

The New Energy-Efficient Mortgage

An Innovative Financial Tool for Energy Efficiency

This issue brief summarizes the Energy Programs Consortium's (EPC)¹ new energy-efficient mortgage initiative. Goals of this initiative are 1) to develop a new financial instrument based on the old energy efficient mortgage, by revising it significantly to make it attractive to lenders, investors and borrowers; and 2) to bring this new energy efficient mortgage quickly to scale, moving from a small group of pilot states to a large-scale roll-out. The initiative already is under way; a group of pilot states have begun to work together to form this product, a nonprofit is being formed that would market the new mortgages to low-income populations, and a national advisory group is being formed.

The energy efficient mortgage initiative is a significant part of EPC's residential energy efficiency finance initiative. The residential energy efficiency finance initiative is working with states, the private sector, the federal government and foundations to 1) refine existing energy efficiency finance instruments and 2) develop new energy efficiency finance instruments. The effort will improve energy efficiency in homes; reduce energy-related emissions, including greenhouse gas emissions; and make homes more affordable for low- and moderate-income people. The intent of this effort is to quickly move beyond small-scale energy efficiency pilot projects and toward large-scale energy efficiency financing. The Ford Foundation, the Surdna Foundation, the Heron Foundation, the U.S. Department of Energy and the U.S. Environmental Protection Agency fund this effort.

THE ENERGY-EFFICIENT MORTGAGE PRODUCT

Across the United States, lenders originate about 15 million mortgages each year for Americans to buy new homes or refinance or rehabilitate their homes. These transactions are worth about \$2.8 trillion each year. Table 1 shows mortgages issued in 2005 by state and by purpose. Table 2 lists mortgage loan by purchase, refinance and improvement by state. Of the 15.5 million mortgage loans made in 2005, 7.3 million were for purchase, 7.1 million for refinancing and 1.1 million for home improvement.

If even 5 percent of these mortgages were energy efficient mortgages, it would be significant. Yet, despite the fact that energy efficient mortgages have existed since the mid-1990s, very few of all mortgages are energy efficient mortgages. This is the case despite the fact that the underlying concept of the energy efficient mortgage is a good one. An energy efficient mortgage does the following.

1. EPC is a 501(c)(3) nonprofit organization that conducts policy research and demonstration programs sponsored by the four main organization representing state energy and regulatory agencies: the National Association of State Energy Officials, National Energy Assistance Directors' Association, National Association of Regulatory Utility Commissioners and National Association of State and Community Services Programs.

Table 1. Mortgage Loans for All Types of Units by State (2005)

State	Loan Purpose			
	Purchase	Refinancing	Improvement	Total
Alabama	86,525	68,053	11,724	166,302
Alaska	15,362	10,462	1,319	27,143
Arizona	297,762	254,691	27,007	579,460
Arkansas	47,934	36,836	9,667	94,437
California	920,116	1,312,043	169,634	2,401,793
Colorado	171,321	149,291	13,841	334,453
Connecticut	77,893	89,746	18,862	186,501
Delaware	23,984	24,473	5,970	54,427
District of Columbia	16,306	17,536	1,821	35,663
Florida	745,121	531,912	60,815	1,337,848
Georgia	267,382	192,635	22,323	482,340
Hawaii	28,630	30,073	4,039	62,742
Idaho	53,317	33,647	4,172	91,136
Illinois	316,881	309,735	36,974	663,590
Indiana	127,723	120,132	19,760	267,615
Iowa	53,548	49,894	9,969	113,411
Kansas	53,648	45,436	7,877	106,961
Kentucky	69,997	67,829	12,804	150,630
Louisiana	70,843	58,707	14,337	143,887
Maine	24,316	33,144	7,464	64,924
Maryland	169,341	239,871	27,478	436,690
Massachusetts	135,973	177,196	29,704	342,873
Michigan	195,320	269,573	33,969	498,862
Minnesota	125,499	132,480	19,732	277,711
Mississippi	40,898	33,345	7,840	82,083
Missouri	134,996	136,640	17,054	288,690
Montana	16,689	15,167	3,134	34,990
Nebraska	29,254	28,360	5,824	63,438
Nevada	140,434	104,729	11,940	257,103
New Hampshire	29,399	39,114	7,248	75,761
New Jersey	183,713	241,444	46,169	471,326
New Mexico	45,216	33,575	4,227	83,018
New York	249,037	239,789	55,560	544,386
North Carolina	219,704	159,335	18,388	397,427
North Dakota	10,475	7,083	2,255	19,813
Ohio	220,556	220,227	34,213	474,996
Oklahoma	66,239	47,480	13,674	127,393
Oregon	112,805	95,656	9,211	217,672
Pennsylvania	216,298	255,428	77,874	549,600
Rhode Island	22,768	37,082	7,465	67,315
South Carolina	113,364	69,546	9,034	191,944
South Dakota	13,941	11,753	2,334	28,028
Tennessee	142,862	102,908	14,008	259,778
Texas	551,704	228,199	52,853	832,756
Utah	90,467	63,038	5,180	158,685
Vermont	10,450	12,836	2,954	26,240
Virginia	233,012	248,432	35,110	516,554
Washington	198,673	187,970	19,888	406,531
West Virginia	25,070	26,225	7,477	58,772
Wisconsin	110,666	150,375	22,640	283,681
Wyoming	11,652	9,054	1,390	22,096
Total	7,335,084	7,060,185	1,066,206	15,461,475

Source: Home Mortgage Disclosure Act data. Data accessed using DataPlace™

1. It incorporates the cost of energy efficiency investments (insulation, efficient windows and furnaces or air conditioners) into a mortgage so customers can pay these costs over the life of the loan—often 20 or 30 years—and deduct the interest from taxes.
2. It is based on the fact that the smaller electric and gas bills resulting from efficiency investments reduce homeowners' everyday expenses. This changes their ratio of expenses to income, allowing homebuyers to qualify for a larger mortgage.

Unfortunately, energy-efficient mortgages have not made major inroads into the mortgage market. Few lenders participate in the program because it adds paperwork, increases processing time, is more difficult to sell on the secondary mortgage market, and has been of little apparent interest to borrowers. Realtors tend not to know about the energy efficient mortgage, and those who do see little advantage in telling their clients about it. Customers, even if they know about the program, may not understand it and often are concerned that the energy efficient mortgage may take extra. With the extremely active real estate market of the past several years, realtors, lenders and mortgage brokers have had little need to offer new products or to add complexity to the transactions; as the housing market cools, this situation may well change.

EPC's goal is to make apparent the three major advantages of the new energy efficient mortgage over mortgage products. The energy-efficient mortgage will: 1) use and leverage a variety of sources of capital, 2) be streamlined and easy to use and 3) be more secure and priced at an attractive interest rate. It also will build on a network of nonprofit organizations that are active in low- to moderate-income housing rehabilitation, retrofit and finance. This complex undertaking will require careful coordination among many different players.

