

**BUREAU OF CONSUMER FINANCIAL PROTECTION
PAPERWORK REDUCTION ACT SUBMISSION
INFORMATION COLLECTION REQUEST**

SUPPORTING STATEMENT PART A

**OWNING A HOME STUDY
(OMB CONTROL NUMBER: 3170-XXXX)**

TERMS OF CLEARANCE: Not applicable. This is a new information collection request.

ABSTRACT: The Dodd Frank Act directs the Consumer Financial Protection Bureau (CFPB) to develop a program of consumer education and engagement. As part of that program, the CFPB has developed a suite of online tools and resources, known as the Owing a Home project, to help consumers make better, more informed decisions about mortgages. The purpose of this information collection is to learn about the behavioral mechanisms and evaluate the hypotheses underlying the Owing a Home project. This information collection is structured as a randomized-controlled trial field study.

A. JUSTIFICATION

1. Circumstances Necessitating the Data Collection

The Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 (Pub. L. 111-203) directs the Consumer Financial Protection Bureau (CFPB) to develop and implement “initiatives intended to educate and empower consumers to make better informed decisions” (12 U.S.C. § 5493(d)). As part of fulfilling this mission, the CFPB has developed a suite of online tools and resources to help consumers make better, more informed decisions about mortgages. Collectively, these tools and resources are known as the Owing a Home project.

In order to ensure that the CFPB’s tools are as effective as possible, and to ensure that resources are well-spent, the CFPB must study the impact of the Owing a Home project. The CFPB seeks to gain insights as to (1) general consumer behavior, attitudes, and approaches to obtaining a mortgage and mortgage shopping; (2) the validity of certain hypotheses underlying the development of the Owing a Home project; (3) the mechanisms by which the Owing a Home project impacts consumer behavior and attitudes; (4) which consumer segments or profiles benefit the most from the Owing a Home project; and (5) the degree to which the Owing a Home project impacts consumer behaviors, attitudes, and approaches to obtaining a mortgage.

To answer these questions, the CFPB intends to conduct a field study. We will recruit prospective homebuyers and assign them to one of three study groups: those exposed to the

Owning a Home tools and resources (the first treatment group), those who receive encouragement to comparison shop for mortgage offers (the second treatment group), and those not exposed to any additional resources (the control group). We will survey these groups of homebuyers as they go through the process of shopping for and acquiring a mortgage, and will compare the groups' attitudes, behaviors, and outcomes.

2. Use of the Information

Use of the information

This information will be used to inform CFPB's future work on the Owning a Home project. It will also inform – at a high level – CFPB's overall approach to consumer education and engagement. As described in more detail in section 4, the Owning a Home project is premised on two key hypotheses: (1) that comparison shopping in the mortgage market leads to better consumer outcomes; and (2) that consumers often do not shop for a mortgage because shopping in the mortgage market is difficult, confusing, and generally discouraged by the market structure. The Owning a Home project seeks to remedy this situation by (1) encouraging consumers to shop for mortgages and (2) supporting and empowering them with user-friendly tools and resources designed to make shopping easier and give consumers greater confidence when shopping. In order to explore the first hypothesis further, a second treatment group will be encouraged to comparison shop for mortgage offers, but will not be exposed to the Owning a Home suite.

This study will inform CFPB's future work on Owning a Home as well as its overall approach to consumer education and engagement in several ways. First, the study will help us understand to what extent – and for what specific consumer segments or profiles – the above hypotheses are true. There is some support in existing literature and much anecdotal wisdom to support these hypotheses, but little solid research. This study will contribute significantly to the baseline knowledge on which the CFPB and other governmental agencies and community intermediaries operate.

Second, the study will help us understand more about how the market and behavioral forces implicit in these hypotheses work in practice, which will help inform both the Owning a Home project and related programs the CFPB might develop in the future. Third, the study will help us understand to what extent, in what specific ways, and for what specific consumer segments or profiles the Owning a Home suite is effective at encouraging consumers to shop and mitigating the market conditions and behavioral forces that discourage shopping. This nuanced information will help the CFPB refine and improve the Owning a Home suite over time.

The CFPB intends to publish aggregate and overall findings from the study so that other researchers and agencies may benefit from the work, but it will not make raw data available to other agencies or parties. This is a one-time research study. There are no plans to collect this information on an on-going basis.

Collection of the information

The target audience for the Owning a Home project is prospective homebuyers. Thus, the study will attempt to replicate this target audience by recruiting respondents from among prospective homebuyers. Potential respondents will be asked to complete a short screening questionnaire in order to determine if they are eligible. Data obtained in the screening questionnaire does not contain any directly identifying information and will be analyzed only in the aggregate to assess which eligibility criteria have the most impact on disqualifying individuals. Upon completing the screening questionnaire, respondents are presented with informed consent language and asked to opt-in to the study.

