

Public Comments

RFI- ENTERPRISE SINGLE-FAMILY SOCIAL BOND POLICY

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A. Outcomes, Borrower Benefit, and Reporting

Question I. What program outcomes and borrower impacts should an Enterprise Single Family Social Bond program seek to achieve?

1. Social Bond Program Outcomes and Borrower Impacts

(a) Serving the Underserved

The housing finance system, especially the single family mortgage markets has worked extremely well for middle and upper income Americans but other Americans have been underserved. Social bond programs should be designed to open up more access to wealth building along with the financial opportunities and security that come from single family homeownership.

The Housing and Economic Recovery Act (HERA) of 2008 requires that the Enterprises take steps to improve credit access to underserved markets like manufactured housing, affordable housing preservation and rural housing. Finally, FHFA has proposed in its Fair Lending, Fair Housing and Equitable Housing Finance Plan rule published on April 26, 2023 (FR Document 2023-08602, pages 25293-25309) that the Enterprises develop plans for the following Americans:

- Those subject to past or present discrimination affecting housing market participation
- Those who have historically had a lower share of the benefits of Enterprise programs
- Those who have had difficulty accessing these benefits when compared with other groups.

The Social bond program can be a major step forward in accomplishing the HERA mandates and promoting social equity.

(b) Promoting Wealth Building and Housing Adaptability

Building wealth and economic opportunity through homeownership has helped generations of Americans. Instead of paying rent to a third party, homeowners build equity. Owning a home has more predictable housing costs over time and can increase financial stability. Housing wealth (equity) is also a key component of retirement resources for many families because lower housing costs after the mortgage is paid off make it possible to live comfortably on the reduced income usually associated with retirement.

As an increasing proportion of households wish to age in place, there is often a lack of housing opportunities that provide for mobility and other physical impairments. Homeownership allows Americans to make changes to their home as they age, encounter mobility limitations or take on caregiver responsibilities for family members.

(c) Increasing Demand for Affordable Housing Supply and Access

According to a recent report released by the real estate firm Redfin, the percentage of affordable housing for sale has dipped to 21% nationally, the lowest affordability percentage since the Great Recession. This finding is also consistent with studies by Freddie Mac that show the percentage of affordable housing being constructed is under 10% of total housing production. Social bond programs can help increase demand for affordable housing and thus assist low-and moderate income Americans achieve the American dream of home ownership.

(d) Structuring the Bond Program To Accomplish Program Outcomes

Another social bond program outcome can be to promote greater market participation in this important area of finance. This will allow the Enterprises to sell bonds more easily, potentially reducing transaction costs and increasing market participation.

2. Environmental, Social and governance (ESG) and Expanding the Reach of the Social Density Index

(a) Environmental, Social and Governance Considerations

Environmental, social and governance (ESG) programs are becoming more common among large investors in bonds and mortgage backed securities with total cumulative issuances passing the \$3 trillion mark as of September 30, 2022. Many investors are seeking out ESG-based investments that will have a positive impact on climate and social objectives. The RFI also references “impact investments” that are:

1. Intended to benefit a specific class of persons
2. The environment through financial products that focus on facilitating positive social and environmental outcomes.

Social bond policies can be an important part of a broader ESG effort.

(b) Sustainable Housing Opportunities

Sustainable housing opportunities are defined in the Fair Lending, Fair Housing and Equitable Housing Finance Plan rule noted above as housing characteristics such as cost affordability, habitability, withstanding natural disasters, improving the housing stock, located in an area with access to educational, transportation, economic, and other important opportunities, including community assets; and being accessible for disabled persons. Also, the housing opportunity should give the potential homeowner a reasonable chance to keep the home for the long term and withstand short term hardships.

3. The Value of The Fannie Social Density Index in Promoting Standardization in Social Bonds

Another program outcome could be to standardize the criteria for social bonds. There are many different standards and interpretations of social impact, environmental or other similar public purpose directed investing. Having clear categories for Income, Borrower and Property characteristics in the Fannie Mae index is a major step forward in standardization. Also, the Fannie Mae social index is consistent with the UN Principles mentioned in the RFI and the International Capital Market Association Social Bond goals for Affordable Housing, Access to Essential Services, and Socioeconomic Advancement and Empowerment.

4 Adding Energy Efficient Homes To the Social Index Design (Sustainable Bonds)

Increased energy efficient homes or homes with renewable energy systems like solar, wind and geothermal systems are not now a part of the Social Index. EPA’s Energy Star certification program covers enhanced energy efficiency for buildings and certified homes must perform better than at least 75% of similar buildings. Including energy star homes would help broaden the positive impact of the social bonds by increasing investment in energy efficiency.

Energy Star market share for site built single family homes and multifamily apartment homes ranges from less than 5% to over 35-45% in Maryland (see Table One below). Only 1/3 of the States have market shares of

Energy Star homes above 5% and States in very similar climate zones vary from under 5% to 35%-45%. Raising the number of energy efficient single family homes financed would be consistent with the public purpose that underlies all ESG and social indexes.

Personal property manufactured home loans which are currently not eligible for mortgage pooling have a much higher rate of Energy star certifications. Currently, about 1/3 of the new manufactured homes meet the Energy Star standards. In addition to fostering equity among these underserved Americans, accepting these loans can help achieve climate goals by enhancing the overall energy efficiency of single family housing.

5. Community Benefits

Social density indexes could also support more sustainable communities that promote social connectivity and vibrancy. Improved connectivity includes local investments in mobility, especially walkability, public transportation access and access to community amenities. There are walkability scores and the Department of Transportation has a tool for identifying Transportation Disadvantaged Census Tracts (Historically Disadvantaged Communities). Including transportation as part of the social density score framework could promote more inclusive, livable neighborhoods while expanding homeownership access. By taking a broad view of the opportunities from social bond investing, the Enterprises can help build stronger communities and increase equity by directing capital to these areas.