Although the intent of this project to develop energy efficient mortgage products for all income levels, it also is clear that the measures that address low-income homebuyers may differ from those that address higher-income homebuyers. Not all the elements described below can or will apply to both high-income and to low- and moderate-income homebuyers.²

EPC now is conducting research and analysis to create an efficient, marketable and scalable new energy efficient mortgage product. These steps are described below.

Formation of National Cross-Sector Advisory Committee

EPC is now forming a national advisory committee that will include the major players involved in making the energy efficient mortgage program successful. These advisory committee members may include state energy, treasury and housing finance officials along with utility, finance and housing industry representatives.

2. In some cases substantial outside financial support mechanisms are directed at lower- and moderate-income Americans—defined as less than 80 percent of average median income (AMI) for that area. AMI in the United States is approximately \$50,000. Forty-two million households, or about 40 percent of the approximately 100 million U.S. households, are at 80 percent of the area-wide median income levels.

Identification of Sources of Capital for the New Energy Efficient Mortgage

This energy efficient mortgage product will seek to use various sources of capital that can reduce interest rates for low-income and, in some cases, even for non-low-income homebuyers.

For low-income homeowners and homebuyers only:

1. *Tax-exempt financing.* Tax-exempt financing may come from an adaptation of state-issued bonds now used to finance low- and moderate-income first-time homebuyers. An adaptation of this tax-exempt bond structure could be used to serve the needs of low-income homebuyers. In New York, for example, the State of New York Mortgage Agency provides low-interest-rate mortgage financing that could be made available for this product.
2. *Program related income (PRI) support from foundations.* Some foundations loan money at very low interest rates to support causes and initiatives that correspond with their priorities; such PRI funds could be directed to create a more secure energy efficient mortgage product that is more attractive to lenders and investors.
3. *Other grant funds.* This program will seek to leverage other funds that are available to low- and moderate-income families such as lead abatement, HOME, Weatherization, Community Development Block Grants (CDBG), and state funds. For example, grant funds from the New York State Affordable Housing Corporation could be incorporated as part of the mortgage, thereby reducing both the amount to be borrowed and the monthly payment.

For non-low-income or low-income homeowners and homebuyers:

1. *Utility funds and state public benefit funds.* Funding from these sources may be structured so to provide funding for non-low-income homebuyers. Such funding could be used to buy down interest rates, to make energy efficient mortgage loans more secure, or to reduce the need for mortgage insurance.
2. EPC also is exploring ways to use mortgage insurance funds and loan guarantees such as those from the U.S. Department of Energy to provide further financial support.

Development of A Streamlined Product

EPC is designing a streamlined financial product to reduce paperwork for the mortgage lender and the borrowing consumer. Such streamlining will reduce the costs of the mortgage product and speed up loan processing. One key to this effort is to design an energy audit process that is quick and—in the case of low-income customers—coordinated with other home energy rehabilitation financing programs.

One possible scenario that EPC is exploring is described below.

1. Upon the homeowner's request, the agency providing the mortgage product would order a property inspection, in cooperation with the local weatherization partner. The borrower, state energy office or

another source, could pay the cost of the inspection. This inspection, using appraisal protocols, would estimate the costs of the rehabilitation and energy efficiency improvements.

2. The property inspector would estimate the costs of the rehabilitation and energy efficiency improvements and the estimated savings from energy efficiency improvements and send them to an appraiser, who would add the improvements to the property value to create an after-improvement value for the property.
3. The estimates of monthly savings from the energy efficiency measures would be subtracted from the monthly PITI (principle, interest, taxes and insurance) payment when the lender considers the loan. The lender uses the after-improvement value to consider the loan request.
4. This rehabilitation/energy inspection also serves any grant support program for which the client may be eligible, such as (in the case of low-income homeowners) weatherization programs, CDBG, HOME or income-dependent state-run programs. It also could be used for other state-run programs that are available to homeowners, regardless of their income.

Although some elements of this streamlined process apply only to low-income homeowners, EPC also is working with the advisory group to design energy efficient mortgage products that are streamlined for non-low-income homebuyers.³

Creating More Secure Loans to Be Offered at Attractive Prices

Outside capital has the potential to support energy efficient mortgages by reducing the interest rate that borrowers pay. This outside capital could come in the form of loan insurance, loan guarantees, measures that may reduce the need for mortgage insurance, interest rate buy-downs, state public benefit funds, and creative uses of foundation PRI funds. Together, these tools reduce risks for both lenders and investors. Lower-risk loans can be lower-interest loans, so these tools help to create a new lower-interest energy-efficient mortgage product that is attractive to borrowers.

EPC is exploring the following concept, among others.

1. **Clarification of Title XVII of the Energy Policy Act to allow the secretary of the Department of Energy (DOE) to guarantee up to 80 percent of the amount of the state-issued bonds to provide energy efficient mortgages.** Title XVII currently authorizes the use of DOE funds for a wide range of energy-saving projects and technologies, but does not specifically authorize the use of this authority to support residential energy efficiency financing programs. The clarification would expand the authorized uses of funds to include residential energy efficiency mortgages backed by state authorities or agencies in support of consumer energy programs.

The guarantee would insure up to 25 percent of the mortgage principal, thereby allowing lenders to issue such mortgages at a lower interest rate and providing added incentive for borrowers to take these

3. This product complements the existing energy efficient mortgage offered through both FHA and VA. FHA has recently made progress in streamlining its program by requiring fewer inspections.

mortgages. Essentially, the guarantee would replace the need to purchase mortgage insurance or significantly reduce the risk of the loan, thereby resulting in a lower interest rate of between approximately 0.5 percent and 1 percent that would be charged the borrower. For a borrower who takes a \$200,000 mortgage loan, at current market rates, the interest rate could be reduced from 6 percent to 5 percent, resulting in a lower monthly payment of \$1,198 to \$1,074.

The proposed clarification of Section 1703 would allow states to offer a loan guarantee through a state-sponsored program to participating lenders that issue energy efficient mortgages at lower risk or without requiring private mortgage insurance and thereby would be required to pass on the savings to the borrowers as an additional incentive to increase market interest in energy efficiency mortgages. Energy-efficient mortgages that would be issued under the proposed amendment would allow low-income homeowners and home purchasers to be approved even their credit is not perfect.

2. **Tax-Exempt Bonds Issued by State Housing Finance Agencies.** Another approach is to use tax-exempt bond funds issued by state housing finance agencies, although these are limited by IRS regulation to exclude refinance loans. These bonds currently are issued for various purposes, including providing below-market interest rate loans to low- and moderate-income first-time homebuyers. Use of these bonds could be expanded to include energy efficiency improvements as part of the home mortgage.
3. **Foundation Program Related Investments (PRI's).** These are low- or very low-interest- only loans that could over-collateralize investment securities, reduce interest rates and eliminate the need for mortgage insurance.
4. **State Public Benefit Funds.** Many states use public benefit or other funds to offer below- market interest rates for small second mortgages or small, unsecured loans to support residential energy improvements. These funds could be combined with other tools to further reduce the interest rate on mortgage loans. EPC also is working with state public benefit funds to structure effective ways to use those funds to buy down energy efficient mortgage interest rates.

