TECHNICAL REPORT 2

NMDB
National Mortgage Database

National Survey of Mortgage Originations Technical Documentation

2022
December 13

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1.   Introduction[1]

The National Mortgage Database (NMDB®) program is jointly funded and managed by the Federal Housing Finance Agency (FHFA) and the Consumer Financial Protection Bureau (CFPB). The program is designed to provide a rich source of information about the U.S. mortgage market based on a five percent sample of residential mortgages. It has three primary components:

> (1) the National Mortgage Database (NMDB);
> (2) the National Survey of Mortgage Originations (NSMO); and
> (3) the American Survey of Mortgage Borrowers (ASMB).

The NMDB program 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 (HERA).[2] Specifically, FHFA must, through a monthly survey of the mortgage market, collect data on the characteristics of individual mortgages including both those eligible and not eligible for purchase by Fannie Mae and Freddie Mac, 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.[3]

For CFPB, the NMDB program supports policymaking and research efforts, and helps identify and understand emerging mortgage and housing market trends. CFPB uses NMDB, among other purposes, in support of the market monitoring called for by the Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank Act), including understanding how mortgage debt affects consumers and for retrospective rule review required by this statute.[4]

In seeking to meet these objectives, FHFA and CFPB decided to create NMDB after determining that no existing database was sufficient.[5] NMDB is a de-identified loan-level database of closed-end first-lien residential mortgages. It has the following features:

> (1) Represents 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) Continually updates;
> (4) Has a historical component dating back before the financial crisis of 2008; and
> (5) Provides a sampling frame for NSMO and ASMB.

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[1] The authors would like to thank several groups for their contributions to this report: our former team members at FHFA and CFPB; our current and former colleagues at both agencies; and everyone who has worked on the NSMO project at Experian, Westat, and Freddie Mac.

[2] Housing and Economic Recovery Act of 2008, Pub. L. 110–289, 122 Stat. 2654 (2008).

[3] FHFA interprets the NMDB program, including NSMO, as the "survey" required by the Safety and Soundness Act. The statutory requirement is for a monthly survey. Core inputs to NMDB, such as a regular refresh of credit-repository data, occur monthly, though NSMO is conducted quarterly.

[4] Dodd-Frank Wall Street Reform and Consumer Protection Act, Pub. L. 111-203, 124 Stat. 1376 (2010).

[5] For a fuller description of NMDB, including a discussion of existing sources and their limitations, see NMDB Technical Report 1 at www.fhfa.gov/nmdb.

The core data in NMDB represent a statistically valid 1-in-20 random sample of all closed-end first-lien mortgages in the files of Experian, one of the three national credit bureaus.[6] When the NMDB program began, an initial sample was drawn from all mortgage files outstanding at any point from January 1998 through June 2012. Since then, the sample has been updated quarterly with mortgages newly reported to Experian. Borrowers are tracked in NMDB from at least one year prior to the origination of the sampled mortgage to one year after termination of the mortgage, whether that termination is through prepayment, adverse termination, or maturity.

NSMO is designed to complement the core NMDB by providing supplementary information related to borrower opinions, expectations, and experiences. This quarterly survey is voluntary, and its target universe is all newly originated closed-end first-lien residential mortgages and their associated borrowers. To achieve this objective, NSMO draws its sample from mortgages that are part of NMDB, whose sample is drawn 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 those newly added to NMDB for NSMO. At present, this represents a sampling rate of roughly 1-in-15 from NMDB (or 1-in-300 from all originations since NMDB itself is a 1-in-20 sample of loans).[7]

The remainder of this technical report is organized as follows.

The second through fourth sections of this technical report provides background details on the development of 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 through ninth sections provide analysis and a discussion about the editing process of the survey data. The fifth section presents an analysis of survey responses for the first 30 waves. The sixth section explains how the usable population for analysis is derived, also for the first 30 waves. 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 discusses the sampling error of the survey.

The tenth section provides an overview of techniques used to preserve respondent anonymity and data security, and the eleventh section describes a data file newly available to the public for analysis.[8]

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[6] Experian was chosen through a competitive procurement process to assist in creating NMDB.

[7] As of this writing, NSMO is currently in the field with Wave 36. Data in this document represent Waves 1 through 30.

[8] This document has four appendices. Appendix A presents the survey cover letters and the NSMO questionnaire used for Waves 35 and 36. Appendix B lists the retired survey questions. Appendix C cites the codebook that shows the changes in questions over the waves and tabulations with un-weighted frequency responses for all questions for the first 30 waves of the survey associated with mortgages originated from 2013 to 2020. Appendix D contains weighted tabulations broken down by origination year for the same period. These observations represent those included in the public use data file.

2.   Development of the Survey

Freddie Mac developed several pilot versions of what has now become NSMO in reaction to the financial crisis of 2008. The initial pilot was administered as a mail survey to about 1,500 borrowers drawn from data maintained by Experian, one of the three national credit bureaus. The pilot used a sample frame like that currently used by NSMO. The survey response rate was much lower than was hoped, at only 12 percent.

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 the contacting strategy, participation incentives, communication strategy, and 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 bureau records as the survey sampling frame as well as the effectiveness of the questionnaire and methodology.

The NSMO questionnaire draws heavily on these pilots and leverages the input of an advisory group of experts from government, non-profit organizations, advocacy groups, trade groups, and academia convened by Freddie Mac when creating its questionnaires. This group played a significant role in ensuring that NSMO provided information of interest to policymakers, researchers, and data analysts.

NSMO collects unique information that cannot be obtained from other sources, such as mortgage shopping behavior, mortgage closing experiences, borrowers' expectations regarding house price appreciation and experiences of critical household financial events (for example, a period of unemployment, large medical expenses, or divorce). Borrowers are only asked a handful of questions about their mortgage terms, just enough to verify that the survey reached the correct person and that the respondent discussed the correct loan.

By interagency agreement between FHFA and CFPB, FHFA led the production of NSMO.[9] This work included seeking public comments concerning information collection as required by the Paperwork Reduction Act. On April 25, 2013, FHFA published a 60-Day Notice of Submission of Information Collection for Approval from the OMB in the *Federal Register*. No comments were received for this notice. Subsequently, on July 1, 2013, FHFA published a 30-Day Notice of Submission of Information Collection for Approval from OMB indicating that FHFA had received no comments during the 60-day comment period.

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[9] An interagency agreement between FHFA and CFPB was signed on September 12, 2012, in which they agreed to share the costs of the survey and the development of NMDB equally.

Following these *Federal Register* notices, OMB reviewed the FHFA application and approved the request in December 2013, assigning 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 Notice (SORN) in the *Federal Register* extending the system of records entitled "National Mortgage Database Project" to cover NSMO. The second and third revisions of the SORN were published in the *Federal Register* in August 2015 and December 2016, respectively.

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 must be administered through Experian to maintain consumer privacy because it utilizes borrower names and addresses drawn from credit reporting bureau records.[10]

The NMDB team 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. (See Section 3 for more information about the timeframe for each survey wave.)

In the process of applying for a three-year extension of the OMB control number, FHFA published a 60-Day Notice of Submission of Information Collection for Approval from the OMB in the *Federal Register* on September 13, 2016. Two comment letters were received for this notice. Subsequently, on December 28, 2016, FHFA published a 30-Day Notice of Submission of Information Collection for Approval from OMB indicating receipt of the two comment letters. OMB reviewed the FHFA application and approved the request on April 20, 2017 and extended the collection authority for NSMO through April 30, 2020. On December 10, 2019, FHFA published another 60-day notice, followed by an additional 30-day notice on April 3, 2020. No comments were received, so OMB approved another request for extension on June 17, 2020, which extended the collection authority for NSMO through June 30, 2023.

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[10] 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.

3.   Detailed Survey Sample Frame

Approximately 6,000 of the closed-end first-lien mortgage loans newly added to NMDB are selected for NSMO following the update of NMDB at the end of each quarter.[11] At present this represents about a 1-in-300[12] sampling rate from the population of such loans as a whole. Loans are selected at random from mortgages that were newly reported to Experian within a year of origination. Once selected to participate in NSMO, a borrower is ineligible to be selected again.