Respondents will provide information in three primary ways. First, respondents are asked to complete several short surveys, approximately two weeks apart, for approximately three months. Second, the usage of the Owning a Home website is recorded for respondents in the Owning a Home treatment group. Third, respondents are asked to submit some of their mortgage documents.

The survey component will include questions on consumers' current attitudes and behaviors around shopping for and acquiring a mortgage. These questions will explore consumers' attitudes to learn how consumers think about and perceive the mortgage shopping/acquisition process, and consumers' behaviors to learn more about what consumers actually do when shopping for or acquiring a mortgage. The control group will help us understand more about the status quo; that is, how consumers currently go about buying a home and getting a mortgage. The treatment groups will help us understand how additional mortgage shopping and the Owning a Home suite can alter that status quo.

Recording the Owning a Home treatment group's use of the Owning a Home site will help us learn more about what types of consumers are best served by the Owning a Home project, and what pieces of the Owning a Home experience are most effective in improving consumer attitudes and behaviors.

Finally, the collection of mortgage documents will enable us to learn whether changes in attitudes and behaviors produced by either of the two treatments actually lead to improvements in consumer outcomes, e.g., lower-priced mortgages. It is important to collect these documents because data obtained from self-reporting of complex financial transactions is extremely unreliable. Any personally identifiable information present on these documents will be redacted prior to delivery to the CFPB.

Survey

The survey for this evaluation is organized into 10 modules. A brief description of the modules is as follows, with additional justification below. Not all modules are administered in each survey.

Module	Description of questions
A: Screening, consent & contact information	Eligibility screening questions such as involvement in the mortgage industry and in household's financial decisions, and the timing of their plans to buy a home. After

	participant is shown an informed consent and opts in, contact information is collected.
B: Homebuying stage	Participants' stage of the home buying process (e.g. whether they have made an offer on a home).
C: Search details	Identification of the sources used to learn about available homes and mortgage options, and frequency of usage.
D: Empowerment	Participants' confidence in searching for and evaluating mortgage information and offers.
E: Knowledge	Factual questions on mortgages, including concepts like discount points and mortgage insurance. Beliefs about real estate agents and lenders.
F: Beliefs about personal home and mortgage terms	Pre- and post-purchase beliefs regarding a participants' expectation of mortgage terms, including purchase price, closing costs, and interest rates.
G: Correlates and demographics	Correlates include time and risk preferences, financial literacy and numeracy, and need for cognition. Demographics include race/ethnicity, income, employment status, gender, age, and financial information relevant to mortgage search.
H: Lender summary & disclosure	Summary of the contact respondent had with lenders throughout the mortgage process. Respondent's experience during closing, including how they used their closing disclosures.
I: Request for documents	Request for documents. This is structured as a separate request that includes additional privacy and consent language. If a participant opts not to submit documents, they are instead asked questions about their mortgage terms.
J: Wrap-up	Open-ended feedback from participants on the survey; treatment reinforcement.

Module A is required to identify eligible participants from the population of interest – individuals who are interested in buying a home in the next few months, are involved in their household's financial decisions, who are planning on getting a mortgage to finance their home purchase, and who are not real estate professionals. Module A will measure these concepts in order to screen potential participants for eligibility. It will be administered one-time, and is therefore not expected to represent an undue burden. At the conclusion of Module A, participants are presented with informed consent language and asked to opt-in to the remainder of the study.

Module B assesses participants' stage of the home and mortgage search processes. It is used to identify which subsequent questions and modules will be administered (or skipped), and therefore is useful for minimizing participant burden. For example, participants who report that they are still searching for a home will not be asked questions about when they put in an offer on a home; conversely, those who say that they have put in an offer will not be asked how likely they are to make an offer on a home in the next three months. Module B additionally provides information on the dynamics of participants' information search, for instance, at what point in their home search they begin to think about mortgage terms.

Module C assesses participants' information search for home and mortgage information, including where they have looked for information and whether they have contacted lenders to ask for background information, pre-approvals, or mortgage estimates. It is necessary for measuring where participants are gathering information about mortgages.

Module D contains questions on participants' empowerment, that is, their subjective ability to navigate the mortgage process and confidence in doing so. These questions will allow researchers to investigate whether the Owning a Home website increases empowerment, one of

the outcomes of interest.

