# TOWARD A SUSTAINABLE AND RESPONSIBLE EXPANSION OF AFFORDABLE MORTGAGES FOR MANUFACTURED HOMES



A Report from the I'M HOME Loan Data Collection Project

MARCH 2013





## **ABOUT THE AUTHORS**

**Howard Banker** is the Executive Director, and a founding member of the Fair Mortgage Collaborative, a nonprofit organization that works to improve mortgage lending for low- and moderate-income households. Howard has spent over thirty years working in the fields of affordable housing finance, although he began as a community organizer in the Bronx, New York. He has experience managing all facets of financial products, including loan originations, loan sales and securitization, loan counseling, loan servicing and loan collections while integrating the use of private and public capital. He has worked primarily but not exclusively for nonprofit financial intermediaries.

Howard received an M.S. in Urban and Regional Planning from Pratt Institute and a B.A in Medieval Studies from Fordham University.

**Robin LeBaron** is the Deputy Director of the Fair Mortgage Collaborative. He also serves as the Managing Director of the National Home Performance Council, a national nonprofit organization that promotes residential energy efficiency through research and stakeholder engagement, where, among other projects, he has promoted reform of utility cost-effectiveness tests and national data standards. Robin has spent the past twenty years working in the fields of affordable housing, community development and residential energy efficiency. Prior to joining the Fair Mortgage Collaborative and the National Home Performance Council, he served as Executive Director of Hope Community, Inc., an East Harlem-based nonprofit that owned and managed more than 1,200 units of affordable housing.

Robin received a Ph.D. in Anthropology from the New School for Social Research, and a B.A. in Political Science and Anthropology from McGill University.

The authors welcome comments and suggestions regarding these issues, particularly regarding ways to improve or add to the paper's recommendations. All comments should be sent to **hbanker@fairmortgage.org** or **rlebaron@fairmortgage.org**.

Copyright © 2013 by the Corporation for Enterprise Development

The materials from this publication can be used by individuals for their own purposes and can be quoted with credit to writers, original source information and the Corporation for Enterprise Development (CFED). Copies of any material quoting from this publication would be appreciated. The use and duplication of these materials requires permission from CFED, the original owner, unless otherwise identified.





© Geoff Forester Photography, courtesy New Hampshire Community Loan Fund

© New Hampshire Community Loan Fund

### ACKNOWLEDGEMENTS

A special acknowledgement is extended to Data Project participants, both for sharing loan data and permitting their names to be used in this Report. In each case, both senior management and staff were interested in furthering greater understanding of manufactured home loan performance through data aggregation and analysis. While partly motivated by an interest in how their portfolios performed compared to similar portfolios, their enthusiastic support of the I'M HOME Loan Data Collection Project effort and their attention to and interest in our follow-up questions strongly suggest a keen desire to continuing to support affordable MH lending. These organizations include: BECU; Bank2; Community Development Bank; Delaware State Housing Authority; Hope Credit Union; Idaho Housing and Finance Agency; MaineHousing; Minnesota Housing; Montana Board of Housing; New Hampshire Community Loan Fund; New Hampshire Housing Finance Authority; New Mexico Community Development Authority; Pennsylvania Housing Finance Authority; Self-Help Credit Union; State of New York Mortgage Authority; Texas Department of Housing and Community Affairs; Vermont Housing Finance Agency; Wyoming Community Development Authority; the United States Department of Agriculture, and Washington State Housing Finance Commission. New Hampshire Community Loan Fund was and remains an enthusiastic Project participant and is an engaged and evolving MH lender: their ongoing enthusiasm and interest is infectious. Jennifer Hopkins, SF Program Manager, New Hampshire Community Loan Fund; Brian Hudson, Executive Director & CEO Pennsylvania Housing Finance Agency; Susan Semba, VP Homeownership Lending Idaho Housing and Finance Association; and Joyce Allen, Deputy Administrator Rural Housing Service - Single Family Division, United States Department of Agriculture were particularly generous in support of this project.

The authors wish to thank the many people who assisted with this paper. Special thanks are due to Anne Li of CFED, who read and improved multiple drafts. Anita Drever and Lebaron Sims, also of CFED, provided very helpful guidance and advice regarding the data analysis. FMC consultant Benjamin Baker exhibited great patience while cleaning and organizing the data and creating the tables included in the final report as did Marvin Henry in supporting data aggregation. Cheryl Pahaham carefully reviewed the data and conducted the regression analyses. David Moffat and Richard Hornaday, the CEO and SVP, respectively, of the data management and analysis firm Northpoint Solutions, identified and supported the analysis and use of OCC loan performance data. Finally, thanks are due to Nicholas Banker for his back-up support in reviewing, cleaning and organizing the data. The authors are exceedingly grateful to these knowledgeable professionals, who generously gave their time to explain issues and share their concerns and advice. Any errors or omissions in this paper should be attributed to the authors, rather than to any of those mentioned above.

CFED gratefully acknowledges the support of the Ford Foundation, NeighborWorks<sup>®</sup> America and Fannie Mae for I'M HOME. CFED also extends its sincere thanks to participants in a February 2013 Roundtable whose thoughtful comments enhanced the final stages of this Report and its recommendations.



# FAIR MORTGAGE COLLABORATIVE (FMC)

FMC provides consumers and nonprofit financial intermediaries and lenders with education, research and support built around providing Fair and Safe loans to qualified low and moderate income individuals and families for all homeownership options including manufactured housing. We support the design and delivery of affordable and sustainable loan product offerings for low and moderate income families and identify and advocate against predatory lending products. We pilot national, regional and local lending programs to demonstrate the efficacy of lending to our target population.

FMC was established in 2008 and works from its offices in New York City, New York. www.fairmortgage.org



# I'M HOME

Innovations in Manufactured Homes (I'M HOME) is a national initiative managed by CFED which seeks to ensure that owners of manufactured homes have the opportunity to build wealth through homeownership by improving the quality of new and replacement development, enhancing homeowners' ability to enjoy long-term land security, expanding access to safe home financing and encouraging a supportive policy environment.

Since 2005, CFED, national partners including the Ford Foundation, Fannie Mae, NeighborWorks<sup>®</sup> America, NCB Capital Impact, Next Step <sup>®</sup> and ROC USA<sup>TM</sup>, and the I'M HOME network have worked to unlock manufactured housing's potential through I'M HOME.

### www.cfed.org/programs/innovations\_manufactured\_homes



### CFED

CFED empowers low- and moderate-income households to build and preserve assets by advancing policies and programs that help them achieve the American Dream, including buying a home, pursuing higher education, starting a business and saving for the future. As a leading source for data about household financial security and policy solutions, CFED understand what families need to succeed. We promote programs on the ground and invest in social enterprises that create pathways to financial security and opportunity for millions of people.