After the sample is selected, Experian eliminates any potential respondents who: (1) have opted out of previous surveys, (2) are deemed not to have usable addresses or names, or (3) are on a do-not-contact list (a small number). 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 borrower billing addresses as the survey mailing addresses.

Table 1 shows the rules for selecting the borrower(s) and address to which the survey is mailed where there are multiple addresses or borrowers associated with a sample loan. The survey is sent to no more than two borrowers who share a common address.

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

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[11] For a fuller description of how loans are selected for NMDB, see NMDB Technical Report 1.
[12] During periods of unusually high loan activity, such as the second half of 2020, the sample rate can be as low as 1-in-600. This variation is accounted for in the sampling weights for each observation.

4.   Survey Timeline

At the beginning of each quarter, a 1-in-20 sample of mortgage loans newly reported to Experian over the previous quarter is delivered to the NMDB team from Experian. It takes approximately five weeks to identify and combine duplicative records, draw the NSMO sample, process it at Experian, and print the survey materials. At this point, the survey enters the field.

For the first 21 waves, the survey process was as follows:

On the first day NSMO was in the field, borrowers of sampled mortgages were sent a cover letter, printed questionnaire, and $5 cash incentive. The mailing and printed questionnaire detailed how borrowers could mail back the completed survey or complete the survey online in either English or Spanish using instructions and a unique PIN provided in the questionnaire packet. At first, approximately one third of the overall survey responses were completed online, but that share is approaching, and sometimes exceeding, 50 percent in recent waves.

At the start of NSMO's second week in the field, borrowers were sent their first reminder letter. If a borrower had not submitted their questionnaire by the middle of NSMO's fifth week in the field, they were sent a second reminder letter, another copy of the printed questionnaire, and an additional $5 cash incentive. If borrowers still had not replied by the end of NSMO's sixth week in the field, they were sent a third and final reminder letter at the start of NSMO's seventh week in the field. This last letter included the due date for returning the questionnaire to close the communication loop.

After testing several alternatives to this process in waves 22 through 26 (elaborated upon in Section 5), the incentive structure was permanently updated as follows, for waves 27 to the present. The first incentive was increased from $5 to $10 for all respondents. The second incentive was changed from $5 up-front to a promise of $20 upon receipt of a completed survey. This change necessitated sending a thank-you letter sent only to those who received a fifth-week reminder letter and subsequently returned the survey, to which the $20 is attached.

During the first eight weeks of each cycle, Experian maintains a NSMO call center to address any questions by borrowers. This call center also allows borrowers to "opt out" of the survey and future surveys. Both FHFA and CFPB describe the survey on their websites so that borrowers can independently verify its legitimacy. The agency officials whose signature is on the cover letter (Daniel E. Coates at FHFA and Janis K. Pappalardo at CFPB) are identified on the websites as senior employees of their respective agencies.

Mail surveys and online responses are accepted and processed until 12 weeks after the mail date, which means that the survey cycle extends about five weeks into the next quarter. After the deadline, responses undergo initial processing by Westat to strip the data of any personally identifiable information such as the names of borrowers or institutions. This takes roughly 25 days, after which the data are delivered to FHFA by Experian.

Once the data arrive at FHFA, it takes approximately eight weeks to complete additional processing of the survey responses, create preliminary sample weights, and assemble a preliminary usable data file. For more information on this process, see Section 7.

The timeline described above applies to each quarterly data collection and production. Because some loans take longer than six months to be reported to the credit bureaus, a data file fully representative of a calendar year will generally not be available until December of the following year. For example, data on 2019 mortgage originations only became available towards the end of 2020. As of this writing, the NSMO survey is currently on its 36th wave. Table 2 shows the survey field periods and sample size for each quarter to date. FHFA has received data from Experian up to the 34th wave as shown in Table 3 in Section 5. The NMDB team has processed, cleaned, and imputed data up to the 30th wave as shown in Tables 4 and 5 in Section 6.

Table 2. Survey Field Periods			
Wave	**Survey Field Dates**	**Calendar Quarter**	**Surveys Mailed**
1	April to June 2014	2014 Quarter 1	15,000
2	June to August 2014	2014 Quarter 2	3,000
3	August to November 2014	2014 Quarter 3	5,992
4	November 2014 to February 2015	2014 Quarter 4	5,795
5	February to May 2015	2015 Quarter 1	5,925
6	May to August 2015	2015 Quarter 2	4,428
7	August to November 2015	2015 Quarter 3	7,352
8	November 2015 to February 2016	2015 Quarter 4	5,913
9	February to May 2016	2016 Quarter 1	5,907
10	May to August 2016	2016 Quarter 2	5,885
11	August to November 2016	2016 Quarter 3	5,904
12	November 2016 to February 2017	2016 Quarter 4	5,919
13	February to May 2017	2017 Quarter 1	5,910
14	May to August 2017	2017 Quarter 2	5,804
15	August to November 2017	2017 Quarter 3	5,809
16	November 2017 to February 2018	2017 Quarter 4	5,707
17	February to May 2018	2018 Quarter 1	5,755
18	April to July 2018	2018 Quarter 2	5,773
19	August to November 2018	2018 Quarter 3	5,759
20	November 2018 to February 2019	2018 Quarter 4	5,770
21	February to May 2019	2019 Quarter 1	5,746
22	May to August 2019	2019 Quarter 2	5,720
23	August to November 2019	2019 Quarter 3	5,737
24	November 2019 to February 2020	2019 Quarter 4	5,676
25	February to May 2020	2020 Quarter 1	5,698
26	May to August 2020	2020 Quarter 2	5,679
27	August to November 2020	2020 Quarter 3	5,697
28	November 2020 to February 2021	2020 Quarter 4	5,658
29	February to May 2021	2021 Quarter 1	5,649
30	May to August 2021	2021 Quarter 2	5,653
31	August to November 2021	2021 Quarter 3	5,678
32	November 2021 to February 2022	2021 Quarter 4	5,650
33	February to May 2022	2022 Quarter 1	5,680
34	May to August 2022	2022 Quarter 2	5,685
Total			202,913

5.   Survey Samples and Returns

As shown in Table 3, NSMO typically samples about 6,000 new mortgage originations each quarter. Over the 34 waves for which FHFA has received data from Experian, just under 30 percent of the surveys mailed to borrowers of sampled mortgages were completed and, of those completed, over 40 percent were done online. The variation in quarterly sampling methodology and questionnaires are highlighted in this section. Additional details on questionnaire changes are in Appendices B and C.

Table 3. Survey Samples and Returns								
Wave	**Average Sampling Weight**	**Surveys Mailed**	**Postal Non-Delivery**	**Surveys Delivered**	**Surveys Completed**				**Opt-Out**
					Total	**By Mail**	**Online English**	**Online Spanish**	
1	464.21	15,000	218	14,782	5,793	4,410	1,360	23	169
2	296.14	3,000	37	2,963	1,076	858	214	4	31
3	280.96	5,992	110	5,882	2,073	1,534	524	15	40
4	263.63	5,795	86	5,709	2,020	1,496	514	10	53
5	247.32	5,925	126	5,799	2,089	1,567	520	2	39
6	238.92	4,428	38	4,390	1,489	1,133	353	3	31
7	297.20	7,352	147	7,205	2,494	1,744	744	6	39
8	326.97	5,913	99	5,814	1,899	1,305	587	7	24
9	292.31	5,907	155	5,752	1,824	1,230	584	10	42
10	253.27	5,885	98	5,787	1,765	1,148	607	10	36
11	278.27	5,904	172	5,732	1,733	1,097	627	9	21
12	343.76	5,919	167	5,752	1,778	1,078	687	13	18
13	363.21	5,910	127	5,783	1,885	1,197	675	13	32
14	318.55	5,804	107	5,697	1,681	1,085	588	8	21
15	270.61	5,809	136	5,673	1,537	765	760	12	24
16	305.24	5,707	164	5,543	1,507	757	738	12	26
17	304.31	5,755	112	5,643	1,647	879	762	6	45
18	262.93	5,773	163	5,610	1,536	812	711	13	32
19	266.84	5,759	242	5,517	1,464	760	695	9	29
20	284.50	5,770	206	5,564	1,396	762	627	7	11
21	266.12	5,746	251	5,495	1,511	777	719	15	17
22	213.35	5,720	219	5,501	1,405	757	630	18	29
23	262.92	5,737	235	5,502	1,236	647	579	10	29
24	346.01	5,676	181	5,495	1,097	561	532	4	20
25	398.60	5,701	142	5,559	1,780	771	891	11	27
26	364.62	5,679	120	5,559	1,743	666	983	6	23

