83	46	64	1,864	5	1,859	0	0	0
6	1,489	106	75	30	51	1,227	0	1,227	0	0	0
7	2,494	38	154	78	106	2,118	0	180	301	1,637	0
8	1,899	23	83	29	62	1,702	0	12	0	1,690	0
9	1,824	21	77	27	42	1,657	0	0	0	1,657	0
10	1,765	43	87	41	58	1,536	0	0	0	1,049	487
11	1,733	31	98	38	38	1,528	0	0	0	155	1,373
Total	24,255	543	1,689	518	808	20,697	6,076	6,272	301	6,188	1,860
<i>Percent of Mailed Surveys</i>	<i>34.1%</i>	<i>0.8%</i>	<i>2.4%</i>	<i>0.7%</i>	<i>1.1%</i>	<i>29.1%</i>	<i>8.5%</i>	<i>8.8%</i>	<i>0.4%</i>	<i>8.7%</i>	<i>2.6%</i>

The first criterion is a “no” response to the first question (Q1). Q1 is used as a screener question to confirm that the survey respondent took out a mortgage during the reporting period (which Experian records suggest that they did). In the first wave, a surprisingly high number of 764 respondents said that they had not taken out a mortgage. An analysis of these responses suggests that some respondents who had refinanced their mortgage did not consider the loan a new mortgage. Consequently in Wave 2, the wording of Q1 was changed to add the phrase “including any mortgage refinances.” With this change, the share of “no” responses to Q1 decreased from 13 percent to 8 percent.

The next exclusion criterion eliminates breakoffs, defined as those for which the respondent did not answer almost all questions from question Q50 through the end or answered less than 50 percent of the questions). The third criterion for exclusion was for respondents who provided information on the wrong loan. The sampling frame was tied to a particular loan associated with the borrower. However, the questionnaire did not refer explicitly to that loan. Instead, respondents who had taken out multiple loans during the reference period were asked to report on the “most recent.” In some instances this was not the sample loan. This was a particular problem in Wave 1 which, as a “catch up” survey, had a relatively long reference period. Also, some respondents who had refinanced their mortgage reported on the original home purchase

mortgage rather than the refinance. Finally, in a few instances it appears that the survey went to the wrong person, with answers bearing no resemblance to the sample loan features as characterized by Experian records. In each of these circumstances the survey response was removed from the data set used for analysis.

The last category of unusable surveys comes from respondents whose sample loans were ultimately removed from the NMDB® after the survey had been executed either because they were deemed to have duplicate trade lines and to not meet the criteria for remaining in the NMDB® or where the sample loan was determined to be a second and not a first mortgage lien. In some instances the survey response itself led to the removal, as margin notes or comments indicated that the loan was a second lien. This was a particular problem in Wave 4 where a significant number of respondents were removed from the NMDB® for reasons unrelated to the survey.

Given this, the rate of usable responses in each wave is lower than the survey response rates reported earlier. Overall, 14,287 usable responses were obtained from 47,499 sample cases (for a rate of 30.1%).

7. Cleaning, Editing, and Imputing Responses

The survey responses, once delivered to the NMDB® development staff, are subjected to thorough editing and review. The initial phase consists of standard editing—correcting numbers reported in the wrong units, changing answers in responses based on margin notes and comments, assigning responses for questions with open-ended “other” responses, dealing with multiple responses to a question that calls for only one response, and deciding how to handle situations where respondents followed the wrong skip pattern.

During the initial process of cleaning responses from waves 1–4, examination of responses suggested questions that respondents may have frequently misunderstood or misinterpreted. Three questions were judged to be particularly problematic:

1. Question Q64 (how many separate units does your mortgage cover?): Inconsistencies between the self-reported loan amount and the amount reported in the credit reporting agency data suggested that the number of units that a mortgage covered in a property was sometimes answered incorrectly.
2. Q75 (owned other residential properties besides this one?): In many instances, credit reporting agency data indicated that the borrower had previous mortgages contrary to the response to this question.
3. Q16 (a term of less than 30 years?): The term of the loan reported by the lender in many cases did not match responses to Q16.

It also seems that some respondents with sample loans on investment properties may have provided information on their primary residence property and neighborhood rather than that of their investment property.

These problems were addressed in changes made to the questionnaire for Wave 7 based on the June 2015 archive. However, users should be aware of these interpretation inconsistencies when using data from the earlier waves.

One advantage that the NSMO has over other surveys is the availability of credit and administrative data, much of which appears to be quite reliable. These data can be used to assist in the editing and imputation process. Four primary sources of such data are available in processing the NSMO: (1) credit data from Experian on sample loans; (2) data collected by Experian from other data sources on the survey respondents, including loan servicers and data companies; (3) information from matches to administrative loan and property files (only matches to Fannie Mae and Freddie Mac administrative files for 2013 are available at this writing); and (4) information for loans that could be matched to Home Mortgage Disclosure Act (HMDA) files (only HMDA data through calendar year 2014 are available as of this writing).¹¹ In the future, additional information from further HMDA administrative and property file matches will be available for this purpose.

The credit and administrative data are used to determine which borrower in the Experian data corresponded to the respondent (and spouse/partner of the respondent) in the survey and to infer the loan the respondent had in mind when answering the survey. These data are also useful in determining if respondents correctly identified their loan as a home purchase loan or a refinance.

Tabulations of the raw un-weighted—but edited—responses to all the questions in the survey are presented in Appendix B. Data are presented for usable observations in Waves 1 through 11.

After editing and cleaning the survey response data, NMDB® staff impute missing responses using statistical models estimated based on credit and administrative data and answers to other questions in the survey. In order to preserve the original responses, the raw responses are retained (“Q” variables) with missing responses coded as such. A parallel set of variables (“X” variables) are constructed where all missing responses are imputed. Each instance in which an X variable differs from its comparable Q variable is recorded by a shadow variable (“J” variables) that indicate the method and reason whereby the change was made. Missing responses typically total about 3 to 5 percent for most questions and only in a few instances were more than 10 percent. The X variables are not created when a directly comparable credit or administrative variable is available for all respondents (e.g., loan amount, loan payment, number of co-signers)

¹¹ Merges between the NMDB® or NSMO and HMDA rely on variables common to both datasets, including the original loan balance, the opening date of the mortgage and the general location of the property (census tract or state/county). Unfortunately, mortgage servicers report the billing address of the mortgage borrowers to Experian, but this is not necessarily the property address, particularly for mortgages on non-owner occupied properties. Additional address information maintained within Experian’s databases is useful in supplementing the repository addresses, as is historical information on borrower location. Nevertheless, HMDA merges are less accurate than those employing directly identifying information such as name and Social Security number because the latter are less reliant on address.

as comparable credit or administrative variables can be used in lieu of survey responses in analysis.

Key demographic variables (age, gender, education, ethnicity, and income) are imputed first. For these variables, high quality administrative data are generally available and can be used directly to impute a value for the X variable. For example, lender-reported information provides high quality data on age. Administrative data, which are available for Fannie Mae and Freddie Mac loans, provide reliable information on race, income, and interest rate. HMDA data, which are available for loans originated up to 2015, provide reliable information on race, income, and gender.

Comparable credit or administrative information is not available, however, for most survey variables. For these variables, missing values are imputed statistically using an iterative process. More specifically, individual statistical models were developed for each question that used the key demographic variables as well as credit or administrative data such as loan amount and credit score as regressors in linear probability, logistic, or cell-based models (since almost all variables in the survey are categorical). Each imputed value incorporates both a predicted value from the model as well as a random component that reflects the accuracy of the imputation model. Variables are imputed in order, with higher-order variables that dictate a skip-pattern imputed first, before the variables conditioned on the pattern are imputed. Once the first round of imputations is completed, the process is repeated with expanded models that incorporate some of the newly imputed variables as regressors for other variables. Iterating in this way ensures that correlations among the imputed values will better reflect correlations among observations where responses were available.

8. Sample Non-Response Weights

There are several ways calculations based on the NSMO raw survey responses may not be representative of the population as a whole. First, as shown in the Table 2, the 11 survey waves did not have the same sampling rates. Second, only about one-third of the sampled borrowers completed the survey. Commonly, in survey sampling, some individuals chosen for the sample are unwilling or unable to participate in the survey. Non-response bias is the bias that results when respondents differ systematically from non-respondents. A common method for mitigating possible non-response bias is to use weights to align the characteristics of respondents and the population more closely. This is known as “non-response weighting.” Such weights are generally calculated from statistical models.

Often, little is known about survey non-responders, thus the statistical models used to construct non-response weights are quite simplistic. Compared with many other surveys, however, the NSMO has extensive credit and administrative data on both responding and non-responding borrowers that can be used to estimate non-response weights.

Table 4. Overall Weights, 2013, 2014 and 2015 Originations (Waves 1-11)			
	Unweighted Percentage	Weighted Percentage	Average Weight
Loan Category			
Purchase, First-Time Homeowner	13.6%	17.4%	1,392
Purchase, Repeat Homeowner	29.0%	26.6%	995
Purchase, Seasonal Home	1.7%	1.4%	880
Purchase, Relative Home	0.7%	0.6%	951
Purchase, Investment Home	2.2%	2.1%	1,056
Refinance, Homeowner Cashout	17.3%	16.6%	1,041
Refinance, Homeowner Regular	31.6%	31.3%	1,076
Refinance, Seasonal Home	0.8%	0.7%	918
Refinance, Relative Home	0.4%	0.4%	1,001
Refinance, Investor Home	2.7%	2.8%	1,128
	100%	100%	
Loan Size			
\$50,000 or Less	3.6%	3.4%	1,032
\$50,001 to \$150,000	37.2%	37.5%	1,092
\$150,001 to \$300,000	39.4%	39.0%	1,075
More than \$300,000	19.9%	20.2%	1,099
	100%	100%	
Mortgage Term to Maturity			
Less than 15 Years	4.9%	4.4%	972
15 Years	17.5%	16.3%	1,012
15 to 30 Years	6.1%	6.0%	1,068
30 Years or More	71.6%	73.3%	1,111
	100%	100%	
Respondent Credit Score			
Lower than 620	3.9%	5.3%	1,490
620 to 639	3.1%	4.0%	1,388
640 to 659	4.8%	6.1%	1,364
660 to 679	5.6%	6.3%	1,233
680 to 699	6.4%	7.2%	1,222
700 to 719	7.5%	8.3%	1,192
720 to 739	9.3%	9.9%	1,148
740 or Higher	59.4%	53.0%	967
	100%	100%	

Sample non-response weights are estimated with logistic models separately for each sample wave and within a wave for loans with a single borrower versus those with multiple borrowers and loans with a HMDA match versus those without a HMDA match. The models estimate the probability of getting a usable response for each wave of the survey. In the most recent updates, the predictive equations have had pseudo-R-square values ranging from 0.0622 to 0.1987. The

largest pseudo-R-square values were for models estimated on data from wave 9, which had more 2015 observations than other waves. Through wave 11 the largest pseudo-R-square was 0.2219 from wave 3 with responses for multiple borrowers without HMDA data. Key predictive variables included are: loan amount, borrower age, the median income of borrowers census tract of the sample loan as captured in the HMDA data, an indicator of investor status, and if matched to HMDA, whether it was a home purchase or refinance loan, and whether a borrower kept a loan at the same time the sample loan was taken out (an indicator of multiple loans). The models also control for credit score, for geography using Census Divisions, and for demographic characteristics using Experian's marketing-type variables on family composition, race, ethnicity, gender, and educational attainment.

The model's predicted probabilities of response were grouped into quintiles. The average of the response rates from each of these five groups was used to calculate a response weight as the inverse of these five average rates. Once within-wave sample non-response weights are estimated, they are multiplied by the wave sample weight to provide an overall weight.

Table 4 demonstrates the effect of differential sampling weights for the first 11 waves. Column one shows the distribution among various demographic and loan categories of the raw survey responses. Column two provides the distribution using estimated overall weights. Finally, column three shows the average overall weight for each category.

9. Sampling Error

Errors in survey values can stem from several sources. Sampling error—the variability expected in estimates based on a sample instead of a census—is often an important source of error. For the NSMO, estimates of statistics that apply to most any mortgage may be measured with reasonable precision, but sampling variability will generally be greater for estimates for less-common types of loans or mortgage features.

Other errors occur because borrowers who respond to the survey or to a particular question are not random. Imputation and sample non-response weights correct for some of this error but not all. Other errors occur when respondents interpret a question differently than intended by the survey or other respondents. As noted above, for some questions this problem was serious enough to call into question the use of the variable.