EPC is conducting analytical work to define the structure and benefit of these measures. One consideration is that not all funds can be used to benefit all borrowers. Foundation PRI funds or state tax-exempt bond funds work for low- to moderate-income homebuyers; these funding sources typically cannot be used for higher-income borrowers. The pool of funding for higher-income homebuyers could include state public benefit funds, utility funds or other private sector funds.

Helping Families Qualify for Lower Interest Rates

Many families are burdened with a combination of high interest rate mortgages and high energy costs. This combination is particularly challenging for low-income families. The new energy efficiency loan product may allow energy cost savings from efficiency to be combined with lower mortgage interest rates to reduce monthly mortgage payments.

Figure 1 illustrates a family with a \$150,000 loan and an interest rate of 8 percent. The family's monthly principal and interest payment is \$1,101 per month. If the family earned \$2,500 per month, it would have

a mortgage debt ratio (monthly income divided by mortgage debt) of 44 percent on the loan. Such a debt ratio is quite high and often outside the allowance of a prime lender. The family described in the table also has energy bills of \$200 month.

Using the new energy efficiency mortgage product, the family could borrow an additional \$20,000 to make efficiency and related home improvements and reduce the interest rate on the mortgage to 6 percent. As a result, the monthly mortgage payment would fall to \$1,020 and the energy bill would be reduced by \$40 (or more in states with higher energy costs). The debt ratio would fall to 39 percent and the family would save \$121 a month (\$1,301-\$1,180)—the equivalent of about a 5 percent increase in its monthly income.

Figure 1. Savings to Household Using New Energy-Efficient Mortgage Product

	Current Mortgage	Energy-Efficient Mortgage
Mortgage Balance	\$150,000	\$170,000
Monthly Income	\$2,500	\$2,500
Interest Rate	8.0%	6.0%
Average Monthly Energy Bill	\$200	\$160
Current Monthly Mortgage Payment	\$1,101	\$1,020
Mortgage Debt Ratio	44.0%	39.2%
Monthly Costs (mortgage+energy)	\$1,301	\$1,180

The monthly savings made possible by the lower interest rate reduce the debt ratio as well as the expectation of mortgage default. A legitimate sub-prime lender would need to charge a higher interest rate to cover this risk. The reduction to a 39 percent debt ratio allows the lender to qualify the family as a “prime” borrower at a lower interest rate. If the family ever wishes to again borrow against its home, the home is worth more due to the improvements, and the new lower monthly debt and energy payments leave the family more money for food, education and other living costs.

Note: A key difference between the state-sponsored and Fannie Mae energy efficiency mortgage products is that the state product would subtract the full \$40 in monthly energy savings from the family’s monthly mortgage calculation for the purposes of calculating the debt ratio. Under the Fannie Mae product, the additional \$40 is added to the family’s income.

The new energy-efficient mortgage product also is being designed to offer low- and moderate-income families an alternative to inappropriate sub-prime loans.⁴ By working with nonprofit agencies, EPC will be able to combine energy efficiency grants with mortgage refinance and offer low-income families an alternative to sub-prime lenders.

Table 2 shows sub-prime home purchase loans by AMI by state. In 2005, of 7.3 million home mortgages made, almost 2 million were considered.

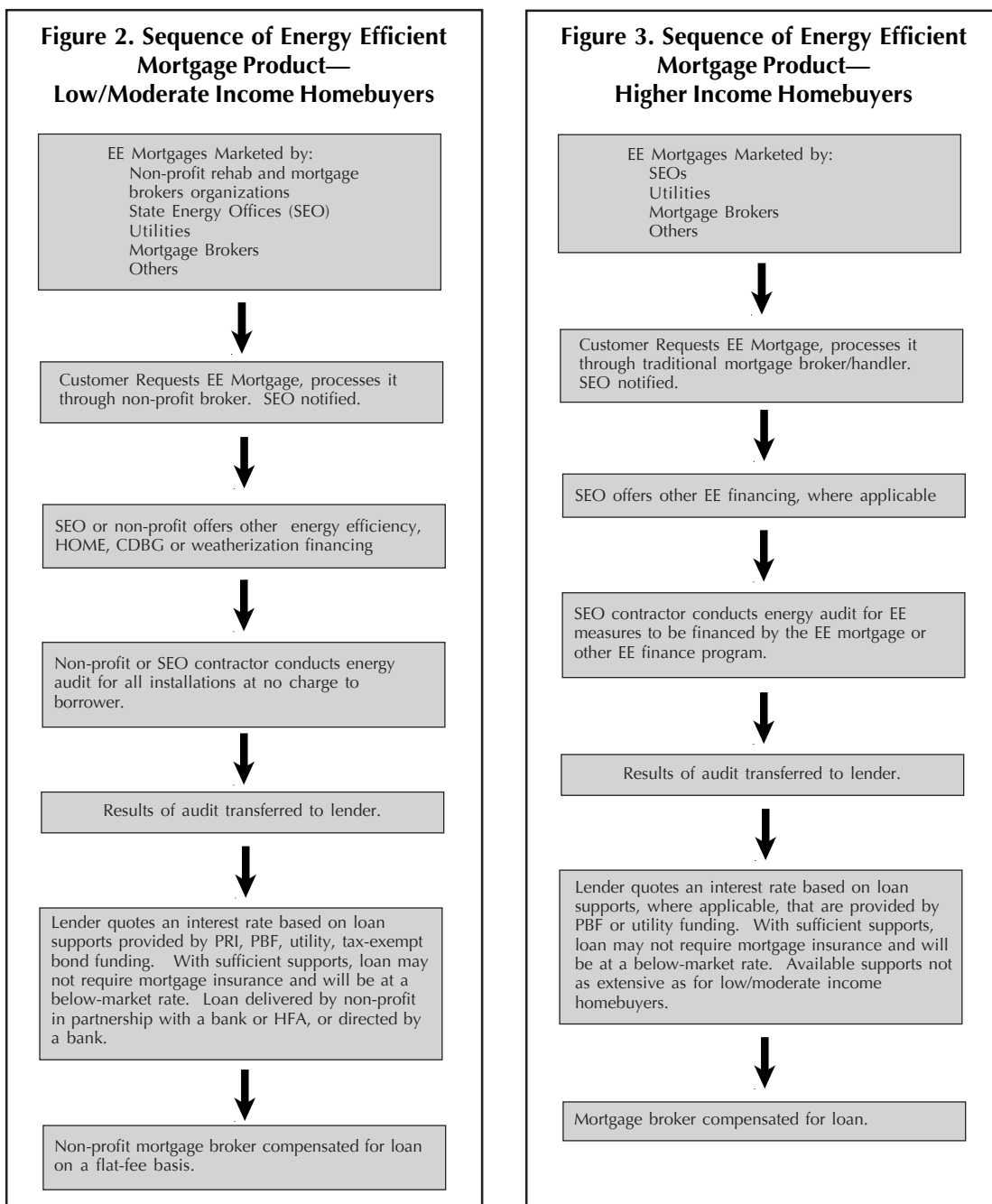
4. A sub-prime loan contrasts with a prime loan. Sub-prime loans are higher risk; they are more likely than prime loans to be repaid late or to go into default. Sub-prime loans are higher cost loans, and their number has increased rapidly during the past several years.