Module E contains factual questions that measure knowledge of the mortgage process and products available including concepts like discount points and mortgage insurance. These questions will allow researchers to investigate whether the Owning a Home website increases knowledge, one of the outcomes of interest. It will also be used to assess whether knowledge increases during the process of searching for a home or mortgage. By collecting this information from both the treatment and control groups, researchers can compare the relative improvement in knowledge (if any) between the groups.

Module F initially asks questions designed to assess participants' beliefs about the mortgage market, that is, the terms that they believe they will receive. After participants have purchased their home, Module F is modified to ask parallel questions about the mortgage terms that they actually received. By combining data on participants' pre-purchase beliefs with information on their demographic and financial characteristics, the research team will be able to assess whether beliefs are reasonable, and whether they increase in accuracy over time. By comparing data on participants' pre- and post-purchase beliefs, the research team can look at whether participants had accurate expectations about their mortgage outcomes, and whether expectations were more accurate for participants in the treatment groups.

Module G collects background information on respondents' characteristics, including risk and time preferences, financial knowledge, numeracy, cognitive reflection, locus of control, and need for cognition. These characteristics will be helpful in subsequent analyses for assessing whether the Owning a Home tools are more effective for certain subsets of homebuyers. For instance, it may be the case that those with a high level of knowledge of financial concepts are more easily able to interpret the information that is provided on the website. In addition, Module G collects basic demographic and socio-economic information including race/ethnicity, income, employment status, gender, and age, as well as financial information relevant to mortgage search. This data will be used for two purposes: (1) to assess whether randomization has been conducted successfully and (2) to determine whether the Owning a Home tools are more effective for certain home-buyers and whether participants are receiving mortgages that are relatively expensive or inexpensive, given their background characteristics. Module G will be administered only once to reduce burden on respondents.

Module H asks about the respondent's overall contact with lenders and their experiences at closing, including when they received their Closing Disclosure and whether they reviewed and asked questions about it. Data from Module H can be combined with data from Module D (measuring empowerment) to assess whether participants who were more confident about their ability to navigate the mortgage process also asked more questions at closing.

Module I asks participants to send in their loan documents and provides privacy information and instructions on how to submit the documents. Previous research has shown that self-reported

mortgage information is often inaccurate.¹ Specifically, in a study in which borrowers were asked to identify mortgage terms (using their loan documents), the percentage identifying a term correctly was sometimes as low as 5%.² Given that mortgage outcomes are one of the primary measures of interest, it is essential to collect accurate information on mortgage terms. To reduce burden, participants will be given the opportunity to send in their documents directly through a method of their choice: uploading electronic files, mobile capture, or sending a fax. They will also be able to choose whether to send in their documents immediately or at a later time. Any direct identifying information present on the documents will be redacted immediately, and the source documents will be destroyed as soon as practicable. If participants decline to send in their final mortgage documents, this module will instead ask questions about mortgage terms, allowing for a coarse estimate of mortgage costs. In order to further reduce respondent burden, Module I will be administered only when participants report having received a new loan estimate or after closing.

Module J consists of a reinforcing treatment language for both treatment groups, as well as a single open-ended, optional question, where participants can report any additional thoughts or problems that they have with the survey. Data from Module J will be used to track any potential problems with the survey collection that should be addressed by the research team. As it is an optional question, it is expected to pose little burden to respondents. The final administration of Module J includes additional questions for respondents in the Owning a Home treatment group regarding their experience with the website.

3. Use of Information Technology

This collection will be administered almost entirely using electronic submission technology. The survey component will be delivered electronically and responses will be received electronically. The collection of Owning a Home site usage information will be completed entirely electronically.

For the mortgage document submission component, we plan to give respondents several options for submitting their documents. One option will be to scan (if necessary – many consumers may receive mortgage documents electronically) and securely upload the documents. A second option will be mobile capture technology, in which consumers take pictures of their paper documents with their mobile phones. A third option will allow consumers to fax a copy of their paper documents.

There are several reasons why electronic delivery and submission are appropriate for this collection. The Owning a Home project is itself an online set of tools and resources in its current iteration. Thus, our target audience for the Owning a Home project are prospective homebuyers with at least moderate competence in using modern internet technology. Our recruitment pool for

¹ Bucks, B., and Pence, K. (2008). Do borrowers know their mortgage terms? *Journal of Urban Economics*, 64(2): 218-33.