Analysis of these data with software that assumes the data are from a simple random sample will under-estimate the standard errors (statistical precision) of the estimates. Users are encouraged to use analytic procedures (so-called “survey” procedures in most major statistical analysis packages) that take into account the effect of the differential sampling and non-response adjustment weights on the estimates.

Appendix A. NSMO Questionnaire Changes, Waves 1-11

Thank you for helping us to learn more about your experience in getting or refinancing a mortgage.

1. Within the past 18 months or so, did you take out or co-sign for a mortgage loan including any refinance of an existing mortgage?

☐ Yes → If you took out or co-signed for more than one mortgage during this time, please refer to your experience with the **most recent refinance or new mortgage**.

☐ No → Please return the blank questionnaire so we know the survey does not apply to you. The money enclosed is yours to keep.

2. Did we mail this survey to the address of the house or property you financed with this mortgage?

☐ Yes ☐ No

3. Including you, who signed or co-signed for this mortgage? Mark all that apply.

- ☐ I signed
☐ Spouse/partner including a former spouse/partner
☐ Parents
☐ Children
☐ Other relatives
☐ Other (e.g. friend, business partner)

If this loan was co-signed by others, take into account all co-signers as best you can when answering the rest of the survey. Otherwise, it is your own situation that we want to know about.

4. When you began the process of getting this mortgage, how familiar were you (and any co-signers) with each of the following?

	Very	Somewhat	Not At All
The mortgage interest rates available at that time	☐	☐	☐
The different types of mortgages available	☐	☐	☐
The mortgage process	☐	☐	☐
The down payment needed to qualify for a mortgage	☐	☐	☐
The income needed to qualify for a mortgage	☐	☐	☐
Your credit history or credit score	☐	☐	☐
The money needed at closing	☐	☐	☐

5. When you began the process of getting this mortgage, how concerned were you about qualifying for a mortgage?

☐ Very ☐ Somewhat ☐ Not at all

6. How firm an idea did you (and any co-signers) have about the mortgage you wanted?

☐ Firm idea ☐ Some idea ☐ Little idea

7. How much did you use each of the following sources to get information about mortgages or mortgage lenders?

	A Lot	A Little	Not At All
Your lender or mortgage broker	☐	☐	☐
Other lenders or brokers	☐	☐	☐
Real estate agents or builders	☐	☐	☐
Material in the mail	☐	☐	☐
Websites that provide information on getting a mortgage	☐	☐	☐
Newspaper/TV/Radio	☐	☐	☐
Friends/relatives/co-workers	☐	☐	☐
Bankers or financial planners	☐	☐	☐
Housing counselors	☐	☐	☐
Other (specify) _____	☐	☐	☐

8. Which of the following best describes your shopping process?

- ☐ I picked the loan type first, and then I picked the lender/mortgage broker
☐ I picked the lender/mortgage broker first, and then I picked the loan type

9. How did you apply for this mortgage? Mark one answer.

- ☐ Directly to a lender, such as a bank or credit union
☐ Through a mortgage broker (someone who works with multiple lenders to get a loan)
☐ Other (specify) _____

10. How many different lenders/mortgage brokers did you seriously consider before choosing where to apply for this mortgage?

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 or more

Q#	Variable Description and Codes
1	Within the past 18 months or so, did you take out or co-sign for a mortgage loan including any refinance of an existing mortgage? Wave 7 wording change Wave 3, 4, 5, 6 Within the past 15 months, or so, did you take out or co-sign mortgage loan documents (<i>including any mortgage refinances</i>)? Wave 1 & 2 At any time in 2013, did you take out or co-sign mortgage loan documents?
2	Did we mail this survey to the address of the house or property you financed with this mortgage? Wave 7 changed "the" to "this"
3	Including you, who signed or co-signed for this mortgage? Mark all that apply. ☐ I signed ☐ Spouse/partner including a former spouse/partner ☐ Parents ☐ Children ☐ Other relatives ☐ Other (e.g. friend, business partner) Wave 11 NEW Prior to Wave 11: Including you, how many people signed or co-signed for this mortgage? ☐ 1 ☐ 2 ☐ 3 ☐ 4 or more Pre-Wave 11 Data remapped to Q103
4	When you began the process of getting this mortgage, how familiar were you (and any co-signers) with each of the following? Wave 7 changed "your" to "this" [A] The mortgage interest rates available at that time
4	[B] The different types of mortgages available
4	[C] The mortgage process Wave 7 new wording Prior to Wave 7: The process of taking out a mortgage
4	[D] The down payment needed to qualify for a mortgage
4	[E] The income needed to qualify for a mortgage
4	[F] Your credit history or credit score
4	[G] The money needed at closing
5	When you began the process of getting this mortgage, how concerned were you about qualifying for a mortgage? Wave 7 changed "your" to "this"
6	How firm an idea did you (and any co-signers) have about the mortgage you wanted?

Q#	Variable Description and Codes
7	How much did you use each of the following sources to get information about mortgages or mortgage lenders? [A] Your lender or mortgage broker Added "mortgage" Wave 11
7	[B] Other lenders or broker
7	[C] Real estate agents or builders
7	[D] Material in the mail
7	[E] Websites that provide information on getting a mortgage
7	[F] Newspaper/TV/Radio Wave 7 renumber Q7F Wave 4 NEW Q7J
7	[G] Friends/relatives/co-workers Wave 7 renumbered was Q7F
7	[H] Bankers or financial planners Wave 7 renumbered was Q7G
7	[I] Housing counselors Wave 7 renumbered was Q7H
7	[J] Other Wave 7 renumbered was Q7I
7	Other (specify) Wave 7 renumbered was Q7_OS
8	Which of the following best describes your shopping process? ☐ I picked the loan type first, and then I picked the lender/mortgage broker ☐ I picked the lender/ mortgage broker first, and then I picked the loan type Wave 11 added "mortgage"
9	How did you apply for this mortgage? Mark <u>one</u> answer. ☐ Through a mortgage broker (<i>someone who works with multiple lenders to get a loan</i>) Wave 11 changed "two or more" to "multiple" Wave 7 changed "your" to "this"
10	How many different lenders/mortgage brokers did you seriously consider before choosing where to apply for this mortgage? Wave 11 added "mortgage" Wave 7 changed "your" to "this", removed "Mark one answer."

11. How many different lenders/mortgage brokers did you end up applying to?

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 or more

12. Did you apply to more than one lender/mortgage broker for any of the following reasons?

	Yes	No
Searching for better loan terms	☐	☐
Concern over qualifying for a loan	☐	☐
Information learned from the "Loan Estimate"	☐	☐
Turned down on earlier application	☐	☐

13. How important were each of the following in choosing the lender/mortgage broker you used for the mortgage you took out?

	Important	Not Important
Having an established banking relationship	☐	☐
Having a local office or branch nearby	☐	☐
Used previously to get a mortgage	☐	☐
Lender/mortgage broker is a personal friend or relative	☐	☐
Lender/mortgage broker operates online	☐	☐
Recommendation from a friend/relative/co-worker	☐	☐
Recommendation from a real estate agent/home builder	☐	☐
Reputation of lender/mortgage broker	☐	☐
Spoke my primary language, which is not English	☐	☐

14. Who initiated the first contact between you and the lender/ mortgage broker you used for the mortgage you took out?

☐ I (or one of my co-signers) did
☐ The lender/mortgage broker did
☐ We were put in contact by a third party (such as a real estate agent or home builder)

15. How open were you to suggestions from your lender/mortgage broker about mortgages with different features or terms?

☐ Very ☐ Somewhat ☐ Not at all

16. How important were each of the following in determining the mortgage you took out?

	Important	Not Important
Lower interest rate	☐	☐
Lower APR (Annual Percentage Rate)	☐	☐
Lower closing fees	☐	☐
Lower down payment	☐	☐
Lower monthly payment	☐	☐
An interest rate fixed for the life of the loan	☐	☐
A term of 30 years	☐	☐
No mortgage insurance	☐	☐

17. Was the "Loan Estimate" you received from your lender/mortgage broker...

	Yes	No
Easy to understand	☐	☐
Valuable information	☐	☐

18. Did the "Loan Estimate" lead you to...

	Yes	No
Ask questions of your lender/mortgage broker	☐	☐
Seek a change in your loan or closing	☐	☐
Apply to a different lender/mortgage broker	☐	☐

19. In the process of getting this mortgage from your lender/mortgage broker, did you...

	Yes	No
Have to add another co-signer to qualify	☐	☐
Resolve credit report errors or problems	☐	☐
Answer follow-up requests for more information about income or assets	☐	☐
Have more than one appraisal	☐	☐
Redo/refile paperwork due to processing delays	☐	☐
Delay or postpone closing date	☐	☐
Have your "Loan Estimate" revised to reflect changes in your loan terms	☐	☐
End up with better mortgage terms than you were originally offered	☐	☐
Check other sources to confirm that terms of this mortgage were reasonable	☐	☐

20. Your lender may have given you a booklet "Your home loan toolkit: A step-by-step guide", do you remember receiving a copy?

☐ Yes – Continue with Q21
☐ No – Skip to Q22
☐ Don't know – Skip to Q22

Q#	Variable Description and Codes
11	How many different lenders/mortgage brokers did you end up applying to? Wave 11 added "mortgage" Wave 7 removed "Mark one answer."
12	Did you apply to more than one lender/mortgage broker for any of the following reasons? [A] Searching for better loan terms Wave 11 added "mortgage"
12	[B] Concern over qualifying for a loan
12	[C] Information learned from the "Loan Estimate" Wave 11 changed "Good Faith" to "Loan"
12	[D] Turned down on earlier application
13	How important were each of the following in choosing the lender/mortgage broker you used for the mortgage you took out? Wave 11 added "mortgage" Wave 7 changed from 3-point to 2-point scale 1 = Important 2 = Not Important Prior to Wave 7 (Important) 1 = Very 2 = Somewhat 3 = Not At All [A] Having an established banking relationship Pre-Wave 7 Data remapped to Q113A
13	[B] Having a local office or branch nearby Pre-Wave 7 Data remapped to Q113B
13	[C] Used previously to get a mortgage Pre-Wave 7 Data remapped to Q113C
13	[D] Lender/mortgage broker is a personal friend or relative Wave 11 added "mortgage" Pre-Wave 7 Data remapped to Q113D
13	[E] Lender/mortgage broker operates online Wave 11 added "mortgage" Pre-Wave 7 Data remapped to Q113E
13	[F] Recommendation from a friend/relative/co-worker Wave 7 renumbered was Q13G Pre-Wave 7 Data remapped to Q113G
13	[G] Recommendation from a real estate agent/home builder Wave 7 renumbered was Q13H Pre-Wave 7 Data remapped to Q113H
13	[H] Reputation of the lender/mortgage broker Wave 11 added "mortgage" Wave 7 renumbered was Q13J Pre-Wave 7 Data remapped to Q113J
13	[I] Spoke my primary language, which is not English Wave 7 renumbered was Q13K Pre-Wave 7 Data remapped to Q113K
14	Who initiated the first contact between you and the lender/mortgage broker you used for the mortgage you took out? Wave 11 added "mortgage"
15	How open were you to suggestions from your lender/mortgage broker about mortgages with different features or terms? Wave 11 added "mortgage"
16	How important were each of the following in determining the mortgage you took out? Wave 7 changed from 3-point to 2-point scale 1 = Important 2 = Not Important Prior to Wave 7 (Important) 1 = Very 2 = Somewhat 3 = Not At All [A] Lower interest rate Pre-Wave 7 Data remapped to Q116A