Established in 1979 as the Corporation for Enterprise Development, CFED works nationally and internationally through its offices in Washington, DC; Durham, North Carolina; and San Francisco, California. www.cfed.org

# TABLE OF CONTENTS

EXECUTIVE SUMMARY	5
I. INTRODUCTION	7
II. MANUFACTURED HOUSING SINGLE-FAMILY FINANCE	9
III. METHODOLOGY	13
IV. FINDINGS	21
V. NEED FOR BETTER DATA COLLECTION AND ANALYSIS	39
VI. RECOMMENDATIONS	41

# **Appendices**

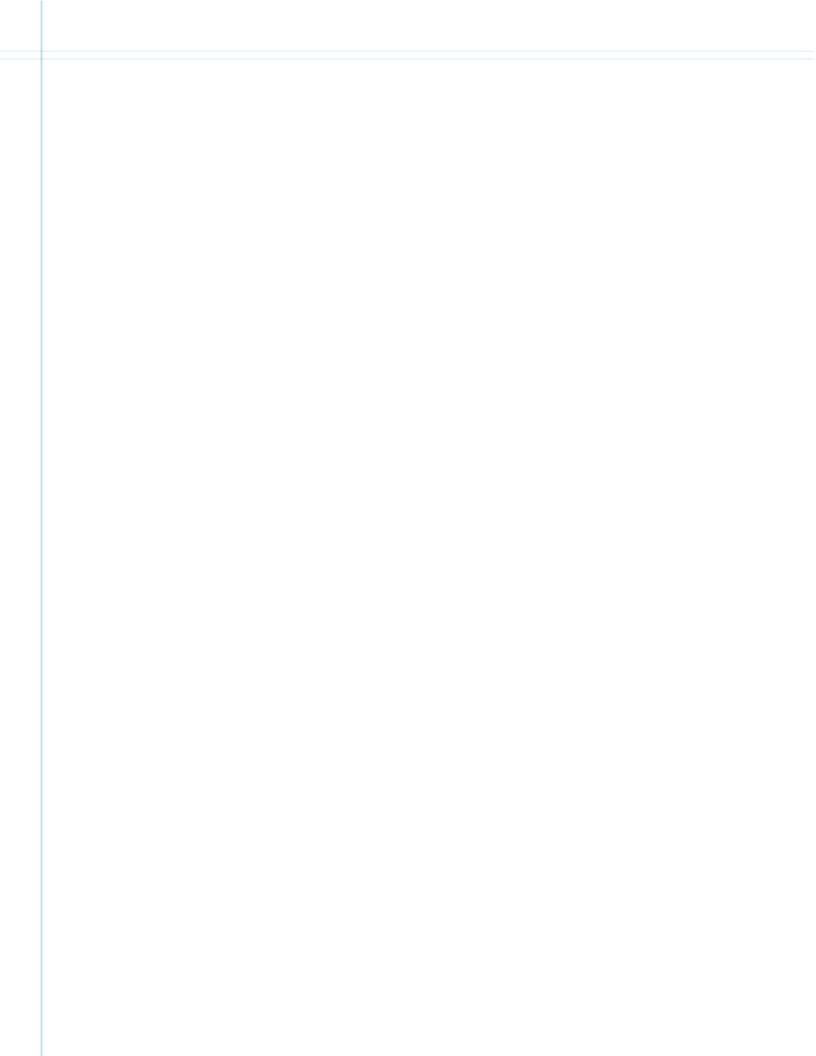
APPENDIX A. COMPARISON OF CHATTEL AND MORTGAGE LOAN COSTS AND PAYMENTS

APPENDIX B.

FULL SET OF DATA FIELDS IN ORIGINAL PROJECT DATA REQUESTS

APPENDIX C. STATISTICAL ANALYSIS

APPENDIX D. TABLES NOT INCLUDED IN NARRATIVE



# **Executive Summary**

The I'M HOME Loan Data Collection Project was initiated in 2011 to collect and analyze origination and performance data for manufactured home (MH) single family loans with the goal of answering the following questions:

- To what extent and from what sources can lowand moderate-income (LMI) households obtain MH single-family loans?
- How well do manufactured housing loans perform, and how does their performance compare with that of mortgage loans for site-built homes?
- Are there products or underwriting features that are correlated with more successful loan performance?



© CFED

The Project's long-term goal is to expand access to and availability of affordable financing to low- and moderate-income (LMI) owners and buyers of manufactured homes to enhance household financial security and opportunities for wealth building. As an early step toward this goal, CFED and the Fair Mortgage Collaborative (FMC) addressed the need for more information about MH loans by collecting a large set of data about origination and performance of manufactured homes mortgage loans, totaling \$1.7 billion at origination.

We analyzed this data with the goal of identifying best practices in the finance of affordable and sustainable MH homeownership to share with lenders, investors and government insurance and loan programs with the ultimate aim of expanding high quality, affordable MH finance products and practices.

The data analysis produced the following main findings:

- 1. A variety of lenders and investors provide home mortgage products to owners and buyers of manufactured homes
- 2. Manufactured home mortgage performance is comparable to general mortgage performance and certain manufactured housing mortgage portfolios *outperform* comparable general mortgage portfolios
- 3. Conventional underwriting criteria such as higher FICO scores, low loan-to-value (LTV) and debt-to-income (DTI) ratios are strongly related to higher loan performance; however, certain MH products and providers demonstrate that conventional underwriting is *not necessary* for strong performance
- 4. Strong performance can be achieved by manual underwriting even with less restrictive downpayment and credit requirements

- 5. Servicing loans with "high-touch" protocols achieves the strongest performance even with low downpayments and other features perceived to involve higher risk
- 6. As an investor group, Housing Finance Agencies demonstrate superior performance to others with the same loan product
- 7. The research conducted for the project resulted in indirect evidence suggesting that homeowner education and counseling result in better loan performance, but the data obtained through the Project was inadequate to properly test this relationship
- 8. Data shortcomings are widespread and a serious barrier to understanding the factors that contribute to loan performance; improved and standardized data collection and reporting is an urgent need whose importance goes beyond loan underwriting and investment practices to the shape of the nation's future affordable housing landscape

The Report contains recommendations that fall into three major categories:

- Improve the quality of data and analysis on affordable loans for manufactured homes to build the evidence base needed to attract more lenders and investment
- Promote product development and innovation among lenders and investors to generate higher volume of affordable MH loans with sustainable performance
- Mobilize a range of stakeholders to integrate the comprehensive MH value proposition one that accounts for energy efficiency, cost savings, housing choice and more into mainstream policies shaping the future of housing affordability in the United States

A number of specific steps to consider are described in the Report's Section VI. "Recommendations."

# **I. Introduction**

The I'M HOME Loan Data Collection Project (the Data Project) was initiated in 2011 to collect and analyze origination and performance data for manufactured home (MH) single-family loans with the goal of answering the following questions:

- To what extent and from what sources can low- and moderate-income (LMI) households obtain MH single-family loans?
- How do manufactured housing loans perform, and how does their performance compare with that of mortgage loans for site-built homes?
- Are there products or underwriting features that are correlated with more successful loan performance?