Table 2. Subprime Home Purchase Loans by Income (2005)

State	Very Low Income	Low Income	Middle Income	High	Total	Total Purchase	Percent of Total
Alabama	2,893	6,189	5,912	6,914	21,908	86,525	25.3%
Alaska	89	528	912	793	2,322	15,362	15.1%
Arizona	2,048	13,535	24,127	39,755	79,465	297,762	26.7%
Arkansas	1,042	2,636	2,823	3,683	10,184	47,934	21.2%
California	1,080	8,332	50,541	269,329	329,282	920,116	35.8%
Colorado	3,216	13,740	13,525	13,056	43,537	171,321	25.4%
Connecticut	1,102	5,881	7,196	5,214	19,393	77,893	24.9%
Delaware	386	1,064	1,272	1,477	4,199	23,984	17.5%
District of Columbia	103	512	898	1,100	2,613	16,306	16.0%
Florida	3,602	23,196	56,724	123,024	206,546	745,121	27.7%
Georgia	7,918	24,141	21,994	20,288	74,341	267,382	27.8%
Hawaii	30	435	1,163	4,681	6,309	28,630	22.0%
Idaho	852	3,006	3,331	4,741	11,930	53,317	22.4%
Illinois	5,529	25,762	35,176	28,186	94,653	316,881	29.9%
Indiana	5,686	11,510	9,051	7,010	33,257	127,723	26.0%
Iowa	2,074	3,537	2,544	1,632	9,787	53,548	18.3%
Kansas	1,680	3,575	3,243	2,604	11,102	53,648	20.7%
Kentucky	2,100	5,094	5,091	5,067	17,352	69,997	24.8%
Louisiana	1,919	4,907	5,716	7,188	19,730	70,843	27.9%
Maine	223	1,103	1,857	2,153	5,336	24,316	21.9%
Maryland	2,347	11,471	17,507	14,829	46,154	169,341	27.3%
Massachusetts	749	5,952	13,319	12,565	32,585	135,973	24.0%
Michigan	8,129	21,611	17,961	13,804	61,505	195,320	31.5%
Minnesota	2,887	10,956	8,846	6,711	29,400	125,499	23.4%
Mississippi	1,292	3,379	3,697	5,183	13,551	40,898	33.1%
Missouri	6,117	11,325	9,503	8,209	35,154	134,996	26.0%
Montana	148	509	849	1,229	2,735	16,689	16.4%
Nebraska	906	2,006	1,637	1,188	5,737	29,254	19.6%
Nevada	391	3,712	11,945	25,760	41,808	140,434	29.8%
New Hampshire	250	1,356	2,537	2,323	6,466	29,399	22.0%
New Jersey	971	5,970	13,453	18,163	38,557	183,713	21.0%
New Mexico	373	1,617	2,420	4,359	8,769	45,216	19.4%
New York	1,738	5,858	14,223	34,123	55,942	249,037	22.5%
North Carolina	4,558	13,272	12,734	13,662	44,226	219,704	20.1%
North Dakota	205	523	417	320	1,465	10,475	14.0%
Ohio	8,084	18,786	15,620	12,967	55,457	220,556	25.1%
Oklahoma	1,836	4,526	4,861	5,681	16,904	66,239	25.5%
Oregon	1,126	7,633	9,267	9,225	27,251	112,805	24.2%
Pennsylvania	4,518	11,173	11,980	12,440	40,111	216,298	18.5%
Rhode Island	72	1,114	3,396	3,165	7,747	22,768	34.0%
South Carolina	2,902	6,801	6,646	7,622	23,971	113,364	21.1%
South Dakota	245	662	699	607	2,213	13,941	15.9%
Tennessee	4,857	11,385	9,866	9,936	36,044	142,862	25.2%
Texas	10,397	42,040	47,811	61,059	161,307	551,704	29.2%
Utah	2,124	7,619	7,332	8,174	25,249	90,467	27.9%
Vermont	80	348	525	501	1,454	10,450	13.9%
Virginia	1,993	9,308	16,684	17,319	45,304	233,012	19.4%
Washington	2,049	11,804	17,233	17,065	48,151	198,673	24.2%
West Virginia	594	1,192	1,432	2,038	5,256	25,070	21.0%
Wisconsin	2,662	7,677	6,981	4,736	22,056	110,666	19.9%
Wyoming	165	668	937	770	2,540	11,652	21.8%
Total	118,337	400,936	545,414	883,628	1,948,315	7,335,084	26.6%

Source: Home Mortgage Disclosure Act data. Data accessed using DataPlace™

Figures 2 and 3 show how the energy-efficient mortgage product would work for both a low-income borrower and a non-low-income borrower. The primary differences between the two are that the low-income borrower may have access to more loan supports (some loan supports, such as tax-exempt funds and foundation PRI investments are limited to lower-income borrowers; utility and system benefit funds do not always have such limitations).



A Marketing Program Template and Branding Strategy

EPC is working with its advisory committee to develop a marketing program for these energy efficient loans that publicizes their advantages and will create consumer demand for these loans. The marketing program will be a critical part of the effort to bring the program from the pilot stage to full-scale implementation in many states.

One limitation of previous efforts to develop a national energy efficiency mortgage program was a lack of market research and planning. To address this concern, EPC is developing a national database to target outreach effort and to inform the design of the final product.

This data already shows that the design of an energy-efficient mortgage product should not take on a “one-size fits all” approach. The age of the nation’s housing stock, household income distribution and homeownership rates vary considerably from region to region and by state, as shown in tables 3-5.

- Table 3A shows the age of housing stock, by period built, through 2000. It also lists median year built, by state.
- Table 3B shows the age of housing stock by state by percentage built by age group.

Tables 3A and 3B show that 22.3 percent of the nation’s housing was built before 1950, 26.4 percent between 1950 and 1970, 24.3 percent between 1970 and 1990, and 17 percent between 1990 and 2000. In general, the states in the northeast have the oldest housing stock in the country, followed by midwestern, southern and western states.