Q#	Variable Description and Codes
16	[B] Lower APR (Annual Percentage Rate) Pre-Wave 7 Data remapped to Q116B
16	[C] Lower closing fees Pre-Wave 7 Data remapped to Q116C
16	[D] Lower down payment Pre-Wave 7 Data remapped to Q116D
16	[E] Lower monthly payment Pre-Wave 7 Data remapped to Q116E
16	[F] An interest rate fixed for the life of the loan Pre-Wave 7 Data remapped to Q116F
16	[G] A term of 30 years Wave 7 wording change removed "less than" Prior to Wave 7: A term of less than 30 years Pre-Wave 7 Data remapped to Q116G
16	[H] No mortgage insurance Pre-Wave 7 Data remapped to Q116H
17	Was the "Loan Estimate" you received from your lender/mortgage broker... Wave 11 changed Good Faith to "Loan" and added "mortgage" [A] Easy to understand
17	[B] Valuable information
18	Did the "Loan Estimate" lead you to... Wave 11 changed Good Faith to "Loan" [A] Ask questions of your lender/broker
18	[B] Seek a change in your loan or closing
18	[C] Apply to a different lender/mortgage broker Wave 11 NEW
19	In the process of getting this mortgage from your lender/mortgage broker, did you... Wave 11 added "mortgage" Wave 7 changed "your" to "this" [A] Have to add another co-signer to qualify Wave 7 wording change Prior to Wave 7: Add a cosigner
19	[B] Resolve credit report errors or problems
19	[C] Answer follow-up requests for more information about income or assets
19	[D] Have more than one appraisal Wave 7 wording change Prior to Wave 7: Have multiple appraisals
19	[E] Redo/refile paperwork due to processing delays
19	[F] Delay or postpone closing date
19	[G] Have your "Loan Estimate" revised to reflect changes in your loan terms Wave 11 changed Good Faith to "Loan" Wave 5 NEW
19	[H] End up with better mortgage terms than you were originally offered Wave 7 NEW
19	[I] Check other sources to confirm that terms of this mortgage were reasonable Wave 7 NEW
20	Your lender may have given you a booklet "Your home loan toolkit: A step-by-step guide", do you remember receiving a copy? Wave 11 changed name of booklet (Shopping for your home loan: Settlement cost booklet) Wave 7 NEW

21. Did the “Your home loan toolkit” booklet lead you to ask additional questions about your mortgage terms?

☐ Yes ☐ No

22. During the application process were you told about mortgages with any of the following?

	Yes	No
An interest rate that is fixed for the life of the loan	☐	☐
An interest rate that could change over the life of the loan	☐	☐
A term of less than 30 years	☐	☐
A higher interest rate in return for lower closing costs	☐	☐
A lower interest rate in return for paying higher closing costs (<i>discount points</i>)	☐	☐
Interest-only monthly payments	☐	☐
An escrow account for taxes and/or homeowner insurance	☐	☐
A prepayment penalty (<i>fee if the mortgage is paid off early</i>)	☐	☐
Reduced documentation or “easy” approval	☐	☐
An FHA, VA, USDA or Rural Housing loan	☐	☐

23. In selecting your settlement agent did you...

	Yes	No
Use an agent selected/recommended by the lender/mortgage broker	☐	☐
Use an agent you had used previously	☐	☐
Shop around	☐	☐

☐ Did not have a settlement/closing agent

24. Do you have title insurance on this mortgage?

- ☐ Yes – *Continue with Q25*
☐ No – *Skip to Q26*
☐ Don’t know – *Skip to Q26*

25. Which best describes how you picked the title insurance?

- ☐ Reissued previous title insurance
☐ Used title insurance recommended by lender/mortgage broker or settlement agent
☐ Shopped around

26. Overall, how satisfied are you that the mortgage you got was the one with the...

	Very	Somewhat	Not At All
Best terms to fit your needs	☐	☐	☐
Lowest interest rate for which you could qualify	☐	☐	☐
Lowest closing costs	☐	☐	☐

27. Overall, how satisfied are you with the...

	Very	Somewhat	Not At all
Lender/mortgage broker you used	☐	☐	☐
Application process	☐	☐	☐
Documentation process required for the loan	☐	☐	☐
Loan closing process	☐	☐	☐
Information in mortgage disclosure documents	☐	☐	☐
Timeliness of mortgage disclosure documents	☐	☐	☐
Settlement agent	☐	☐	☐

28. Did you take a course about home-buying or talk to a housing counselor?

☐ No - *Skip to Q32*

☐ Yes 

29. How was the home-buying course or counseling provided?

	Yes	No
In person, one-on-one	☐	☐
In person, in a group	☐	☐
Over the phone	☐	☐
Online	☐	☐

30. How many hours was the home-buying course or counseling?

- ☐ Less than 3 hours
☐ 3 – 6 hours
☐ 7 – 12 hours
☐ More than 12 hours

31. Overall, how helpful was the home-buying course or counseling?

☐ Very ☐ Somewhat ☐ Not at all

Q#	Variable Description and Codes
21	Did the “Your home loan toolkit” booklet lead you to ask additional questions about your mortgage terms? Wave 11 changed name of booklet Wave 7 NEW
22	During the application process were you told about mortgages with any of the following? [A] An interest rate that is fixed for the life of the loan Wave 7 renumbered was Q20A
22	[B] An interest rate that could change over the life of the loan Wave 7 renumbered was Q20B
22	[C] A term of less than 30 years Wave 7 renumbered was Q20C
22	[D] A higher interest rate in return for lower closing costs Wave 7 renumbered was Q20D
22	[E] A lower interest rate in return for paying higher closing costs (discount points) Wave 7 renumbered was Q20E
22	[F] Interest-only monthly payments Wave 7 renumbered was Q20F
22	[G] An escrow account for taxes and/or homeowner insurance Wave 7 renumbered was Q20G
22	[H] A prepayment penalty (fee if the mortgage is paid off early) Wave 7 renumbered was Q20H
22	[I] Reduced documentation or “easy” approval Wave 7 renumbered was Q20I
22	[J] An FHA, VA, USDA or Rural Housing loan Wave 7 renumbered was Q20J
23	In selecting your settlement agent did you... [A] Use an agent selected/recommended by the lender/mortgage broker Wave 11 added “selected” and “mortgage” Wave 7 renumbered was Q21A
23	[B] Use an agent you had used previously Wave 7 renumbered was Q21B
23	[C] Shop around Wave 7 renumbered was Q21C
23	[none] Did not have a settlement/closing agent Wave 11 NEW
24	Do you have title insurance on this mortgage? Wave 11 NEW + added “Don’t know” Wave 7 renumbered was Q22 Pre-Wave 11 Data remapped to Q124 Did your lender require you to get title insurance on this mortgage?
25	Which best describes how you picked the title insurance? Wave 7 renumbered was Q23

Q#	Variable Description and Codes
26	Overall, how satisfied are you that the mortgage you got was the one with the... [A] Best terms to fit your needs Wave 7 renumbered was Q24A
26	[B] Lowest interest rate for which you could qualify Wave 7 renumbered was Q24B
26	[C] Lowest closing costs Wave 7 renumbered was Q24C
27	Overall, how satisfied are you with the... [A] Lender/mortgage broker you used Wave 11 added “mortgage” Wave 7 renumbered was Q25A
27	[B] Application process Wave 7 renumbered was Q25B
27	[C] Documentation process required for the loan Wave 7 NEW
27	[D] Loan closing process Wave 7 renumbered was Q25C
27	[E] Information in mortgage disclosure documents Wave 7 wording change, removed “the” Wave 7 renumbered was Q25D
27	[F] Timeliness of mortgage disclosure documents Wave 7 wording change, removed “the” Wave 7 renumbered was Q25E
27	[G] Settlement agent Wave 7 renumbered was Q25F
28	Did you take a course about home-buying or talk to a housing counselor? Wave 3 wording change Wave 7 renumbered was Q26 Wave 1 & 2: Did you take a course about home-buying or talk to a credit counselor?
29	How was the home-buying course or counseling provided? Wave 3 wording change Wave 1 & 2: How was the counseling or home-buying course provided? [A] In person, one-on-one Wave 7 renumbered was Q27A
29	[B] In person, in a group Wave 7 renumbered was Q27B
29	[C] Over the phone Wave 7 renumbered was Q27C
29	[D] Online Wave 7 renumbered was Q27D
30	How many hours was the home-buying course or counseling? Wave 7 renumbered was Q28
31	Overall, how helpful was the home-buying course or counseling? Wave 7 renumbered was Q29

32. What was the primary purpose for this most recent mortgage? If you refinanced an existing mortgage for any reason, please select refinance below. Mark one answer.

- ☐ Purchase of a property - *Continue with Q33*
- ☐ Permanent financing on a construction loan
- ☐ Refinance or modification of an existing mortgage
- ☐ New loan on a mortgage-free property
- ☐ Some other purpose (specify) _____

Skip to Q36

33. Did you do the following before or after you made an offer on this house or property?

	Before Offer	After Offer	Did Not Do
Contacted a lender to explore mortgage options	☐	☐	☐
Got a pre-approval or pre-qualification from a lender	☐	☐	☐
Decided on the type of loan	☐	☐	☐
Made a decision on which lender to use	☐	☐	☐
Submitted an official loan application	☐	☐	☐

34. What percent down payment did you make on this property?

- ☐ 0%
- ☐ Less than 3%
- ☐ 3% to less than 5%
- ☐ 5% to less than 10%
- ☐ 10% to less than 20%
- ☐ 20% to less than 30%
- ☐ 30% or more

35. Did you use any of the following sources of funds to purchase this property?

	Used	Not Used
Proceeds from the sale of another property	☐	☐
Savings, retirement account, inheritance, or other assets	☐	☐
Assistance or loan from a nonprofit or government agency	☐	☐
A second lien, home equity loan, or home equity line of credit (HELOC)	☐	☐
Gift or loan from family or friend	☐	☐
Seller contribution	☐	☐

Skip to Q40

36. How important were the following in your decision to refinance, modify or obtain a new mortgage?

	Important	Not Important
Change to a fixed-rate loan	☐	☐
Get a lower interest rate	☐	☐
Get a lower monthly payment	☐	☐
Consolidate or pay down other debt	☐	☐
Repay the loan more quickly	☐	☐
Take out cash	☐	☐

37. Approximately how much was owed, in total, on the old mortgage(s) and loan(s) you refinanced?

\$ _____ . 00

☐ Zero (the property was mortgage-free)

38. How does the total amount of your new mortgage(s) compare to the total amount of the old mortgage(s) and loan(s) you paid off (include any new second liens, home equity loans, or a home equity line of credit (HELOC))?

- ☐ New amount is lower - *Skip to Q40*
- ☐ New amount is about the same - *Skip to Q40*
- ☐ New amount is higher
- ☐ Property was mortgage-free

39. Did you use the money you got from this new mortgage for any of the following?

	Yes	No
College expenses	☐	☐
Auto or other major purchase	☐	☐
Buy out co-borrower e.g. ex-spouse	☐	☐
Pay off other bills or debts	☐	☐
Home repairs or new construction	☐	☐
Savings	☐	☐
Closing costs of new mortgage	☐	☐
Business or investment	☐	☐
Other (specify) _____	☐	☐

This Mortgage

40. When you took out this most recent mortgage or refinance, what was the loan amount (the dollar amount you borrowed)?

\$ _____ . 00 ☐ Don't know

Q#	Variable Description and Codes
32	What was the primary purpose for this most recent mortgage? If you refinanced an existing mortgage for any reason, please select refinance below. Mark one answer. Wave 7 wording change Wave 7 renumbered was Q50 Prior to Wave 7: What was the primary purpose of your mortgage at the time you took it out?
32	Wave 7 Skip pattern of response "Permanent financing on a construction loan" was changed from that of "purchase of a property" (continue with Q33) to "refinance..." (skip to Q36)
33	Did you do the following before or after you made an offer on this house or property? Wave 11 added "Offer" to column headings Wave 9 wording change, dropped first word "When" [A] Contacted a lender to explore mortgage options Wave 7 NEW
33	[B] Got a pre-approval or pre-qualification from a lender Wave 7 NEW
33	[C] Decided on the type of loan Wave 7 NEW
33	[D] Made a decision on which lender to use Wave 7 NEW
33	[E] Submitted an official loan application Wave 7 NEW
34	What percent down payment did you make on this property? Wave 7 changed "your" to "this" Wave 7 renumbered was Q54 Wave 11 2 NEW response options (all renumbered) 1 = 0%, 2 = Less than 3%, 3 = 3% to less than 5%, 4=5% to less than 10%, 5 = 10% to less than 20 6 = 20% to less than 30%, 7=30% or more Waves 3-10 response options: 1 = 0, 2 = Less than 5%, 3 = 5% to less than 10%, 4 = 10% to less than 20%, 5 = 20% or more Wave 1 & 2 response options: 1 = 0%, 2 = Less than 5%, 3 = 5-9.99%, 4 = 10-19.99%, 5 = 20% or more
35	Did you use any of the following sources of funds to purchase this property? Wave 7 changed "your" to "this" [A] Proceeds from the sale of another property Wave 7 renumbered was Q52 Prior to Wave 7 "How much money from the sale of this other property was used to purchase this property?" dollar and "don't know" response was dropped. Pre-Wave 7 Data remapped to Q153
35	[B] Savings, retirement account, inheritance, or other assets Wave 7 renumbered was Q55A
35	[C] Assistance or loan from a nonprofit or government agency Wave 7 renumbered was Q55B
35	[D] A second lien, home equity loan, or home equity line of credit (HELOC) Wave 7 NEW
35	[E] Gift or loan from family or friend Wave 7 renumbered was Q55C
35	[F] Seller contribution Wave 7 renumbered was Q55D

