



Fannie Mae 2019
Affordable Housing Preservation
Loan Product

ACTIVITY:

H. Regulatory Activity: Energy or water efficiency improvements on single-family, first lien properties that meet the FHFA Criteria (12 C.F.R. § 1282.34 (d) (3)).

OBJECTIVE:

1. Increase liquidity for energy or water efficiency improvements through outreach, research, and developing solutions (Analyze, Partner and Innovate, Test and Learn).

SUMMARY OF RESULTS:

Following are the 2019 Actions under this Objective per the December 20, 2019 Duty to Serve Plan:

<i>Objective's components detailed in the Plan</i>	<i>Corresponding actions taken</i>	<i>Explanation of any deviations from the Plan (if applicable)</i>
<input checked="" type="checkbox"/> Based on lessons learned in 2018 and to further increase knowledge through market outreach, research, analysis, and tests:		
<input checked="" type="checkbox"/> Enhance and continue to execute the business-to-business marketing and outreach by identifying new market entrants and incorporating impact and needs into outreach efforts and updating product materials and webinars or presentations. Target engagement with an additional seven lenders and three additional stakeholders (i.e., lenders and stakeholders not approached in 2018). The additional lenders and stakeholders will be selected based on evaluation of 2018 activities and responses as well as an assessment of geographical and other needs. Fannie Mae will also work with additional HFA in two more States	<p>We engaged with 16 lenders not approached in 2018 and presented training on HomeStyle® Energy updated with variance terms. The training included background on the HomeStyle Energy product, the flexibilities enabled by the variance, eligibility requirements for the property and energy-related improvements, benefits to the borrower and Duty to Serve identification. Of the 16 lenders to which we presented the variance, 13 accepted our offer to implement the HomeStyle Energy variance.</p> <ul style="list-style-type: none"> • We worked with three State Housing Finance Agency (HFA) organizations, each covering a different state. Two of the three 	N/A



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<p>and work with the non-profit organizations engaged in 2018 to determine additional organizations we should target. Ten additional relationships will be a significant commitment of time and will provide substantial learnings on how to expand engagement in following years.</p>	<p>HFA organizations accepted our offer to implement the HomeStyle Energy variance.</p> <ul style="list-style-type: none"> • We reached out to three additional stakeholders to plan the rollout of the HomeStyle Energy variance to lenders doing business in the City of Portland, Oregon, as well as other areas in Oregon where Home Energy Reports are required when selling an existing home. 	
<p><input checked="" type="checkbox"/> Expand industry leadership efforts by participating in two key industry conferences and seek a leadership role in speaking at one other event for purposes of informing the industry of research findings, product enhancements, and/or market insights. Host one in-person energy advisory council meeting, incorporating feedback from 2018 and including two new participants in order to improve engagement and outcomes.</p>	<p>We participated in key industry conferences, including the Home Performance Coalition National Conference, the Better Buildings Conference, and the E Source Forum.</p> <ul style="list-style-type: none"> • We spoke at the National Association of Realtors National Conference. • We hosted two in-person advisory council meetings. 	N/A
<p><input type="checkbox"/> Assess findings from Fannie Mae research to date and build upon the outcome of 2018 as well as new trends to acquire additional data and industry research, study consumer behavior or sentiment by executing, directly or through a</p>	<p>After evaluating findings from 2018, we, in conjunction with research partners, launched the following research:</p> <ul style="list-style-type: none"> • Interviews with non-profit housing groups in key markets to understand their perspective on low- and moderate-income 	We did not publish any findings related to one of the research outcomes in 2019.