<sup>©</sup> Geoff Forester Photography, courtesy New Hampshire Community Loan Fund

Innovations in Manufactured Homes (I'M HOME) is a national initiative managed by the Corporation for Enterprise Development (CFED) which seeks to ensure that owners of manufactured homes have the opportunity to build wealth through homeownership by improving the quality of new and replacement development, enhancing homeowners' ability to enjoy long-term land security, expanding access to safe home financing and encouraging a supportive policy environment. As an initiative of I'M HOME, the Data Project's long-term goal is to expand access to and availability of affordable financing for low- and moderate-income (LMI) owners and buyers of manufactured homes so as to enhance their household financial security and opportunities for wealth building.

Finding an almost complete lack of public and relevant MH loan data to answer our questions, CFED and its Data Project partner, the Fair Mortgage Collaborative (FMC) invited a wide set of institutions to share data about origination and performance of manufactured home loans in existing portfolios. The resulting usable dataset totals \$1.7 billion in loan volume at origination. We analyzed this data to understand loan performance and to gain insights into best practices in the finance of affordable and sustainable MH homeownership. Through this Report, we seek to share our findings and recommendations for next steps with lenders, investors and government insurance and guarantee programs to move toward our overarching goals by expanding high quality MH finance products and practices.



# **II. Manufactured Housing Single-Family Finance**

More than seventeen million Americans – approximately 5% of the U.S. population – live in a manufactured home. Manufactured homes are constructed in factory conditions to the specifications of the "HUD Code," a national standard first implemented by the U.S. Department of Housing and Urban Development (HUD) in 1976 to ensure the "safety, quality and durability of manufactured homes." Manufactured homes are built in a wide range of sizes and styles for many different market segments, from families with children to singles and retirees. Manufactured homes are well suited to rural locations, although they can also be found in urban and suburban settings, and they are marketed to a broad range of incomes, from low- and moderate-income to affluent households.

Manufactured housing is particularly important as an affordable housing resource, and currently represents the largest supply of new affordable housing units in the U.S. In 2009, the median household income of households in manufactured homes was under \$30,000 – well below the national average of \$49,777. More than one-fifth (22%) of manufactured housing residents have incomes at or below the federal poverty level.<sup>1</sup>

Access to affordable financing is an important part of the affordable housing equation. Financing that has affordable rates and fees, combined with fair terms and monthly payments that allow for other living expenses and a margin for saving, is essential for lower-income households to attain and maintain financial security. Affordable, long-term financing is also necessary so that homeowners have the opportunity to build wealth through asset appreciation.

There are two serious challenges for households seeking to finance manufactured homes:

- Owners and buyers of manufactured homes tend to pay more for financing, in part due to the way many manufactured homes are titled
- Even when manufactured homes can be titled in the same way as site-built homes, there are many fewer options for mortgage financing

### **Differences in titling**

The majority of the manufactured homes in the U.S. are titled as "personal property" – the same type of property as a car or boat – as opposed to the way that site-built homes are titled as real estate or "real property;" in 2008, for example, approximately one third of new manufactured homes were titled as personal property.<sup>2</sup> Titling is governed by state laws that reflect the origins of the industry in the mobile camping trailers of the 1920s and 1930s. This convention has not reflected reality for decades: modern manufactured homes (i.e., those built to the HUD Code) are designed to be permanent homes, and the vast majority is never moved from their original sites. Nevertheless, most manufactured homes are titled as personal property.

' "Manufactured Housing Fact Sheet," CFED, March 2, 2013, http://cfed.org/assets/pdfs/manufactured\_housing/Manufactured\_Housing\_Fact\_Sheet\_10.17.2011.pdf.

<sup>2</sup> "Manufactured Housing Resource Guide: Conventional Mortgage Financing," CFED & National Consumer Law Center. June 2010, http://cfed.org/assets/pdfs/ ConventionaMortgagelFinancing\_June2010.pdf. Manufactured homes titled as personal property are not eligible for long-term mortgages<sup>3</sup> like most homes. These homeowners and buyers can only access "chattel" or personal property loans. Chattel loans generally feature maximum terms of fifteen to twenty years, in contrast to the common 30-year mortgage. Chattel loans typically feature higher interest rates than mortgages: current rates range between 6% and 14%, depending on the borrower's credit history and the size of the downpayment, compared to 2.5% to 5% for mortgages at the present time. Higher interest rates and shorter terms combine to create significantly higher monthly payments for chattel loans borrowers. Chattel loans generally involve lower closing costs than mortgage loans because mortgages typically require more expensive appraisal, title insurance and other services, but the higher closing costs can typically be recovered through lower monthly payments within a matter of months.<sup>4</sup>

Many state laws allow owners to convert the title on their manufactured home from personal property to real property under certain circumstances; however, those provisions are not a solution to the problem. The requirements for conversion of title effectively prevent many homes, such as those on leaseholds in communities, for example, from becoming titled as real property. Differences in provisions from state to state discourage government-sponsored enterprises (GSEs) and other national financial institutions from creating national investment programs for MH loans.

A major recent development is expected to transform this picture. In July 2012, the Uniform Law Commission unanimously adopted a Uniform Manufactured Housing Act that would give all manufactured housing owners and buyers the option of titling their homes as real property.<sup>5</sup> Once adopted by states, the Uniform Manufactured Housing Act will provide a clear and consistent process for owners and buyers to choose the real property titling option and thereby qualify for mortgage finance. The market for mortgages for manufactured homes can be expected to grow significantly with more homes titled as real property, and because of consistency across states that is sought by lenders and investors, including secondary markets.

### Fewer options for mortgage financing

An estimated one-quarter to one-third of manufactured homes are already titled as real property and therefore can qualify for mortgage financing.<sup>6</sup> However, even these manufactured housing buyers and owners typically have many fewer options than buyers seeking to finance site-built or even other forms of factory-built homes, such as modular homes, because many mortgage lenders exclude or avoid providing mortgages on manufactured homes. In some cases, lenders may avoid MH on the grounds that MH loans are "difficult" to make or sell. Indeed, Fannie Mae and Freddie Mac, the government-sponsored entities (GSEs) that purchase a substantial majority of the mortgage loans made in the U.S., distinguish between manufactured housing

<sup>3</sup> "Mortgage" is used to mean a legal document by which the owner (or buyer) transfers to the lender an interest in real estate to secure the repayment of a debt, and the mortgage note evidencing the debt.

<sup>4</sup> See Appendix A for calculations comparing costs for a chattel loan to a mortgage.

- <sup>5</sup> The Uniform Manufactured Housing Act provides that the homeowner or buyer has the option (not the requirement) to title a manufactured home as real property, whether it is on land owned in fee simple or on leased land. See the Uniform Law Commission's website for more information at http://www.uniformlaws.org/NewsDetail.aspx?title+Uniform%20Manufactured%20Housing%20Act%20Approved.
- <sup>6</sup> "Manufactured Housing Resource Guide."

loans and other mortgage loans. Fannie and Freddie maintain a distinct set of criteria for mortgages secured by manufactured housing that include more demanding appraisal requirements<sup>7</sup> and, for some lenders, an extra pricing charge. Fannie Mae does not permit state housing finance agencies (HFAs) to include MH mortgages in their preferred pricing programs for securitized loan sales. Most lenders follow the lead established by the GSEs (whether or not they actually sell loans to the GSEs) and treat manufactured housing mortgages as different than mortgages for site-built homes. Many lenders simply avoid MH entirely.