² Lacko, J. M., and Pappalardo, J. K. (2010). The failure and promise of mandated consumer mortgage disclosures: Evidence from qualitative interviews and a controlled experiment with mortgage borrowers. *American Economic Review: Papers and Proceedings*, 100: 516-21.

the study will be drawn from the existing customer base of a major online home shopping website. Therefore, individuals in the study population are well-equipped to use an online survey interface. Moreover, we anticipate that given the respondent pool, respondents will likely prefer an online interface, and that conducting the study online will increase the response rate. Finally, an online survey allows us to use dynamic programming to match the survey modules administered to the participant's individual home buying stage, thereby reducing burden.

We acknowledge that individuals who are comfortable with online tools and resources may be different from the general population of prospective homebuyers. However, in order to recruit consumers who are actively shopping for a home, we need access to a large number of people who can easily be identified as prospective homebuyers. We do not intend to extrapolate our findings to larger populations, including a general population of internet users or homebuyers.

4. Efforts to Identify Duplication

A key purpose of this research is to gain insight into: (1) general consumer behavior, attitudes, and approaches to obtaining a mortgage and mortgage shopping; (2) the validity of certain hypotheses underlying the development of the Owning a Home project. While some prior research does exist on these topics, it is limited in scope.

Another key purpose of this collection is to gain insight into: (3) the mechanisms by which the Owning a Home project impacts consumer behavior and attitudes; (4) which consumer segments or profiles benefit the most from the Owning a Home project; and (5) the degree to which the Owning a Home project impacts consumer behaviors, attitudes, and approaches to obtaining a mortgage. Because the Owning a Home project has been specifically developed by the CFPB as part of its consumer education and engagement mandate, no pre-existing sources of information relevant to these objectives exists.

One of the hypotheses underlying the development of the Owning a Home project is that additional mortgage shopping should allow consumers to obtain more favorable mortgage terms. Previous research has explored the returns to shopping; however, there are two main limitations of this work in addressing this hypothesis. First, the majority of existing research concentrates on consumer goods other than mortgages.³ Given that shopping for a home and mortgage is a large, infrequently undertaken, and financially complex transaction, it is unclear whether results from other markets will generalize to mortgage outcomes. A second limitation of existing research is that methodologically, it has been limited to theoretical and correlational analysis.⁴

³ See, for example, Griffith, R. et al. (2009). "Consumer Shopping Behavior: How Much Do Consumers Save?" *The Journal of Economic Perspectives*, 23(2), pp. 99-120; Ratchford, B. and Srinivasan N. (1993). "An Empirical Investigation of Returns to Search." *Marketing Science*, 12(1), pp. 73-87; Brown, J. and Goolsbee, A. (2000). "Does the Internet make Markets More Competitive? Evidence from the Life Insurance Industry." NBER Working Paper 7996.

⁴ See, for example, Cook M. et al. (2002). "Losing Interest: How Much Can Consumers Save by Shopping Around for Financial Products?" Financial Services Authority Occasional Paper Series 19 and Woodward, S. and Hall, R. (2012). "Diagnosing Consumer Confusion and Sub-Optimal Shopping Effort: Theory and Mortgage-Market Evidence." *American Economic Review*, 102(7), 3249-3279.

Such research designs make it impossible to establish a *causal* relationship between shopping behavior and mortgage outcomes, because homebuyers' shopping behavior may be correlated with other unobservable characteristics. Analyses that do not identify exogenous variation in shopping behavior are therefore unable to cleanly identify returns to shopping. In contrast, the current research will induce exogenous variation in shopping behavior through the use of a randomized controlled trial.

We have relied on previous research in developing the approach to the Owning a Home project, but it is not an adequate substitute for the planned collection. We expect that this study will contribute two main sets of findings to existing research. First, the project will provide information about the impact of Owning a Home and similar tools on mortgage outcomes. A randomized controlled trial, such as the one described here, is the best method for cleanly distinguishing the impact of financial education on mortgage outcomes from other individual characteristics. Second, the project will provide estimates of the returns to search in the mortgage market. As discussed, this work will broaden existing research on consumer search using other consumer products and make methodological improvements in establishing the causal effect of search on outcomes.

5. Efforts to Minimize Burdens on Small Entities

Not applicable. The information will be collected from private citizens, not business entities.

6. Consequences of Less Frequent Collection and Obstacles to Burden Reduction

This is a one-time collection of information. If the information is not collected, the CFPB will be unable to make evidence-based decisions about how best to deliver on its consumer education and engagement mandate. This study will enable a better understanding of consumers' mortgage shopping processes, which will enable the CFPB to make decisions about how to improve and target its mortgage consumer education and engagement work.