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<p>partnership one new consumer survey and/or focus group that contributes to a trend analysis, add new acquisitions to the loan analysis, and publish findings related to one of these research outcomes.</p>	<p>borrowers and energy efficiency improvements;</p> <ul style="list-style-type: none"> •Interviews to understand consumer considerations of energy efficiency during the home buying experience; •We continued a research effort launched in 2018, gathering additional data and analyzing trends in 2019 to study the financial and behavioral impacts of smart thermostats on very low- and low-to moderate-income single-family households (continuing into 2020). 	
<p><input checked="" type="checkbox"/> Evaluate the outcomes of variance(s) executed in 2018 and introduce one new variance with terms for one additional policy/product update, or review credit and/or collateral policy identifying opportunities to enhance policy/product parameters. One variance will focus on opportunities to finance Improvements in high-needs rural areas. If feasible and depending on research, learnings, and analysis, publish one policy update.</p>	<p>We introduced a variance to HomeStyle Energy to support our Duty to Serve goals. The variance provided flexibility on eligible energy-related improvements, deeming all Energy Star-certified improvements to be cost-effective and eligible for financing. The same designation was given to any improvement recommended on an energy report, or supported by a state, local, tribal or utility incentive, which the borrower is eligible for.</p> <ul style="list-style-type: none"> • We elected to use this same variance for high-needs rural regions and engaged five lenders serving high needs rural areas to offer HomeStyle Energy with the variance to their borrowers. 	<p>N/A</p>



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<input checked="" type="checkbox"/> Update the consumer outreach strategy and execute necessary changes to incorporate an analysis of the appropriateness of social media types and frequency, update resources and expand consumer education to two additional non-profit networks or counseling agencies. Fannie Mae plans to focus on networks or organizations that can reach a number of affiliated or similar non-profits and as such, has determined that two such entities is appropriate.	<p>We redesigned the HomeStyle Energy consumer product page and energy efficiency portal on the Know Your Options website. We refreshed materials and added additional content including articles, infographics, and an energy efficiency overview video.</p> <ul style="list-style-type: none"> • We launched HomeStyle Energy mortgage lender- and realtor-targeted paid social media campaigns across Facebook, Instagram, Twitter, and LinkedIn in specific markets to generate product awareness. • Fannie Mae brought those updated resources and expanded consumer education material. 	N/A
<input checked="" type="checkbox"/> Evaluate potential opportunities from engagement in 2018 with State energy financing agencies, utilities, or solar energy financing companies, to determine Fannie Mae's role, if any, in collaborating with related	<p>We evaluated potential opportunities to collaborate with various utilities and energy-related companies throughout 2019</p>	N/A



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<p>financing, subsidy, or assistance programs.</p>	<ul style="list-style-type: none"> • We began to scope out a program with a Northeast utility company to provide low-income homeowners with a smart thermostat and information about utility-sponsored income-eligible energy efficiency programs and incentives. The program is anticipated to launch in the first half of 2020 and possibly expanded to one other utility company during the year. 	
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SELF-ASSESSMENT RATING OF PROGRESS:

- Objective met
- Objective exceeded
- Objective partially completed: 75-99% (substantial amount)
- Objective partially completed: 50-74% (limited amount)
- Objective partially completed: 25-49% (minimal amount)
- Objective partially completed: 0-24% (less than a minimal amount)
- No milestones achieved

PARTIAL CREDIT JUSTIFICATION:

We completed or launched several research projects in 2019. However, we did not publish the results of the research findings in 2019. Every other action item we committed to for this objective was completed in 2019. Therefore, we are seeking partial credit for completing a substantial amount of this objective.

IMPACT:

- 50 – Substantial Impact
- 40 – Between Meaningful and Substantial Impact
- 30 – Meaningful Impact
- 20 – Between Minimal and Meaningful Impact
- 10 – Minimal Impact
- 0 – No Impact



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IMPACT EXPLANATION:

1. How and to what extent were actions under this objective impactful in addressing underserved market needs, or in laying the foundation for future impact in addressing underserved market needs?

HomeStyle Energy Variance:

Our current HomeStyle Energy product, used to finance energy and water efficiency related improvements, has requirements for both the borrower and the lender that may limit its use. The product requires the borrower to obtain a home energy report and the lender to calculate the cost effectiveness of the improvement. The lender requirement to calculate cost effectiveness made the product difficult for lenders to use.