It seems that the predominant reason that lenders do not make MH mortgage loans is a widespread perception that manufactured housing mortgage loans do not perform as well as mortgages secured by site-built homes. Since very little quantitative research has been conducted on manufactured housing loan performance, such assumptions about manufactured housing mortgage loan performance are likely to have been based largely on conjecture or on the performance of individual portfolios.

While many mortgage lenders exclude manufactured housing, there are a number of lenders and investors that currently offer mortgages on manufactured homes. These are an important segment that serves thousands of households each year, many of low- and moderate-income. To our great appreciation, some of the lenders, investors and government programs serving this market participated in the Data Project, making it possible to take an objective look at the performance of MH mortgages.

<sup>7</sup> Robin LeBaron, Real Homes, Real Value: Challenges, Issues and Recommendations Concerning Real Property Appraisals of Manufactured Homes (Washington, DC: CFED, 2012), 13, 17-24.



# **III. Methodology**

### Data Project Participants and the MH Mortgage Dataset

For the Data Project, CFED and FMC made requests for data from a wide range of organizations known to originate or purchase manufactured housing loans. Organizations were invited to participate voluntarily and without remuneration;<sup>8</sup> they were assured that their identities would not be disclosed without their permission.<sup>9</sup> Twenty-three organizations responded. Generally speaking, participants in the Data Project were interested in improving their own understanding of MH loan performance as well as in contributing to an improved body of knowledge on this subject. As part of the Data Project, each data provider was given a confidential analysis comparing their portfolio to comparable ones which included the same or similar loan product types and underwriting requirements, allowing for useful comparisons to support their better understanding of some of the underlying reasons for loan performance.

Although the Data Project originally intended to study both chattel and mortgage loans, chattel loan providers, with one exception, did not respond with data. One organization reported a small number of chattel loans, as well as a larger set of mortgage loans. Due to the small number, the chattel loans were not included in our analysis.<sup>10</sup> Three organizations submitted mortgage loan information that did not contain data that were necessary to analyze loan performance; their data was not included in the analysis. In the end, the dataset (hereinafter known as the "MH Mortgage Dataset") analyzed here contains only mortgage loan information from 20 organizations: the United States Department of Agriculture (USDA), 13 state Housing Finance Agencies (HFAs), three credit unions, two banks, and one community loan fund which is also a community development financial institution (CDFI).<sup>11</sup>

*An alphabetical listing of Project participants that have given us permission to list their names includes:* 

	-	$\sim$	
к		( I	
0	_		-

Bank2 Community Development Bank Delaware State Housing Authority Hope Credit Union Idaho Housing & Finance Association MaineHousing Minnesota Housing Finance Agency Montana Board of Housing New Hampshire Community Loan Fund New Hampshire Housing Finance Authority New Mexico Community Development Authority Pennsylvania Housing Finance Agency Self-Help Credit Union State of New York Mortgage Agency Texas Department of Housing & Community Affairs U.S. Department of Agriculture Vermont Housing Finance Agency Washington State Housing Finance Commission Wyoming Community Development Authority

<sup>8</sup> Data from one participant were received through a Freedom of Information Act request.

<sup>9</sup> Listed participants subsequently granted permission for the Data Project to list their names.

<sup>10</sup> Compiling and analyzing chattel data, not possible in this Report due to the lack of chattel data shared, will be important to improving the understanding of how MH loans perform. (See Section VI. Recommendations.)

<sup>11</sup> CDFIs are financial institutions certified by the U.S. Treasury Department CDFI Fund as serving low and moderate-income (LMI) population's needs, as well as meeting a number of other requirements. In addition to the loan fund, other Project participants are CDFIs.

Tables showing data by provider use "Organization Numbers" that were assigned anonymously and not in alphabetical order. While there are 20 data providers, the USDA data were divided into Direct and Guaranteed sets and assigned two Organization Numbers, for a total of 21 Organization Numbers.

## **Data Elements Requested**

From each organization, CFED and FMC requested data that would enable analysis of manufactured housing loan origination and performance. A total of 50 data fields were requested, none of which included nonpublic personal information.<sup>12</sup>

Basic loan characteristics requested included:

- Date (year) of origination
- First payment date
- Loan amount at origination
- Interest rate, fixed or adjustable
- Location of home and property securing loan by state
- Loan product type
- Type of mortgage insurance, coverage and company, if any

Underwriting parameters recorded for each loan requested included:

- Middle FICO score
- Loan-to-value (LTV) ratio
- Debt-to-Income ratios (DTI) (front- and back-end)
- Loan interest rate
- Monthly payment (both principal & interest, "P&I," and principal, interest, taxes and insurance, "PITI")

Loan performance and delinquency details were also requested. Project participants were asked to identify whether loans were paid in full (PIF), current, late, or in foreclosure. If loans were late, participants were asked by how many days: 30, 60, 90, 120 or more than 120.<sup>13</sup>

Participants were invited to provide the data to the extent that they were able, with the understanding that they might not be able to provide all fields, or might have information in a format different than that requested. In some cases, participants indicated that they needed to compile information from more than one database system; for example, an origination system and a servicing system. No participant was able to provide all the data fields requested.

### Data Review and "Clean-up"

Each participant's total loan set was reviewed for usability and internal consistency. All second mortgages (equity loans), site-built mortgages and other non-MH loans were removed (900 loans totaling \$1.338 billion). The remaining loans were reviewed to ensure that sufficient information for analysis was provided about each loan. (Three providers' datasets totaling 703 loans for \$75.1 million were removed because they did not provide enough data for analysis. Individual records from other providers were also removed for this reason.) After removing unusable loans, the MH Mortgage Dataset contains useable data on 16,557 loans totaling \$1.652 billion at origination.

<sup>&</sup>lt;sup>12</sup> A full list of all requested data fields is provided as Appendix B.

<sup>&</sup>lt;sup>13</sup> See section, "Performing versus Nonperforming Loans," on p. 16.