7. Circumstances Requiring Special Information Collection

Participation in this study is entirely voluntary, and respondents can choose to cease their involvement at any time. Respondents will be asked to report information every two weeks, for a period of approximately three months. This frequency of survey was chosen so as to ensure that we can capture the changes in consumers' attitudes and behaviors over a relatively short mortgage shopping/acquisition window. A less frequent survey schedule would require respondents to recall how they felt or what actions they took over too long of a recall period. In behavioral surveys, the best practice is to survey respondents frequently enough so that the period of recall is not too long to confound their memories. To minimize burden, the individual surveys will be kept short.

Respondents will be asked to respond to surveys within eight days of receipt. Again, the goal is to capture consumers' attitudes and behavioral reports while the information is still fresh in their

mind. Moreover, given that respondents will be surveyed again two weeks later, the first survey must be answered in a timely fashion so as not to conflate results with the subsequent survey.

With the exception of the reporting frequency noted above (every two weeks as opposed to quarterly), this study is conducted in a manner consistent with the guidelines in 5 CFR 1320.5(d)(2).

8. Consultation Outside the Agency

In accordance with 5 CFR 1320.8(d)(1), the Bureau published a notice Federal Register allowing the public 60 days to comment on this proposed new collection of information. The Bureau received three comments in response to this notice. The commenters suggested that the Bureau should make the results of the study publicly available, that information about home ownership is useful, and that more information about the home buying process should be added to the Owning a Home website. The Bureau currently intends to follow all of these recommendations.

Further and in accordance with 5 CFR 1320.5(a)(1)(iv), the Bureau has published a notice in the Federal Register allowing the public 30 days to comment on the submission of this information collection request to the Office of Management and Budget.

The CFPB has also consulted on the design of this survey with Mick Couper, a professor and survey design expert at the Population Studies Center at the University of Michigan. The CFPB tested the survey instrument using two rounds of cognitive interviews. The first set of interviews was conducted on September 25 and 26, 2014 while the second set was conducted from March 6, 2015 through March 10, 2015. During both sets of interviews, participants were asked open-ended questions regarding their understanding of study materials, revealing problems with question comprehensibility and response options. Study materials were subsequently refined to address these issues.

In addition to these interviews, the CFPB conducted a pilot test of the full study from October 27, 2014 through November 9, 2014. This pilot-phase study was approved by the Office of Management and Budget under a separate generic PRA clearance. This study was conducted using procedures that were designed to parallel those from the full study. Specifically, participants were recruited through an email solicitation, answered screening questions, and completed the baseline survey and up to two periodic surveys. Based on results of the pilot study, the CFPB revised the survey instrument and recruitment language, incentive structure, and implementation method. Examples of the changes are:

- **Survey instrument:** Questions with low variance were eliminated in order to reduce the length of the survey instrument. For example, 83.0% of respondents in the pilot study could correctly identify the concept of “home equity”; therefore, we no longer ask this

question. Eliminating questions reduces the length of the survey instrument and corresponding respondent burden.

- **Implementation method:** The survey invitation now contains unique links so that participants do not have to enter a survey password. This change reduces respondent burden and is expected to reduce attrition.

9. Payments or Gifts to Respondents

Prospective homebuyers are a hard-to-find population—only a small percentage of the population is actively interested in purchasing a new home at any given time. Additionally, searching for a home is a time-consuming activity. We believe incentives are necessary to ensure an adequate response rate.

The current literature on survey incentives suggests that study response rates increase dramatically when participants are compensated for their participation relative to when they receive no incentive (Goritz et al. 2006). Our pilot study also provided estimates for the response rates for the early surveys. Based on these estimates and the literature we believe monetary incentives are necessary.

A few studies have tested the magnitude of payment on retention in an analogous situation to our proposed study. Alexander et al. (2008) conducted a study quite similar to our intended design. Participants in this study were recruited for a baseline survey and a three month follow-up survey. Incentives were given out at the baseline and follow-up survey. Of 24 combinations of baseline and follow-up incentives they found that a \$5 incentive for the baseline and a \$20 incentive for the follow-up survey resulted in the highest retention. Unfortunately, none of the incentives tested were greater than \$20 for a single stage of the study so we do not know if paying individuals more than \$20 for completing a single phase would dramatically increase retention.

As part of our pilot study we experimentally manipulated the level of incentives homebuyers were paid to test if the amounts impacted retention. Participants were offered incentives for completing two different phases of the study. The first milestone was completion of the baseline survey and the second was finishing the remainder of the pilot. The combinations of incentives offered for completing the first and second phases were \$5/\$15, \$5/\$25, and \$15/\$15. Two additional incentives were offered for submitting mortgage documents at the application and closing stage, each \$5 dollars. Participants could submit multiple sets of application documents but they would only be paid for the first set. For the pilot study, participants had to complete at least one of the two follow-up surveys after they completed the baseline in order to receive the study completion incentive. In our full study, participants will need to complete five of six follow-up surveys after completing the baseline survey to receive the study completion incentive.