We responded to this issue by launching a variance to deem the following improvements to be cost-effective; (1) all Energy Star-certified products, (2) any improvement recommended by a home energy report, and (3) any improvement with a state, local, utility or tribal incentive. This variance helps simplify the HomeStyle Energy loan product, making it easier to invest in energy and water efficiency improvements. We launched this variance in Portland, Oregon, where home energy reports are now required in all listings of existing homes for sale. It has been expanded to 13 lenders, who in the aggregate, originate loans throughout the country. This variance, combined with extensive training and marketing efforts on the variance, has prepared lenders to meet increased demand for energy efficiency financing in the future.

Smart Thermostat Test and Learn:

We created a smart thermostat test and learn program with a utility company in the Northeast in 2019. The program is on track to launch in March 2020 and will deliver smart thermostats to low-income homeowners in a specific utility company service territory. This utility plans to cross-promote their other utility-sponsored low-income energy and water saving programs that will benefit homeowners. They have indicated their willingness to measure the impact of this collaboration, including energy savings and participation lift in other utility company low-income programs. We are looking to expand this test and learn to potentially one or two other utility companies in 2020. Fannie Mae expects to impact over 2,000 homes in this initial phase.

Research:

Research findings from non-profit housing stakeholders indicate that low-income homebuyers do not consider energy efficiency during the buying process. Stakeholders agreed that the most effective time to talk about energy efficiency is post-purchase. There is opportunity for Fannie Mae to educate new low-income homeowners on energy efficiency financing; a similar model to our smart thermostat program, connecting recent buyers to utility programs may be considered. The research also supports a renewed focus on energy efficiency improvements through refinance and renovation when homeowners are settled, have a lower LTV ratio, and have capacity to work with contractors to plan for energy- and water-saving upgrades.

2. What did the Enterprise learn from its work about the nature of underserved market needs and how to address them?

Today, lenders, realtors and appraisers largely ignore energy efficiency when working with a borrower or assessing the value of a home which prevents investments in energy efficiency. Without meaningful changes to the financing process, which today is overly complex, mortgage industry participants are unlikely to engage.



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This year we took significant steps to make energy efficiency financing easier to use and more attractive to lenders. In addition to the partnership with the city of Portland described above, we are currently negotiating a variance with one of the country's largest mortgage lenders to integrate energy efficiency products into a new smart home package that will be financed with homestyle energy. Our hope is that as loan officers become more comfortable with our improved product, it will become more integrated into the suite of options they offer to buyers.

We learned that there is a significant opportunity to work with utility companies - many of whom have similar goals to help reduce energy and water use of low-income homeowners. Our objectives in this area of affordable housing preservation are well-aligned with the goals of the utility companies. Despite utilities having different criteria for program eligibility, utility program managers are enthusiastic about the potential to collaborate. A common theme across utility companies that run low-income energy and water efficiency programs is the lack of participation by homebuyers. Utility companies usually rely on state or local agencies and non-profits to help identify eligible customers, but low-income customers tend not to self-identify for these programs or are not aware they exist. Programs can range from energy assistance and fixed-budget billing programs to free energy audits and home weatherization. We could help connect low-income homeowners to these various programs already available to them.

Additionally, research showed that very low- and low-income buyers do not consider energy efficiency during the homebuying process. This helps us make changes to when information is provided to buyers and how products may need to change to offer more flexibility to borrowers to better suit their timing and needs.

Finally, while it is too soon to gauge the effectiveness of the variance described above, we are eager to learn from lender and borrower experiences in the year to come and to adjust our offerings accordingly.

3. (Optional): If applicable, why were all components of this objective not completed?

We completed or launched several research projects in 2019. However, we did not publish the results of the research findings in 2019 .



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ACTIVITY:

H. Regulatory Activity: Energy or water efficiency improvements on single-family, first lien properties that meet the FHFA Criteria (12 C.F.R. § 1282.34 (d) (3)).