- Table 4A shows home ownership rates by area median income (AMI) by state. Of the nation’s families with incomes less than 80 percent of AMI, 49.2 percent own their homes in comparison to 82.6 percent of those with incomes of more than 120 percent of AMI.
- Table 4B shows home ownership rate by state, sorted by homeownership rates, for those with incomes of 0-80 percent of AMI. Homeownership rates are highest among states in the South and Midwest and lowest in the northeastern and western states.
- Table 5 lists home purchase loans by area-wide median income by state. Of the 6.5 million home mortgages made in 2005 for purchase (for which income data is available), 1.4 million were made to families with incomes of less than 80 percent of AMI, 1.6 million were made to those with incomes between 80 percent and 120 percent of AMI, and 3.5 million were made to those with incomes of more than 120 percent of AMI.

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Table 3A. Age of Housing Stock

State	Pre-1950	1950-70	1970-79	1980-89	1990-94	1995-00	Total	Median Yr.
District of Columbia	141,138	88,907	23,859	13,695	3,437	3,809	274,845	1949
New York	3,309,770	2,383,831	866,120	594,390	259,063	266,133	7,679,307	1954
Massachusetts	1,121,552	652,515	336,814	292,701	106,216	112,191	2,621,989	1956
Pennsylvania	2,113,422	1,348,297	709,768	531,986	266,445	279,832	5,249,750	1957
Rhode Island	172,412	119,503	58,999	50,618	20,326	17,979	439,837	1958
Iowa	483,849	291,582	206,519	99,157	61,890	89,514	1,232,511	1959
Connecticut	435,884	444,230	203,377	183,405	56,058	63,021	1,385,975	1961
Illinois	1,555,079	1,453,818	798,295	473,462	268,350	336,611	4,885,615	1962
New Jersey	998,852	1,092,579	462,740	409,978	158,581	187,545	3,310,275	1962
Ohio	1,502,331	1,433,104	757,116	455,996	274,662	359,842	4,783,051	1962
Michigan	1,131,959	1,309,469	722,799	446,197	259,389	364,466	4,234,279	1965
Nebraska	233,764	180,438	136,263	74,294	38,748	59,161	722,668	1965
Wisconsin	722,078	568,136	391,349	249,789	168,838	220,954	2,321,144	1965
Indiana	717,111	676,210	415,562	286,089	178,425	258,922	2,532,319	1966
Kansas	320,648	303,330	193,842	148,455	66,960	97,965	1,131,200	1966
Maine	233,187	115,960	103,806	104,039	46,041	48,868	651,901	1966
South Dakota	98,826	70,291	64,474	37,148	21,746	30,723	323,208	1968
Vermont	101,489	50,693	51,018	50,986	20,546	19,650	294,382	1968
Minnesota	560,322	497,782	375,503	299,068	148,759	184,512	2,065,946	1969
West Virginia	243,886	191,579	156,862	121,243	56,800	74,253	844,623	1969
California	2,092,267	3,942,371	2,504,157	2,098,028	845,325	732,401	12,214,549	1970
Missouri	577,060	657,791	443,860	347,622	176,169	239,515	2,442,017	1970
North Dakota	77,231	67,831	68,376	38,483	15,205	22,551	289,677	1970
Maryland	439,180	610,109	368,974	367,969	179,323	179,728	2,145,283	1971
Montana	101,166	94,581	89,740	54,320	27,750	45,076	412,633	1971
New Hampshire	157,121	103,043	95,757	117,865	34,207	39,031	547,024	1971
Louisiana	285,831	536,443	415,167	339,849	105,327	164,564	1,847,181	1972
Oklahoma	272,451	422,474	339,008	277,098	76,352	127,017	1,514,400	1972
Delaware	59,008	94,198	56,475	60,729	34,348	38,314	343,072	1973
Kentucky	335,067	437,055	350,021	258,318	151,270	219,196	1,750,927	1973
Oregon	299,403	324,817	334,429	176,639	127,309	190,112	1,452,709	1973
Wyoming	46,514	47,728	59,700	38,803	10,382	20,727	223,854	1973
Hawaii	45,073	134,884	120,513	76,517	47,892	35,663	460,542	1974
Washington	475,191	551,760	496,088	397,167	244,670	286,199	2,451,075	1974
Alabama	261,970	511,344	400,128	347,272	187,261	255,736	1,963,711	1975
Idaho	95,144	103,282	129,261	65,869	51,909	82,359	527,824	1975
Tennessee	349,462	618,828	477,097	421,225	233,593	339,238	2,439,443	1975
Virginia	453,297	730,931	570,065	570,178	271,818	307,903	2,904,192	1975
Arkansas	153,008	283,754	265,647	211,664	105,115	153,855	1,173,043	1976
Colorado	261,751	397,786	430,637	317,848	128,619	271,396	1,808,037	1976
Mississippi	135,350	292,914	262,509	214,865	101,265	155,050	1,161,953	1976
Utah	120,546	155,565	169,025	124,012	66,058	133,388	768,594	1976
New Mexico	90,327	189,692	165,774	155,971	69,854	108,961	780,579	1977
Texas	878,981	1,992,190	1,753,545	1,843,009	615,612	1,074,238	8,157,575	1977
North Carolina	449,819	790,390	641,117	692,633	373,721	576,264	3,523,944	1978
South Carolina	194,461	393,873	349,513	362,092	184,176	269,555	1,753,670	1978
Alaska	12,472	48,282	75,095	78,090	17,979	29,060	260,978	1979
Florida	433,564	1,609,340	1,686,263	1,916,430	768,470	888,880	7,302,947	1980
Georgia	337,036	699,471	608,926	721,174	370,878	544,252	3,281,737	1980
Arizona	99,986	390,724	517,059	540,122	230,230	411,068	2,189,189	1982
Nevada	28,525	116,347	159,852	172,290	133,641	216,802	827,457	1986
Total	25,815,821	30,622,052	21,438,863	18,326,847	8,467,008	11,234,050	115,904,641	