Table 3. Survey Samples and Returns (continued)								
Wave	**Average Sampling Weight**	**Surveys Mailed**	**Postal Non-Delivery**	**Surveys Delivered**	**Surveys Completed**				**Opt-Out**
					Total	**By Mail**	**Online English**	**Online Spanish**	
27	606.49[13]	5,697	94	5,603	1,821	717	1,014	11	19
28	586.42	5,658	120	5,538	1,752	562	1,178	12	9
29	626.20	5,649	127	5,522	1,761	677	1,077	7	26
30	629.72	5,653	149	5,504	1,576[14]	646	916	14	22
31	621.72	5,678	172	5,506	1,458	567	877	14	19
32	509.98	5,650	185	5,465	1,415	552	852	11	22
33	463.01	5,680	202	5,478	1,482	720	748	14	26
34	468.72	5,685	165	5,520	1,253	596	643	14	28
Total	-	202,916	5,072	197,844	59,976	34,833	24,516	353	1,079
Percent of Mailed Surveys		*100.00%*	*2.50%*	*97.50%*	*29.56%*	*17.17%*	*12.08%*	*0.17%*	*0.53%*
Percent of Completed Surveys					*100.00%*	*58.08%*	*40.88%*	*0.59%*	*NA*

In 2014, the first year of the survey, a modified version was conducted for 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.

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. 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 fourth wave, mailed in November 2014, was the first sample that is comparable to subsequent surveys. It was comprised of any mortgage newly reported to Experian in the most recent quarter (July to September 2014) that was reported within a year of origination. It is also the first wave where Experian eliminated potential sample cases deemed to not have legitimate addresses or names prior to mailing. Other than slight changes to two questions, the questionnaire was unchanged from prior waves. This same questionnaire was used for Wave 5.

Initial analysis of data from the first four waves of the survey prompted major revisions to the questionnaire around this time. Examination of responses suggested that respondents may have frequently misunderstood or misinterpreted some of the questions.[15] This issue was addressed in

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[13] The average sampling weight increased in 2020 due to the unusually large volume of originations in that year.
[14] Survey responses noticeably dropped in Wave 30, which was mailed in the second quarter of 2021. FHFA suspects that increased COVID-19 vaccination rates and changes in the interest rate environment drove this change, although this subject is still being investigated.
[15] A list of retired survey questions is provided in Appendix B. Changes to the language of the questions across waves are provided in Appendix C.

changes made to the questionnaire for parts of Wave 6 (details below) and all of Wave 7. Users should be aware of these interpretation inconsistencies when using data from the earlier waves.

These revisions were anticipated, so Wave 6 was broken into two parts. Mortgages that were originated in 2014 were mailed on time, following the established schedule and using the original questionnaire; mortgages originated in 2015 were held back to be mailed with the new questionnaire alongside the usual Wave 7 sample.

Wave 7 consisted of three samples drawn independently. The first were those 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 sample of 1,142 borrowers residing in "remote rural" counties as defined using a U.S. Department of Agriculture (USDA) criterion with 2014 loan originations reporting to Experian within a year of origination was selected.[16] Each subsample was assigned a different sample weight.

All subsequent waves of the survey sent out only the regular sample mailed on-schedule. Minor revisions occurred roughly twice a year and can be tracked in the codebook in Appendix C. One prevailing trend during these waves was a slow but steady decline in the response rate, a problem facing many other surveys like NSMO during this period.

During waves 22 through 26, experiments with survey methodology were conducted to address the issue of declining response rate. In wave 22, one half of the usual 6,000 borrowers were randomly selected to receive a $10 cash incentive with the first mailing instead of the $5 incentive the other half received. In waves 23 and 24, one half of the borrowers randomly received revised cover and reminder letters while the other half received the originals. (Edits were made to the revised letters between waves 23 and 24 to boost response rates.) In wave 25, all borrowers were sent an initial incentive of $10. For the second incentive, one half of the non-respondents were randomly sent the normal $5 cash incentive as in previous waves and the other half were randomly sent a letter informing them that they will be sent a $20 incentive upon completion of the survey. In wave 26, all borrowers who had not returned a survey by week 5 were told they would be sent the $20 incentive upon completion of the survey; half were given a $5 incentive in week one and the other half were given $10.

The results of these experiments allowed the NMDB team to create a new incentive structure for waves 27 and beyond, as discussed previously. All borrowers are sent a $10 incentive in week one and, if they had not yet responded, told in week five that they would receive $20 upon receipt of a completed survey.

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[16] 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 online responses were evaluated to determine the set of usable responses. Table 4 summarizes the results of this analysis through the 30 waves which have been completely processed and illustrates the four criteria for rejecting a completed questionnaire.

Table 4. Usable Survey Responses						
		Not Usable				Usable	
Survey Wave	Returned	Duplicate or Ineligible	Answered "No" to Q1	Did Not Finish Survey	Wrong Loan	Unweighted	Weighted [17]
1	5,792	91	737	606	216	4,142	6,205,196
2	1,075	15	84	116	38	822	789,441
3	2,073	41	108	203	58	1,663	1,519,129
4	1,975	123	86	167	63	1,536	1,297,974
5	2,089	41	81	184	62	1,721	1,346,077
6	1,488	117	69	130	50	1,122	914,414
7	2,494	73	142	146	96	2,037	2,080,172
8	1,899	46	72	88	59	1,634	1,836,133
9	1,824	42	68	96	37	1,581	1,637,073
10	1,765	63	84	96	58	1,464	1,382,686
11	1,733	43	92	74	37	1,487	1,565,096
12	1,778	61	101	76	50	1,490	1,958,830
13	1,885	50	102	75	54	1,604	2,080,169
14	1,681	55	66	69	44	1,447	1,793,112
15	1,537	35	136	102	33	1,231	1,510,479
16	1,507	33	115	90	26	1,243	1,676,135
17	1,647	31	126	80	34	1,376	1,698,912
18	1,536	28	113	81	34	1,280	1,466,219
19	1,464	40	101	79	31	1,213	1,473,533
20	1,396	37	114	83	24	1,138	1,575,887
21	1,511	66	125	98	23	1,199	1,433,735
22	1,405	39	126	73	23	1,144	1,166,935
23	1,241	31	86	65	32	1,027	1,436,000
24	1,268	57	60	90	37	1,024	1,855,521
25	1,780	30	55	96	63	1,536	2,165,561
26	1,743	27	39	81	81	1,515	2,033,486
27	1,821	15	54	84	94	1,574	3,419,997
28	1,752	21	52	90	75	1,514	3,271,637
29	1,761	17	39	96	67	1,542	3,491,065
30	1,576	11	41	35	90	1,399	3,532,099
Total	54,496	1,379	3,274	3,449	1,689	44,705	59,612,703
Percent of Mailed Surveys	30.24%	0.77%	1.82%	1.91%	0.94%	24.81%	NA

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[17] The weighted usable total excludes the remote rural sample in wave 7.

The first category of unusable surveys comes from respondents whose sample loans were ultimately removed from 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 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 NMDB for reasons unrelated to the survey.

The second 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 respondents (738) said that they had not taken out a mortgage. An analysis of these responses suggests that many people did not consider a refinance 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 stopped answering questions halfway through or answered less than 50 percent of the questions overall.

The last 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 have refinanced their mortgage report 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.

Given this, the rate of usable responses in each wave is lower than the survey response rates reported earlier. Overall, for the first 30 waves, 44,705 usable responses were obtained from 54,496 returned surveys. This resulted in a usable response rate of 24.81% out of the mailed-out questionnaires. The distribution of the usable surveys by mortgage origination year is shown in Table 5.