OBJECTIVE:

2. Increase liquidity for energy or water efficiency improvements that meet the FHFA Criteria by facilitating the adoption of enhanced industry standards and purchasing loans (Partner and Innovate, Do What We Do Best, Test and Learn).

SUMMARY OF RESULTS:

Following are the 2019 Actions under this Objective per the December 20, 2019 Duty to Serve Plan:

<i>Objective's components detailed in the Plan</i>	<i>Corresponding actions taken</i>	<i>Explanation of any deviations from the Plan (if applicable)</i>
<input type="checkbox"/> Based on outcomes in 2018 and to further accelerate industry standardization efforts and liquidity for Improvements, the following will be undertaken:		
<input checked="" type="checkbox"/> Evaluate the Uniform Loan Delivery Dataset to determine which energy and water efficiency Improvements can be supported with existing ULDD fields.	We reviewed the current Uniform Loan Delivery Dataset (ULDD), and determined that the only existing ULDD field, which could be used to identify loans with energy and water efficiency improvements, is the Special Feature Code (SFC) field. We often use SFCs to identify loans with unusual or uncommon characteristics that may not otherwise be easily identified. We use several different SFCs to track delivery of loans with various energy-related and water-related efficiency improvements.	N/A
<input checked="" type="checkbox"/> To inform the redesign of the Uniform Appraisal Dataset and	The Uniform Appraisal Dataset (UAD) joint team baselined business data requirements,	N/A



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<p>forms specified in the 2019 Scorecard for Fannie Mae, Freddie Mac and Common Securitization Solutions, work with the Uniform Data Committee to gain consensus for updating the appraisal form to include identified fields for property-level information about energy and water efficiency features.</p>	<p>drafted the output report, crafted the first Uniform Residential Appraisal Report (URAR) example using a single-family property, and conducted phase II of the industry outreach. The UAD joint team is in process of completing the initial draft of the UAD Specification.</p> <ul style="list-style-type: none"> • In 2020, the UAD joint team will continue to conduct industry outreach to obtain feedback about the example URAR and will meet with the Appraisal Data Standardization subgroup of the Mortgage Industry Standards Maintenance Organization (MISMO) Development Work Group to review the proposed changes to the MISMO Reference Model. 	
<p><input checked="" type="checkbox"/> Continue to work with the industry to drive efforts for standardization on the MLS. Assess progress and required actions to address challenges.</p>	<p>We continue to support the Home Energy Score Reports of the United States Department of Energy when available in an Multiple Listing Service (MLS) listing. We use this document as a model and in our variance to guide lenders and borrowers in financing energy-efficiency improvements. We have developed training on HomeStyle® Energy to inform lenders how to use Home Energy Reports when they are included with an MLS listing.</p>	<p>N/A</p>
<p><input type="checkbox"/> Launch the lender and realtor training program.</p>	<p>N/A</p>	<p>We did not launch a lender and realtor training program. We intend to train lenders and realtors when these efforts for standardization on</p>



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		the ULDD, UAD, and MLS are finalized.
<input type="checkbox"/> Purchase between 150 and 200 mortgage loans that meet the FHFA Criteria.	We purchased 131 mortgage loans that meet the FHFA criteria.	In addition to the 131 mortgage loans that met the FHFA criteria, we also purchased 95 loans that were to low- and moderate-income households but were for new construction.

SELF-ASSESSMENT RATING OF PROGRESS:

- Objective met
- Objective exceeded
- Objective partially completed: 75-99% (substantial amount)
- Objective partially completed: 50-74% (limited amount)
- Objective partially completed: 25-49% (minimal amount)
- Objective partially completed: 0-24% (less than a minimal amount)
- No milestones achieved

PARTIAL CREDIT JUSTIFICATION:

We were unable to launch the lender and realtor training program due to ongoing efforts associated with the standardization of the ULDD, UAD, and MLS. We intend to launch this training program once these efforts are finalized. Every other action item we committed to in 2019 for this objective was completed. Therefore, we are seeking partial credit for completing a substantial amount of this objective.