# Years of Loan Origination

Loan data were received for loans originated as far back as 1982. Loans with significant remaining balances are concentrated in years from 2001 through 2012. The totals by year are shown in the following table.<sup>14</sup>

YEAR	LOANS (#)	ORIGINAL BALANCE	CURRENT BALANCE	PERFORMANCE (% OF CUR. BAL.)
1982		\$266,875	\$0	N/A
1983	2	\$57,925	\$0	N/A
1984	4	\$162,550	\$0	N/A
1985	4	\$171,900	\$0	N/A
1986	6	\$282,930	\$0	N/A
1987	0	\$0	\$0	N/A
1988		\$499,301	\$24,706	100.0%
1989	28	\$1,335,606	\$45,898	100.0%
1990	17	\$836,539	\$49,581	100.0%
1991	16	\$837,429	\$0	N/A
1992	40	\$2,153,226	\$144,385	100.0%
1993	44	\$2,288,363	\$135,866	100.0%
1994	75	\$4,887,060	\$474,85 I	100.0%
1995	125	\$8,351,049	\$522,338	100.0%
1996		\$7,532,782	\$660,111	100.0%
1997	162	\$11,421,157	\$2,009,260	93.2%
1998	158	\$10,788,871	\$4,168,410	84.9%
1999	227	\$16,281,748	\$6,773,542	86.0%
2000	510	\$41,910,513	\$17,390,624	53.4%
2001	638	\$52,275,435	\$24,938,528	56.3%
2002	722	\$62,338,099	\$34,638,789	67.1%
2003	971	\$82,134,070	\$48,131,192	70.5%
2004	1,143	\$103,292,635	\$70,553,119	75.5%
2005	1,402	\$138,456,773	\$103,249,791	77.9%
2006	I,486	\$162,773,382	\$127,022,192	78.0%
2007	1,647	\$189,167,808	\$158,933,368	79.9%
2008	1,461	\$161,517,122	\$141,338,822	79.6%
2009	1,663	\$187,458,217	\$176,382,218	89.5%
2010	2,079	\$230,843,176	\$225,187,637	95.6%
2011	1,021	\$113,370,637	\$111,959,935	98.8%
2012	36	\$3,767,923	\$3,762,307	100.0%
Not Provided	737	\$54,390,635	\$45,361,840	94.2%
TOTAL	16,557	\$1,651,851,735	\$1,303,859,311	84.1%

### TABLE 1 - NUMBER, VOLUME AND PERFORMANCE OF LOANS BY YEAR

 $^{\rm I4}$  "Performance" in Table 1 is defined in the following section.

### Performing versus Nonperforming Loans

While information on the number of days late (30, 60, 90, 120 or more than 120) was requested, it was determined that in many cases a simple binary distinction between "performing" and "nonperforming" loans better served many of the analytical purposes of this study. Accordingly, all loans paid in full (PIF), current, and 59 days late or less are classified in this Report as "performing," and all loans 60 or more days late or foreclosed are categorized as "nonperforming." The term "performance rate" is used in the following discussion to indicate the percentage of performing loans compared to total loans in a given portfolio or category of mortgages.

### **Percentages and Averages**

Tables showing loan performance as percentages calculate those percentages using the current balances of the loans, as opposed to origination amounts (i.e., principal balances on the day the loans closed). Percentages are shown unless the loan number is 10 or less, when the actual number of loans and the total number of loans (e.g., "9 of 10") is given.

Where other percentages appear in tables, unless otherwise specified, these are percentages of loan volume by dollar amount (and not by number of loans). Where tables for loan and underwriting characteristics show weighted averages, these averages are weighted by loan size in dollars. The implication of this weighting is that the characteristics of larger loans are weighted more heavily than those of smaller loans.

### **Treatment of Loan Underwriting Parameters**

Data about underwriting parameters were not consistently reported by data providers for all loans. Loans that were missing one or two underwriting characteristics, but contained other relevant data fields, were included in the total dataset, and were included for tables in which the missing characteristic was not directly relevant. For example, a loan record that contained most of the loan characteristics, including interest rate, loan-to-value ratio (LTV), debt-to-income ratio (DTI), and loan size, but did not include the borrower's middle FICO score, was included in tables dealing with general performance of a product or lender, but was not included in tables showing average FICO score by institution or product type.

Table 2 shows the number and percentage by number of loans that included data on three key underwriting characteristics: FICO score, LTV and DTI by Project participant (DTI is broken out as Front-End and Back-End DTI).

Only eight organizations provided information on FICO score for 95% or more of loans, although most provided this information for some of them. (USDA and one other organization did not provide FICO scores.) Virtually all Project participants provided LTV information on all or almost all loans. Twelve out of 20 organizations provided DTI information; however, most did not specify whether the DTI was a front- or back-end ratio, a critical piece of information for analysis.<sup>15</sup> So in the end, only five organizations provided useable DTI information.

<sup>15</sup> See debt-to-income ratio discussion on pages 29-30.

	FI	CO	LTV		FRONT-	END DTI	BACK-E	ND DTI	TOTAL
	(#)	(%)	(#)	(%)	(#)	(%)	(#)	(%)	(#)
Org_1	26	96.3%	27	100.0%	0	0.0%	0	0.0%	27
Org_2	621	82.8%	750	100.0%	0	0.0%	0	0.0%	750
Org_4	178	100.0%	178	100.0%	178	100.0%	178	100.0%	178
Org_5	5	10.0%	50	100.0%	0	0.0%	0	0.0%	50
Org_6	1,312	100.0%	1,312	100.0%	0	0.0%	0	0.0%	1,312
Org_7	434	59.7%	727	100.0%	0	0.0%	0	0.0%	727
Org_8	48	98.0%	49	100.0%	0	0.0%	0	0.0%	49
Org_9	53	21.2%	250	100.0%	0	0.0%	249	99.6%	250
Org_10	45	31.0%	145	100.0%	0	0.0%	0	0.0%	145
Org_11	0	0.0%	534	98.7%	0	0.0%	0	0.0%	541
Org_12	45	5.5%	825	100.0%	0	0.0%	825	100.0%	825
Org_13	2,209	95.4%	2,309	99.7%	2,315	100.0%	0	0.0%	2,315
Org_14	155	100.0%	155	100.0%	155	100.0%	155	100.0%	155
Org_15	51	39.5%	129	100.0%	0	0.0%	0	0.0%	129
Org_16	42	93.3%	45	100.0%	0	0.0%	0	0.0%	45
Org_17	535	97.6%	0	0.0%	0	0.0%	0	0.0%	548
Org_18	0	0.0%	61	100.0%	0	0.0%	0	0.0%	61
Org_19	737	100.0%	737	100.0%	0	0.0%	0	0.0%	737
Org_20	0	0.0%	5,638	99.7%	0	0.0%	0	0.0%	5,654
Org_21	0	0.0%	2,057	99.9%	0	0.0%	0	0.0%	2,059
TOTAL	6,496	39.2%	15,978	<b>96.5</b> %	2,648	16.0%	I,407	8.5%	16,557

### TABLE 2 - NUMBER AND PERCENTAGE OF LOANS FOR WHICH UNDERWRITING PARAMETERS ARE AVAILABLE BY ORGANIZATION<sup>16</sup>

# Analyzing Data by Provider Type

For a number of analyses, the data providers are grouped into three categories:

- **Originators**, which make mortgage loans to qualified borrowers and either hold these loans in their portfolios or sell them to GSEs or other investors, including HFAs. Some of their loans may be guaranteed by FHA Title II<sup>17</sup>, USDA Rural Development 502 or Veterans Administration. The Originator category includes banks, credit unions and CDFIs.