We used statistical analyses to assess the causal impact of the different incentives on completion rates of participants. With the incentive amounts tested we cannot claim that the marginal

impacts of higher incentives produce statistically significant differences in retention. For later stages in our pilot study the sample sizes became quite small and therefore our lack of statistical significance may be due to insufficient power. Given the lack of clear direction from our pilot testing we will defer to previous experimental results.

Our incentive scheme is multistage and dynamic. It is designed to maximize the response rate of all necessary components of the study while minimizing the cost to the government.

Following the example of Alexander et al. (2008), participants are informed at recruitment and in the informed consent stage that they will receive a \$5 incentive for completing the baseline survey, and an additional \$20 incentive for completing the entire study.

During the course of the study, at a moment in time appropriate to the individual participant’s stage in the homebuying process, we ask participants to submit their Loan Estimates (mortgage offer disclosures). Participants are offered an additional incentive of \$5 to submit their Loan Estimate documents. Based on our pilot experience, we believe the additional incentive is necessary to ensure a reasonable response rate. If a participant indicates in a later survey that they have received additional Loan Estimates, they are invited to submit these documents as well, but not offered an additional incentive.

After the participant has closed on their home, we ask participants to submit their Closing Disclosures and offer an additional \$10 incentive. Based on our pilot experience, we believe the additional incentive is necessary to ensure a reasonable response rate. We offer a larger incentive than at the Loan Estimate stage for two reasons: (1) Closing Disclosure data is particularly important for our analysis; (2) participants are likely to be more fatigued, both with respect to the home buying process and with respect to participating in the survey, at the closing stage.

Finally, we anticipate that some number of study participants will have put an offer on a house, but will not have closed on that home within the three month study timeframe. Our study provides a novel contribution by tracking outcomes that occur at closing. Therefore we do not want to miss out on collecting closing information from individuals who have completed several surveys and are scheduled to close on a home, but will not complete that closing during the timeframe of the study. Losing out on closing data from this population would be detrimental to the study. Thus, we invite this limited population of participants to complete a follow-up survey once they have closed.

Since these participants have already completed their obligation outlined in the consent form, we feel that the follow-up survey request will require an additional incentive. We offer an additional incentive of \$5 to complete the follow-up survey. The following chart indicates the maximum incentive offered to all participants:

Incentive	Participant experience				
	Completes the baseline	Completes the study,	Completes the study and submits	Completes the study	Completes the study and submits

	survey, fails to complete the remainder of the study	but declines to submit documents	documents, but still searching for a home (not scheduled to close) at conclusion of 3-month study window	and submits documents, closes within 3 month study window	documents, home purchase accepted within 3-month study window, but scheduled to close after study window is complete
Baseline (\$5)	\$5	\$5	\$5	\$5	\$5
Study completion (\$20)		\$20	\$20	\$20	\$20
Submits Loan Estimate (\$5)			\$5	\$5	\$5
Submits Closing Disclosure (\$10)				\$10	\$10
Completes follow-up survey (\$5)					\$5
Total	\$5	\$25	\$30	\$40	\$45

The incentives will be delivered through PayPal, Amazon e-giftcard, use-anywhere e-giftcard, or reusable physical gift card. Incentives are delivered throughout the study – at the conclusion of the baseline survey, at the conclusion of the study period, upon submission of documents, and at the conclusion of the follow-up survey.

Participants will be able to complete all survey activities at home or in the location of their choice, thus there are no expected travel costs. The surveys have been tested to minimize time burden; additional details are provided below in Section 12.

Providing incentives for completion and minimizing costs for participants (in terms of time and travel) will decrease missing data problems arising from survey non-response and participant attrition. Reducing these problems is important for lowering the probability that there will not be sufficient statistical power to derive conclusions from the study. Without statistical power, the Bureau would have to determine whether it would want to repeat this data collection, thus engendering additional costs to the government.

10. Assurances of Confidentiality

The Bureau will not disclose any personally identifiable information collected except to the extent that it is required to do so by law and as provided in the Privacy Impact Assessment listed below. Additionally, the Bureau will treat the information collected consistent with its confidentiality regulations at 12 C.F.R. Part 1070, et seq.