Table 5. Usable Survey Responses by Origination Year										
Survey Wave	Total Usable	2013	2014	2015	2016	2017	2018	2019	2020	2014 Rural
1	4,142	4,142	0	0	0	0	0	0	0	0
2	822	822	0	0	0	0	0	0	0	0
3	1,663	460	1,203	0	0	0	0	0	0	0
4	1,536	10	1,526	0	0	0	0	0	0	0
5	1,721	4	1,717	0	0	0	0	0	0	0
6	1,122	0	1,122	0	0	0	0	0	0	0
7	1,750	0	189	1,561	0	0	0	0	0	295
8	1,634	0	12	1,622	0	0	0	0	0	0
9	1,581	0	1	1,580	0	0	0	0	0	0
10	1,464	0	0	1,016	448	0	0	0	0	0
11	1,487	0	0	153	1,334	0	0	0	0	0
12	1,490	0	0	12	1,478	0	0	0	0	0
13	1,604	0	0	2	1,602	0	0	0	0	0
14	1,447	0	0	0	1,105	342	0	0	0	0
15	1,231	0	0	0	177	1,054	0	0	0	0
16	1,243	0	0	0	6	1,237	0	0	0	0
17	1,376	0	0	0	5	1,371	0	0	0	0
18	1,280	0	0	0	0	928	352	0	0	0
19	1,213	0	0	0	0	130	1,083	0	0	0
20	1,138	0	0	0	0	5	1,133	0	0	0
21	1,199	0	0	0	0	1	1,198	0	0	0
22	1,144	0	0	0	0	0	777	367	0	0
23	1,027	0	0	0	0	0	77	950	0	0
24	1,024	0	0	0	0	0	0	1,024	0	0
25	1,536	0	0	0	0	0	2	1,534	0	0
26	1,515	0	0	0	0	0	0	1,006	509	0
27	1,574	0	0	0	0	0	0	56	1,518	0
28	1,514	0	0	0	0	0	0	3	1,511	0
29	1,540	0	0	0	0	0	0	0	1,540	0
30	489	0	0	0	0	0	0	0	489	0
Total	43,506	5,438	5,770	5,946	6,155	5,068	4,622	4,940	5,567	295
Percent of Mailed Surveys	*24.13%*	*3.02%*	*3.20%*	*3.30%*	*3.41%*	*2.81%*	*2.56%*	*2.74%*	*3.09%*	*0.16%*

7.   Cleaning, Editing, and Imputing Responses

One advantage that 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 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 files (Fannie Mae, Freddie Mac, Federal Housing Administration (FHA), Department of Veteran Affairs (VA), Rural Housing Services (RHS), and Federal Home Loan Banks (FHLB)); and

    (4) Information for loans that could be matched to Home Mortgage Disclosure Act (HMDA) files (HMDA data through calendar year 2020 are available as of this writing). [18]

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.

The survey responses are first subjected to thorough editing and review after being delivered to FHFA. This 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.

Tabulations of the raw unweighted—but edited—responses to all the survey questions in Appendix C. Data are presented for usable observations in Waves 1 through 30 with loan originations between 2013 and 2020. These observations are those included in the public use data file [19].

After editing and cleaning the survey response data, missing responses are imputed using answers to related questions or statistical models estimated based on credit and administrative data and answers to other questions in the survey. Imputations are designed to replicate the level of inherent inconsistencies between related variables in the actual (non-imputed) responses by

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[18] Merges with most administrative files are conducted behind a firewall at Experian using borrower name, address, date of birth and Social Security number to ensure the highest quality match accuracy (neither FHFA nor CFPB staff ever receive such information). However, merging the NMDB data with the HMDA data and the FHLB loan files must 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) but not property address or borrower name. 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. Those, when converted to a census tract for matching it may be incorrect. Thus, 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.

[19] Section 10 contains an explanation of the differences between the public use file and the internal use file.

the respondents. Actual responses are generally not changed (except in cases where they are edited as described above). In order to preserve the original responses, the raw responses are retained with missing responses coded as such. A parallel set of variables ("X" variables) are constructed where all missing responses are imputed, and necessary responses are edited as described above. Each instance in which an X variable differs from original responses is recorded by a shadow variable ("J" variables) that indicates the method and reason why the change was made. Missing responses typically total about three to five percent of responses 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) as comparable credit or administrative variables can be used in lieu of survey responses in analysis. Instead, Z variables are created in their place to indicate whether the respondents answered the question.

The initial set of imputations are based on inferences drawn from patterns of response. Patterns of missing responses sometimes provide an indication of how the respondent would have answered if they had taken the time to fill out all answers of a group. For example, one question reads, "how important were each of the following…" and provides choices of important or not important. Some respondents only mark "important" for the choices important to them. Other respondents might only mark choices that are "not important." When all answers are in a group with only one side answered, the other answers are imputed as the opposite choice. For example, when a respondent only marks choices that are "important," the missing questions were imputed as "not important."

The survey skips do not always work for every respondent and some respondents miss the lead-in question. The answers to the lead-in question were often imputed based on actual answers to the follow-up questions. For example, one question reads, "how many different lenders/mortgage brokers did you end up applying to" and provides options for one to five. When a respondent chooses one, they skip the next question about reasons they applied to more than one. If the lead-in question was left blank, any yes answer to the follow-up is considered a reason to impute that they applied to more than one lender. All "no" answers to the follow-up questions mean that they probably only applied to one lender. When respondents skip both a lead-in and follow-up question, both are imputed with one of the imputation models.

Once these inferential imputations are taken care of, statistical models are used to impute the remaining missing answers. The most common type of question in NSMO provides a simple "yes" or "no" answer. A binomial logistic model provides an estimated probability of a "yes" answer. For some questions, such as the number of lenders or brokers the respondent seriously considered, the answers are in a logical order. For these types of questions, an ordered logistic model is used to determine the probability of each answer. For other questions the order does not matter, and the answer choices are not related to the previous choice. For these questions, a multinomial logistic model is used, and the reference group is selected to be the most common answer. Again, the model produces a probability of each answer response. A random number is drawn with a different seed for every question and it is then compared to the probability of each response level. When the random number falls below the cumulative probability of an answer, that answer is used as the imputed response. This method injects some randomness to the

imputed answers, but the goal is to provide a distribution of imputed answers that mimics the distribution of the answers where no imputation was necessary.

The dependent variable (y_i) in all the models used is a value for the missing answer. The vector of characteristics (x_i) can include information from the credit files or answers to survey questions. 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 also provide reliable information on race, income, and interest rate. HMDA data also provide reliable information on race, income, and gender.

The initial statistical imputation models first use all the respondents who provided answers using a standard set of predictors to provide an initial imputation. The models use age, loan amount, credit score, loan type, education and income level. Once the initial imputation values are established, the models are enhanced for any predictor that provides a good fit to the models and these models use actual and imputed values from all respondents. The missing values are imputed statistically using an iterative process where each subsequent run of the model uses the actual responses and the imputed responses from the previous run. Iterating in this way ensures that correlations among the imputed values will better reflect correlations among observations where responses were available.

The regression runs always start with key variables first. As with the initial imputations, the first variables imputed are age, loan amount, credit score, loan type, education and income. The next level covered by the models imputes marital status, race, and ethnicity. The process then moves on to other questions and often follows the order of the survey instrument for less consequential questions. Lead-in questions are always imputed before the follow-up question to keep the follow-up imputations consistent with the lead-in question.

As the recursive models run, the coefficient of each predictor variable in each model is tracked and compared with values from the previous runs. The recursive runs are only stopped when the coefficients have settled down with minimal changes in the last few runs. This ensures that the recursive effect on each model has fed into all the predictions of imputed values and stabilized.

To find the best model for each imputation, the last recursive run is selected, and the actual response is subtracted from the predicted value of the response. The difference represents the error term or the portion of the probability of a response that was not explained by the predictive variables. A large matrix of error terms is constructed, and the values are tested for correlation. Error terms with a correlation coefficient of over 0.30 get explored as possible indicators of new predictor variables. Each year, new predictors are placed into the recursive model and the results are tested to see if the model improves. With improved models, the recursive runs are restarted until all the beta coefficients settle down again.