Table One: 2021 ENERGY STAR Site-Built New Homes & Apartments

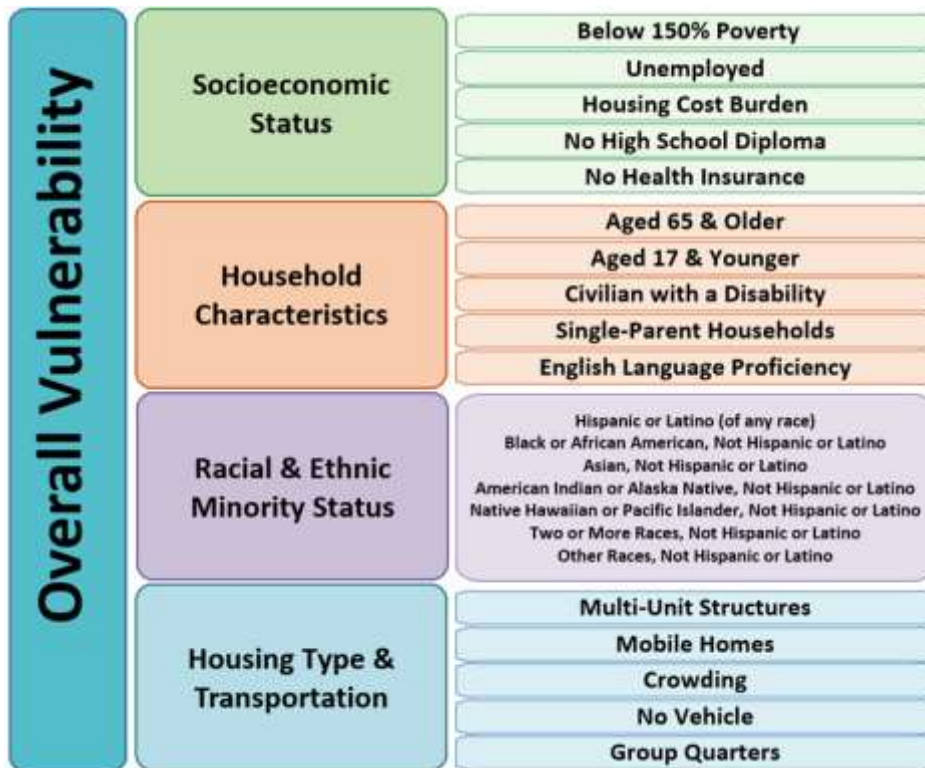
State	Number of Energy Star Homes	Market Share (%)
Alabama	2	Below 5%
Alaska	2	Below 5%
Arizona	20,140	25-35%
Arkansas	102	Below 5%
California	4,928	Below 5%
Colorado	3,964	5-11%
Connecticut	645	16-25%
Delaware	1,166	11-16%
Florida	5,599	Below 5%
Georgia	1,470	Below 5%
Hawaii	20	Below 5%
Idaho	2,267	11-16%
Illinois	124	Below 5%
Indiana	670	Below 5%
Iowa	173	Below 5%
Kansas	56	Below 5%
Kentucky	480	Below 5%
Louisiana	102	Below 5%
Maine	17	Below 5%
Maryland	6,061	35-45%
Massachusetts	1,100	5-11%
Michigan	1,514	5-11%
Minnesota	768	Below 5%
Mississippi	2	Below 5%
Missouri	30	Below 5%
Montana	1	Below 5%
Nebraska	56	Below 5%
Nevada	2,994	11-16%
New Hampshire	843	16-25%
New Jersey	4,030	11-16%
New Mexico	162	Below 5%
New York	4,812	11-16%
North Carolina	3,658	Below 5%
North Dakota	0	Below 5%
Ohio	2,345	5-11%
Oklahoma	241	Below 5%
Oregon	86	Below 5%
Pennsylvania	1,270	Below 5%
Rhode Island	97	5-11%
South Carolina	1,244	Below 5%
South Dakota	22	Below 5%
Tennessee	1,319	Below 5%
Texas	20,876	5-11%
Utah	2,408	5-11%
Vermont	9	Below 5%
Virginia	2,313	5-11%
Washington	932	Below 5%
West Virginia	7	Below 5%

6. Social Vulnerability Scores

Another potential source of information for the Fannie Mae social criteria listing is the Social Vulnerability data compiled by the Centers for Disease Control. Social Vulnerability is defined as:

“The degree to which a community exhibits certain social conditions, including high poverty, low percentage of vehicle access, or crowded households (see the graphic below)”

The data element dictionary (see https://www.atsdr.cdc.gov/placeandhealth/svi/documentation/pdf/SVI2020Documentation_08.05.22.pdf) shows the individual data elements to track incomes, education levels, vehicles in the household, English proficiency, minority status and manufactured (mobile) housing with nominal, percentage and percentile statistics.



7. Program Outcome and Evaluation Measures

Metrics such as the number of closed loans, home affordability and other impacts such as community value improvements or access to credit could be important ways to measure program success (see Table Two below). Community benefits such as financing affordable housing near employment areas and areas with good public transportation could be other ways to measure outcomes.

Table Two: ICMA Social Bond Principles (Sustainable Development Goals) - Program Outcome Metrics

Category	Possible Indicators*	
<ul style="list-style-type: none"> Affordable Housing (Target 1.4) Socioeconomic Advancement and Empowerment (Target 1.4) Access to Essential Services (Target 1.4) 	<ul style="list-style-type: none"> Number of loans serving low- and moderate- income groups 	<ul style="list-style-type: none"> Number of people provided with access to financial services
DECENT WORKING ECONOMIC GROWTH <ul style="list-style-type: none"> Access to Essential Services (Target 8.10) 	<ul style="list-style-type: none"> Number of people provided with access to financial services (mortgage, down payment assistance, or homebuyer education) 	
<ul style="list-style-type: none"> Socioeconomic Advancement and Empowerment (Target 10.2) Access to Essential Services (Target 10.2) 	Number of mortgages in targeted areas	<ul style="list-style-type: none"> Percent of mortgages for disadvantage groups and target populations
Sustainable Cities and Communities. <ul style="list-style-type: none"> Affordable Housing (Target 11.1) 	<ul style="list-style-type: none"> Number of first-time homeownership opportunities 	<ul style="list-style-type: none"> Number of households provided down payment and closing cost assistance in addition to mortgage loan access

8. Other Program Outcomes: Increasing the Overall Level of Homeownership

Examining the level of homeownership during the early years of the millennium with the second decade shows that much of the homeownership rate gains were lost in the Great Financial crisis foreclosures (see Table Three below) and underserved borrowers were also subject to this phenomenon. Rising homeownership rates, especially in underserved geographic areas and among underserved Americans could be an important program outcome along with tracking delinquency and foreclosure rates to assess housing stability, especially at a time of increased inflation. Measuring wealth gains in underserved areas would be another way to assess social bond success.

Table Three: US Census Bureau Homeownership Estimates

Year	Total households	Homeowners	Homeownership Percentage
2005	111,090,617	74,318,982	66.9
2006	111,617,402	75,086,485	67.3
2007	112,377,977	75,515,104	67.2
2008	113,097,835	75,342,138	66.6
2009	113,616,229	74,843,004	65.9
2010	114,567,419	74,873,372	65.4
2011	114,991,725	74,264,435	64.6
2012	115,969,540	74,119,256	63.9
2013	116,291,033	73,843,861	63.5
2014	117,259,427	73,991,995	63.1
2015	118,208,250	74,506,512	63.0
2016	118,860,065	75,022,569	63.1
2017	120,062,818	76,684,018	63.9
2018	121,520,180	77,708,394	63.9
2019	122,802,852	78,724,862	64.1
2020	125,805,000	82,808,000	65.7
2021	127,604,000	83,583,000	65.5
2022	129,396,000	85,224,000	65.9

9. Future Actions to Promote Environmental Justice

Another possible outcome could be to direct more financial capital to minority, low-income, tribal, and indigenous populations which have suffered environmental and health hazards due to pollution. To advance environmental justice, President Biden issued Executive Order No. 14008 (Executive Order on Revitalizing Our Nation’s Commitment to Environmental Justice for All) on April 21, 2023. This e Executive Order is designed to invest in and support “culturally vibrant, sustainable, and resilient communities in which every person has safe, clean, and affordable options for housing, energy, and transportation”.

The Council on Environmental Quality (CEQ) has compiled a Climate and Economic Justice database that cover many of the same criteria shown in the Fannie Mae social criteria list (see Table Four below). A complete list of all of the data elements is shown in Appendix A. This dataset covers 74,000 census tracts in the 50 States plus Puerto Rico, Guam, American Samoa and the Northern Mariana Islands. Using the data elements found in the Social Vulnerability and the Environmental Justice data collections along with Energy star data could make the Fannie Mae social index even more comprehensive.

Table Four: Climate and Economic Justice Screening Tool Dataset

Category	Number of Fields In Each Category
Geographic	3
Demographic	11
Threshold Criteria	2
Disadvantaged	7
Low Income	4
Natural Hazards	9
Flooding	4
Fire Risk	3
Energy Burden	4
Air Pollution	6
Traffic	7
Lead Paint	5
Impervious Surface or Cropland	5
Historic Underinvestment	4
Proximity to Hazardous Waste	3
Proximity to NPL/Superfund Site	3
Proximity to Risk Management Plan site	5
Formerly Used Defense Site	7
Wastewater Discharge and Underground Storage Tanks	10
Diseases	2
Life Expectancy	4
Median Income	2
Linguistic Isolation	4
Unemployment	4
Poverty Levels	3
Education Levels	5
Tribal Areas	3

Question 1: Which Borrower Impacts Should Be Reported?