Q#	Variable Description and Codes
36	How important were the following in your decision to refinance, modify or obtain a new mortgage? Wave 7 changed from 3-point to 2-point scale 1 = Important 2 = Not Important Prior to Wave 7 (Important) 1 = Very 2 = Somewhat 3 = Not At All [A] Change to a fixed-rate loan Pre-Wave 7 Data remapped to Q156A
36	[B] Get a lower interest rate Pre-Wave 7 Data remapped to Q156B
36	[C] Get a lower monthly payment Pre-Wave 7 Data remapped to Q156C
36	[D] Consolidate or pay down other debt Pre-Wave 7 Data remapped to Q156D
36	[E] Repay the loan more quickly Pre-Wave 7 Data remapped to Q156E
36	[F] Take out cash Pre-Wave 7 Data remapped to Q156F
37	Approximately how much was owed, in total, on the old mortgage(s) and loan(s) you refinanced? Wave 7 renumbered was Q57
38	How does the total amount of your new mortgage(s) compare to the total amount of the old mortgage(s) and loan(s) you paid off (include any new second liens, home equity loans, or a home equity line of credit (HELOC))? Wave 7 changed "when they were paid off" to "you paid off" Added the expression in parenthesis Wave 7 renumbered was Q58
39	Did you use the money you got from this new mortgage for any of the following? [A] College expenses Wave 7 renumbered was Q59A
39	[B] Auto or other major purchase Wave 7 renumbered was Q59B
39	[C] Buy out co-borrower e.g. ex-spouse Wave 11 NEW
39	[D] Pay off other bills or debts Wave 11 renumbered was Q39C Wave 7 renumbered was Q59C
39	[E] Home repairs or new construction Wave 11 renumbered was Q39D Wave 7 wording change, renumbered was Q59D Prior to Wave 7 response was "Home repairs"
39	[F] Savings Wave 11 renumbered was Q39E Wave 7 renumbered was Q59E
39	[G] Closing costs of new mortgage Wave 11 renumbered was Q39F Wave 7 renumbered was Q59F
39	[H] Business or investment Wave 11 renumbered was Q39G Wave 7 renumbered was Q59G
39	[I] Other Wave 11 renumbered was Q39H Wave 7 renumbered was Q59H
39	Other (specify) Wave 7 renumbered was Q59_OS

41. What is the monthly payment, including the amount paid to escrow for taxes and insurance?

\$ _____ . 00 ☐ Don't know

42. What is the interest rate on this mortgage?

_____ % ☐ Don't know

43. Is this an adjustable-rate mortgage (one that allows the interest rate to change over the life of the loan)?

☐ Yes

☐ No

☐ Don't know

44. At the time of application, did the lender give you the option to set/lock the interest rate so that it would not change before closing?

☐ Yes

☐ No

☐ Don't know

45. When was the interest rate set/locked on this loan?

☐ At application

☐ Between application and closing

☐ Around closing

46. Does this mortgage have any of the following features?

	Yes	No	Don't Know
A prepayment penalty (<i>fee if the mortgage is paid off early</i>)	☐	☐	☐
An escrow account for taxes and/or homeowner insurance	☐	☐	☐
A balloon payment	☐	☐	☐
Interest-only payments	☐	☐	☐
Private mortgage insurance	☐	☐	☐

47. The closing disclosure statement you received at closing shows the loan closing costs and other closing costs separately. What were the loan closing costs you paid on this loan?

\$ _____ . 00 ☐ Don't know

48. How were the total closing costs (loan costs and other costs) for this loan paid?

	Yes	No	Don't Know
By me or a co-signer (<i>check or wire transfer</i>)	☐	☐	☐
By lender/mortgage broker	☐	☐	☐
By seller/builder	☐	☐	☐
Added to the mortgage amount	☐	☐	☐
Other (specify) _____	☐	☐	☐

49. Were the loan costs you paid similar to what you had expected to pay based on the Loan Estimates or Closing Disclosures you received?

☐ Yes

☐ No

50. Did you seek input about your closing documents from any of the following people?

	Yes	No
Lender/mortgage broker	☐	☐
Settlement agent	☐	☐
Real estate agent	☐	☐
Personal attorney	☐	☐
Title agent	☐	☐
Trusted friend or relative who is not a co-signer on the mortgage	☐	☐
Housing counselor	☐	☐
Other (specify) _____	☐	☐

51. At any time after you made your final loan application did any of the following change?

	Higher	Same	Lower
Monthly payment	☐	☐	☐
Interest rate	☐	☐	☐
Other fees	☐	☐	☐
Amount of money needed to close loan	☐	☐	☐

Q#	Variable Description and Codes
40	When you took out this most recent mortgage or refinance, what was the loan amount (the dollar amount you borrowed)? Wave 7 wording change Wave 7 renumbered was Q30 Prior to Wave 7: When you took out this mortgage, what was the loan amount?
41	What is the monthly payment, including the amount paid to escrow for taxes and insurance? Wave 7 wording change Wave 7 renumbered was Q31 Prior to Wave 7: What is the monthly payment?
42	What is the interest rate on this mortgage? Wave 7 changed "your" to "this" Wave 7 renumbered was Q32
43	Is this an adjustable-rate mortgage (one that allows the interest rate to change over the life of the loan)? Wave 7 wording change Wave 7 renumbered was Q33 Prior to Wave 7: Is this an adjustable-rate mortgage?
44	At the time of application, did the lender give you the option to set/lock the interest rate so that it would not change before closing? Wave 7 renumbered was Q34
45	When was the interest rate set/locked on this loan? Wave 7 changed "your" to "this" Wave 7 renumbered was Q35
46	Does this mortgage have any of the following features? Wave 7 changed "your" to "this" [A] A prepayment penalty (<i>fee if the mortgage is paid off early</i>) Wave 7 renumbered was Q40A
46	[B] An escrow account for taxes and/or homeowner insurance Wave 7 renumbered was Q40B
46	[C] A balloon payment Wave 7 renumbered was Q40C
46	[D] Interest-only payments Wave 7 renumbered was Q40D
46	[E] Private mortgage insurance Wave 11 NEW
47	The Closing Disclosure statement you received at closing shows the loan closing costs and other closing costs separately. What were the loan closing costs you paid on this loan? Wave 9 added "closing" Wave 7 NEW
48	How were the total closing costs (loan costs and other costs) for this loan paid? Wave 7 wording change Prior to Wave 7: Were the costs to close your loan paid in any of the following ways? [A] By me or a co-signer (<i>check or wire transfer</i>) Wave 7 renumbered was Q41A
48	[B] By lender/mortgage broker Wave 11 added "mortgage" Wave 7 renumbered was Q41B
48	[C] By seller/builder Wave 7 renumbered was Q41C

Q#	Variable Description and Codes																				
48	[D] Added to the mortgage amount Wave 7 renumbered was Q41D																				
48	[E] Other Wave 7 renumbered was Q41E																				
48	[none] Loan had no closing costs Wave 11 NEW																				
49	Were the loan costs you paid similar to what you had expected to pay based on the Loan Estimates or Closing Disclosures you received? Wave 11 NEW Wave 7 wording: Did you compare the final loan costs to the final Good Faith Estimate you received from your lender? Waves 1-6 wording: At or before closing did you compare the final loan costs to the Good Faith Estimate you received earlier from your lender? Pre-Wave 11 data remapped to Q149 Wave 7 renumbered was Q42																				
50	Did you seek input about your closing documents from any of the following people? [A] Lender/broker Wave 11 renumbered was Q51A Wave 7 renumbered was Q44A																				
50	[B] Settlement agent Wave 11 renumbered was Q51B Wave 7 renumbered was Q44D																				
50	[C] Real estate agent Wave 11 renumbered was Q51C Wave 7 renumbered was Q44C																				
50	[D] Personal attorney Wave 11 renumbered was Q51D Wave 7 added "Personal" Wave 7 renumbered was Q44B																				
50	[E] Title agent Wave 11 renumbered was Q51E Wave 7 renumbered was Q44E																				
50	[F] Trusted friend or relative who is not a co-signer on the mortgage Wave 11 renumbered was Q51F Wave 7 renumbered was Q44F																				
50	[G] Housing counselor Wave 11 renumbered was Q51G Wave 7 renumbered was Q44G																				
50	[H] Other Wave 11 renumbered was Q51H Wave 7 renumbered was Q44H																				
51	At any time after you made your final loan application did any of the following change? <table><tr><td></td><td>Higher</td><td>Same</td><td>Lower</td></tr><tr><td>Monthly payment</td><td>☐</td><td>☐</td><td>☐</td></tr><tr><td>Interest rate</td><td>☐</td><td>☐</td><td>☐</td></tr><tr><td>Other fees</td><td>☐</td><td>☐</td><td>☐</td></tr><tr><td>Amount of money needed to close loan</td><td>☐</td><td>☐</td><td>☐</td></tr></table> Wave 11 NEW		Higher	Same	Lower	Monthly payment	☐	☐	☐	Interest rate	☐	☐	☐	Other fees	☐	☐	☐	Amount of money needed to close loan	☐	☐	☐
	Higher	Same	Lower																		
Monthly payment	☐	☐	☐																		
Interest rate	☐	☐	☐																		
Other fees	☐	☐	☐																		
Amount of money needed to close loan	☐	☐	☐																		

52. Did you face any unpleasant “surprises” at your loan closing?

☐ No *Skip to Q54*

☐ Yes 

53. What unpleasant surprises did you face?

	Yes	No
Loan documents not ready	☐	☐
Closing did not occur as originally scheduled	☐	☐
Three day rule required re-disclosure	☐	☐
Mortgage terms different at closing e.g. interest rate, monthly payment	☐	☐
More cash needed at closing e.g. escrow, unexpected fees	☐	☐
Asked to sign blank documents	☐	☐
Rushed at closing or not given time to read documents	☐	☐
Other (specify) _____	☐	☐

54. At the same time you took out this mortgage, did you also take out another loan on the property you financed with this mortgage (a second lien, home equity loan, or a home equity line of credit (HELOC))?

☐ No *Skip to Q56*

☐ Yes 

55. What was the amount of this loan?

\$ _____ . 00

☐ Don't know

56. How well could you explain to someone the...

	Very	Somewhat	Not
			At All
Process of taking out a mortgage	☐	☐	☐
Difference between a fixed- and an adjustable-rate mortgage	☐	☐	☐
Difference between a prime and subprime loan	☐	☐	☐
Difference between a mortgage's interest rate and its APR	☐	☐	☐
Amortization of a loan	☐	☐	☐
Consequences of not making required mortgage payments	☐	☐	☐
Difference between lender's and owner's title insurance	☐	☐	☐
Relationship between discount points and interest rate	☐	☐	☐
Reason payments into an escrow account can change	☐	☐	☐

This Mortgaged Property

57. When did you buy or acquire this property? If you refinanced, the date you originally acquired the property?

_____/_____
month year

58. What was the purchase price of this property, or if you built it, the construction and land cost?

\$ _____ . 00 ☐ Don't know

59. How did you acquire this property?

Mark one answer.