The final imputations rely on a further set of quality control checks. Conditional correlation tables of model residuals are constructed to identify any additional significant explanatory variables which may have been left out of individual equations. Further, imputed values of

similar related variables are sometimes adjusted to ensure that the covariances among the imputed answers mirror that of the non-imputed responses.

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 earlier in Table 2, the survey waves do 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. Specifically, the non-response weights in NSMO are designed to "blow up" the usable sample (column 7 in Table 4 to the total surveys mailed (column 3 in Table 3, less duplicate and ineligible loans taken out of NMDB (column 3 in Table 4 and a comparable proportion of non-returned surveys not shown in the table).

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

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. The models estimate the probability of getting a usable response for each wave of the survey. The predictive equations have had pseudo-R-square values ranging from 0.0454 to 0.1560. The models for joint borrowers perform better than those for single borrower. The largest pseudo-R-square values in models used for 2020 loans were for models estimated on data from Wave 26 joint borrowers. Key predictive variables included are loan amount, borrower age, the income relied upon for underwriting, the combined loan-to-value ratio, an indicator of whether it was a home purchase or refinance loan, and the interest rate spread over the prevailing prime interest rate at origination. The models also control for credit score, for geography using Census Divisions, and for demographic characteristics on family composition, race, ethnicity, gender, and educational attainment.

The model's predicted probabilities of response were placed into 5 equal groups of 20 percent each. 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 6 demonstrates the effect of differential sampling weights for the first 30 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.

Table 6. Overall Weights, 2013 - 2020 Originations (Waves 1-30)			
	Unweighted Percentage	Weighted Percentage	Average Weight
Loan Category			
Purchase	48.10%	48.90%	1,339
Refinance	47.90%	47.10%	1,296
Other (i.e. bought out co-borrower, put loan on mortgage-free property)	4.00%	3.90%	1,289
	100.00%	100.00%	
Loan Size			
Less than $50,000	2.10%	2.00%	1,259
$50,000 to $99,999	11.90%	11.30%	1,246
$100,000 to $149,999	18.10%	17.60%	1,277
$150,000 to $199,999	17.00%	16.80%	1,301
$200,000 to $249,999	13.80%	13.80%	1,323
$250,000 to $299,999	10.60%	10.50%	1,299
$300,000 to $349,999	7.70%	8.00%	1,365
$350,000 to $399,999	5.50%	5.70%	1,349
$400,000 or more	13.20%	14.30%	1,426
	100.00%	100.00%	
Mortgage Term to Maturity			
Less than 15 Years	3.60%	3.00%	1,090
15 Years	15.30%	13.90%	1,194
Between 15 and 30 Years	6.60%	6.70%	1,349
30 Years or More	74.50%	76.40%	1,349
	100.00%	100.00%	
Loan to Value (LTV) Ratio at Origination			
Less than 75%	39.10%	36.60%	1,234
75% to 79%	11.60%	11.10%	1,268
80%	9.80%	9.50%	1,273
81% to 89%	9.60%	9.60%	1,318
90% or More	30.00%	33.20%	1,455
	100.00%	100.00%	
Respondent Credit Score (VantageScore® 3.0)			
Lower than 620	4.70%	6.20%	1,732
620 to 639	3.10%	4.00%	1,686
640 to 659	4.70%	5.90%	1,653
660 to 679	5.40%	6.30%	1,551
680 to 699	6.10%	6.90%	1,483
700 to 719	7.20%	7.90%	1,445
720 to 739	9.10%	9.50%	1,385
740 or Higher	59.70%	53.20%	1,173
	100.00%	100.00%	

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 NSMO, estimates of statistics that apply to most mortgages 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, but not all, of this error. 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.

Analyses 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.

10. Security and Privacy Measures

The most important way NMDB protects its sampled borrowers is by keeping all personally identifiable information (PII) behind Experian's firewalls. No Social Security numbers, names, addresses, or institution names ever arrive at FHFA.

The use of a sample in the full NMDB also 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 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 computing costs.

All survey responses for NSMO 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 before leaving Westat. 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. Borrowers are informed that their participation in the survey is voluntary and that their responses will be kept strictly confidential.

As a final security measure, two versions of the NSMO data are made available outside of the production environment: a public use file (PUF) available to the general public and an internal use file (IUF) accessible only to federal employees who have signed an agreement to use the data responsibly.

Neither the IUF nor the PUF contain any PII from borrowers, but the IUF contains geographic data and continuous variables that have been deemed a reidentification risk and are therefore not released to the public. The U.S. Census Bureau periodically reviews the PUF to ensure that its release cannot jeopardize respondent privacy. More information about measures taken to protect publicly available data can be found in the next section of this report.

11. Public Use File

On November 8, 2018, FHFA and CFPB released the first NSMO public use file based on the first 15 quarterly waves of the survey. On July 29, 2021, an update was released based on waves 22 through 26, and on December 13, 2022, another update was released based on waves 27 through 30. This updated file contains data for 43,506 sample mortgages originated from 2013 through 2020 based on 5,000 to 6,000 usable surveys per year.[20]

To ensure that the public use file adequately protects privacy, FHFA entered into an agreement with the U.S. Census Bureau to conduct an independent third-party assessment of the proposed public use file to determine whether PII can be re-identified from the NSMO public use data set by matching against other publicly available data sets. On June 11, 2021, the U.S. Census Bureau submitted a memorandum to FHFA stating that the NSMO public use data and the methods used to protect privacy in that data met its privacy standard for public release. The same method was used for the current public data release.

The public use file excludes virtually all geographic variables to protect privacy. Specifically, the public use file excludes geographical information such as Census region, Census division, state, county, city, zip code, and Census tract. It only includes a flag indicating whether the property associated with the mortgage was in a metropolitan area tract designated as low-to-moderate income (LMI) for Community Reinvestment Act (CRA) purposes, non-CRA-LMI metropolitan tract, or in a non-metropolitan area.

The public use file contains 314 survey data elements on mortgage shopping behavior, mortgage closing experience as well as borrower perception, opinion, and outlook about their mortgages. It also contains over 100 supplementary data elements about the sample mortgages and borrowers, such as the loan amount (in $50,000 categories), loan-to-value ratio, debt-to-income ratio, origination and quarterly VantageScore® 3.0 credit scores of borrowers, and quarterly performance status of the mortgages through June 2022.

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[20] The NSMO public use file does not include 295 "remote rural" special sample loans originated in 2014 because they were sampled differently.

Appendix A. NSMO Letters and Questionnaire, Waves 35 and 36

This appendix shows the NSMO cover letters and survey questionnaire (or instrument) that was mailed to the borrowers associated with the sampled mortgages during Waves 35 and 36. All the questionnaires used in Waves 1 through 36 are available on www.fhfa.gov/nsmodata.

IMPROVING MORTGAGE EXPERIENCES IN AMERICA
National Survey of Mortgage Originations

|||||| ||| ||||| ||| |||| |||| || ||| 1234567   101

<FIRST NAME1> <LAST NAME1>   November 14, 2022
<FIRST NAME2> <LAST NAME2>
<ADDRESS>
<CITY> <STATE> <ZIP>

We are writing to ask for your help.

It is our understanding that you have taken out or co-signed on a mortgage loan sometime in the last two years. We want to learn about your experience, whether your mortgage was to purchase a housing property or to refinance or modify an existing loan.

The **Federal Housing Finance Agency** and the **Consumer Financial Protection Bureau** are working together on this study. Understanding your experience is particularly important in developing policies to assist consumers when obtaining a mortgage.

You can complete the paper copy and return it in the enclosed postage-paid envelope or complete the survey online in either of the following ways:

>   To complete the survey on a computer or tablet, please go to: **www.NSMOsurvey.com**
>   Then, enter this unique access code: **<123 456 789>** and your 5-digit zip code.

>   To complete the survey on a mobile device/smartphone, text your unique access code **<123 456 789>** to **(202) 759-2029** to receive a link to the survey or scan the QR code.

The unique access number helps us keep track of returned surveys and not send needless reminders.

Completing the survey is voluntary. Your answers will not be connected to your name or any other identifying information. If you have any questions about this study, please call us toll free 1-855-339-7877 or visit our web sites, www.fhfa.gov/nsmo or www.consumerfinance.gov.