- **State housing finance agencies (HFAs)**, which, to further their specific mission requirements to help low- and moderate-income households achieve homeownership, purchase manufactured housing loans from approved originators (lenders) in their state or originate these loans themselves. Some of these loans are guaranteed by FHA Title II, USDA Rural Development 502 or Veterans Administration. Some of these loans may be sold by the HFA to a GSE; others may be held in the HFA's portfolio.

- United States Department of Agriculture (USDA), which offers the USDA Rural Development (RD) 502 program that both originates manufactured housing mortgage loans ("USDA Direct") and guarantees loans made by originators ("USDA Guaranteed"). As a provider type, "USDA" refers to the data received from the USDA, as distinguished from data on USDA Guaranteed loans purchased by HFAs, which are labeled as "HFA-USDA."

<sup>&</sup>lt;sup>16</sup> In Table 2 and other tables showing data by organization, participants are designated by anonymously-assigned number in non-alphabetical order. Although there were 20 Project participants, USDA is assigned two numbers, one for the 502 Direct and one for the 502 Guaranteed loans, so there are 21 numbered organizations. Org 3 is omitted from this table.

<sup>&</sup>lt;sup>17</sup> FHA Title II requires the homeowner to own their land in fee simple, thereby allowing a mortgage to be made to home, land and improvements.

For some analyses, Originators and HFAs were grouped together to compare with USDA and non-MH datasets.

## Analyzing Data by Product Type

For some analyses, the dataset was divided into six mortgage loan product types for comparative purposes:

• **Conventional mortgages (Conventional)**: Loans that have 80% or less loan-to-value (LTV) at the time of origination, requiring a high downpayment by the borrower; lenders and investors generally consider conventional loans to be lower risk than other loan types

• Conventional mortgages with private mortgage insurance (Conventional with MI or CMI): Loans that have LTV ratios between 80 and 98%; the portion of the loan above 80% LTV is insured by a third party (mortgage insurer), and the borrower covers the cost of the insurance through one of several forms of payment

• Self Insured mortgages (SI or Self Insured): Loans that are permitted to go up to 100% LTV but do not have third party-provided mortgage insurance. The borrower pays a higher interest rate than they would for a similar loan with mortgage insurance in order to cover the increased risk

• **FHA-insured mortgages (FHA)**: Loans that meet FHA Title II requirements and have up to 97.5% LTV; they are made by FHA-approved lenders and insured by FHA for a premium

• USDA Guaranteed and Direct mortgages: Loans to eligible rural borrowers that meet USDA RD 502 requirements which allow up to 100% LTV; they are either originated by USDA ("Direct" loans), or originated by another lender and guaranteed by USDA ("Guaranteed" loans)

• VA mortgages (VA): Loans to eligible veteran and military borrowers that meet Veterans Administration (VA) requirements which allow up to 102% LTV; made by VA-approved lenders and guaranteed by the VA

Table 3 shows the same information as Table 2, this time by product type.

	FI	CO	LTV		FRONT-END DTI		BACK-END DTI		TOTAL
	(#)	(%)	(#)	(%)	(#)	(%)	(#)	(%)	(#)
Conventional	1,551	86.0%	1,794	99.5%	723	40.1%	110	6.1%	1,803
Conventional with MI	2,044	68.4%	2,981	99.8%	944	31.6%	660	22.1%	2,988
Self Insured	272	28.2%	956	99.3%	132	13.7%	156	16.2%	963
FHA	2,197	87.2%	2,043	81.1%	644	25.6%	373	14.8%	2,520
VA	268	77.7%	284	82.3%	80	23.2%	73	21.2%	345
USDA	164	2.1%	7,920	99.8%	125	1.6%	35	0.4%	7,938
Total	6,496	39.2%	15,978	<b>96.5</b> %	2,648	16.0%	1,407	8.3%	16,557

#### TABLE 3 - NUMBER AND PERCENTAGE OF LOANS FOR WHICH UNDERWRITING PARAMETERS ARE AVAILABLE BY PRODUCT TYPE

For some comparisons, FHA, USDA and VA loans purchased by HFAs are shown to illustrate the performance of HFAs as investors in those types of loan products. In those cases, the designations used are "HFA-FHA," "HFA-USDA" and "HFA-VA."

## **Comparing MH to Non-MH Loan Performance**

Because one of the goals of this study was to compare the performance of manufactured housing mortgage loans with mortgage loans secured by site-built homes, FMC obtained data from the Office of the Controller of the Currency (OCC) on first lien loans originated during the last ten years. As of the end of 2011, the institutions reporting to and regulated by OCC serviced 31.4 million mortgages secured by one- to four-family homes totaling more than \$5.4 trillion in unpaid balances. The OCC dataset represents 60% of outstanding first mortgages in the U.S. The OCC dataset does not identify which or how many of its loans are secured by manufactured housing, but the large majority are not MH.

The primary reason for selecting the OCC dataset for use in this study was that it contains loan performance data. While it does not provide the same degree of loan level data as the MH Mortgage Dataset, it provides loan groupings by FICO scoring and contemporary credit risk categories (prime, Alt A, and Subprime) that allow comparisons with the manufactured housing mortgage loans in the MH Mortgage Dataset. In the OCC dataset, Prime loans are loans with FICO scores of 660 or higher, Alt A loans have FICO scores between 620 and 659, and Subprime loans have FICO scores below 620.

The total OCC dataset can be divided into three different categories: GSE loans (i.e., loans purchased by Fannie Mae or Freddie Mac), government guaranteed loans (i.e., loans guaranteed by FHA or VA), and loans privately owned by banks and thrifts. The GSE loans are the least risky and highest performing group, primarily because of the generally more conservative underwriting policies used in origination. The banks and thrift loans are the riskiest, largely due to the inclusion of a high number of legacy subprime loans made before the housing credit crisis changed the market.

The government guaranteed loans category is the most similar in terms of loan type, underwriting characteristics and borrower profile to the loans in the MH Mortgage Dataset. In both loan sets, loan sizes (and thus property values) are low to moderate, the average loan-to-value ratio is relatively high, and the borrowers are middle- to low-income households with slightly higher than average DTI ratios and lower than average credit scores. Accordingly, in Table 4, the government guaranteed OCC loan set was used for comparison with the MH Mortgage Dataset.

### **Use of Statistical Analyses**

In several cases, our analyses revealed products and practices that appeared to be strongly associated with excellent loan performance. To further test these associations, a series of statistical tests were conducted to test the extent to which performance could be explained by traditional underwriting criteria (e.g. FICO and LTV), and the extent to which it appeared likely that another factor, such as the nature of the specific product or practice in question, might reasonably be considered to be causing strong loan performance. (See Appendix C. Statistical Analysis.)

### Information not part of the original data request

The original data request focused on loan origination and performance. Information about underwriting guidelines and product marketing, about fees and costs (other than interest rate), about applicant and borrower counseling and education, and about servicing procedures (e.g., methods of notification and collection) were not part of the original request for data. However, FMC subsequently found anecdotal evidence suggesting that both servicing procedures and applicant/ borrower counseling/education might influence loan performance, and issued follow-up requests for information, particularly regarding how loans were serviced.