1. Most Important Borrower Impacts

The level of achievement in terms of borrowers assisted, the level of homeownership in geographically underserved areas, greater homeownership among low to moderate income Americans are all important borrower impact measures that should be reported annually. Fannie Mae is currently reporting on the impact of multifamily social bonds; similar annual reporting of success in meeting the Social index criteria would be beneficial.

2. Other Methods For Reporting on Borrower Impacts

The Enterprises could consider other reporting models being used for socially oriented investing. The Sustainability Accounting Standards Board (SASB) has issued industry specific guidance for mortgage lenders (the Mortgage Finance Sustainability Accounting Standard). The SASB standard covers accounting metrics for the number of loans for the various categories of underserved borrowers, including disclosures about adjustable rate mortgages, high rate mortgages and prepayment penalties.

The SASB standard also includes mortgage servicing metrics for modifications, defaults, foreclosures and short sales and other conveyances (deed in lieu of foreclosure) and borrower eligibility data (the creditworthiness of the borrower, downpayments and loan to value ratios). Finally, there are also metrics for environmental risks such as making loans in Zone A or Zone V flood prone areas, weather related losses due to natural disasters and climate change.

3. A Reporting Framework Based On The ICMA Social Bond Principles

The Harmonized Framework for Impact Reporting for Social Bonds issued by International Capital Market Association could be another methodology to consider. This framework covers outcome and impact metrics for a number of categories such as Socioeconomic Advancement and Empowerment, Social Inclusion for the Disadvantaged and Affordable Housing.

4. ICMA Style Reports For Investors and The Public

Another possible reporting mechanism could be based on the following ICMA Social Bond Principles:

1. Use of Proceeds
2. Process for Project Evaluation and Selection
3. Management of Proceeds
4. Reporting

(a) Process for Project Evaluation and Selection

First, the Enterprises could report on the specific means of evaluating eligibility for the bond pool and other information about the social and other risks associated with the bond pool. For example, the risks associated with concentration of loans in certain states or regions could be described and quantified. ICMA also has a harmonized framework for the reporting of impacts from the issuance of social bonds. Fannie Mae should consider adopting the following ICMA reporting principles:

- Tracking eligible activities (loans)
- Reporting annually on social impacts
- Identification of social project categories
- Identification of targeted population
- Reporting on social impact for the life of the social bond
- Impact reporting on the social impact of the bond issuance

The ICMA framework covers impact measures based on output, outcome and impact. The core reporting principles and some measures tailored to the Fannie Mae social values are shown in Table Five:

Table Five: Output, Outcome and Impact Measures

Type	Examples of Measures		
Output	Number of Mortgages Originated	% of bond made to targeted populations or areas	Number of Second Mortgages Originated
Outcomes	Reduction in Funding Gap among underserved borrowers		
Impact	Growth in Net Worth	Satisfaction Survey compared with baseline	

Question A-2 Should pay-ups from social bonds that accrue to the Enterprises or lenders be deployed to maximize borrower benefit? For example, should funds be allocated for specific programs, to provide financial or other benefits to the individual borrowers that comprise a given pool, or some combination of options?

1. The Different Varieties of Pay-ups

Yes, pay-ups should be considered for underserved borrowers. Examples of pay-ups that might be part of a social bond offering are the following:

- Down payment assistance
- Closing costs
- Buy down programs
- Cost subsidies
- Liquidity funds
- Increased borrower education and counselling

The amount of the pay-up can depend on credit conditions, the goals being accomplished and borrower and geographic characteristics. Some State Finance authority or other State organizations that have issued social bonds for housing are shown in Table Six below.

Table Six: Examples of State Organizations Issuing Social Bonds For Mortgages

ISSUER	CATEGORY
Colorado Housing and Finance Authority	Social
Minnesota Housing Finance Agency	Social
North Dakota Housing Finance Agency	Social
Tennessee Housing Development Agency	Social
Texas Department of Housing and Community Affairs	Social
Washington State Housing Finance Commission	Social
Wisconsin Housing and Economic Development Authority	Social

2. A Pay-up Mechanism Being Used by State Governments

Downpayment and closing cost assistance are present in the mortgages financed by the Colorado Housing and Finance Authority social bonds. These pay-ups are financed by non-amortizing second mortgage loans with a stated rate of interest of 0% with repayment due upon the sale of the related property or refinancing. The median amount of the second mortgages shown in Table Seven below is \$11,823. The average downpayment assistance was 4% of the loan. Other housing authorities (e.g., the North Dakota Housing Finance Agency) also used second mortgages but the maximum amount was limited to 3% of the loan amount.

Table Seven: Colorado Finance Authority: Average Amount of Pay-ups (Second Mortgages)

Series Number	Average Amount of Second Mortgage
2017E	\$11,733
2018AB	\$10,357
2018C	\$12,492
2018D	\$3,192
2019ABC	\$12,028
2019DE	\$10,261
2019FG	\$12,348
2019H1	\$12,004
2019JKL	\$7,714
2020ABC	\$11,205
2020DEF	\$11,912
2020GH1	\$12,800

3. Tracking Pay-up Assistance by Income Brackets

Social bonds can also be structured to assist borrowers from many income levels. Table Eight shows the distribution of Colorado Housing and Finance Authority loans by income category for the years 2019-2021. Approximately 31% of such loans in 2020 were made to homebuyers with incomes below 80% of the Area Median Income ("AMI").

Table Eight: Income bands of loans Qualified Single-Family Program (1/1/2019-6/1/2021).

Income Range of Area Median Family Income	\$ of Loans (\$MM)	% Of proceeds	\$ of Loans (\$MM)	% Of proceeds	\$ of Loans (\$MM)	% Of proceeds
Year	2019	2019	2020	2020	2021	2021
<50%	\$15.15	2.9%	\$22.53	2.9%	\$6.73	2.4%
50%-59%	\$36.80	7.1%	\$46.33	5.9%	\$14.80	5.4%
60%-69%	\$55.94	10.9%	\$75.68	9.7%	\$27.41	9.9%
70%-79%	\$64.06	12.4%	\$98.58	12.6%	\$29.46	10.7%
80-89%%	\$79.37	15.4%	\$121.28	15.5%	\$42.16	15.3%
90% -99%	\$77.61	15.1%	\$104.47	13.3%	\$32.27	11.7%
100% or more	186.38	36.2%	314.38	40.2%	\$123.01	44.6%
Total	\$515.31	100%	\$783.36	100%	\$275.84	100%

4. The Importance of Pay-ups In addressing Barriers to Manufactured Home Homeownership

(a) The Rising Cost of New Manufactured Homes

In the last four years, US Census data (the Average Sales Price of New Manufactured Homes by Region and Size of Home Report) shows a 75% increase in the cost of new single section and a 60% increase in the cost of new multi-section manufactured homes. With these dramatic prices increases, achieving a 10-20% downpayment can be especially daunting given the rising cost of living. Fewer low to moderate income Americans have liquid savings sufficient for a downpayment of \$15,000-\$25,000 or more.