Source: U.S. Census Bureau. Data accessed using DataPlace™

The New Energy-Efficient Mortgage

Table 3B. Age of Housing Stock—Percent of State Total

State	Pre-1950	1950-70	1970-79	1980-89	1990-94	1995-00	Median Yr.
Alabama	51.4%	32.3%	8.7%	5.0%	1.3%	1.4%	1975
Alaska	43.1%	31.0%	11.3%	7.7%	3.4%	3.5%	1979
Arizona	42.8%	24.9%	12.8%	11.2%	4.1%	4.3%	1982
Arkansas	40.3%	25.7%	13.5%	10.1%	5.1%	5.3%	1976
California	39.2%	27.2%	13.4%	11.5%	4.6%	4.1%	1970
Colorado	39.3%	23.7%	16.8%	8.0%	5.0%	7.3%	1976
Connecticut	31.4%	32.1%	14.7%	13.2%	4.0%	4.5%	1961
Delaware	31.8%	29.8%	16.3%	9.7%	5.5%	6.9%	1973
District of Columbia	30.2%	33.0%	14.0%	12.4%	4.8%	5.7%	1949
Florida	31.4%	30.0%	15.8%	9.5%	5.7%	7.5%	1980
Georgia	26.7%	30.9%	17.1%	10.5%	6.1%	8.6%	1980
Hawaii	32.3%	25.0%	18.9%	10.3%	5.4%	8.2%	1974
Idaho	31.1%	24.5%	16.9%	10.8%	7.3%	9.5%	1975
Illinois	28.3%	26.7%	16.4%	11.3%	7.0%	10.2%	1962
Indiana	28.3%	26.8%	17.1%	13.1%	5.9%	8.7%	1966
Iowa	35.8%	17.8%	15.9%	16.0%	7.1%	7.5%	1959
Kansas	30.6%	21.7%	19.9%	11.5%	6.7%	9.5%	1966
Kentucky	34.5%	17.2%	17.3%	17.3%	7.0%	6.7%	1973
Louisiana	27.1%	24.1%	18.2%	14.5%	7.2%	8.9%	1972
Maine	28.9%	22.7%	18.6%	14.4%	6.7%	8.8%	1966
Maryland	17.1%	32.3%	20.5%	17.2%	6.9%	6.0%	1971
Massachusetts	23.6%	26.9%	18.2%	14.2%	7.2%	9.8%	1956
Michigan	26.7%	23.4%	23.6%	13.3%	5.2%	7.8%	1965
Minnesota	20.5%	28.4%	17.2%	17.2%	8.4%	8.4%	1969
Mississippi	24.5%	22.9%	21.7%	13.2%	6.7%	10.9%	1976
Missouri	28.7%	18.8%	17.5%	21.5%	6.3%	7.1%	1970
Montana	15.5%	29.0%	22.5%	18.4%	5.7%	8.9%	1971
Nebraska	18.0%	27.9%	22.4%	18.3%	5.0%	8.4%	1965
Nevada	17.2%	27.5%	16.5%	17.7%	10.0%	11.2%	1986
New Hampshire	19.1%	25.0%	20.0%	14.8%	8.6%	12.5%	1971
New Jersey	20.6%	22.4%	23.0%	12.2%	8.8%	13.1%	1962
New Mexico	20.8%	21.3%	26.7%	17.3%	4.6%	9.3%	1977
New York	9.8%	29.3%	26.2%	16.6%	10.4%	7.7%	1954
North Carolina	19.4%	22.5%	20.2%	16.2%	10.0%	11.7%	1978
North Dakota	13.3%	26.0%	20.4%	17.7%	9.5%	13.0%	1970
Ohio	18.0%	19.6%	24.5%	12.5%	9.8%	15.6%	1962
Oklahoma	14.3%	25.4%	19.6%	17.3%	9.6%	13.9%	1972
Oregon	15.6%	25.2%	19.6%	19.6%	9.4%	10.6%	1973
Pennsylvania	13.0%	24.2%	22.6%	18.0%	9.0%	13.1%	1957
Rhode Island	14.5%	22.0%	23.8%	17.6%	7.1%	15.0%	1958
South Carolina	11.6%	25.2%	22.6%	18.5%	8.7%	13.3%	1978
South Dakota	15.7%	20.2%	22.0%	16.1%	8.6%	17.4%	1968
Tennessee	11.6%	24.3%	21.2%	20.0%	8.9%	14.0%	1975
Texas	10.8%	24.4%	21.5%	22.6%	7.5%	13.2%	1977
Utah	12.8%	22.4%	18.2%	19.7%	10.6%	16.4%	1976
Vermont	11.1%	22.5%	19.9%	20.6%	10.5%	15.4%	1968
Virginia	4.8%	18.5%	28.8%	29.9%	6.9%	11.1%	1975
Washington	5.9%	22.0%	23.1%	26.2%	10.5%	12.2%	1974
West Virginia	10.3%	21.3%	18.6%	22.0%	11.3%	16.6%	1969
Wisconsin	4.6%	17.8%	23.6%	24.7%	10.5%	18.8%	1965
Wyoming	3.4%	14.1%	19.3%	20.8%	16.2%	26.2%	1973
Total	22.3%	26.4%	18.5%	15.8%	7.3%	9.7%	

Source: U.S. Census Bureau. Data accessed using DataPlace™

Table 4A. Home Ownership Rates by Area Median Income by 80% AMI (2005)