## Geographical analysis not performed

Analysis by geography was not performed because most of the data providers served specific and limited areas, and, as a result, any variations observed are more likely to result from differences among providers than as a result of geographic variation. Future studies involving larger national datasets could support regional analyses.<sup>18</sup>

### Analyses that could not be performed

Some data fields that were requested were not reported by any participant because the data had not been recorded or maintained by the lender, the investor or the third party servicing company charged with maintaining performance data for the loan originator or investor. We believe that these missing data fields could contribute to better understanding loan program outcomes and loan performance. In addition, during the course of the Data Project, there were additional kinds of information that were not part of our original data request that we have come to understand to be important to capture and analyze.

Some of the parameters that could not be analyzed because of lack of data include:

- Borrower income (very low, low and moderate-income)
- New home purchase versus refinance
- Age of home
- Size of home (single-, double-, multi-section)
- ENERGY STAR<sup>®</sup> (yes or no)
- Whether applicant/borrower received counseling or education
- Whether borrower received downpayment assistance, and what amount and type
- Net loss (loss severity)

A further discussion of the need for more data and analyses can be found in Section V. "Need for Better Data Collection and Analysis."

All conclusions presented in this Report, unless otherwise noted, are drawn from data tables included in the Report.

<sup>18</sup> Such geographical analyses would be desirable, as further discussed in Section V."Need for Better Data Collection and Analysis."



# **IV. Findings**

# I. A variety of lenders and investors provide home mortgage products to owners and buyers of manufactured homes

The Data Project found that mortgages on manufactured homes are offered by a variety of types of financial institutions including credit unions, banks<sup>19</sup> and community development loan funds.<sup>20</sup> These institutions either retain these MH mortgages on their balance sheets and/or sell loans to investors, including Fannie Mae, Freddie Mac, Ginnie Mae and state housing finance agencies, among others.

Three major federal programs insure or make loans on manufactured homes: FHA Title I (chattel loans) and Title II (mortgage loans), USDA Rural Development 502 program Guaranteed and Direct mortgages, and Veterans Administration mortgages. There are a number of additional loan programs in particular states and for certain eligible applicants, including a number of state housing finance agency first-time homebuyers programs. Another federal program, HUD Section 184, supports mortgages, including those for manufactured homes, on tribal lands.

The Data Project received data on mortgages made in all 50 states and the District of Columbia. While the Data Project was not designed to be and is not an exhaustive or statistically representative sampling of MH loan originators, the Project's outreach to participants and others, and the data compiled, suggest that mortgages are available to at least some owners and buyers of manufactured homes in most parts of the country. GSEs and many state HFAs purchase MH mortgages. They have approved anywhere from hundreds to thousands of loan originators of all lender types, able to sell MH loans to them under acceptable terms and conditions. We did not seek nor did we collect a list of names for the subset of those GSE and HFA-approved originators who originate MH loans.

<sup>&</sup>lt;sup>19</sup> Notable among banks are smaller, community banks in certain local markets.

<sup>&</sup>lt;sup>20</sup> Notable among community development loan funds is New Hampshire Community Loan Fund, which in 2012 expanded its successful MH lending in that state from serving only homeowners in resident-owned communities (ROCs) to also serving fee-simple homeowners and buyers.

# 2. MH mortgage loans can perform as well as mortgage loans secured by site-built homes

As described in Section II, lenders and investors frequently believe that loans secured by manufactured housing perform badly. Fannie Mae, for example, is so skeptical about manufactured housing mortgages that it does not allow state HFAs to include them in loan sales or securitized sales with preferred pricing. To study this issue objectively, FMC compared the MH Mortgage Dataset to a dataset from the Office of the Comptroller of the Currency (OCC) of home mortgages, primarily secured by site-built homes.<sup>21</sup>

### a. Comparing general mortgage performance to the MH Mortgage Dataset

As an initial comparison, the MH Mortgage Dataset was divided into two broad categories by data provider: the USDA loans in one category, and the Originator and HFA loans in the other ("non-USDA Dataset"). This separation allows direct comparisons between and among these specific types of participating providers.

These datasets were compared to the government guaranteed loans in the OCC portfolio report, which, as discussed in the Methodology section, are the most similar in make-up to the types of loans in our MH dataset – low to moderate property values, middle- to low-income borrowers with slightly higher than average DTI ratios and lower-than-average credit scores.

### **TABLE 4 - PERFORMANCE OF MH AND OCC MORTGAGES**

DATA PROVIDERS	PERCENT PERFORMING AS OF 12/31/12
OCC Government Guaranteed Dataset	89.2%
MH Mortgage non-USDA Dataset	90.3%
MH Mortgage USDA Dataset	77.9%

The performance of the MH Mortgage non-USDA (Originator plus HFA) MH Dataset has a performance profile that is very similar to, but slightly better than, that of the OCC Government Guaranteed loans: for OCC 89.2% of loans are performing and for the MH Mortgage non-USDA Dataset 90.3% are performing. The performance of the USDA loans from the MH Mortgage Dataset, by contrast, is not as strong: only 77.9% of the loans are performing.

This comparison indicates that some MH loans do, in fact, perform poorly, as indicated by the weak performance of the USDA dataset relative to that of the OCC dataset. However, the performance of the non-USDA MH loans, which is very similar to the loans in the OCC dataset, indicates that *significant numbers of MH mortgage loans perform as well as mortgages made to site-built homes.* 

It should be noted that the fact that the USDA portfolio performed relatively poorly does not indicate that USDA manufactured housing loans always perform badly. As discussed below under Finding 6, some originators and investors have portfolios of USDA loans that perform well.

<sup>&</sup>lt;sup>21</sup> The OCC dataset is more fully described in the Methodology section, page 19.

### b. MH and general home mortgage comparison by three categories

As discussed in the Methodology section above, the OCC dataset is divided into three sets: "Banks" (loans retained by lending institutions in their own portfolios), "Guaranteed" (loans guaranteed by government agencies), and "GSE" (the highest-performing loans purchased by Fannie Mae and Freddie Mac). In Table 5, we divided the MH Mortgage Dataset's Originator and HFA loans into three comparable categories to look at performance relative to the OCC categories. The MH "Banks" category includes banks and credit unions; the MH "Guaranteed" category includes HFA-purchased FHA, VA and USDA loans; and the MH "GSE" category includes Originator loans sold to GSEs.

The fourth column, "MH Mtg Dataset" represents the total MH Mortgage Dataset – including USDA loans and loans that did not fit into the three preceding categories -- rather than the sum of the three preceding columns.