5. Mortgage Buydowns

Underserved borrowers are further challenged by rising interest rates which have increased from 3.25% to 6.25% or even higher for single family site built homes. The cost of a 6.25% 3/2/1 buydown loan is shown in Table Nine below:

Table Nine: Cost of 3/2/1 Mortgage Buy downs (Base Rate 6.25; first year buy down 3%)

	Mortgage Amount	Mortgage Amount
Interest Rate	\$150,000.00	\$250,000.00
3.25	\$3,249.24	\$5,905.80
4.25	\$2,228.04	\$4,203.84
5.25	\$1,143.24	\$2,335.92
6.25		
Total Payments	\$6,620.52	\$12,445.56
Present Value (3.25% Discount Rate)	\$6,275.59	\$11,785.47

6. Interest Rate Buy downs For Manufactured Home Purchase Loans

The interest rates on manufactured home personal property loans have traditionally been 400 basis points or more higher than site-built single family home loans. For these loans, a 3% buy down of the loan especially for loans under \$100,000 could have a material impact in the number of persons who could qualify for such a loan.

7. Alignment of the Social Bond Pay-ups with Homeowner Assistance to Existing Homeowners

(a) Homeowner Assistance Funds Categories

There are other possibly pay-ups or special benefit models that could be considered for loans in social bonds pools. The American Rescue Act passed in 2021 established a fund for Homeowner Assistance Fund (HAF) payments. The Department of the Treasury issued HAF Guidance on March 7, 2023. The parties eligible for these HAF payments are nearly identical to the social index categories (see below):

- (1) Member of a group that has been subjected to racial or ethnic prejudice or cultural bias within American society;
- (2) Resident of a majority-minority Census tract;
- (3) Individual with limited English proficiency;
- (4) Resident of a U.S. territory, Indian reservation, or Hawaiian Home Land, or
- (5) Individual lives in a persistent-poverty county, meaning any county that has had 20% or more of its population living in poverty over the past 30 years as measured by the three most recent decennial censuses.

There is one significant difference between the Fannie Mae Social Index categories and the HAF Guidelines. Under the Fannie Mae social index categories, the borrower’s income must be no greater than 120% of the area medium family income and no greater than 80% if the borrower is qualifying solely based on their income rather than certain borrower or property characteristics. HAF borrowers must have experienced hardship before January 21, 2020 and “have incomes equal to or less than 150% of the area median income or 100% of the median income for the United States, whichever is greater.”

(b) Eligible Benefits

There are three main categories of Homeowner Assistance payments under the Treasury Notice (see Table Ten). A more detailed listing of these HAF categories is included in Appendix B.

Table Ten: Homeowner Assistance Fund (HAF) Categories and Social Bond Corollaries

HAF Category Number	Financial	Social Bond Corollary
1	Mortgage payment assistance	Emergency Fund Escrow
2	Cost to reinstate a delinquent, defaulted or a mortgage under forbearance	Emergency Fund Escrow
3	Mortgage principal reduction	Downpayment Assistance
4	Facilitating interest rate reductions	Mortgage Buy downs
5	Payments for utilities, Internet Service, homeowners insurance or homeowner association fees	Emergency Fund Escrow
6	Payments for delinquent real estate taxes	Emergency Fund Escrow
7	Measures to prevent homeowner displacement	Emergency Fund Escrow
8	Housing counseling and legal services to prevent displacement	Pre-purchase Counseling
11	Manufactured home lot rent to prevent default; promote housing stability	Emergency Fund Escrow

8. Other Existing Enterprise Programs With Benefits Similar to Pay-ups

There are existing Enterprise programs like the Community Land Trust Mortgages which have specialized requirements due to the nature of the loans. The Enterprises can consider if they would want to apply special loan features for social index pool loans; for example, the special latitude provided for sweat equity loans where borrower improvements to the property are permitted in lieu of the full downpayment for the loan. Also, Freddie Mac has Home Possible Loans with liberalized underwriting and origination criteria which could be used for social bond loans.

Question A2: Would improved liquidity resulting from the issuance of MBS social bond pools generate a sufficient benefit to borrowers, or should borrowers whose loans are included in a social pool receive specific benefit(s)? What could those specific benefits be?

Improving access to credit (liquidity) is significant but assisting the most underserved borrowers will probably require the use of the pay-ups described above. Also, as discussed above, Fannie Mae's social criteria could be enlarged to consider additional social benefits, such as the energy efficiency, sustainable bonds and improving communities. Also, adding additional environmental and social benefits could attract a number of investors, which could lead to higher pay-ups and greater bond liquidity.

Single Family mortgage backed social bonds are becoming popular with investors with some of the recent issuances of RMBS securitizations being over-subscribed (see the AAA-Rated Securitization of CDFI Originated Home Loans: Change CDFI LLC AAA 2022). Also, Investors could share in the cost of the social bonds through receiving a lesser rate of interest which could be used to fund some of the enhancements for the underserved borrowers.

Question A-3 Should the Enterprises monitor ongoing borrower impacts and benefits? If so, how? How often should reporting on impacts be provided?

1. Monitoring of Borrower Impacts

Monitoring and then reporting on the outputs, outcomes and impact of social bonds are important for a number of reasons. Tracking of outcomes can show the social and other benefits derived from social bonds and make investors more aware and comfortable with these types of investments, thus expanding the number of investors interested in these pools. Increased participation can lower costs and allow more individuals to become homeowners and have better lives.

Evaluating the impacts of social bonds is a long term undertaking given the relatively small number of loans in a typical size (100 million dollar) social bond (e.g., 400 loans with an average principal amount of \$250,000). Therefore, annual reporting of the outcomes and impacts would be the minimum period in which to observe likely effects among the targeted communities. Also, some of the metrics used (loan delinquency and foreclosure rates) will vary and therefore, an annual snapshot of the current state of the loan pool would be appropriate. Financial and security reporting tend to be annual and therefore, the social impact reporting should become part of that annual cycle of assessing impact.

2. Monitoring Using the ICMA Framework

The International Capital Market Association (ICMA) has developed a harmonized framework for impact reporting on social bonds along with impact reporting metrics. Checking for success in reaching low income, disadvantaged group members and geographic locations less likely to access credit could be part of social bond monitoring. These same target groups are part of the Duty to Serve provisions to promote housing for supporting low-income and minority communities, and three underserved markets: Manufactured Housing, Affordable Housing Preservation, and Rural Housing.

QuestionA-4 Should the Enterprises isolate, measure, and report on increased market liquidity for Enterprise social bonds and any resulting benefit for eligible borrowers? If so, how?

As explained above in Questions A 1-3, the Enterprises should encode the social bond mortgage loans and as recommended by the ICMA four principles, isolate and report on increases in credit availability for these underserved borrowers. Also, reporting on the achievement of goals would assist in the evaluation of the effectiveness of this market intervention. Reporting on increased market liquidity could include the benefits and costs of this effort and provide greater transparency concerning the achievement of program goals.

B. Eligible Loans

Question B-1 What attributes should be used to determine whether a loan is eligible for a social bond pool (e.g., income, geography, down payment assistance, reduction in mortgage interest rate, buydown programs)?

1. Eligibility Attributes

The most important attributes for loan eligibility are the following:

1. Increasing the number of Americans of modest incomes that are able to afford to buy a home through pay-ups, like cost subsidies and buydowns, expanding income eligibility, such as expanding debt to income and housing expense to income ratios
2. Increasing credit access in underserved communities and borrowers (minority, rural geography and manufactured home potential homeowners) and thereby reducing economic disadvantage
3. Downpayment assistance including grants and silent second mortgages to especially help younger families and those with limited wealth to become homeowners

As mentioned above, other loan attributes could be added to the social index including the energy efficiency of the proposed home, measures of community benefits etc. In addition, the program could target first-time homebuyers, qualified veteran and other non-homeowners seeking to buy a primary residence.

Question B1. What are the advantages and disadvantages to identifying eligibility based on mortgage product versus some other methodology (e.g., minimum Social Index scores)?