- ☐ Purchased an existing home
- ☐ Purchased a newly-built home from a builder
- ☐ Had or purchased land and built a house
- ☐ Received as a gift or inheritance
- ☐ Other (specify) _____

60. Which of the following best describes this property? Mark one answer.

- ☐ Single-family detached house *Skip to Q62*
- ☐ Townhouse, row house, or villa *Skip to Q62*
- ☐ Mobile home or manufactured home *Skip to Q62*
- ☐ 2-unit, 3-unit, or 4-unit dwelling
- ☐ Apartment (or condo/co-op) in apartment building
- ☐ Unit in a partly commercial structure
- ☐ Other (specify) _____ 

61. Does this mortgage cover more than one unit?

☐ Yes ☐ No

62. About how much do you think this property is worth in terms of what you could sell it for now?

\$ _____ . 00 ☐ Don't know

63. Do you rent out all or any portion of this property?

☐ No *Skip to Q65*

☐ Yes 

64. How much rent do you receive annually?

\$ _____ . 00 per year

Q#	Variable Description and Codes
52	Did you face any unpleasant “surprises” at your loan closing? Wave 7 renumbered was Q45
53	What unpleasant surprises did you face? [A] Different loan terms Wave 11 deleted, Pre-Wave 11 Data remapped to Q253A Wave 7 renumbered was Q46A
53	[B] Higher monthly payment Wave 11 deleted, Pre-Wave 11 Data remapped to Q253B Wave 7 renumbered was Q46B
53	[C] Higher interest rate Wave 11 deleted, Pre-Wave 11 Data remapped to Q253C Wave 7 renumbered was Q46C
53	[D] Unexpected fees Wave 11 deleted, Pre-Wave 11 Data remapped to Q253D Wave 7 renumbered was Q46D
53	[E] Higher amount of money needed at closing Wave 11 deleted, Pre-Wave 11 Data remapped to Q253E Wave 7 renumbered was Q46E
53	[A] Loan documents not ready Wave 11 NEW
53	[B] Closing did not occur as originally scheduled Wave 11 NEW
53	[C] Three day rule required re-disclosure Wave 11 NEW
53	[D] Mortgage terms different at closing e.g. interest rate, monthly payment Wave 11 NEW
53	[E] More cash needed at closing e.g. escrow, unexpected fees Wave 11 NEW
53	[F] Asked to sign blank documents Wave 7 renumbered was Q46F
53	[G] Rushed at closing or not given time to read documents Wave 7 renumbered was Q46G
53	[H] Other Wave 7 renumbered was Q46H
54	At the same time you took out this mortgage, did you also take out another loan on the property you financed with this mortgage (a second lien, home equity loan, or a home equity line of credit (HELOC))? Wave 7 changed “your” to “this” and added “you financed with this mortgage” Wave 7 renumbered was Q47
55	What was the amount of this loan? Wave 7 renumbered was Q48
56	How well could you explain to someone the... [A] Process of taking out a mortgage Wave 7 renumbered was Q49A
56	[B] Difference between a fixed- and an adjustable-rate mortgage Wave 7 renumbered was Q49B
56	[C] Difference between a prime and subprime loan Wave 7 renumbered was Q49C
56	[D] Difference between a mortgage’s interest rate and its APR Wave 7 renumbered was Q49D
56	[E] Amortization of a loan Wave 7 renumbered was Q49E

Q#	Variable Description and Codes
56	[F] Consequences of not making required mortgage payments Wave 7 renumbered was Q49F
56	[G] Difference between lender’s and owner’s title insurance Wave 7 NEW
56	[H] Relationship between discount points and interest rate Wave 11 NEW
56	[I] Reason payments into an escrow account can change Wave 11 NEW
57	When did you buy or get this property? If you refinanced, the date you originally bought or got the property? Wave 11 change acquire to get/bought/got Wave 7 words added Prior to Wave 7: When did you buy or acquire your property? Wave 7 renumbered was Q60A/B
58	What was the purchase price of this property, or if you built it, the construction and land cost? Wave 7 changed “your” to “this” Wave 7 renumbered was Q61
59	How did you acquire this property? Mark <u>one</u> answer. Wave 7 changed “the” to “this” Wave 7 response changes: 1 = Purchased an existing home (deleted in a standard sale from the previous owner) 2 = Purchased a newly-built home from a builder 3 = Had or purchased land and built a house Wave 7 renumbered was 5 4 = Received as a gift or inheritance Wave 7 renumbered was 6 5 = Other (specify) Wave 7 renumbered was 7 Wave 7 deleted responses: Purchased a foreclosed property... (was Q62-3) Purchased a “short sale” property ... (was Q62-4) Pre-wave 7 data renumber to responses “13” and “14” Wave 7 renumbered was Q62
60	Which of the following best describes this property? Mark <u>one</u> answer. Wave 11 question rewrite was “What type of house is on this property?” Wave 11 changed “Condo, apartment house, or co-op” to “Apartment (or condo/co-op) in apartment building” Wave 10 changed skip directions for townhouse, row house, or villa, now asked if more than one unit Wave 7 changed “your” to “this” Wave 7 renumbered was Q63
61	Does this mortgage cover more than one unit? Wave 7 NEW Pre-wave 7: (If multiple units in Q60) How many separate living units does your mortgage cover? 0 – 999 = Amount Blank = No Answer or Appropriately skipped Pre-wave 7 data remapped to Q164
62	About how much do you think this property is worth in terms of what you could sell it for now? Wave 7 changed “your” to “this” Wave 7 renumbered was Q65
63	Do you rent out all or any portion of this property? Wave 7 added wording “all or” and “this” Wave 7 renumbered was Q66
64	How much rent do you receive annually? Wave 7 added “annually” Wave 7 response changed from “ ____ .00 per month” to “ ____ .00 per year” Wave 7 renumbered was Q67

65. Besides you, the mortgage co-signers, and renters, does anyone else help pay the expenses for this property?

☐ Yes ☐ No

66. Which of the following best describes how you use this property?

- ☐ Primary residence (where you spend the majority of your time)
- ☐ It will be my primary residence soon
- ☐ Seasonal or second home
- ☐ Home for other relatives
- ☐ Rental or investment property
- ☐ Other (specify) _____
- } Skip to Q68

67. If primary residence, when did you move into this property?

_____/_____
month year

68. In the last couple years, how has the following changed in the neighborhood where this property is located?

	Significant Increase	Little/No Change	Significant Decrease
Number of homes for sale	☐	☐	☐
Number of vacant homes	☐	☐	☐
Number of homes for rent	☐	☐	☐
Number of foreclosures or short sales	☐	☐	☐
House prices	☐	☐	☐
Overall desirability of living there	☐	☐	☐

69. What do you think will happen to the prices of homes in this neighborhood over the next couple of years?

- ☐ Increase a lot
- ☐ Increase a little
- ☐ Remain about the same
- ☐ Decrease a little
- ☐ Decrease a lot

70. In the next couple of years, how do you expect the overall desirability of living in this neighborhood to change?

- ☐ Become more desirable
- ☐ Stay about the same
- ☐ Become less desirable

71. How likely is it that in the next couple of years you will...

	Very	Somewhat	Not At All
Sell this property	☐	☐	☐
Move but keep this property	☐	☐	☐
Refinance the mortgage on this property	☐	☐	☐
Pay off this mortgage and own the property mortgage-free	☐	☐	☐

Your Household

72. What is your current marital status?

- ☐ Married Skip to Q74
- ☐ Separated
- ☐ Never married
- ☐ Divorced
- ☐ Widowed

73. Do you have a partner who shares the decision-making and responsibilities of running your household but is not your legal spouse?

☐ Yes ☐ No

Please answer the following questions for you and your spouse or partner, if applicable.

74. Age at last birthday:

You	Spouse/ Partner
____ years	____ years

75. Sex:

	You	Spouse/ Partner
Male	☐	☐
Female	☐	☐

76. Highest level of education achieved:

	You	Spouse/ Partner
Some schooling	☐	☐
High school graduate	☐	☐
Technical school	☐	☐
Some college	☐	☐
College graduate	☐	☐
Postgraduate studies	☐	☐

Q#	Variable Description and Codes
65	Besides you, the mortgage co-signers, and renters, does anyone else help pay the expenses for this property? Wave 7 wording change Pre-wave 7: "Do any of the other household members help pay of household expenses" Only asked if "yes" to "Besides you (and your spouse/partner), does anyone else live in your household or use your house as a permanent address?" Wave 7 renumbered was Q84
66	Which of the following best describes how you use this property? Wave 11 changed "investor property" to "investment property" Wave 7 renumbered was Q68
67	If primary residence, when did you move into this property? Wave 7 wording change Prior to Wave 7: When did you move into the property? Month Wave 7 renumbered was Q69A
67	Year Wave 7 renumbered was Q69B
68	In the last couple years, how has the following changed in the neighborhood where this property is located? Wave 7 wording change Prior to Wave 7: In the last couple years, how have the following changed in your neighborhood? [A] Number of homes for sale Wave 7 renumbered was Q94A
68	[B] Number of vacant homes Wave 7 renumbered was Q94B
68	[C] Number of homes for rent Wave 7 renumbered was Q94BC
68	[D] Number of foreclosures or short sales Wave 7 renumbered was Q94D
68	[E] House prices Wave 7 renumbered was Q94E
68	[F] Overall desirability of living there Wave 7 renumbered was Q94F
69	What do you think will happen to the prices of homes in this neighborhood over the next couple of years? Wave 7 wording change Prior to Wave 7: What do you think will happen to the prices of homes like yours in your neighborhood over the next couple of years?" Wave 7 renumbered was Q95

Q#	Variable Description and Codes
70	In the next couple of years, how do you expect the overall desirability of living in this neighborhood to change? Wave 7 changed "your" to "this" Wave 7 renumbered was Q96 Wave 3 scale change 1 = Become more desirable 2 = Stay about the same 3 = Become less desirable Wave 1 & 2 scale: 1 = Significant increase 2 = Stay about the same 3 = Significant decrease
71	How likely is it that in the next couple of years you will... [A] Sell this property Wave 7 word change Prior to Wave 7: Move and sell property Wave 7 renumbered was Q98A
71	[B] Move but keep this property Wave 7 changed "your" to "this" Wave 7 renumbered was Q98B
71	[C] Refinance the mortgage on this property Wave 7 word change Prior to Wave 7: Refinance Wave 7 renumbered was Q98C
71	[D] Pay off this mortgage and own the property mortgage-free Wave 7 changed "your" to "this" and "the" Wave 7 renumbered was Q98D
72	What is your current marital status? Wave 7 renumbered was Q71
73	Do you have a partner who shares the decision-making and responsibilities of running your household but is not your legal spouse? Wave 7 renumbered was Q72
74	Age at last birthday: Wave 7 renumbered was Q73A or Q73B
75	Sex:
76	Highest level of education achieved:

77. Hispanic or Latino:

	You	Spouse/ Partner
Yes	☐	☐
No	☐	☐

78. Race: Mark all that apply.

	You	Spouse/ Partner
White	☐	☐
Black or African American	☐	☐
American Indian or Alaska Native	☐	☐
Asian	☐	☐
Native Hawaiian or Pacific Islander	☐	☐

79. Current work status: Mark all that apply.

	You	Spouse/ Partner
Self-employed full time	☐	☐
Self-employed part time	☐	☐
Employed full time	☐	☐
Employed part time	☐	☐
Retired	☐	☐
Unemployed, temporarily laid-off or on leave	☐	☐
Not working for pay (<i>student, homemaker, disabled</i>)	☐	☐

80. Ever served on active duty in the U.S. Armed Forces: (*Active duty includes serving in the U.S. Armed Forces as well as activation from the Reserves or National Guard*).

	You	Spouse/ Partner
Yes, now on active duty	☐	☐
Yes, on active duty in the past, but not now	☐	☐
No, never on active duty except for initial/basic training	☐	☐
No, never served in the U.S. Armed Forces	☐	☐

81. Besides you (and your spouse/partner) who else lives in your household? Mark all that apply.

- ☐ Children/grandchildren under age 18
☐ Children/grandchildren age 18-22
☐ Children/grandchildren age 23 or older
☐ Parents of you or your spouse or partner
☐ Other relatives like siblings or cousins
☐ Non-relative

☐ No one else

82. Approximately how much is your total annual household income from all sources (*wages, salaries, tips, interest, child support, investment income, retirement, social security, and alimony*)?

- ☐ Less than \$35,000
☐ \$35,000 to \$49,999
☐ \$50,000 to \$74,999
☐ \$75,000 to \$99,999
☐ \$100,000 to \$174,999
☐ \$175,000 or more

83. How does this total annual household income compare to what it is in a “normal” year?

- ☐ Higher than normal
☐ Normal
☐ Lower than normal

84. Does your total annual household income include any of the following sources?

	Yes	No
Wages or salary	☐	☐
Business or self-employment	☐	☐
Interest or dividends	☐	☐
Alimony or child support	☐	☐
Social Security, pension or other retirement benefits	☐	☐

85. Does anyone in your household have any of the following?

	Yes	No
401(k), 403(b), IRA, or pension plan	☐	☐
Stocks, bonds, or mutual funds (<i>not in retirement accounts or pension plans</i>)	☐	☐
Certificates of deposit	☐	☐
Investment real estate	☐	☐

86. Which one of the following statements best describes the amount of financial risk you are willing to take when you save or make investments?