IMPACT:

- 50 – Substantial Impact
- 40 – Between Meaningful and Substantial Impact
- 30 – Meaningful Impact
- 20 – Between Minimal and Meaningful Impact
- 10 – Minimal Impact
- 0 – No Impact

IMPACT EXPLANATION:

1. How and to what extent were actions under this objective impactful in addressing underserved market needs, or in laying the foundation for future impact in addressing underserved market needs?

Of the 226 mortgage loans we purchased, 131 met the FHFA criteria under this Affordable Housing Preservation Objective. The remaining 95 loans were for new construction homes purchased by low- and moderate-income borrowers. We did not count these new construction loans toward the purchased loan count because newly-constructed units are not eligible under the DTS rule. Despite these loans not meeting the FHFA criteria, we believe that they meet the spirit of Duty to Serve. These newly constructed, ENERGY STAR certified homes



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ensure a higher standard of energy and water efficiency. These homes can deliver energy savings of 40 percent or greater as compared to the 2006 International Energy Conservation Code standard for new homes. Most states in the country have adopted codes either comparable to or better than IECC 2006, and thus this baseline would be relevant in most states. The whole-home, certified new construction approach ensures energy and water savings to low- and moderate-income households that can significantly reduce their energy burden from the first day that they occupy the home. If these homeowners purchased existing housing stock, they would likely have had to make significant investments in energy and water efficiency to reduce their energy burden, many of the improvements like HVAC upgrades and insulation upgrades are cost-intensive, or even cost-prohibitive endeavors for new low- and moderate-income homeowners. We believe focusing on both improving existing housing stock and encouraging energy- and water-efficient new construction can provide significant value to underserved markets even if loans for newly-constructed homes do not count for DTS loan purchase credit.

Today, the real estate market does not know how to value the various components of a home that are categorized as green, renewable, energy efficient, or water efficient. As these components become more widely utilized by homeowners, they should be defined clearly and captured by appraisals so that we may understand how they impact home values. Standardized information about energy efficiency and green home features in appraisals will make it easier for appraisers to search for comparable properties with energy efficient features as part of their valuation.

The UAD baselining work we conducted to define energy and water efficiency data fields for the future Uniform Appraisal Dataset is a critical step toward giving appraisers the tools they need to understand how the market values energy efficiency. Although there is still much work to be done, including gaining industry consensus on how to define the components of a home that effect energy efficiency and whether they should be adopted into the UAD, our baselining and defining of terms is helping move the process forward.

2. What did the Enterprise learn from its work about the nature of underserved market needs and how to address them?

Adding new fields in UAD and the Uniform Loan Delivery Dataset (ULDD) to capture energy efficiency data is challenging, as there is a lack of significant industry-wide motivation to capture additional new fields, and there are barriers to adding new fields such as required certifications. Moreover, we learned that adding new fields in ULDD to capture energy and water efficiency features is unlikely to improve the energy efficiency financing process unless we first address the challenges lenders face in identifying and qualifying energy improvements. Without addressing these upstream challenges, lenders will not properly enter information into the ULDD even if there is a field available to them. Going forward, we will continue to engage with the industry to simplify new data requests where we can and to properly train industry participants.

Similarly, few appraisers have a background in energy efficiency. When the new UAD rolls out, education will be important to ensure appraisers leverage the new fields properly.

3. (Optional): If applicable, why were all components of this objective not completed?

We did not launch a lender and realtor training program because ULDD, UAD and multiple listing service (MLS) standards for energy efficiency are still being developed with industry-wide participation. This standard-setting is a collaborative process between Fannie Mae, Freddie Mac and FHFA and the timeline is longer than originally



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anticipated when we wrote our DTS plan in 2017. We intend to train lenders and realtors when these standards are finalized.