We realize that answering this survey will take some time and effort, so we have enclosed a small token of appreciation as a way of saying thanks.

Sincerely,

Daniel E. Coates
Deputy Director for Research and Statistics
Federal Housing Finance Agency
fhfa.gov

Janis K. Pappalardo
Associate Director for Research, Markets, and Regulations
Consumer Financial Protection Bureau
consumerfinance.gov

Para leer esta carta en español por favor vea el dorso.

MEJORANDO LOS TRÁMITES HIPOTECARIOS EN ESTADOS UNIDOS

Encuesta Nacional de Apertura de Hipotecas

‖‖‖‖‖‖‖‖‖‖‖‖   1234567   101

<FIRST NAME1> <LAST NAME1>   14 de noviembre de 2022
<FIRST NAME2> <LAST NAME2>
<ADDRESS>
<CITY> <STATE> <ZIP>

Por medio de la presente queremos solicitar su ayuda.

Tenemos entendido que usted obtuvo o firmó un préstamo hipotecario en los últimos dos años. Queremos conocer su experiencia ya sea que su hipoteca fue para comprar una vivienda o para refinanciar o modificar un préstamo existente.

La **Agencia Federal de Financiamiento de Vivienda** y la **Oficina para la Protección Financiera del Consumidor** están trabajando conjuntamente en este estudio. Comprender su experiencia es de especial importancia para poder crear políticas que ayuden a los consumidores cuando obtienen hipotecas.

Puede contestar la encuesta impresa y enviarla de vuelta en el sobre pre-pagado, o la puede contestar por Internet de cualquiera de estas dos maneras:

> Para contestar la encuesta en una computadora o tableta, por favor, vaya a: **www.NSMOsurvey.com** y anote este código de acceso único: **<123 456 789>** y su código postal de 5 digitos.

> Para contestar la encuesta en un aparato móvil/teléfono inteligente, envíe en un mensaje de texto su código de acceso único **<123 456 789>** al **(202) 759-2029** para recibir un enlace a la encuesta o escanee el código QR.

El número de acceso único nos ayuda a darle seguimiento a las encuestas devueltas y no tener que enviar recordatorios innecesarios.

Contestar la encuesta es voluntario. Sus respuestas no se relacionarán con su nombre ni con otra información que lo pudiera identificar. Si tiene alguna pregunta acerca de este estudio, nos puede llamar a la línea directa y gratuita 1-855-339-7877 o ir a nuestras páginas web, fhfa.gov/nsmo o consumerfinance.gov.

Sabemos que contestar esta encuesta tomará algo de tiempo y dedicación, por lo que hemos adjuntado una pequeña muestra de agradecimiento.

Atentamente,

Daniel E. Coates
Director asistente de investigación y estadística
La Agencia Federal de Financiamiento de Vivienda
fhfa.gov

Janis K. Pappalardo
Subdirector de Investigación, Mercados, y Regulación
La Oficina para la Protección Financiera del Consumidor
consumerfinance.gov

To read this letter in English, please turn over to the other side.

IMPROVING MORTGAGE EXPERIENCES IN AMERICA
National Survey of Mortgage Originations

1234567   101

<FIRST NAME1> <LAST NAME1>   November 21, 2022
<FIRST NAME2> <LAST NAME2>
<ADDRESS>
<CITY> <STATE> <ZIP>

Last week, we wrote to ask for help in understanding your experiences in obtaining a mortgage to purchase a housing property or to refinance or modify an existing loan. Understanding your experience is particularly important in developing policies to assist consumers who are getting a mortgage.

If you have already responded, we thank you for your help. If you have not yet had time to respond, we hope that you will do so soon.

If you still have the paper copy, you can complete the paper copy and return it in the postage-paid return envelope or you can complete the survey online. The online version may be easier to complete because it automatically skips any questions that do not apply to you.

To complete the survey on a computer or tablet, go to: **www.NSMOsurvey.com**
Then, enter this unique access code: **<123 456 789>** and your 5-digit zip code.

To complete the survey on a mobile device/smartphone, text your unique access code **<123 456 789>** to **(202) 759-2029** to receive a link to the survey or scan the QR code.

We really appreciate that you are considering our request. It's because of help from people like yourself that we can improve the process people go through when seeking home financing.

Thank you for considering our request.

Daniel E. Coates
Deputy Director for Research and Statistics
Federal Housing Finance Agency
fhfa.gov

Janis K. Pappalardo
Associate Director for Research, Markets, and Regulations
Consumer Financial Protection Bureau
consumerfinance.gov

P.S. We are happy to respond to any questions you might have about this study. You are welcome to call us toll free at 1-855-339-7877 or visit our web sites www.fhfa.gov/nsmo or www.consumerfinance.gov.

Para leer esta carta en español por favor vea el dorso.

MEJORANDO LOS TRÁMITES HIPOTECARIOS EN ESTADOS UNIDOS

Encuesta Nacional de Apertura de Hipotecas

|||| IIII III| II|| I||| III| III| 1234567   101

<FIRST NAME1> <LAST NAME1>
<FIRST NAME2> <LAST NAME2>   21 de noviembre de 2022
<ADDRESS>
<CITY> <STATE> <ZIP>

La semana pasada le escribimos para solicitarle su ayuda para entender sus experiencias cuando obtuvo una hipoteca para comprar una vivienda o para refinanciar o modificar un préstamo existente. Comprender su experiencia es de especial importancia para poder crear políticas que ayuden a los consumidores que obtienen hipotecas.

Si ya nos ha contestado, le agradecemos por su ayuda. Si aún no ha tenido tiempo de contestar, esperamos que pueda hacerlo pronto.

Si todavía tiene la copia impresa, puede completar el cuestionario en papel y enviarlo de vuelta en el sobre pre-pagado, o puede completar la encuesta por Internet. Es possible que la encuesta por Internet sea más fácil de completar ya que automáticamente se salta las preguntas que no le corresponden a su situación.

Para contestar la encuesta en una computadora o tableta, vaya a: **www.NSMOsurvey.com** y anote este código de acceso único: **<123 456 789>** y su código postal de 5 digitos.

Para contestar la encuesta en un aparato móvil/teléfono inteligente, envíe en un mensaje de texto su código de acceso único **<123 456 789>** al **(202) 759-2029** para recibir un enlace a la encuesta o escanee el código QR.

Realmente agradecemos su interés en esta solicitud. Es gracias a la ayuda de personas como usted que podemos mejorar el trámite de financiación de vivienda.

Gracias por considerar nuestra solicitud.

Daniel E. Coates
Director asistente de investigación y estadística
La Agencia Federal de Financiamiento de Vivienda
fhfa.gov

Janis K. Pappalardo
Subdirector de Investigación, Mercados, y Regulación
La Oficina para la Protección Financiera del Consumidor
consumerfinance.gov

P. D. Con gusto le responderemos cualquier pregunta que tenga sobre este estudio. No dude en llamarnos a nuestra línea directa y gratuita 1-855-339-7877 o ir a nuestras páginas web fhfa.gov/nsmo o consumerfinance.gov.

To read this letter in English, please turn over to the other side.

Improving Mortgage Experiences in America

National Survey of Mortgage Originations

You have been selected to participate in an important national survey. Learning directly from borrowers like you about your experiences obtaining a mortgage to purchase or refinance your home will help us improve lending practices and the mortgage process for future borrowers like you.

To Complete the Survey Online

PC/TABLET   **Go to: www.NSMOsurvey.com and enter the unique access code provided in the letter and your 5-digit zip code.**

MOBILE DEVICE   **Text your unique access code to (202) 759-2029 to receive a link to the survey or scan the QR code.**

ESPAÑOL   **Vaya a: www.NSMOsurvey.com e ingrese el código de acceso único que se le envió en la carta y su código postal de 5 digitos.**

Para contestar la encuesta en un aparato móvil/teléfono inteligente Envie en un mensaje de texto su código de acceso único al (202) 759-2029 o escanee el código QR.

While we prefer online to help us save costs for processing, it is important we hear from you. If you prefer paper, you can mail back the completed survey in the enclosed pre-paid postage envelope.