- ☐ Take substantial financial risks expecting to earn substantial returns
☐ Take above-average financial risks expecting to earn above-average returns
☐ Take average financial risks expecting to earn average returns
☐ Not willing to take any financial risks

Q#	Variable Description and Codes
77	Hispanic or Latino:
78	Race: Mark <u>all</u> that apply.
79	Current work status: Mark <u>all</u> that apply. Wave 11 revised list and renumbered all responses Self-employed full time Self-employed part time Employed full time Employed part time Retired Unemployed, temporarily laid-off or on leave Not working for pay (<i>student, homemaker, disabled</i>)
80	Ever served on active duty in the U.S. Armed Forces: <i>(Active duty includes serving in the U.S. Armed Forces as well as activation from the Reserves or National Guard).</i> Wave 11 change question to statement
81	Besides you (and your spouse/partner) who else lives in your household? Mark <u>all</u> that apply. Wave 8 ADDED [G] No one else Wave 7 NEW [A] Children/grandchildren under age 18 [B] Children/grandchildren age 18-22 [C] Children/grandchildren age 23 or older [D] Parents of you or your spouse or partner [E] Other relatives like siblings or cousins [F] Non-relatives

Q#	Variable Description and Codes
82	Approximately how much is your total annual household income from all sources (<i>wages, salaries, tips, interest, child support, investment income, retirement, social security, and alimony</i>)? Wave 11 changed Under \$35,000 to "Less than \$35,000" Wave 7 renumbered was Q85
83	How does this total annual household income compare to what it is in a "normal" year? Wave 7 renumbered was Q86
84	Does your total annual household income include any of the following sources? [A] Wages or salary Wave 7 renumbered was Q87A
84	[B] Business or self-employment Wave 7 renumbered was Q87B
84	[C] Interest or dividends Wave 7 renumbered was Q87C
84	[D] Alimony or child support Wave 7 renumbered was Q87D
84	[E] Social Security, pension or other retirement benefits Wave 11 expanded definition Wave 7 renumbered was Q87E
85	Does anyone in your household have any of the following? [A] 401(k), 403(b), IRA, or pension plan Wave 7 renumbered was Q88A
85	[B] Stocks, bonds, or mutual funds (<i>not in retirement accounts or pension plans</i>) Wave 7 renumbered was Q88B
85	[C] Certificates of deposit Wave 7 renumbered was Q88C
85	[D] Investment real estate Wave 7 renumbered was Q88D
86	Which <u>one</u> of the following statements best describes the amount of financial risk you are willing to take when you <u>save or</u> make investments? Wave 11 expanded definition Wave 7 renumbered was Q89

87. Do you agree or disagree with the following statements?

	Agree	Disagree
Owning a home is a good financial investment	☐	☐
Most mortgage lenders generally treat borrowers well	☐	☐
Most mortgage lenders would offer me roughly the same rates and fees	☐	☐
Late payments will lower my credit rating	☐	☐
Lenders shouldn't care about any late payments, only whether loans are fully repaid	☐	☐
It is okay to default or stop making mortgage payments if it is in the borrower's financial interest	☐	☐
I would consider counseling or taking a course about managing my finances if I faced financial difficulties	☐	☐

88. In the last couple of years, have any of the following happened to you?

	Yes	No
Separated, divorced or partner left	☐	☐
Married, remarried or new partner	☐	☐
Death of a household member	☐	☐
Addition to your household (not including spouse/partner)	☐	☐
Person leaving your household (not including spouse/partner)	☐	☐
Disability or serious illness of household member	☐	☐
Disaster affecting a property you own	☐	☐
Disaster affecting your (or your spouse/partner's) work	☐	☐
Moved within the area (less than 50 miles)	☐	☐
Moved to a new area (50 miles or more)	☐	☐

89. In the last couple of years, have any of the following happened to you (or your spouse/partner)?

	Yes	No
Layoff, unemployment, or reduced hours of work	☐	☐
Retirement	☐	☐
Promotion	☐	☐
Starting a new job	☐	☐
Starting a second job	☐	☐
Business failure	☐	☐
A personal financial crisis	☐	☐

90. In the last couple years, how have the following changed for you (and your spouse/partner)?

	Significant Increase	Little/No Change	Significant Decrease
Household income	☐	☐	☐
Housing expenses	☐	☐	☐
Non-housing expenses	☐	☐	☐

91. In the next couple of years, how do you expect the following to change for you (and your spouse/partner)?

	Significant Increase	Little/No Change	Significant Decrease
Household income	☐	☐	☐
Housing expenses	☐	☐	☐
Non-housing expenses	☐	☐	☐

92. How likely is it that in the next couple of years you (or your spouse/partner) will face...

	Very	Somewhat	Not At All
Retirement	☐	☐	☐
Difficulties making your mortgage payments	☐	☐	☐
A layoff, unemployment, or forced reduction in hours	☐	☐	☐
Some other personal financial crisis	☐	☐	☐

93. If your household faced an unexpected personal financial crisis in the next couple of years, how likely is it you could...

	Very	Somewhat	Not At All
Pay your bills for the next 3 months without borrowing	☐	☐	☐
Get significant financial help from family or friends	☐	☐	☐
Borrow a significant amount from a bank or credit union	☐	☐	☐
Significantly increase your income	☐	☐	☐

Q#	Variable Description and Codes
87	Do you agree or disagree with the following statements? [A] Owning a home is a good financial investment Wave 7 renumbered was Q90A
87	[B] Most mortgage lenders generally treat borrowers well Wave 9 added "Most" Wave 7 renumbered was Q90B
87	[C] Most mortgage lenders would offer me roughly the same rates and fees Wave 9 added "Most" Wave 7 NEW RESPONSE
87	[D] Late payments will lower my credit rating Wave 7 renumbered was Q90C
87	[E] Lenders shouldn't care about any late payments, only whether loans are fully repaid Wave 7 renumbered was Q90D
87	[F] It is okay to default or stop making mortgage payments if it is in the borrower's financial interest Wave 7 renumbered was Q90E
87	[G] I would consider counseling or taking a course about managing my finances if I faced financial difficulties Wave 11 NEW
88	In the last couple of years, have any of the following happened to you? [A] Separated, divorced or partner left Wave 11 modified Wave 7 renumbered was Q91A Prior to Wave 7: Separate/divorced
88	[B] Married, remarried or new partner Wave 7 renumbered was Q91B
88	[C] Death of a household member Wave 7 renumbered was Q91C
88	[D] Addition to your household (not including spouse/partner) Wave 7 renumbered was Q91D
88	[E] Person leaving your household (not including spouse/partner) Wave 7 renumbered was Q91E
88	[F] Disability or serious illness of household member Wave 7 renumbered was Q91F
88	[G] Disaster affecting a property you own Wave 7 renumbered was Q91G Prior to Wave 7: Disaster affecting your house
88	[H] Disaster affecting your (or your spouse/partner's) work Wave 7 renumbered was Q91H
88	[I] Moved within the area (less than 50 miles) Wave 7 renumbered was Q91I
88	[J] Moved to a new area (50 miles or more) Wave 7 renumbered was Q91J
89	In the last couple of years, have any of the following happened to you (or your spouse/partner)? [A] Layoff, unemployment, or reduced hours of work Wave 7 renumbered was Q92A
89	[B] Retirement Wave 7 renumbered was Q92G Wave 4 NEW RESPONSE

Q#	Variable Description and Codes
89	[C] Promotion Wave 7 renumbered was Q92B
89	[D] Starting a new job Wave 7 renumbered was Q92C
89	[E] Starting a second job Wave 7 renumbered was Q92D
89	[F] Business failure Wave 7 renumbered was Q92E
89	[G] A personal financial crisis Wave 7 renumbered was Q92F
90	In the last couple years, how have the following changed for you (and your spouse/partner)? Household income Wave 7 renumbered was Q93A
90	[B] Housing expenses Wave 7 renumbered was Q93B
90	[C] Non-housing expenses Wave 7 renumbered was Q93C
91	In the next couple of years, how do you expect the following to change for you (and your spouse/partner)? [A] Household income Wave 7 renumbered was Q97A
91	[B] Housing expenses Wave 7 renumbered was Q97B
91	[C] Non-housing expenses Wave 7 renumbered was Q97C
92	How likely is it that in the next couple of years you (or your spouse/partner) will face... [A] Retirement Wave 7 renumbered was Q99A
92	[B] Difficulties making your mortgage payments Wave 7 renumbered was Q99B
92	[C] A layoff, unemployment, or forced reduction in hours Wave 7 renumbered was Q99C
92	[D] Some other personal financial crisis Wave 7 renumbered was Q99D
93	If your household faced an unexpected personal financial crisis in the next couple of years, how likely is it you could... [A] Pay your bills for the next 3 months without borrowing Wave 7 renumbered was Q100A
93	[B] Get significant financial help from family or friends Wave 7 renumbered was Q100B
93	[C] Borrow a significant amount from a bank or credit union Wave 11 modified Wave 7 renumbered was Q100C
93	[D] Significantly increase your income Wave 7 renumbered was Q100D

RETIRED SURVEY QUESTIONS – DATA MAP				
Old Q #	New Q #	When deleted	Comments	Question
3	103	Wave 11	Replaced with NEW Q3	Including you, how many people signed or co-signed for this mortgage? ☐ 1 ☐ 2 ☐ 3 ☐ 4 or more
13A-K	113A-K	Wave 7	Scale changed from 3-point to 2-point	How important were each of the following in choosing the lender/broker you used for the mortgage you took out? 1 = Important 2 = Not Important Prior to Wave 7 (Important) 1 = Very 2 = Somewhat 3 = Not At All Having an established banking relationship Having a local office or branch nearby Used previously to get a mortgage Lender/broker is a personal friend or relative Lender/broker operates online Recommendation from a friend/relative/co-worker Recommendation from a real estate agent/home builder Reputation of lender/broker Spoke my primary language, which is not English Deleted in Wave 7 [F] Recommendation from a lending website [I] Lender is a community bank or credit union
16A-H	116A-H	Wave 7	Scale changed from 3-point to 2-point	How important were each of the following in determining the mortgage you took out? 1 = Important 2 = Not Important Prior to Wave 7 (Important) 1 = Very 2 = Somewhat 3 = Not At All Lower interest rate Lower APR (<i>Annual Percentage Rate</i>) Lower closing fees Lower down payment Lower monthly payment An interest rate fixed for the life of the loan A term of 30 year No mortgage insurance
24	124	Wave 11	Replaced with NEW Q24	Did your lender require you to get title insurance on this mortgage? ☐ No ☐ Yes
36 37 38 39	136 137 138 139	Wave 7	Replaced with new Q47	36. Many mortgages have discount points paid to the lender to get a lower interest rate. Did you pay any discount points? ☐ No ☐ Yes 37. (If Yes) How many discount points did you pay? _____ points ☐ Don't know 38. Some lenders charge origination points to cover the cost of preparing a mortgage for closing. These are often expressed as a percentage of the loan amount. Did you pay any origination points? ☐ No ☐ Yes 39. (If Yes) How many origination points did you pay? _____ points ☐ Don't know