(a) Advantages of Social Index Scores and Mortgage Products

The advantage of a social credit index is that it provides a scalable and quantifiable method of determining eligibility. Also, the Fannie Mae scoring index methodology is comprehensive covering geographic divisions (rural areas, minority census tracts, low income census tracts, high needs rural and disaster areas) and borrower characteristics (minority and low income potential homeowners).

The advantage of a mortgage product is that it can be fine-tuned to focus on a number of socially desirable characteristics while maintaining specific controls applicable to a particular mortgage product. For example, the mortgage program can establish minimum underwriting criteria so that the borrower is able to afford the loan, proper collateral and appraisal standards and other criteria to protect the Enterprises and engage in sound risk management. The Sweat Equity and Home Possible programs mentioned above are examples of program specific controls and requirements.

(b) Disadvantages of Social Index Scores and Mortgage Products

There is the problem of incompleteness in that a social index may be too limited a measure of social benefit by not including other relevant social or economic factors. Also, there are many social indexes or ways to measure outcomes; the variety of indexes means that it is difficult to compare the results or for investors to decide which investment best suits their goals. Finally, complying with only one of the eight specific social criteria to determine the Fannie Mae Social Credit score is setting a low bar where lenders can claim a social benefit when they have accomplished much less than others who are serving multiple social criteria (see Question B2, section 2 below).

The disadvantage of eligibility by mortgage product is that by specifying the minimum standards, there may be many borrowers who will qualify for most of the mortgage product requirements but not all, thus making them ineligible for the social bond loan pool. This will mean less success in meeting the statutory affordable housing goals, Duty to Serve requirements, and the Equitable Housing Finance Plan goals.

If some wiggle room is put into the mortgage product evaluation process (e.g., you meet all of the criteria except for one requirement), then which noncompliance can be accepted and why not two noncompliances? This can lead to a scoring debate as to which credit noncompliances are more important.

Question B-2 Are the Social Index loan criteria aligned with investors’ social and/or impact mandates? If not, what adjustments are needed to the criteria or to reporting of the scores?

1. Alignment With Investor Social or Impact Mandates

The Social index loan criteria appear to generally align with institutional investor’s social or impact “mandates”. Frameworks such as the UN Principles for Responsible Investing (UNPRI), and the criteria developed by the International Capital Market Association (ICMA) were discussed above. This social criteria and social density framework would help investors to consider ESG issues in investment analysis, their ownership policies and proper disclosure which are three Principles for Responsible Investing.

2. Limitations of the Fannie Mae social index vs. other measuring frameworks

The social index scores proposed by Fannie Mae are based of eight criteria that derive a social criteria percentage and a separate social density score. The Fannie Mae Social Index has the disadvantage of meaning that there will be little difference between loan pools that meet a large number of the social criteria vs those which meet only one of them.

3. A Different Approach for Evaluating Social Impact

A different approach would allow for more targeting of those loan pools which have a much greater social impact for underserved borrowers based on income, borrower characteristics or geographic characteristics. For example, four possible categories of social criteria scores are shown in Table Eleven below.

Table Eleven: Social Impact Ranking

Very High Social Impact	75% or 6 or more of the eight criteria would be met on average for loans in the pool
High Social Impact	50% or 4 or more of the eight criteria would be meet on average for loans in the pool
Moderate Social Impact	25% or 2 or more of the eight criteria would be meet on average for loans in the pool
Low Social Impact	12% or 1 or fewer of the eight criteria would be met on average for loans in the pool

4. Social Criteria Category 7, Designated Disaster Areas

It is important to note that on March 13, 2020, President Trump declared all of the US as a disaster area during the COVID-19 pandemic so every loan made after 3/13/20 until 5/11/2023 (the announced end of the

disaster declaration) would technically qualify under the Social Criteria thus giving the pool a 100% social criteria score.

In addition, Presidential Disaster Declarations cover a limited incident time frame and usually a limited number of counties. For example, the presidentially declared disaster for the Rosebud Sioux Tribe Severe Winter Storms and Snowstorm covered the period from December 12-25, 2022 for only the tribal reservation in southern South Dakota (see <https://www.fema.gov/disaster/4687>). The disaster declaration was issued on February 20, 2023 or 70 days after the official end of the disaster. If the loans were pooled before that time, loans meeting the social criteria might have been missed.

Question B-3 What are the advantages and disadvantages of identifying loans for inclusion in social bonds prior to origination, compared to after funding?

(a) Advantages

If the loans are identified before origination, the specific terms and advantages such as pay-ups or other advantages can be directed toward those borrowers who are most in need and thus improving the overall efficacy of the social bond effort. Also, involving the lender earlier in the process will allow the lender to consider adjusting underwriting and origination requirements to best meet borrower and program requirements.

(b) Disadvantages

The disadvantage of designating loans before origination is that the loans may not close due to a number of factors including borrower or property qualifications, insufficient documentation or problems with the transference of title. Lenders would then have to identify other qualifying loans which may be difficult in areas where there are a limited number of potential borrowers (e.g., certain rural areas, manufactured home loans).

Question B-3: What notice, if any, should borrowers be given regarding potential inclusion of their loan into an Enterprise social bond?

Transparency as to the nature of the program is always the best policy, whether it is for the investors or the borrowers whose loans comprise the loan pool. The loan originator can include the notice of the Enterprise social bond in the initial written communication with the borrower and also describe what difference this makes in terms of the mortgage or personal property loan terms and conditions. If the social bond has special terms for buy-down of interest rates or other borrower benefits, these should be made known to the borrower. Also, Fannie Mae could develop a pamphlet for distribution by lenders that explain the specific attributes of a social bond loan.

Question B-3: Should borrowers be able to opt out of a social bond program?

Borrowers should be able to refuse to participate in a social bond program. For those who decide for whatever reason that they do not want their loan in a social bond pool, they would not receive the benefits offered, if any, and would have to meet all Enterprise requirements.

C. General Questions on a Social Bond Program

Question C-1 What considerations should be made to ensure the issuance of social bonds appropriately aligns with and supports the safety and soundness of the Enterprises?

1. Credit and Default Risk

The balancing of safety and soundness with the social benefits of making credit available to underserved borrowers is a key issue in designing a successful social bond program. Borrowers must be determined to be an acceptable risk based on stability of employment and income, credit history and credit score. The use of pay-ups or latitude in terms of income and debt ratios should be counterbalanced with a strong credit history or other attributes.

2. Overconcentration in Certain Sectors

There are other considerations that may impact the safety and soundness of a particular loan pool. For example, loan pools can be balanced to give a range of borrower incomes, varied geographic locations along with underwriting characteristics (credit scores, loan to value, downpayment, and debt to income ratios). Excessive geographic concentration, especially in areas of high business failures and unemployment, declining property values and other adverse features could also increase the risk of excess defaults and poor returns.

3. Safety and Soundness Concerns about the Feasibility of Manufactured Home Purchase Loans

The feasibility of making manufactured home personal property loans in a safe and sound manner has been previously covered in a feasibility study submitted to FHFA for the Freddie Mac future manufactured home personal property loan program. This “chattel” manufactured home loan program is proposed to begin in 2024. The previously submitted study covered how the Enterprises could balance risk and with the expansion of the availability of credit.

The Freddie Mac 2022 study of manufactured home loans and rural loans found that manufactured home loans had a lower frequency of default and forbearance than site-built homes. While regional quarterly manufactured home 90 day+ delinquency rates appeared to be higher than site built, a regression model to control for factors other than location indicated that manufactured homes have about a 0.3% lower probability of being delinquent 90 days or more.