The information contemplated here is covered under two separate Privacy Impact Assessments (PIA). The Consumer Experience Research PIA is available at http://files.consumerfinance.gov/f/201406_cfpb_consumer-experience-research_pia.pdf, and the Consumer Education PIA that is available at http://files.consumerfinance.gov/f/201409_cfpb_consumer-education_pia.pdf. Additionally, information contemplated here is subject to the Privacy Act of 1974 and is covered under the Bureau’s existing Consumer Education and Engagement Records System of Records Notice, 77

FR60382.

Participants are informed that their responses will be kept confidential under 12 C.F.R. Part 1070, et seq. at several points during the survey process. This assurance is included in the initial recruitment email, the informed consent, and at the document submission request. Participants can view the full Privacy Act Statement from the initial study welcome page, the informed consent page, and in every subsequent periodic survey welcome page.

11. Justification for Sensitive Questions

Respondents will be asked to provide basic demographic and socio-economic information including their race/ethnicity, employment status, gender, and age. This information is necessary to determine whether a socio-demographically diverse data set has been collected and to what extent respondents are representative of the sampling frame or the broader population of U.S. homebuyers. Additionally, it is necessary to determine that the randomization process was correctly executed and that the treatment and control groups are similar with regard to known factors.

Respondents will also be asked to provide financial information relevant to their home and mortgage search, including an estimated purchase price, income level, liquid assets available, and credit score. This information is necessary to determine whether an economically diverse data set has been collected and to what extent respondents are representative of the sampling frame or the broader population of U.S. home-buyers. In addition, this information will help to determine whether respondents receiving relatively expensive or inexpensive mortgages, as mortgage rates are partially determined by purchase price, a borrower's creditworthiness (credit score, income), and potential down payment (liquid assets).

Finally, respondents will be asked to provide mortgage loan documents. Previous research has demonstrated that borrowers may not be aware of all of their mortgage terms; therefore, it is necessary to see loan documents directly. Improvement in mortgage terms is one of the main measures of interest.

Before providing any personally identifiable or otherwise sensitive information, participants will be given informed consent documents. Such documents will give researchers permission to collect and analyze demographic and financial information throughout the study. Additionally, during survey collection, respondents may refuse to answer any question or participate in additional survey activity, including providing mortgage documents.

12. Estimated Burden of Information Collection

The calculation of burden is complex, as attrition over the course of this longitudinal study results in a diminishing number of participants at each stage. The below table includes estimates of attrition and a detailed calculation of burden hours for each task. The per-task burden estimates were derived from data collected during the pilot study. The total burden is estimated

at 12,480 hours.

Line #	Component	Retention	# Participants	Time/ person (mins)	Burden Hours	Burden calculation notes
1	Arrive at study homepage		230,000			
2	Screener (Module A) (start)	74%	170,200	2	5673	
3	-- completed & eligible	25%	42,550			
4	Opt-in to study	59%	25,105			
4	Finish Module A (contact details)	73%	18,327	2	611	
5	Baseline Survey (start)	84%	15,395			
6	-- complete	83%	12,778	18	4226	avg start/fin
7	Periodic Survey #1	57%	7,283			
8	-- complete	94%	6,846	3	353	avg start/fin
9	Periodic Survey #2	90%	6,161			
10	+ rejoiners	5%	639			
11	--> overall completion	95%	6,460	3	332	avg start/fin
12	Periodic Survey #3	90%	5,814			
13	+ rejoiner rate (those who miss survey #2)	5%	342			
14	--> overall completion	95%	5,848	10	975	avg start/fin
15	-- Of completed, closed	5%	292			
16	-- Of completed, still searching	95%	5,556			
17	Periodic Survey #4	93%	5,167			
18	--> overall completion	95%	4,909	3	123	avg start/fin
19	-- Of completed, closed	10%	491			
20	-- Of completed, still searching	90%	4,418			
21	Periodic Survey #5	90%	3,976			
22	--> overall completion	95%	3,777	3	94	avg start/fin
23	-- Of completed, closed	20%	755			
24	-- Of completed, still searching	80%	3,022			
25	Periodic Survey #6	90%	2,720			
26	--> overall completion	95%	2,584	3	65	avg start/fin
27	-- Of completed, closed	30%	775			
28	-- Of completed, not closed	70%	1,809			
29	-- Of not closed, offer accepted	70%	1,266			
30	-- Of not closed, still searching	30%	543			
31						
32	Follow up survey - eligible	100%	1,266			
33	-- close during follow up window	90%	1,139			
34	-- complete survey	50%	570	3	29	
	Total			50	12,480	

13. Estimated Total Annual Cost Burden to Respondents or Recordkeepers

There are no costs to respondent for responding to this collection of information.