RETIRED SURVEY QUESTIONS – DATA MAP

Old Q #	New Q #	When deleted	Comments	Question									
40E	140E	Wave 7		Owner's title insurance									
40F	140F	Wave 7		Credit life/debt suspension/debt cancellation insurance									
49	149	Wave 11	Replaced with NEW Q49	Did you compare the final loan costs to the final Good Faith Estimate you received from your lender? ☐ No ☐ Yes									
50	150	Wave 11		Did you find any significant differences between the two? ☐ Yes ☐ No									
51	151	Wave 7	Replaced with new Q33	Which statement best describes the approach you took to purchase your house or property? ☐ Had a pre-approval or pre-qualification from a lender before I made the purchase ☐ Shopped for a mortgage after making the purchase offer ☐ Shopped for house and mortgage at the same time									
53A-E	253A-E	Wave 11	Replaced with new Q53A-E	[A] Different loan terms [B] Higher monthly payment [C] Higher interest rate [D] Unexpected fees [E] Higher amount of money needed at closing									
53	153	Wave 7		How much money from the sale of this other property was used to purchase your property? \$_____. 00 ☐ Don't know									
56A-F	156A-F	Wave 7	Scale changed from 3-point to 2-point	If a refinance, construction loan, or new loan on a mortgage free property, how important were the following in your decision to refinance, modify or obtain a new mortgage? 1 = Important 2 = Not Important Prior to Wave 7 (Important) 1 = Very 2 = Somewhat 3 = Not At All									
64	164	Wave 7		(If multiple units) How many separate living units does your mortgage cover? 0 – 999 = Amount									
70	170	Wave 7		Is anyone who currently lives in the property a co-signer on your mortgage? ☐ Yes ☐ No									
75 A&B	175 A&B	Wave 7		Ever owned other residential properties besides this one? <table><tr><td></td><td>You [A]</td><td>Spouse/Partner [B]</td></tr><tr><td>Yes</td><td>☐</td><td>☐</td></tr><tr><td>No</td><td>☐</td><td>☐</td></tr></table>		You [A]	Spouse/Partner [B]	Yes	☐	☐	No	☐	☐
	You [A]	Spouse/Partner [B]											
Yes	☐	☐											
No	☐	☐											
79													
81 82 83	181 182 183	Wave 7	Replaced with new Q84	Q81. Besides you (and your spouse/partner), does anyone else live in your household or use your house as a permanent address? ☐ No ☐ Yes Q82. (If Yes to Q81) How many of the other household members are 18 years of age or younger? _____ household members ☐ None Q83. (If Yes to Q81) How many of the other household members are older than 18? _____ household members ☐ None									

COVER PAGE CHANGED WAVE 10 – Q2 2016

WAVES 1-9

WAVE 10 FORWARD

*PLEASE TELL US ABOUT YOUR RECENT
RESIDENTIAL MORTGAGE OR REFINANCE EXPERIENCE*

*A nationwide survey of mortgage borrowers
throughout the United States*

Over the last few years the U.S. economy has gone through some dramatic changes. Learning directly from borrowers about their experiences will help us improve lending practices and the mortgage process for future borrowers.



This research study is sponsored by two Federal agencies working together on behalf of consumers.

The Federal Housing Finance Agency oversees Fannie Mae and Freddie Mac to ensure the safety of the U.S. housing finance system; and

The Consumer Financial Protection Bureau works to ensure that all consumers have access to markets for consumer financial products and services and that these markets are fair, transparent, and competitive.

TO TAKE THE SURVEY ONLINE
Esta encuesta está disponible en español en línea

- 1 GO TO www.NSMBsurvey.com
Visite al sitio web www.NSMBsurvey.com
- 2 LOG IN with your unique survey PIN # found in the accompanying letter
Inicie la sesión con su número PIN único en la encuesta que se encuentra en la carta adjunta.

Online responses are processed more quickly, so taking the survey online makes it less likely you will receive follow-up reminders to complete the survey.

Respuestas en línea son procesadas más rápido, por lo que tomar la encuesta en línea hace que sea menos probable que usted reciba recordatorios de seguimiento para completar la encuesta.

Tell us about your recent mortgage experience

A nationwide survey of mortgage borrowers
throughout the United States



Learning directly from borrowers, like you, about your experiences will help us improve lending practices and the mortgage process for future borrowers.

Two Federal agencies, The Federal Housing Finance Agency and the Consumer Financial Protection Bureau are working together on your behalf to improve the safety of the U.S. housing finance system and ensure all consumers have access to financial products and services.

We want to make it as easy as possible for you to complete this survey. You can mail back the paper survey in the enclosed business reply envelope OR complete the survey online.

The online version of the questionnaire may be easier, and faster, to complete, because it automatically skips any questions that don't apply to you.

To take the survey online

- 1 GO TO www.NSMOSurvey.com
- 2 LOG IN with your unique survey PIN # found in the accompanying letter

Esta encuesta está disponible en español en línea

- 1 Visite al sitio web www.NSMOSurvey.com
- 2 Inicie la sesión con su número PIN único de la encuesta que se encuentra en la carta adjunta.

Thanks so much for your help with this important national effort to improve people's experiences in financing home ownership.

Appendix B. NSMO Unweighted Frequency Counts, Waves 1-11

Q4A: When you began the process of getting this mortgage, how familiar were you (and any co-signers) with the mortgage interest rates available at that time?	Very	Somewhat	Not at all	Total					
	13025	6704	968	20697					
Q4B: When you began the process of getting this mortgage, how familiar were you (and any co-signers) with the different types of mortgages available?	Very	Somewhat	Not at all	Total					
	10138	8412	2147	20697					
Q4C: When you began the process of getting this mortgage, how familiar were you (and any co-signers) with the mortgage process?	Very	Somewhat	Not at all	Total					
	11703	7088	1905	20697					
Q4D: When you began the process of getting this mortgage, how familiar were you (and any co-signers) with the down payment needed to qualify for a mortgage?	Very	Somewhat	Not at all	Total					
	12583	6329	1785	20697					
Q4E: When you began the process of getting this mortgage, how familiar were you (and any co-signers) with the income needed to qualify for a mortgage?	Very	Somewhat	Not at all	Total					
	12171	6904	1622	20697					
Q4F: When you began the process of getting this mortgage, how familiar were you (and any co-signers) with your credit history or credit score?	Very	Somewhat	Not at all	Total					
	16028	4128	541	20697					
Q4G: When you began the process of getting this mortgage, how familiar were you (and any co-signers) with the money needed at closing?	Very	Somewhat	Not at all	Total					
	11051	7179	2267	20697					
Q4H: When you began the process of getting this mortgage, how concerned were you about qualifying for a mortgage?	Very	Somewhat	Not at all	Total					
	2895	6085	11617	20697					
Q5: How firm an idea did you (and any co-signers) have about the mortgage you wanted?	Firm idea	Some idea	Little idea	Total					
	12527	6751	1019	20697					
Q7A: How much did you use the following source to get information about mortgages or mortgage lenders? Your lender or mortgage broker	A lot	A little	Not at all	Total					
	14497	4220	1980	20697					
Q7B: How much did you use the following source to get information about mortgages or mortgage lenders? Other lenders or broker	A lot	A little	Not at all	Total					
	1012	6654	12131	20697					
Q7C: How much did you use the following source to get information about mortgages or mortgage lenders? Real estate agents or buddies	A lot	A little	Not at all	Total					
	3680	4602	12515	20697					
Q7D: How much did you use the following source to get information about mortgages or mortgage lenders? Material in the mail	A lot	A little	Not at all	Total					
	759	2722	17216	20697					
Q7E: How much did you use the following source to get information about mortgages or mortgage lenders? Websites that provide information on getting a mortgage	A lot	A little	Not at all	Total					
	3939	6385	10373	20697					
Q7F: How much did you use the following source to get information about mortgages or mortgage lenders? Newspaper/TV/Radio	Not asked in Wave 4/Quintile	A lot	A little	Total					
	7401	299	13389	20697					
Q7G: How much did you use the following source to get information about mortgages or mortgage lenders? Friends/relatives/co-workers	A lot	A little	Not at all	Total					
	2661	6921	12015	20697					
Q7H: How much did you use the following source to get information about mortgages or mortgage lenders? Bankers or financial planners	A lot	A little	Not at all	Total					
	2807	4431	13359	20697					
Q7I: How much did you use the following source to get information about mortgages or mortgage lenders? Housing counselors	A lot	A little	Not at all	Total					
	246	724	19697	20697					
Q8: Which of the following best describes your shopping process?	I picked the loan type first, and then I picked the lender/broker	I picked the lender/broker first, and then I picked the loan type	Total						
	10425	24372	20697						
Q9: How did you apply for this mortgage?	Directly to a lender, without a broker or credit union	Through a mortgage broker (someone who works with two or more lenders to get a loan)	Total						
	13536	7068	93	20697					
Q10: How many different lender/mortgage brokers did you seriously consider before choosing whom to apply for this mortgage?	1	2	3	4	5 or more	Total			
	10372	7169	2582	360	234	20697			
Q11: How many different lender/mortgage brokers did you end up applying to?	1	2	3	4	5 or more	Total			
	16351	3511	648	126	61	20697			
Q12A: Did you apply to more than one lender/mortgage broker for the following reason? "Searching for better loan terms"	Not Applicable	Yes	No	Total					
	16351	5498	948	20697					

Q2B: Do you apply to more than one lender/mortgage broker for the following reason? Concern over qualifying for a loan?	Not Applicable	Yes	No	Total
	16351	1245	3101	20697
Q2C: Did you apply to more than one lender/mortgage broker for the following reason? Information learned from the Loan Estimator?	Not Applicable	Yes	No	Total
	16351	1290	3056	20697
Q2D: Did you apply to more than one lender/mortgage broker for the following reason? Turned down on earlier application?	Not Applicable	Yes	No	Total
	16351	912	3434	20697
Q3A: How important was the following in choosing the lender/mortgage broker you used for the mortgage you took out? Having an established banking relationship?	Not asked in Wave/Quarter	Important	Not Important	Total
	12156	4927	3614	20697
Q3B: How important was the following in choosing the lender/mortgage broker you used for the mortgage you took out? Having a local office or branch nearby?	Not asked in Wave/Quarter	Important	Not Important	Total
	12156	4386	4155	20697
Q3C: How important was the following in choosing the lender/mortgage broker you used for the mortgage you took out? Used previously to get a mortgage?	Not asked in Wave/Quarter	Important	Not Important	Total
	12156	3433	5110	20697
Q3D: How important was the following in choosing the lender/mortgage broker you used for the mortgage you took out? Lender/mortgage broker is a personal friend or relative?	Not asked in Wave/Quarter	Important	Not Important	Total
	12156	1172	7369	20697
Q3E: How important was the following in choosing the lender/mortgage broker you used for the mortgage you took out? Lender/mortgage broker operates online?	Not asked in Wave/Quarter	Important	Not Important	Total
	12156	3143	5398	20697
Q3F: How important was the following in choosing the lender/mortgage broker you used for the mortgage you took out? Recommendation from a friend/relative/co-worker?	Not asked in Wave/Quarter	Important	Not Important	Total
	12156	3099	5442	20697
Q3G: How important was the following in choosing the lender/mortgage broker you used for the mortgage you took out? Recommendation from a real estate agent/home builder?	Not asked in Wave/Quarter	Important	Not Important	Total
	12156	2782	5759	20697
Q3H: How important was the following in choosing the lender/mortgage broker you used for the mortgage you took out? Regulation of the lender/mortgage broker?	Not asked in Wave/Quarter	Important	Not Important	Total
	12156	6031	2510	20697
Q3I: How important was the following in choosing the lender/mortgage broker you used for the mortgage you took out? Spoke my primary language, which is not English?	Not asked in Wave/Quarter	Important	Not Important	Total
	12156	981	7560	20697
Q4: Who initiated the first contact between you and the lender/mortgage broker you used for the mortgage you took out?	(or one of my co-signers did)	The lender/broker did	We were put in touch with the lender/broker by a third party (such as a real estate agent or home builder)	Total
	14129	3031	5537	20697
Q4J: How open were you to suggestions from your lender/mortgage broker about mortgages with different features or terms?	Very	Somewhat	Not at all	Total
	10098	8518	2081	20697
Q4K: How important was the following in determining the mortgage you took out? Lower interest rate?	Not asked in Wave/Quarter	Important	Not Important	Total
	12156	8350	1391	20697
Q4L: How important was the following in determining the mortgage you took out? Lower APR (Annual Percentage Rate)?	Not asked in Wave/Quarter	Important	Not Important	Total
	12156	7473	1068	20697
Q4M: How important was the following in determining the mortgage you took out? Lower closing fees?	Not asked in Wave/Quarter	Important	Not Important	Total
	12156	7144	1357	20697
Q4N: How important was the following in determining the mortgage you took out? Lower down payment?	Not asked in Wave/Quarter	Important	Not Important	Total
	12156	5081	3460	20697
Q4O: How important was the following in determining the mortgage you took out? Lower monthly payment?	Not asked in Wave/Quarter	Important	Not Important	Total
	12156	6843	1698	20697
Q4P: How important was the following in determining the mortgage you took out? An interest rate fixed for the life of the loan?	Not asked in Wave/Quarter	Important	Not Important	Total
	12156	7662	879	20697

B-4

[illegible]

[illegible]

B-7

B-8

[illegible]