If you have any questions about the survey or taking the survey online, please call 1-855-339-7877
For more information visit our websites – www.fhfa.gov/nsmo and consumerfinance.gov

National Survey of Mortgage Originations

Who is sponsoring this survey?

The **Federal Housing Finance Agency (FHFA),** is an independent regulatory agency responsible for the effective supervision, regulation, and housing mission oversight of **Fannie Mae**, **Freddie Mac**, the Federal Home Loan Bank System, and the Office of Finance, and ensures a competitive, liquid, efficient, and resilient housing finance market.

The **Consumer Financial Protection Bureau (CFPB)** is a Federal agency created in 2010 to make mortgages, credit cards, automobile and other consumer loans work better and ensure that these markets are fair, transparent, and competitive.

How was I selected for this survey?

Survey recipients were selected at random from across the United States. Your answers will not be connected to your name or any other identifying information.

How long will it take?

The time will vary based on your experiences, but you can expect to spend 15-25 minutes.

1. **Did you take out or co-sign for a mortgage loan sometime in the last couple of years including a purchase or any refinance/modification of an existing loan?**

   ☐ Yes
   ☐ No → **Skip to 71 on page 7**

2. **When did you take out this mortgage?** If you took out or co-signed for more than one mortgage, please refer to your experience with the most recent refinance, modification, or new mortgage.

   _____ / _____
   month   year

3. **Did we mail this survey to the address of the property you financed with this mortgage?**

   ☐ Yes   ☐ No

4. **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 you co-signed this loan with others, take into account all co-signers as best you can when answering the survey. If no co-signers, answer based on your own situation.**

5. **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	☐	☐	☐

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

   ☐ Very   ☐ Somewhat   ☐ Not at all

7. **How firm an idea did you have about the mortgage you wanted?**

   ☐ Firm idea   ☐ Some idea   ☐ Little idea

8. **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 mortgage lender/broker	☐	☐	☐
Other mortgage lenders/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, credit unions or financial planners	☐	☐	☐
Housing counselors	☐	☐	☐
Other (specify) _____	☐	☐	☐

9. **Which one of the following best describes your shopping process?**

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

10. **Which one of the following best describes how you applied for this mortgage?**

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

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

    ☐ 1   ☐ 2   ☐ 3   ☐ 4   ☐ 5 or more

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

☐ 1   ☐ 2   ☐ 3   ☐ 4   ☐ 5 or more

13. Did you apply to more than one mortgage lender/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	☐	☐

14. How important were each of the following in choosing the mortgage lender/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	☐	☐
Mortgage lender/broker is a personal friend or relative	☐	☐
Paperless online mortgage process	☐	☐
Recommendation from a friend/relative/co-worker	☐	☐
Recommendation from a real estate agent/home builder	☐	☐
Reputation of mortgage lender/broker	☐	☐
Spoke my primary language, which is not English	☐	☐
Accommodations for people with disabilities	☐	☐

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

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

16. While you were getting your mortgage, how did you primarily interact with your mortgage lender/broker?

☐ Online (web portal, email)
☐ Phone (voice calls, text messages, fax)
☐ Mail
☐ In person
☐ No primary way

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

☐ Very   ☐ Somewhat   ☐ Not at all

18. 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	☐	☐

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

☐ Yes
☐ No
☐ Don't know

20. In the process of getting this mortgage from your mortgage lender/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	☐	☐
Check other sources to confirm that terms of this mortgage were reasonable	☐	☐

21. Did the "Loan Estimate" you received from your mortgage lender/broker…

	Yes	No
Have easy to understand information	☐	☐
Contain valuable information	☐	☐
Cause you to take an action, such as seek a change in your loan or closing	☐	☐

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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 *(discount points)*	☐	☐
Interest-only monthly payments	☐	☐
An escrow account for taxes and/or homeowner insurance	☐	☐
A prepayment penalty *(fee if the mortgage is paid off early)*	☐	☐
Reduced documentation or "easy" approval	☐	☐
An FHA, VA, USDA or Rural Housing loan	☐	☐

23. In selecting your settlement/closing agent did you use someone…

	Yes	No
Selected/recommended by the mortgage lender/broker, or real estate agent	☐	☐
You used previously	☐	☐
Found shopping around	☐	☐

☐ Did not have a settlement/closing agent

24. Do you have title insurance on this mortgage?

☐ Yes
☐ No
☐ Don't know ⎫ **Skip to 26**

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

☐ Reissued previous title insurance
☐ Used title insurance recommended by mortgage lender/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
Mortgage lender/broker you used	☐	☐	☐
Application process	☐	☐	☐
Documentation process required for the loan	☐	☐	☐
Property appraisal	☐	☐	☐
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 professional housing counselor?

☐ Yes
☐ No → **Skip to 32 on page 4**

29. Was your home-buying course or counseling...

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

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

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

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

☐ Very ☐ Somewhat ☐ Not at all

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32. Which one of these reasons best describes this most recent mortgage?

- ☐ To buy a property
- ☐ To refinance or modify an earlier mortgage
- ☐ To add/remove co-signer(s)/co-owner(s)
- ☐ To finance a construction loan
- ☐ To take out a new loan on a mortgage-free property
- ☐ Some other purpose (specify)

Skip to 36

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. Did you use any of the following sources of funds to buy 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	☐	☐

35. What percent of the purchase price was the down payment to buy this property (including money from a prior home sale, gifts, etc.)?

_____ %   ☐ Don't know

Skip to 39

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	☐	☐
Remove private mortgage insurance	☐	☐
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. 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-signer(s)/co-owner(s)	☐	☐
Pay off other bills or debts	☐	☐
Home repairs or new construction	☐	☐
Savings	☐	☐
Closing costs of new mortgage	☐	☐
Business or investment	☐	☐
Other (specify)	☐	☐

☐ Did not get money from refinancing

This Mortgage

39. When you took out this most recent mortgage or refinance, what was the dollar amount you borrowed?

$ _____ .00   ☐ Don't know

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

$ _____ .00   ☐ Don't know

41. What is the interest rate on this mortgage?

_____ %   ☐ Don't know

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42. Which one of the following best describes how you decided on the interest rate of your mortgage?

- ☐ Paid higher closing costs to get lower interest rate
- ☐ Paid lower closing costs with a higher interest rate
- ☐ Got a balance between closing costs and interest rate

43. Does this mortgage have…

	Yes	No	Don't Know
A prepayment penalty *(fee if the mortgage is paid off early)*	☐	☐	☐
An escrow account for taxes and/or homeowner insurance	☐	☐	☐
An adjustable rate *(one that can change over the life of the loan)*	☐	☐	☐
A balloon payment	☐	☐	☐
Interest-only payments	☐	☐	☐
Private mortgage insurance	☐	☐	☐
Lender-required flood insurance	☐	☐	☐

44. 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	☐	☐	☐

45. 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

46. 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 with a check or wire transfer	☐	☐	☐
Added to the mortgage amount	☐	☐	☐
By mortgage lender/broker	☐	☐	☐
By seller/builder	☐	☐	☐
Other (specify) _____	☐	☐	☐

☐ Loan had no closing costs

47. 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

48. After closing on this mortgage, how much cash reserves in checking, savings, and other similar assets did you have remaining?

- ☐ Less than one month's mortgage payment
- ☐ 1-2 months' worth of mortgage payments
- ☐ 3-6 months' worth of mortgage payments
- ☐ 7 months' worth or more of mortgage payments

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

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

50. Did you face any of the following at your <u>loan closing</u>?

	Yes	No
Loan documents not ready at closing	☐	☐
Closing did not occur as originally scheduled	☐	☐
Three-day rule required re-disclosure	☐	☐
Mortgage terms different at closing than expected, e.g. interest rate, monthly payment	☐	☐
More cash needed at closing than expected, e.g. escrow, unexpected fees	☐	☐
Less cash needed at closing than expected	☐	☐
Asked to sign blank documents at closing	☐	☐
Asked to sign pre-dated or post-dated documents at closing	☐	☐
Felt rushed at closing or not given time to read documents	☐	☐

51. Is there any <u>additional problem</u> you encountered while getting this mortgage that you'd like to tell us about?

_____
_____
_____

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52. 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))*?