14. Estimated Cost to the Federal Government

The costs to the Government to conduct this collection consist of a firm-fixed price contract for survey administration support and data matching, and the incentives paid to participants.

Category	Method of computation	Cost
Contractor support	Firm fixed-price contract	\$207,133
Incentives to respondents	See below	\$173,905
Total cost to the Government:		\$381,038

Incentives to Respondents

The calculation of the total cost of incentives is complex, as attrition over the course of this longitudinal study results in a diminishing number of participants at each stage. The below table includes estimates of participation and incentive costs for each incentive payment. These estimates were derived from data collected during the pilot study.

Component	# Participants	Incentive	Total \$
Complete baseline survey	12,778	\$5	\$63,890
Complete study	4,122	\$20	\$82,440
Submit Loan Estimates	2,061	\$5	\$10,305
Submit Closing Disclosures	1,442	\$10	\$14,420
Complete follow-up survey	570	\$5	\$2,850
TOTAL			\$173,905

15. Program Changes or Adjustments

Not applicable. This is a new information collection. There is no prior OMB approval.

16. Plans for Tabulation, Statistical Analysis, and Publication

Information from participants at baseline will be used to evaluate the quality of the randomization process. Specifically, if assignment to treatment and control groups has occurred randomly, then there should be no statistically distinguishable differences between the treatment and control groups with regard to descriptive characteristics. The initial survey will include information on basic demographic and socio-economic characteristics, information sources used thus far in the mortgage search, and knowledge of and attitudes toward the mortgage process.

The primary analytic technique for estimating the impact of the two treatment conditions is a comparison of the outcomes for participants who were given treatment (the treatment groups) to those who were not given access (the control group). The research team intends to use “intent to treat” analysis, thereby estimating effects on those who had the opportunity to receive treatment, including those who did and did not make use of the treatment. This analysis will identify the overall causal impact of the two treatments -- access to the Owning a Home suite of tools, and encouragement to comparison shop for mortgages -- on mortgage outcomes for those in the study population.

Estimates of the differences between the two groups will be calculated using data from surveys, Owning a Home website usage, and mortgage outcomes. For each difference, statistical confidence intervals will be calculated using standard statistical assumptions.

For some outcomes, the research team is additionally interested in how outcomes changed during the home shopping process. For example, it may be expected that respondents who have completed their home purchase and have closed on a mortgage will have higher knowledge of the mortgage process than those who are in the initial stages of their home search. As such, changes in mortgage knowledge between baseline and the final survey will be compared for those in treatment and control groups. Mortgage knowledge will be measured using scores from Module E, as described above. Specifically, on an individual level, change in mortgage knowledge will be calculated as:

$$\text{Change in mortgage knowledge} = (\text{mortgage knowledge post-purchase}) - (\text{mortgage knowledge at baseline})$$

A similar calculation can be performed for change in empowerment (using scores from Module D).

In addition to variation that is imposed on the groups from random assignment, there will be variation on an individual basis. The research team is interested in whether the Owning a Home suite of tools (or encouragement to comparison shop) is more effective (in terms of improving mortgage knowledge, empowerment, or mortgage outcomes) for individuals with particular characteristics, such as higher financial literacy. Thus, within the treatment groups, outcomes will be compared for respondents with differing baseline characteristics.

Finally, it is worthwhile to know whether shopping behavior itself improves mortgage outcomes, and some academic research has investigated this question.⁵ It is expected that participants in the treatment groups may engage in more shopping behavior than those in the control group. In order to isolate the effect of shopping, researchers will employ what is known as a “two stage least squares” approach. This technique will statistically isolate the effect of shopping on mortgage outcomes, allowing researchers to estimate the benefits from shopping.

⁵ Woodward, S. E., and Hall, R. E. (2010). Consumer confusion in the mortgage market: Evidence of less than a perfectly transparent and competitive market. *American Economic Review: Papers & Proceedings*, 100: 511-15.
Page 16 of 17

The research team plans to analyze, integrate, and summarize data and findings from the research in a report, which will be made publicly available.

Tentative Timetable

Information collected	February – September 2016
Data analysis	October 2016 – March 2017
Writing of report	April 2017 – September 2017
Publication of aggregate report	Approximately December 2017

17. Display of Expiration Date

The Bureau plans to display the expiration date for OMB approval of the information collection on all instruments. Further, the OMB control number and expiration date will be displayed on the Federal government’s electronic PRA docket at www.reginfo.gov

18. Exceptions to the Certification Requirement

The Bureau certifies the this collection of information is consistent with the requirements of 5 CFR 1320.9, and the related provisions of 5 CFR 1320.8(b)(3) and is not seeking an to these certification requirements