Question	Answered	Separated	Never married	Divorced	Widowed	Total
772: What is your current marital status?	14416	265	2406	2822	746	20897
773: Do you have a partner who shares the decision-making and responsibilities of running your household but is not your legal spouse?	Not Applicable	Yes	No	Total		
	14416	1352	4929	20897		
775A: Your gender?	Male	Female	Total			
	11489	9208	20697			
775B: Spouse/partner's gender?	Not Applicable	Male	Female	Total		
	4828	6365	9404	20697		
776A: Highest level of education you have achieved?	Some schooling	High school graduate	Technical school	College Degree	Postgraduate studies	Total
	288	2262	1037	4104	7186	20897
776B: Highest level of education spouse/partner has achieved?	Not Applicable	Some schooling	High school graduate	Technical school	College Degree	Total
	4828	350	2495	919	3365	20897
777A: Are you Hispanic or Latino?	Yes	No	Total			
	1369	23189	24557			
777B: Is your spouse/partner Hispanic or Latino?	Not Applicable	Yes	No	Total		
	4828	1317	14462	20697		
778A: Your race 1 (record)	White/Caucasian	Black or African American	Asian Indian/Alaska Native	Native Hawaiian/Pacific Islander	Two Races, one Black	Total
	17760	1185	112	81	282	20897
778B: Spouse/partner's race 1 (record)	Not Applicable	White/Caucasian	Black or African American	Asian Indian/Alaska Native	Native Hawaiian/Pacific Islander	Total
	4828	13475	742	117	103	20897
779A1: Your current work status 1 (record)	Self-employed full time	Self-employed part time	Employed full time	Employed part time	Retired	Total
	2159	36	13307	1000	3268	20697
779A2: Your current work status 2 (record)	Not Applicable	Self-employed part time	Employed part time	Retired	Unemployed temporarily laid-off or on leave	Total
	20236	116	104	137	14	20897
779B1: Spouse/partner's current work status 1 (record)	Not Applicable	Self-employed full time	Self-employed part time	Employed full time	Employed part time	Total
	4829	1693	30	8137	1307	20897
779B2: Spouse/partner's current work status 2 (record)	Not Applicable	Self-employed full time	Self-employed part time	Employed full time	Employed part time	Total
	20542	1	71	28	46	20897
780A: Have you ever served on active duty in the U.S. Armed Forces? (Active duty includes serving in the U.S. Armed Forces as well as activation from the Reserves or National Guard)	Yes, now on active duty	Yes, now on active duty in the past, but not now	No, never on active duty in the U.S. Armed Forces	Total		
	215	2827	976	16679	20897	
780B: Has spouse/partner ever served on active duty in the U.S. Armed Forces? (Active duty includes serving in the U.S. Armed Forces as well as activation from the Reserves or National Guard)	Not Applicable	Yes, now on active duty	Yes, on active duty in the past, but not now	No, never served in the U.S. Armed Forces	Total	
	4828	126	1349	632	1362	20697
781A: Besides you (and your spouse/partner) who else lives in your household? Children/grandchildren under age 18	Not asked in Wave/Quarter	Selected	Total			
	12156	3567	4874	20897		
781B: Besides you (and your spouse/partner) who else lives in your household? Children/grandchildren age 18-22	Not asked in Wave/Quarter	Selected	Total			
	12156	664	7687	20897		
781C: Besides you (and your spouse/partner) who else lives in your household? Children/grandchildren age 23 or older	Not asked in Wave/Quarter	Selected	Total			
	12156	780	7761	20897		
781D: Besides you (and your spouse/partner) who else lives in your household? Parents of you or your spouse or partner	Not asked in Wave/Quarter	Selected	Total			
	12156	328	6213	20897		
781E: Besides you (and your spouse/partner) who else lives in your household? Other relatives like siblings or cousins	Not asked in Wave/Quarter	Selected	Total			
	12156	216	6325	20897		

Q01F: Besides you (and your spouse/partner) who else lives in your household? Non-relatives	Not asked in Wave/Quarter	Selected	Total						
	12156	450	8091	20697					
Q01G: Besides you (and your spouse/partner) who else lives in your household? No one else	Not asked in Wave/Quarter	Selected	Total						
	14274	3976	3347	20697					
Q02: Approximately how much is your total annual household income from all sources (wages, salaries, tips, interest, child support, investment income, retirement, social security, and a	Under \$35,000	\$35,000 to \$49,999	\$50,000 to \$99,999	\$100,000 - \$174,999	Total				
	1395	2795	4020	3866	3178	\$15,000 or more			
Q03: How does this total annual household income compare to what it is a "normal" year?	Higher than normal	Normal	Lower than normal	Total					
	1222	1703	1780	20697					
Q04A: Does your total annual household income include wages or salary?	Yes	No	Total						
	17443	5354	20697						
Q04B: Does your total annual household income include business or self-employment?	Yes	No	Total						
	4827	15870	20697						
Q04C: Does your total annual household income include interest or dividends?	Yes	No	Total						
	5178	15519	20697						
Q04D: Does your total annual household income include alimony or child support?	Yes	No	Total						
	598	20099	20697						
Q04E: Does your total annual household income include Social Security, pension or other retirement benefits?	Yes	No	Total						
	4431	16266	20697						
Q05A: Does anyone in your household have a 401(k), 403(b), IRA, or pension plan?	Yes	No	Total						
	17503	3194	20697						
Q05B: Does anyone in your household have stocks, bonds, or mutual funds (not in retirement accounts or pension plans)?	Yes	No	Total						
	8803	11894	20697						
Q05C: Does anyone in your household have certificates of deposit?	Yes	No	Total						
	2576	18121	20697						
Q05D: Does anyone in your household have investment real estate?	Yes	No	Total						
	4168	16529	20697						
Q06: Which one of the following statements best describes the amount of financial risk you are willing to take when you save or make investments?	Take substantial financial risks expecting to earn substantial returns	Take above-average financial risks expecting to earn above-average returns	Take average financial risks expecting to earn average returns	Not willing to take any financial risks	Total				
	794	3976	10322	5405	20697				
Q07A: Do you agree or disagree that owning a home is a good financial investment?	Agree	Disagree	Total						
	19730	987	20697						
Q07B: Do you agree or disagree that most mortgage lenders generally treat borrowers well?	Agree	Disagree	Total						
	13012	4085	20697						
Q07C: Do you agree or disagree that most mortgage lenders would offer me roughly the same rates and fees?	Not asked in Wave/Quarter	Agree	Disagree	Total					
	12156	5831	2600	20697					
Q07D: Do you agree or disagree that late payments will lower my credit rating?	Agree	Disagree	Total						
	19157	1540	20697						
Q07E: Do you agree or disagree that lenders shouldn't care about any late payments, only whether loans are fully repaid?	Agree	Disagree	Total						
	2690	18007	20697						
Q07F: Do you agree or disagree that it is okay to default or stop making mortgage payments if it is in the borrower's financial interest?	Agree	Disagree	Total						
	1273	19424	20697						
Q07G: Do you agree or disagree that I would consider consulting or taking a course about managing my finances if I faced financial difficulties?	Not asked in Wave/Quarter	Agree	Disagree	Total					
	19169	1085	443	20697					
Q08A: In the last couple of years, has this happened to you? Separated, divorced or partner left	Yes	No	Total						
	1344	19353	20697						
Q08B: In the last couple of years, has this happened to you? Married, remarried or new partner	Yes	No	Total						
	2027	18670	20697						
Q08C: In the last couple of years, has this happened to you? Death of a household member	Yes	No	Total						
	758	19939	20697						
Q08D: In the last couple of years, has this happened to you? Addition to your household (not including spouse/partner)	Yes	No	Total						
	2708	17989	20697						
Q08E: In the last couple of years, has this happened to you? Person leaving your household (not including spouse/partner)	Yes	No	Total						
	1684	19033	20697						

B-12

	Very	Somewhat	Not at all	Total					
Q16D: If your household faced an unexpected personal financial crisis in the next couple of years, how likely is it you could significantly increase your income?	1811	8621	10265	20697					
	Not asked in Wave/Quarter								
Q16E: How important was the following in choosing the lender/broker you used for the mortgage you took out? Having an established banking relationship	8541	5472	2845	3839	20697				
	Not asked in Wave/Quarter								
Q16F: How important was the following in choosing the lender/broker you used for the mortgage you took out? Having a local office or branch nearby	8541	4383	2941	4832	20697				
	Not asked in Wave/Quarter								
Q16G: How important was the following in choosing the lender/broker you used for the mortgage you took out? Used previously to get a mortgage	8541	4277	1579	5550	20697				
	Not asked in Wave/Quarter								
Q16H: How important was the following in choosing the lender/broker you used for the mortgage you took out? Lender/broker is a personal friend or relative	8541	3162	1167	927	20697				
	Not asked in Wave/Quarter								
Q16I: How important was the following in choosing the lender/broker you used for the mortgage you took out? Lender/broker operates online	8541	2285	2991	980	20697				
	Not asked in Wave/Quarter								
Q16J: How important was the following in choosing the lender/broker you used for the mortgage you took out? Lender is a community bank or credit union	8541	2172	1818	916	20697				
	Not asked in Wave/Quarter								
Q16K: How important was the following in choosing the lender/broker you used for the mortgage you took out? Recommendation from a friend/relative/colleague	8541	2381	2184	7611	20697				
	Not asked in Wave/Quarter								
Q16L: How important was the following in choosing the lender/broker you used for the mortgage you took out? Recommendation from a real estate agent/home builder	8541	2265	1796	9095	20697				
	Not asked in Wave/Quarter								
Q16M: How important was the following in choosing the lender/broker you used for the mortgage you took out? Recommendation from a lending website	8541	448	1233	10475	20697				
	Not asked in Wave/Quarter								
Q16N: How important was the following in choosing the lender/broker you used for the mortgage you took out? Reputation of the lender/broker	8541	4662	3246	3948	20697				
	Not asked in Wave/Quarter								
Q16O: How important was the following in choosing the lender/broker you used for the mortgage you took out? Spoke my primary language, which is not English	8541	675	956	11125	20697				
	Not asked in Wave/Quarter								
Q16P: How important was the following in determining the mortgage you took out? Low interest rate	8541	11383	712	81	20697				
	Not asked in Wave/Quarter								
Q16Q: How important was the following in determining the mortgage you took out? Low APR (Annual Percentage Rate)	8541	9868	1531	757	20697				
	Not asked in Wave/Quarter								
Q16R: How important was the following in determining the mortgage you took out? Low closing fees	8541	8468	3020	958	20697				
	Not asked in Wave/Quarter								
Q16S: How important was the following in determining the mortgage you took out? Low down payment	8541	5754	2855	3547	20697				
	Not asked in Wave/Quarter								
Q16T: How important was the following in determining the mortgage you took out? Low monthly payment	8541	7625	3126	1405	20697				
	Not asked in Wave/Quarter								
Q16U: How important was the following in determining the mortgage you took out? An interest rate fixed for the life of the loan	8541	10340	1122	994	20697				
	Not asked in Wave/Quarter								
Q16V: How important was the following in determining the mortgage you took out? A term of less than 30 years	8541	4152	2813	5901	20697				
	Not asked in Wave/Quarter								
Q16W: How important was the following in determining the mortgage you took out? No mortgage insurance	8541	5033	2840	4283	20697				

B-14

Q1 Q35D: (If 'Yes to Q2) What unpleasant surprises did you face? 'Unexpected fees'	Not asked in Wave Quarter	Yes	No	Total					
	16718	1114	1337	2057					
Q1 Q35E: (If 'Yes to Q2) What unpleasant surprises did you face? 'Higher amount of money needed at closing'	Not asked in Wave Quarter	Yes	No	Total					
	16718	1101	1360	2057					
Q1 Q35H: (If 'Yes to Q2) What unpleasant surprises did you face? 'Other 1'	Not Applicable	Closing did not occur as originally scheduled	Erroneous charges/fees	Erroneous credits/concessions	Seller issues	Property/life/survey issues, including HCA, or around closing	Insufficient or incorrect instructions/ preparation/ review at	Total	
	2040	37	7	6	20	30	76	2057	
Q1 Q35H: (If 'Yes to Q2) What unpleasant surprises did you face? 'Other 2'	Not Applicable	Closing did not occur as originally scheduled	Erroneous charges/fees	Erroneous credits/concessions	Seller issues	Property/life/survey issues, including HCA, or around closing	Insufficient or incorrect instructions/ preparation/ review at	Total	
	2050	14	1	2	4	23	267	2057	



Consumer Financial
Protection Bureau