4. High Needs Rural Housing Areas

Concerning rural markets, the likelihood of forbearance is no higher in rural areas than in metropolitan areas. However, there is a difference in delinquency rates for rural loans in high needs areas vis. a vis. all rural home loans although both delinquency percentages are under 1% (.57% for rural loans; .86% for high needs areas).

Question C-2 If the Enterprises begin issuing social bonds, should they continue issuing single-family affordable bonds, or other “non-social” specified pools?

Maintaining both sets of bonds allows investors a choice in the type of securities they want to buy. There may be investors who are solely interested in assisting low to moderate income buyers and such would gravitate toward the single family affordable housing bonds. There may be other investors who are interested in

promoting equity and enhanced access to credit, especially for underserved borrowers such as those who live in rural high needs areas, minority census tracts or manufactured home buyers. These investors can choose the Fannie Mae social bonds. Also, by separating the bonds, the relative performance of affordable housing vs. social bonds can be analyzed to see if there are performance or other differences which would argue for or against merging or changing the bonds.

Question C-3 If the Enterprises begin issuing social bonds, should they continue disclosing Social Index scores for all UMBS issuances?

Limiting social index scores disclosures to just social bonds would give an incomplete picture of the overall social impact of the Enterprises. Also, investors vary in terms of their risk thresholds, existing portfolios and their interests. Providing social index scores for all UMBS issuances allows investors to determine investment fit and for entities like pension plans and life insurance companies, compliance with their own ESG goals. Having more data is better, especially since the social bonds are new.

Question C-4 What market risks, including potential impacts to the UMBS, should be considered when developing a social bond program? For example, could certain program outcomes be harmful to UMBS liquidity, and, if so, under what circumstances, if any, would such a result be prudent?

Enterprise market risk, including changes in the current value of assets is unlikely to be severely affected by the relatively small issuance of social bonds. The Enterprises have extensive policies for the management of risk and risk sharing strategies could be employed with the social bonds. Also, the enhanced value of social bonds to some investors may make them more willing to share some of the market risks.

Also, it is conceivable that liquidity and market acceptance of social bonds may be reduced in a severe economic downturn. However, the strong growth rate in investor interest and acceptance of socially oriented investments makes it less likely that the Enterprises will be unable to access the debt capital markets. Also, there is no current indication of a change in the current structure of the Enterprises or the degree of federal support which could affect the issuance of social bonds.

Question C-5 What activities or monitoring should the Enterprises and/or FHFA consider to ensure compliance with fair lending laws?

1. The Fair Housing Act and the Equal Credit Opportunity Act and Regulation B

Social bond monitoring procedures should assess the level of compliance with the fair lending laws administered by the Department of Housing and Urban Development and the Consumer Finance Protection Bureau. The social bond policies, especially involving underwriting and appraisal practices must be done in a way that does not violate the Fair Housing Act or the Equal Credit Opportunity Act (ECOA) and Regulation B.

One of the key requirements is to avoid discriminatory effects in the granting of credit. HUD states that a “discriminatory effect” occurs where a facially neutral practice actually or predictably results in a discriminatory effect on a group of persons protected by the Act. That is, there is not necessarily an intent to discriminate but the outcome is discriminatory. HUD has issued a final rule (78 FR 11459, pages 11459-11482), effective March 18, 2023 concerning discriminatory effects liability. The rule includes a three part “burden-shifting test” for

determining an unjustified discriminatory effect along with illustrations of discriminatory housing practices. FHFA and the Enterprises may wish to incorporate these principles in their lender materials. –

2. Special Purpose Credit Programs

Special Purpose Credit Programs (SPCPs) are another area where Enterprise monitoring would be appropriate. SPCPs are allowed for both non-profit and for profit entities under certain conditions. Seven Federal Agencies issued a joint policy statement supporting lenders using SPCPs to help underserved and disadvantaged Americans reduce wealth and homeownership disparities. The possible approaches under ECOA and Regulation B are the following:

- Any credit assistance program expressly authorized by Federal or state law for the benefit of an economically disadvantaged class of persons;
- Any credit assistance program offered by a not-for-profit organization for the benefit of its members or an economically disadvantaged class of persons; or
- Any special purpose credit program offered by a for-profit organization, or in which such an organization participates to meet special social needs, if it meets certain standards prescribed in regulations by the Bureau.

3. Analyzing Special Purpose Credit Programs

On December 21, 2020, the Consumer Financial Protection Bureau (CFPB) issued an Advisory Opinion (AO) on special purpose credit programs to clarify the content that a for-profit organization must include in a written plan that establishes and administers a special purpose credit program under Regulation B. In addition, the AO clarified the type of research and data that may be appropriate to inform a for-profit organization's determination to establish a special purpose credit program to benefit a specified class of persons.

HUD has also issued guidance on the use of Special Purpose Credit Programs. HUD's Office of General Counsel issued an advisory opinion on December 6, 2021 stating that:

"SPCPs offered by non-profit organizations to serve economically disadvantaged classes and those offered by for-profit organizations to meet special social needs that are carefully tailored and targeted to meet ECOA and Regulation B's specifications will generally (emphasis added) not discriminate within the meaning of the [Fair Housing] Act, just as they do not constitute discrimination under ECOA".

In its monitoring of the enterprises, FHFA could sample the written plans made by lenders under Regulation B to ensure that they are compliant with the CFPB advisory opinion mentioned above. Proper execution of SPCP programs would be important for investors who do not wish to invest in debt securities involving questionable loans.

4. FHFA Proposed Rule Concerning Fair Lending, Fair Housing, and Equitable Housing Finance Plans.

In addition to codifying existing Fair Lending and Housing (FLFH) monitoring requirements, the proposed rule would increase Enterprise accountability and public transparency, increase oversight and Board of Director certifications of compliance with FLFH practices. Also, it would require the use of the Supplemental Consumer Information Form which collects information on housing education, housing counseling and language preferences.

FHFA has also proposed a number of sample objectives for assessing compliance with the FLFH practices. These include special purpose credit programs, changes in underwriting and mortgage pricing, increasing renter housing opportunities, reducing homeownership gaps, loan acceptance disparities or disparities in the number of loans purchased by the Enterprises and loan servicing practices. Other Fair Housing and Fair Lending objectives can be investing in formerly redlined or underserved geographic areas, increasing accessible housing access for the disabled, family with children housing and Veterans.

D. Disclosures and Borrower Re-identification

Question D-1 For investors with a social investment mandate, what attributes, impact measures, and guidelines/standards would be necessary to meet that requirement?

Concerning impact measures and attributes of social loans, many investors in these bonds may want to know that the bonds meet the SASB or ICMA principles noted above in Questions A-1 and B-1. Investors may also want to know about the program guidelines for selecting mortgages targeted to underserved communities and how the underwriting and loan guidelines will help meet social goals.

In addition, investors may be interested in loan level data aggregations and information about financial and other risks with these loans along with delinquency and default projections. Currently, the Enterprises are reporting on their compliance with the Sustainability Accounting Standards Board standards and Fannie Mae has issued a Sustainable Bond Framework based on the ICMA requirements. The attributes for the social bonds should be similar (see Question B-1 above).

Question D-2 What incremental insights or additional disclosures do ESG investors need to appropriately evaluate social bonds? For each proposed insight or disclosure (e.g., borrower income band), should it be provided at the loan-level, pool level, cohort-level, or some other level, or should some type of masking be employed?

Fannie Mae has developed a data element dictionary for single family mortgage backed securities (Single-Family MBS Disclosure Mapping Documentation). The 83 data attributes in the Loan Level File could be classified into Security, Mortgage, Underwriting, Servicing and Origination attributes. The social bond mortgages can have additional characteristics beyond the MBS Disclosure Mapping Documentation.