☐ Yes

☐ No → **Skip to 54**

53. What was the amount of this loan?

$ _____ .00

☐ Don't know

54. 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

55. When did you first become the owner of this property?

_____ / _____
month   year

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

$ _____ .00   ☐ Don't know

57. Which one of the following best describes how you acquired this property?

☐ 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) _____

58. Which one of the following best describes this property?

☐ Single-family detached house

☐ Mobile home or manufactured home

☐ Townhouse, row house, or villa

☐ 2-unit, 3-unit, or 4-unit dwelling

☐ Apartment (or condo/co-op) in apartment building

☐ Unit in a partly commercial structure

☐ Other (specify) _____

59. Does this mortgage cover more than one unit?

☐ Yes   ☐ No

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

$ _____ .00   ☐ Don't know

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

☐ Yes

☐ No → **Skip to 63**

62. How much rent do you receive annually?

$ _____ .00 per year

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

☐ Yes   ☐ No

64. Which one 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 67 on page 7

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

_____ / _____
month   year

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66. Which <u>one</u> of the following best describes your willingness or ability to move from your primary residence?

- ☐ Willing and able to move
- ☐ Willing but unable to move
- ☐ Unwilling to move
- ☐ Unsure/Don't know at this time

67. In the last couple years, how have 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	☐	☐	☐
Number of homes impacted by natural disasters	☐	☐	☐
House prices	☐	☐	☐
Overall desirability of living there	☐	☐	☐

68. 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

69. 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

70. 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

71. What is your current marital status?

- ☐ Married
- ☐ Separated
- ☐ Never married
- ☐ Divorced
- ☐ Widowed

72. 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.

73. Age at last birthday:

	You	Spouse/ Partner
	_____ years	_____ years

74. Sex:

	You	Spouse/ Partner
Male	☐	☐
Female	☐	☐

75. Highest level of education achieved:

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

76. Hispanic or Latino:

	You	Spouse/ Partner
Yes	☐	☐
No	☐	☐

77. Race: *Mark <u>all</u> that apply.*

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

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78. 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 *(student, homemaker, disabled)*	☐	☐

79. Ever served on active duty in the U.S. Armed Forces, Reserves or National Guard?

	You	Spouse/ Partner
Never served in the military	☐	☐
Only on active duty for training in the Reserves or National Guard	☐	☐
Now on active duty	☐	☐
On active duty in the past, but not now	☐	☐

80. 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

81. Do you speak a language other than English at home?

☐ Yes
☐ No → **Skip to 84**

82. Was it important to get your mortgage documents in this language?

☐ Yes   ☐ No

83. Did you get mortgage documents in this language?

☐ Yes   ☐ No

84. 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

85. How does this total annual household income compare to what it is in a "normal" year?

☐ Higher than normal
☐ Normal
☐ Lower than normal

86. 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	☐	☐

87. 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 (*not in retirement accounts or pension plans*)	☐	☐
Certificates of deposit	☐	☐
Investment real estate	☐	☐

88. 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

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89. **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	☐	☐

90. **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 spouse/partner)	☐	☐
Person leaving your household (not 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)	☐	☐

91. **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	☐	☐

92. **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	☐	☐	☐

93. **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	☐	☐	☐

94. **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	☐	☐	☐

95. **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	☐	☐	☐

96. **In the next ten years, what do you think could decrease the value of a property you own?**

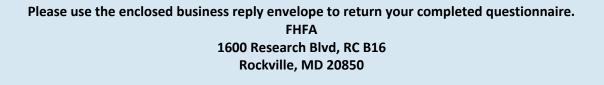_____
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Thank you for completing this survey and sharing your experiences to help improve the processes of getting a mortgage.

We have provided space below for any additional comments.
Is there anything else you would like to tell us about your experience getting a mortgage to purchase or refinance your property?
Please do <u>not</u> put your name or address on the questionnaire.

Please use the enclosed business reply envelope to return your completed questionnaire.
FHFA
1600 Research Blvd, RC B16
Rockville, MD 20850

For any questions about the survey or online access you can call toll free 1-855-339-7877.

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Appendix B. Retired NSMO Questions

This appendix lists the NSMO questions that were retired after Waves 6, 10, 14, 18, 24 and 34.

Questions Retired After Wave 6

13. How important were each of the following in choosing the lender/broker you used for the mortgage you took out?
    Lender is a community bank or credit union
    Recommendation from a lending website
    - Very
    - Somewhat
    - Not At All

19. In the process of getting your mortgage from your lender/broker, did you…
    Add a co-signer
    - Yes
    - No

36. Many mortgages have discount points paid to the lender to get a lower interest rate. Did you pay any discount points?
    - Yes
    - No

37. (If Yes in Q36) How many discount points did you pay?

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?
    - Yes
    - No

39. (If Yes in Q38) How many origination points did you pay?

40. Does your mortgage have any of the following features?
    Owner's title insurance
    Credit life/debt suspension/debt cancellation insurance
    - Yes
    - No
    - Don't Know

51. 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

53. (If Yes to Q52) How much money from the sale of this other property was used to purchase your property?

64. (If multiple units in Q63) How many separate living units does your mortgage cover?

70. Is anyone who currently lives in the property a co-signer on your mortgage?
    • Yes
    • No

75. Ever owned other residential properties besides this one:
    You
    Spouse/Partner
    • Yes
    • No

81. Besides you (and your spouse/partner), does anyone else live in your household or use your house as a permanent address?
    • Yes
    • No

82. (If Yes to Q81) How many of the other household members are 18 years of age or younger?

83. (If Yes to Q81) How many of the other household members are older than 18?

84. (If Yes to Q81) Do any of the other household members help pay for household expenses?
    • Yes
    • No

Questions Retired After Wave 10

3. Including you, how many people signed or cosigned for this mortgage?
    • 1
    • 2
    • 3
    • 4 or more

19. In the process of getting this mortgage from your lender/broker, did you…
    End up with better mortgage terms than you were originally offered
    • Yes
    • No

49. Did you compare the final loan costs to the final Good Faith Estimate you received from your lender?
    • Yes
    • No

50. Did you find any significant differences between the two?
   - Yes
   - No

Questions Retired After Wave 14

45. When was the interest rate set/locked on this loan?
   - At application
   - Between application and closing
   - Around closing

Questions Retired After Wave 18

14. How important were each of the following in choosing the lender/mortgage broker you used for the mortgage you took out?
   Lender/mortgage broker operates online
   - Important
   - Not Important

45. 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

52. Did you face any unpleasant "surprises" at your loan closing?
   - Yes
   - No

Questions Retired After Wave 24

14. How important were each of the following in choosing the mortgage lender/broker you used for the mortgage you took out?
   Could provide documents in my primary language, which is not English
   - Important
   - Not Important

20. In the process of getting this mortgage from your mortgage lender/broker, did you…
   Get documents in your primary language, which is not English
   - Yes
   - No

20. In the process of getting this mortgage from your mortgage lender/broker, did you…
   Have the lender/broker translate in your primary language, which is not English
   - Yes
   - No

39. How did the total amount of your new mortgage(s) compare to the total of the old mortgage(s) and loan(s) you paid off?
    - New amount is lower
    - New amount is about the same
    - New amount is higher
    - Property was mortgage-free

Questions Retired After Wave 34

19. Did the "Your home loan toolkit" booklet lead you to ask additional questions about your mortgage terms?
    - Yes
    - No

22. Did the "Loan Estimate" lead you to…
    Ask questions of your mortgage lender/broker
    Seek a change in your loan or closing
    Apply to a different mortgage lender/broker
    - Yes
    - No

35. What percent of the purchase price was the down payment to buy this property (including money from a prior home sale, gifts, etc.)?
    - 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

Appendix C. NSMO Public Use File Codebook and Tabulations

Because the codebook and tabulations contain a large number of pages, a separate document is available on www.fhfa.gov/nsmodata.

Appendix D. Select Weighted Tabulations, 2013 – 2020

Because the weighted tabulations contain a large number of pages, a separate document is available on www.fhfa.gov/nsmodata.