State	0 to 30%	0 to 50%	0 to 80%	0 to 120%	Over 120%	Total %
Alabama	46.1%	51.7%	57.7%	63.1%	87.4%	72.5%
Alaska	40.0%	40.8%	45.0%	51.5%	79.6%	62.5%
Arizona	42.5%	47.2%	52.5%	58.1%	83.2%	68.1%
Arkansas	42.9%	48.5%	54.3%	59.8%	84.6%	69.4%
California	27.7%	32.0%	37.6%	44.2%	75.2%	56.9%
Colorado	35.4%	41.4%	48.6%	56.3%	85.4%	67.3%
Connecticut	31.7%	38.8%	46.0%	55.3%	85.8%	66.8%
Delaware	42.8%	49.0%	55.7%	62.9%	86.6%	72.3%
Florida	45.0%	50.9%	56.5%	61.3%	83.2%	70.1%
Georgia	40.1%	44.9%	50.8%	56.7%	83.9%	67.5%
Hawaii	26.4%	30.4%	36.9%	43.8%	76.3%	56.5%
Idaho	43.7%	48.8%	56.0%	62.9%	87.6%	72.4%
Illinois	33.0%	41.1%	49.2%	56.8%	84.8%	67.3%
Indiana	38.8%	46.4%	54.6%	61.7%	87.9%	71.4%
Iowa	39.6%	47.6%	56.0%	63.4%	88.3%	72.4%
Kansas	38.4%	44.5%	51.9%	58.8%	86.1%	69.3%
Kentucky	45.1%	50.5%	56.0%	60.9%	86.4%	70.7%
Louisiana	42.1%	47.3%	52.7%	57.7%	83.7%	67.9%
Maine	41.5%	48.2%	55.8%	61.9%	87.5%	71.6%
Maryland	34.9%	40.8%	47.3%	56.6%	85.9%	67.8%
Massachusetts	27.2%	34.6%	41.8%	50.3%	81.0%	61.7%
Michigan	42.6%	49.9%	57.8%	64.7%	88.6%	73.8%
Minnesota	39.5%	47.0%	56.1%	65.4%	91.0%	74.6%
Mississippi	50.2%	54.6%	59.3%	63.5%	85.9%	72.3%
Missouri	39.5%	46.4%	53.8%	60.5%	86.8%	70.3%
Montana	39.6%	45.4%	52.8%	59.1%	85.6%	69.1%
Nebraska	37.1%	43.2%	50.0%	57.2%	85.3%	67.4%
Nevada	33.4%	37.6%	42.9%	49.0%	77.6%	60.9%
New Hampshire	38.2%	45.1%	52.1%	59.8%	86.0%	69.7%
New Jersey	34.0%	40.9%	46.6%	55.0%	82.2%	65.6%
New Mexico	47.5%	50.9%	56.1%	60.6%	83.9%	70.0%
New York	21.8%	28.3%	34.6%	43.0%	68.5%	53.0%
North Carolina	44.1%	48.9%	54.1%	59.5%	84.8%	69.3%
North Dakota	37.2%	42.2%	49.2%	56.6%	84.9%	66.6%
Ohio	35.0%	43.0%	51.4%	58.6%	86.6%	69.1%
Oklahoma	41.7%	46.9%	52.8%	58.2%	84.7%	68.4%
Oregon	32.6%	38.6%	45.4%	52.4%	82.9%	64.2%
Pennsylvania	42.1%	49.2%	56.4%	62.4%	86.4%	71.3%
Rhode Island	24.6%	31.8%	40.5%	46.8%	82.8%	60.0%
South Carolina	48.8%	53.5%	58.4%	63.3%	86.2%	72.2%
South Dakota	37.2%	42.8%	50.6%	58.3%	85.7%	68.2%
Tennessee	42.9%	48.5%	54.3%	59.9%	85.7%	70.0%
Texas	39.4%	43.7%	48.3%	52.9%	80.4%	63.8%
Utah	38.0%	44.5%	53.2%	61.9%	87.9%	71.6%
Vermont	37.6%	45.0%	53.2%	60.4%	87.4%	70.6%
Virginia	38.1%	43.8%	49.8%	56.9%	84.5%	68.1%
Washington	32.2%	37.7%	44.8%	53.0%	83.2%	64.5%
Washington D.C.	17.7%	20.9%	23.8%	30.8%	68.4%	40.7%
West Virginia	47.3%	54.3%	61.9%	66.9%	88.2%	75.2%
Wisconsin	34.4%	41.9%	50.0%	58.1%	86.8%	68.4%
Wyoming	43.0%	47.7%	54.1%	60.2%	86.2%	70.0%
Total	36.4%	42.5%	49.2%	55.8%	82.6%	66.2%

Source: U.S. Census Bureau. Data accessed using DataPlace™

Table 4B. Home Ownership Rates by Area Median Income by 80% AMI (2000)

State	0 to 30%	0 to 50%	0 to 80%	0 to 120%	Over 120%	Total %
West Virginia	47.3%	54.3%	61.9%	66.9%	88.2%	75.1%
Minnesota	39.5%	47.0%	56.1%	65.4%	91.0%	75.4%
Michigan	42.6%	49.9%	57.8%	64.7%	88.6%	74.2%
Alabama	46.1%	51.7%	57.7%	63.1%	87.4%	72.5%
Idaho	43.7%	48.8%	56.0%	62.9%	87.6%	73.0%
Iowa	39.6%	47.6%	56.0%	63.4%	88.3%	72.8%
Mississippi	50.2%	54.6%	59.3%	63.5%	85.9%	71.9%
Delaware	42.8%	49.0%	55.7%	62.9%	86.6%	72.3%
South Carolina	48.8%	53.5%	58.4%	63.3%	86.2%	72.5%
Maine	41.5%	48.2%	55.8%	61.9%	87.5%	72.1%
Utah	38.0%	44.5%	53.2%	61.9%	87.9%	72.0%
Indiana	38.8%	46.4%	54.6%	61.7%	87.9%	71.8%
Pennsylvania	42.1%	49.2%	56.4%	62.4%	86.4%	71.4%
Kentucky	45.1%	50.5%	56.0%	60.9%	86.4%	70.4%
Vermont	37.6%	45.0%	53.2%	60.4%	87.4%	70.1%
Missouri	39.5%	46.4%	53.8%	60.5%	86.8%	70.6%
Florida	45.0%	50.9%	56.5%	61.3%	83.2%	69.7%
New Mexico	47.5%	50.9%	56.1%	60.6%	83.9%	69.8%
Wyoming	43.0%	47.7%	54.1%	60.2%	86.2%	70.0%
Tennessee	42.9%	48.5%	54.3%	59.9%	85.7%	69.7%
New Hampshire	38.2%	45.1%	52.1%	59.8%	86.0%	69.6%
Arkansas	42.9%	48.5%	54.3%	59.8%	84.6%	69.2%
North Carolina	44.1%	48.9%	54.1%	59.5%	84.8%	68.6%
Kansas	38.4%	44.5%	51.9%	58.8%	86.1%	69.6%
Ohio	35.0%	43.0%	51.4%	58.6%	86.6%	69.0%
Montana	39.6%	45.4%	52.8%	59.1%	85.6%	69.1%
Wisconsin	34.4%	41.9%	50.0%	58.1%	86.8%	68.5%
Oklahoma	41.7%	46.9%	52.8%	58.2%	84.7%	69.2%
South Dakota	37.2%	42.8%	50.6%	58.3%	85.7%	68.7%
Virginia	38.1%	43.8%	49.8%	56.9%	84.5%	67.7%
Arizona	42.5%	47.2%	52.5%	58.1%	83.2%	68.2%
Louisiana	42.1%	47.3%	52.7%	57.7%	83.7%	67.9%
Maryland	34.9%	40.8%	47.3%	56.6%	85.9%	68.0%
Georgia	40.1%	44.9%	50.8%	56.7%	83.9%	66.3%
Nebraska	37.1%	43.2%	50.0%	57.2%	85.3%	67.7%
Colorado	35.4%	41.4%	48.6%	56.3%	85.4%	67.5%
Illinois	33.0%	41.1%	49.2%	56.8%	84.8%	67.6%
Connecticut	31.7%	38.8%	46.0%	55.3%	85.8%	66.6%
North Dakota	37.2%	42.2%	49.2%	56.6%	84.9%	67.0%
New Jersey	34.0%	40.9%	46.6%	55.0%	82.2%	65.6%
Washington	32.2%	37.7%	44.8%	53.0%	83.2%	63.9%
Oregon	32.6%	38.6%	45.4%	52.4%	82.9%	64.3%
Texas	39.4%	43.7%	48.3%	52.9%	80.4%	63.8%
Alaska	40.0%	40.8%	45.0%	51.5%	79.6%	61.9%
Massachusetts	27.2%	34.6%	41.8%	50.3%	81.0%	61.9%
Nevada	33.4%	37.6%	42.9%	49.0%	77.6%	60.6%
Rhode Island	24.6%	31.8%	40.5%	46.8%	82.8%	60.6%
California	27.7%	32.0%	37.6%	44.2%	75.2%	52.4%
Hawaii	26.4%	30.4%	36.9%	43.8%	76.3%	56.4%
New York	21.8%	28.3%	34.6%	43.0%	68.5%	52.2%
Washington D.C.	17.7%	20.9%	23.8%	30.8%	68.4%	44.9%
Total	36.4%	42.5%	49.2%	55.8%	82.6%	66.2%