For example, the eight specific social criteria (low-income borrowers-manufactured housing), the social criteria share and social density score could be added to the loan level data collection. Also, the percentage of household to area medium income, the various geographic data elements for low-income, minority, rural and disaster areas, manufactured housing along with borrower nominal data (yes or no values) for low-income, minority and first time homebuyers. Pool or cohort unique identifiers could be associated with the loans so that aggregation and reporting by pool or cohort would be possible. Data masking is covered in Question No. D-4.

Question D-2 How would that additional disclosure aid investment decisions?

According to the US Forum for Sustainable and Responsible Investment Foundation's 2022 report on Sustainable Investing Trends, the total of US sustainable investments is 8.4 trillion, or 12.6% of the assets under professional management. This report identified 497 institutional investors, 349 money managers and 1,359 community investment institutions that incorporate ESG into their investment decisions. Some of these investors are very likely to be interested in additional disclosures about investments to increase the supply of affordable housing through social bonds.

Question D-2 To what extent would a specific disclosure increase the risk of borrower re-identification or provide sensitive, personal insight into the borrower?

The PoolTalk Frequently Asked Questions make it very clear that the distribution of any loan level information to third parties without the prior written approval of the Enterprises is prohibited and the use of this

data is limited to internal use by the investor. This strong policy is the first step in assuring that borrower privacy is being maintained.

Preventing the identification of individual borrowers through loan level disclosures is important, especially for rural areas, minority and manufactured home purchasers who are a relatively small part of the new single family home market. Therefore, it may be necessary to consolidate loan level data reporting at the county level rather than at the census tract level to minimize the risk of borrower re-identification.

Another step that could be considered is some variation of the Bureau of the Census's differential privacy methodology. This policy is designed to prevent the use of mortgage data at lower geographic classifications like census block from being combined with other information collections to identify individual borrowers. Data Swapping and the injection of "noise" without compromising the overall data can be methods to protect from borrower re-identification.

Question D-3 What are the advantages and disadvantages of providing additional loan level and/or pool-level data about the borrower?

The advantage of providing loan level data is that investors can evaluate the effectiveness and relative value of one socially oriented investment vs. another. Investors who are committed to ESG principles may want to know by their own analysis of loan level data that their investment is making social progress in mitigating the credit conditions for underserved populations. Also, investors will want to let their own stakeholders know of the specific progress being made in addressing social conditions.

The disadvantage of providing loan level or pool data could be a risk of borrower re-identification although that this risk can be mitigated as described above. Also, collecting and publishing this data does incur an additional cost.

Question D-4 Are there techniques to anonymize borrower data that the Enterprises should consider to mitigate the risk of borrower re-identification from disclosures supporting Enterprise issuances?

The techniques used by the US Census Bureau to preserve borrower privacy have been discussed above.

Finally, part of the American dream is dependent on housing and owning "a piece of the pie". This is especially true for low-moderate income Americans some of whom are the first in their families to go to college, have jobs that pay enough money to obtain mortgages or housing loans. A 15-30 year home loan allows a young family to avoid rising rents as their children enter adulthood and need support for college or to get started in a business or perhaps, if they are especially successful, obtaining a house of their own. The Fannie Mae methodology for the issuing of social bonds is a major step forward toward increasing the pool of capital dedicated to these social purposes.

Appendix A: Council on Environmental Quality (CEQ) Climate and Economic Justice Dataset

Category	Data Elements
Geographic	Census tract 2010 ID
Geographic	County Name
Geographic	State/Territory
Demographic	Percent Black or African American alone
Demographic	Percent American Indian / Alaska Native
Demographic	Percent Asian
Demographic	Percent Native Hawaiian or Pacific
Demographic	Percent two or more races
Demographic	Percent White
Demographic	Percent Hispanic or Latino
Demographic	Percent other races
Demographic	Percentage under 10
Demographic	Percentage 10 to 64
Demographic	Percentage over 64
Threshold Criteria	Total threshold criteria exceeded
Threshold Criteria	Total categories exceeded
Disadvantaged	Identified as disadvantaged without considering neighbors
Disadvantaged	Identified as disadvantaged based on neighbors and relaxed low income threshold only
Disadvantaged	Identified as disadvantaged due to tribal overlap
Disadvantaged	Identified as disadvantaged
Disadvantaged	Percentage of tract that is disadvantaged by area
Disadvantaged	Share of neighbors that are identified as disadvantaged
Disadvantaged	Total population
Low Income	Adjusted percent of individuals below 200% Federal Poverty Line (percentile)
Low Income	Adjusted percent of individuals below 200% Federal Poverty Line
Low Income	Is low income?
Low Income	Income data has been estimated based on geographic neighbor income
Natural Hazards	Greater than or equal to the 90th percentile for expected agriculture loss rate and is low income?
Natural Hazards	Expected agricultural loss rate (Natural Hazards Risk Index) (percentile)
Natural Hazards	Expected agricultural loss rate (Natural Hazards Risk Index)
Natural Hazards	Greater than or equal to the 90th percentile for expected building loss rate and is low income?
Natural Hazards	Expected building loss rate (Natural Hazards Risk Index) (percentile)
Natural Hazards	Expected building loss rate (Natural Hazards Risk Index)
Natural Hazards	Greater than or equal to the 90th percentile for expected population loss rate and is low income?
Natural Hazards	Expected population loss rate (Natural Hazards Risk Index) (percentile)
Natural Hazards	Expected population loss rate (Natural Hazards Risk Index)
Flooding	Share of properties at risk of flood in 30 years (percentile)
Flooding	Share of properties at risk of flood in 30 years
Flooding	Greater than or equal to the 90th percentile for share of properties at risk of flood in 30 years
Flooding	Greater than or equal to the 90th percentile for share of properties at

Category	Data Elements
	risk of flood in 30 years and is low income?
Fire Risk	Share of properties at risk of fire in 30 years (percentile)
Fire Risk	Share of properties at risk of fire in 30 years
Fire Risk	Greater than or equal to the 90th percentile for share of properties at risk of fire in 30 years
Energy Burden	Greater than or equal to the 90th percentile for share of properties at risk of fire in 30 years and is low income?
Energy Burden	Greater than or equal to the 90th percentile for energy burden and is low income?
Energy Burden	Energy burden (percentile)
Energy Burden	Energy burden
Air Pollution	Greater than or equal to the 90th percentile for PM2.5 exposure and is low income?
Air Pollution	PM2.5 in the air (percentile)
Air Pollution	PM2.5 in the air
Air Pollution	Greater than or equal to the 90th percentile for diesel particulate matter and is low income?
Air Pollution	Diesel particulate matter exposure (percentile)
Air Pollution	Diesel particulate matter exposure
Air Pollution	Greater than or equal to the 90th percentile for traffic proximity and is low income?
Traffic	Traffic proximity and volume (percentile)
Traffic	Traffic proximity and volume
Traffic	Greater than or equal to the 90th percentile for DOT transit barriers and is low income?
Traffic	DOT Travel Barriers Score (percentile)
Traffic	Greater than or equal to the 90th percentile for housing burden and is low income?
Traffic	Housing burden (percent) (percentile)
Traffic	Housing burden (percent)
Lead Paint	Greater than or equal to the 90th percentile for lead paint, the median house value is less than 90th percentile and is low income?
Lead Paint	Percent pre-1960s housing (lead paint indicator) (percentile)
Lead Paint	Percent pre-1960s housing (lead paint indicator)
Lead Paint	Median value (\$) of owner-occupied housing units (percentile)
Lead Paint	Median value (\$) of owner-occupied housing units
Impervious Surface or Cropland	Greater than or equal to the 90th percentile for share of the tract's land area that is covered by impervious surface or cropland as a percent and is low income?
Impervious Surface or Cropland	Greater than or equal to the 90th percentile for share of the tract's land area that is covered by impervious surface or cropland as a percent
Impervious Surface or Cropland	Share of the tract's land area that is covered by impervious surface or cropland as a percent
Impervious Surface or Cropland	Share of the tract's land area that is covered by impervious surface or cropland as a percent (percentile)
Impervious Surface or Cropland	Does the tract have at least 35 acres in it?
Historic Underinvestment	Tract experienced historic underinvestment and remains low income
Historic Underinvestment	Tract experienced historic underinvestment
Historic Underinvestment	Share of homes with no kitchen or indoor plumbing (percentile)
Historic Underinvestment	Share of homes with no kitchen or indoor plumbing (percent)
Proximity to Hazardous Waste	Greater than or equal to the 90th percentile for proximity to hazardous waste facilities and is low income?
Proximity to Hazardous Waste	Proximity to hazardous waste sites (percentile)

Category	Data Elements
Proximity to Hazardous Waste	Proximity to hazardous waste sites
Proximity to NPL/Superfund Site	Greater than or equal to the 90th percentile for proximity to superfund sites and is low income?
Proximity to NPL/Superfund Site	Proximity to NPL (Superfund) sites (percentile)
Proximity to NPL/Superfund Site	Proximity to NPL (Superfund) sites
Proximity to Risk Management Plan site	Greater than or equal to the 90th percentile for proximity to RMP sites and is low income?
Proximity to Risk Management Plan site	Proximity to Risk Management Plan (RMP) facilities (percentile)
Proximity to Risk Management Plan site	Proximity to Risk Management Plan (RMP) facilities
Formerly Used Defense Site and Abandoned Mines	Is there at least one Formerly Used Defense Site (FUDS) in the tract?
Formerly Used Defense Site and Abandoned Mines	Is there at least one abandoned mine in this census tract?
Formerly Used Defense Site and Abandoned Mines	There is at least one abandoned mine in this census tract and the tract is low income.
Formerly Used Defense Site and Abandoned Mines	There is at least one Formerly Used Defense Site (FUDS) in the tract and the tract is low income.
Formerly Used Defense Site and Abandoned Mines	Is there at least one Formerly Used Defense Site (FUDS) in the tract, where missing data is treated as False?
Wastewater Discharge and Underground Storage Tanks	Is there at least one abandoned mine in this census tract, where missing data is treated as False?
Wastewater Discharge and Underground Storage Tanks	Greater than or equal to the 90th percentile for wastewater discharge and is low income?
Wastewater Discharge and Underground Storage Tanks	Wastewater discharge (percentile)
Wastewater Discharge and Underground Storage Tanks	Wastewater discharge
Wastewater Discharge and Underground Storage Tanks	Greater than or equal to the 90th percentile for leaky underground storage tanks and is low income?
Wastewater Discharge and Underground Storage Tanks	Leaky underground storage tanks (percentile)
Wastewater Discharge and Underground Storage Tanks	Leaky underground storage tanks
Diseases	Greater than or equal to the 90th percentile for asthma and is low income?
Diseases	Current asthma among adults aged greater than or equal to 18 years (percentile)
Diseases	Current asthma among adults aged greater than or equal to 18 years
Diseases	Greater than or equal to the 90th percentile for diabetes and is low income?
Diseases	Diagnosed diabetes among adults aged greater than or equal to 18 years (percentile)
Diseases	Diagnosed diabetes among adults aged greater than or equal to 18 years
Diseases	Greater than or equal to the 90th percentile for heart disease and is low income?
Diseases	Coronary heart disease among adults aged greater than or equal to 18 years (percentile)
Diseases	Coronary heart disease among adults aged greater than or equal to 18 years
Diseases	Greater than or equal to the 90th percentile for low life expectancy and is low income?
Life Expectancy	Low life expectancy (percentile)
Life Expectancy	Life expectancy (years)

Category	Data Elements
Median Income	Greater than or equal to the 90th percentile for low median household income as a percent of area median income and has low HS attainment?
Median Income	Low median household income as a percent of area median income (percentile)
Median Income	Median household income as a percent of area median income
Median Income	Greater than or equal to the 90th percentile for households in linguistic isolation and has low HS attainment?
Linguistic Isolation	Linguistic isolation (percent) (percentile)
Linguistic Isolation	Linguistic isolation (percent)
Unemployment	Greater than or equal to the 90th percentile for unemployment and has low HS attainment?
Unemployment	Unemployment (percent) (percentile)
Unemployment	Unemployment (percent)
Unemployment	Greater than or equal to the 90th percentile for households at or below 100% federal poverty level and has low HS attainment?
Poverty Levels	Percent of individuals below 200% Federal Poverty Line (percentile)
Poverty Levels	Percent of individuals below 200% Federal Poverty Line
Poverty Levels	Percent of individuals < 100% Federal Poverty Line (percentile)
Poverty Levels	Percent of individuals < 100% Federal Poverty Line
Education Levels	Percent individuals age 25 or over with less than high school degree (percentile)
Education Levels	Percent individuals age 25 or over with less than high school degree
Education Levels	Percent of residents who are not currently enrolled in higher education
Unemployment	Unemployment (percent) in 2009 (island areas) and 2010 (states and PR)
Unemployment	Percentage households below 100% of federal poverty line in 2009 (island areas) and 2010 (states and PR)
Unemployment	Greater than or equal to the 90th percentile for unemployment and has low HS education in 2009 (island areas)?
Unemployment	Greater than or equal to the 90th percentile for households at or below 100% federal poverty level and has low HS education in 2009 (island areas)?
Unemployment	Greater than or equal to the 90th percentile for low median household income as a percent of area median income and has low HS education in 2009 (island areas)?
Tribal Areas	Number of Tribal areas within Census tract for Alaska
Tribal Areas	Names of Tribal areas within Census tract
Tribal Areas	Percent of the Census tract that is within Tribal areas

Appendix B: Homeowner Assistance Fund (HAF) Qualified Expenses

1. Mortgage payment assistance;
2. Financial assistance to allow a homeowner to reinstate a mortgage or to pay other housing-related costs related to a period of forbearance, delinquency, or default;
3. Mortgage principal reduction, including with respect to a second mortgage provided by a nonprofit or government entity;
4. Facilitating mortgage interest rate reductions;
5. Payment assistance for:
 - a. homeowner's utilities, including electric, gas, home energy (including firewood and home heating oil), water, and wastewater;
 - b. homeowner's internet service, including broadband internet access service, as defined in 47 CFR 8.1(b) (or any successor regulation);
 - c. homeowner's insurance, flood insurance, and mortgage insurance;
 - d. homeowner's association fees or liens, condominium association fees, or common charges, and similar costs payable under a unit occupancy agreement by a resident member/shareholder in a cooperative housing development; and
 - e. down payment assistance loans provided by nonprofit or government entities;
6. Payment assistance for delinquent property taxes to prevent homeowner tax foreclosures;
7. Measures to prevent homeowner displacement, such as home repairs to maintain the habitability of a home, including the reasonable addition of habitable space to alleviate overcrowding, or assistance to enable households to receive clear title to their properties;
8. Counseling or educational efforts by housing counseling agencies approved by HUD or a tribal government (including such efforts by in-house housing counselors who are Uncertified or Tribally approved), or legal services, targeted to households eligible to be served with funding from the HAF related to foreclosure prevention or displacement, in an aggregate amount up to 5% of the funding from the HAF received by the HAF participant;
11. Payment of lot rent for a manufactured home, where such payment would promote housing stability and prevent the default of the resident of the manufactured home