Source: U.S. Census Bureau. Data accessed using DataPlace™

Table 5. Home Purchase Loans to All Households by Income (2005)

State	Very Low	Low	Middle	High	Total
Alabama	5,933	15,378	18,034	34,174	73,519
Alaska	754	2,486	3,746	4,349	11,335
Arizona	6,411	33,751	64,025	161,927	266,114
Arkansas	2,763	7,210	9,293	18,968	38,234
California	4,073	26,959	123,841	719,404	874,277
Colorado	8,556	34,143	41,755	65,759	150,213
Connecticut	3,957	16,437	21,396	28,323	70,113
Delaware	1,448	4,120	5,504	10,192	21,264
District of Columbia	563	2,547	4,234	7,937	15,281
Florida	12,265	63,254	140,987	443,628	660,134
Georgia	17,985	56,920	62,217	91,316	228,438
Hawaii	31	1,969	4,733	19,483	26,216
Idaho	2,522	8,585	11,575	24,213	46,895
Illinois	15,230	62,784	89,766	118,565	286,345
Indiana	13,057	28,623	29,026	37,246	107,952
Iowa	6,848	13,257	13,244	14,440	47,789
Kansas	4,544	11,185	13,136	17,320	46,185
Kentucky	5,204	13,247	15,726	25,410	59,587
Louisiana	3,671	10,594	14,909	30,647	59,821
Maine	966	3,681	6,175	10,528	21,350
Maryland	6,931	31,323	48,765	65,810	152,829
Massachusetts	4,591	22,880	40,993	58,231	126,695
Michigan	17,345	48,393	49,458	60,813	176,009
Minnesota	10,072	32,977	32,957	37,189	113,195
Mississippi	2,016	5,924	8,069	17,796	33,805
Missouri	13,454	29,937	31,289	41,681	116,361
Montana	591	2,108	3,562	7,457	13,718
Nebraska	2,729	6,529	7,028	8,227	24,513
Nevada	1,426	9,785	28,954	84,603	124,768
New Hampshire	1,065	4,967	8,799	11,954	26,785
New Jersey	4,845	23,612	47,272	90,831	166,560
New Mexico	1,607	5,499	8,514	22,573	38,193
New York	7,413	26,552	52,178	138,381	224,524
North Carolina	12,430	38,030	45,325	90,220	186,005
North Dakota	715	1,986	2,502	2,946	8,149
Ohio	19,605	49,035	52,002	72,560	193,202
Oklahoma	4,194	10,803	13,307	24,731	53,035
Oregon	3,985	21,217	29,769	48,968	103,939
Pennsylvania	13,764	40,894	52,646	87,737	195,041
Rhode Island	400	3,110	7,181	10,164	20,855
South Carolina	6,929	18,322	22,329	51,830	99,410
South Dakota	968	2,437	3,157	4,580	11,142
Tennessee	9,913	27,599	31,596	53,139	122,247
Texas	21,071	84,036	117,634	244,796	467,537
Utah	4,891	18,652	21,483	33,924	78,950
Vermont	524	1,929	2,674	4,522	9,649
Virginia	7,159	33,776	61,740	100,168	202,843
Washington	6,933	33,450	55,812	85,179	181,374
West Virginia	1,448	3,620	5,335	11,615	22,018
Wisconsin	8,620	25,362	29,533	36,665	100,180
Wyoming	633	2,381	3,105	3,920	10,039
Total	315,048	1,084,255	1,618,290	3,497,039	6,514,632

Source: Home Mortgage Disclosure Act data, Federal Financial Institutions Examination Council, and various data sets from the U.S. Census Bureau. Data accessed using DataPlace™

NEXT STEPS

This initiative is moving quickly. For instance:

- The National Association of State Energy Officials' Board endorsed the initiative at its December 2006 meeting.
- A pilot energy efficiency mortgage project is being developed in 10 states. The project is designed as a model for all states and will include similar audit, income qualifying ratios and other factors is designed to make the product acceptable to lenders and investors. The pilot states are considering various subsidy options, including interest-rate buy downs and use of tax-exempt bonds to increase the attractiveness of the product. In addition, for those with low and moderate incomes, the states are considering strategies to incorporate weatherization and other energy efficiency grant subsidies. A marketing campaign is being developed to increase its visibility.
- An expanded network of nonprofits will be supported through loan brokering activity to participate in the effort to reach low-income, minority and rural homeowners currently captured by predatory lenders. The revenue from the loan brokering activity will be shared with referral nonprofits, including weatherization providers, loan counseling organizations and state-supported second mortgage and deferred loan program providers. Qualified nonprofits are being identified to pilot the launch of this product in conjunction with approved lender(s). In addition, a pilot mortgage brokerage company is being established by Action Energy (Gloucester, Mass.) and the Massachusetts Affordable Housing Alliance, with funding from the Ford Foundation and other agencies, to directly market energy efficient mortgages to low- and moderate-income households in the Greater Boston and eastern Massachusetts areas.

THE STATE WORKING GROUP ON ENERGY EFFICIENCY AND MORTGAGE LENDING

The purpose of the Working Group is to develop a new state-sponsored energy efficient mortgage product that will allow families to borrow additional amounts to pay for cost-effective energy efficiency improvements not covered by grants, and, in some cases, also allow them to “stretch” the income qualifying ratio allowing families to use the utility savings to qualify for additional borrowing. These mortgages can also play a significant role in helping to reduce the nation’s carbon emissions from home energy use, as well as increase the affordability of home ownership for low-and-moderate income households.

The Working Group was established as a result of the lessons learned from the Weatherization, Rehab and Asset Preservation Partnership (WRAP), a five-year demonstration program funded by the Ford Foundation and state agencies and local and regional foundations, to develop new strategies to sustain low-and-moderate income home ownership. One of the key lessons learned from the WRAP pilot programs is that many of these families are burdened by high interest rate mortgages and energy bills and there is no readily available mortgage product that can help them refinance their mortgage and integrate energy efficiency and other improvement that can help to increase the overall affordability of their home.

EPC is a non-profit research and demonstration organization sponsored by the four national organizations representing state energy and public utility officials: the National Association for State Community Services Programs; National Association of State Energy Officials; National Association of State Regulatory Utility Commissioners and National Energy Assistance Directors’ Association.

The Working Group is supported by grants from the: Ford, Heron and Surdna Foundations; state energy and housing finance agencies; U.S. Environmental Protection Agency and the U.S. Department of Energy.

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