Total	100.0%	100.0%	100.0%	100.0%
Foreclosure	0.0%	0.6%	0.0%	1.3%
Subtotal Seriously DQ:	8.2%	11.0%	2.5%	14.7%
30+ Days in BK	2.9%	8.7%	1.0%	11.8%
90+ Days DQ	3.2%	0.8%	0.5%	0.9%
60-89 Days DQ	2.1%	1.4%	1.0%	1.9%
Seriously DQ:				
Subtotal Performing:	91.8%	88.5%	97.5%	84.1%
Current 30-59 Days DQ	85.8% 6.0%	84.3% 4.1%	97.5% 0.0%	78.7% 5.4%
MH MORTGAGE DATASET	BANKS <sup>(4)</sup>	GUARANTEED <sup>(5)</sup>	GSE <sup>(6)</sup>	MH MTG DATASET
Total	100.0%	100.0%	100.0%	100.0%
Foreclosure	7.2%	3.0%	2.4%	4.1%
Subtotal Seriously DQ:	<b>6.5</b> %	<b>7.8</b> %	2.5%	5.0%
30+ Days in BK	1.6%	1.1%	0.6%	1.0%
90+ Days DQ	3.4%	4.7%	1.2%	2.8%
60-89 Days DQ	1.5%	2.0%	0.7%	1.2%
Seriously DQ:				
Subtotal Performing:	86.4%	89.2%	96.1%	90.9%
Current 30-59 Days DQ	82.6% 3.8%	84.2% 5.0%	93.1% 3.0%	87.9% 3.0%
OCC DATASET	BANKS <sup>(1)</sup>	GUARANTEED <sup>(2)</sup>	GSE <sup>(3)</sup>	ALL OCC

#### TABLE 5 - PERFORMANCE FOR OCC AND MH MORTGAGE DATASET BY THREE CATEGORIES

(1) Banks as listed in OCC Notes file per OCC report

(2) FHA or VA

(3) Fannie and Freddie

(4) Includes credit unions(5) FHA,VA, USDA(6) Fannie and Freddie

The table shows that MH loans outperformed the OCC dataset in two out of three categories. While the Guaranteed category performed very similarly (89.2% for OCC versus 88.5% for MH Mortgage Dataset performing at 59 or less days late), in the Bank category, MH outperforms the OCC loans (91.8% versus 86.4% performing, respectively). Similarly, the MH GSE loans outperform the OCC GSE loans (97.5% versus 96.1% performing, respectively).

While the overall OCC dataset outperforms the MH Mortgage Dataset by 90.9% to 84.1%, it is interesting to note that a significant number of MH lenders (HFAs and Originators) can originate loans that perform significantly better than the comparable set of (primarily) site-built mortgages. Indeed, it is clear that MH loans can perform extremely well.

The remainder of this paper identifies some of the characteristics of MH mortgage lenders and loans that result in strong performance.

# 3. Performance is driven by loan type, data provider type and underwriting parameters

We turn now to analysis and comparisons within the MH Mortgage Dataset. FMC compared the basic underwriting parameters and performance of manufactured housing mortgages loans by product type and by data provider type. These comparisons indicate that MH mortgage loans can perform well, with performance varying significantly by both product and provider type.

### a. MH loan performance and loan characteristics by product type

	CONVEN.	CONVEN. MI	SELF-INSURED	HFA FHA
CHARACTERISTICS:				
WTD. AVG. LOAN SIZE	\$ 89,211	\$ 100,190	\$ 60,754	\$ 105,984
WTD. AVG. LOAN AGE (MOS)	45	58	39	34
WTD. AVG. INTEREST RATE (%)	5.3	5.9	7.0	5.5
WTD. AVG. AGE AT DEFAULT (MOS)	23	21	48	24
UNDEWRITING:				
WTD. AVG. FICO	742	716	675	676
WTD. AVG. LTV	69	94	93	97
PERFORMANCE:				
PERFORMING LOANS (\$MM)	\$129	\$190	\$34	\$185
PERFORMING LOANS (#)	1,923	2,138	675	2,216
PERFORMING LOANS (%)	98.1%	88.8%	91.6%	87.9%
NON-PERF LOANS (\$MM)	\$3	\$27	\$4	\$28
NON-PERF LOANS (#)	32	211	38	276
NON-PERF LOANS (%)	1.9%	11.2%	8.4%	12.1%
PIF	-	-	-	-
CURRENT	\$ 129,333,482	\$ 190,384,787	\$ 34,330,671	\$ 184,734,214
60-120 DAYS	\$ 1,273,796	\$ 5,170,086	\$ 1,553,100	\$ 4,811,826
120+ DAYS	\$1,071,618	\$ 7,025,854	\$ 1,602,150	\$ 18,118,994
FORECLOSURE	\$211,675	\$ 11,910,098	-	\$ 2,495,683
PERFORMING LOANS	\$ 129,333,482	\$ 190,384,787	\$ 34,330,671	\$ 184,734,214
NON-PERFORMING LOANS	\$ 3,287,745	\$ 27,154,104	\$ 3,837,517	\$28,213,337
TOTAL	\$ 131,890,571	\$ 214,490,825	\$ 37,485,921	\$ 210,160,717

### TABLE 6 - LOAN PERFORMANCE COMPARISON BY PRODUCT TYPE

	HFA VA	HFA-USDA	USDA GUAR	USDA DIRECT
CHARACTERISTICS:				
WTD. AVG. LOAN SIZE	\$  22,82	\$115,829	\$    , 22	\$88,168
WTD. AVG. LOAN AGE (MOS)	42	40	38	ND
WTD. AVG. INTEREST RATE (%)	5.5	5.2	6.0	5.1
WTD. AVG. AGE AT DEFAULT (MOS)	23	43	41	53
UNDEWRITING:				
WTD. AVG. FICO	674	682	Not Provided	Not Provided
WTD. AVG. LTV	101	99	97	94
PERFORMANCE:				
PERFORMING LOANS (\$MM)	\$25	\$19	\$398	\$116
PERFORMING LOANS (#)	303	205	4,835	1,773
PERFORMING LOANS (%)	84.5%	88.9%	76.8%	82.3%
NON-PERF LOANS (\$MM)	\$6	\$3	\$121	\$29
NON-PERF LOANS (#)	42	20	1,044	286
NON-PERF LOANS (%)	15.5%	11.1%	23.2%	17.7%
PIF	-	-	-	\$ 1,049,519
CURRENT	\$ 24,832,893	\$18,823,733	\$ 398,163,339	\$ 114,608,410
60-120 DAYS	\$ 1,193,260	\$ 587,293	\$ 15,721,062	\$ 6,530,340
120+ DAYS	\$ 2,201,546	\$ 1,158,090	\$ 104,658,785	\$ 18,386,412
FORECLOSURE	\$ 1,149,025	\$ 609,439	\$  58, 29	-
PERFORMING LOANS	\$ 24,832,893	\$ 18,823,733	\$ 398,163,339	\$115,657,929
NON-PERFORMING LOANS	\$ 5,609,964	\$ 2,880,813	\$ 120,537,976	\$ 29,376,800
TOTAL	\$ 29,376,724	\$ 21,178,555	\$ 518,701,315	\$ 140,574,681

Table 6 demonstrates that, as expected, there is a general relationship between traditional underwriting criteria and performance: loan types with traditional underwriting generally performing well. Specifically, the Conventional loans, with high average FICO (742) and low LTV (69%), perform extremely well, with 98.1% of all Conventional loans performing. Surprisingly, Self Insured loans also perform well (91.6% performing) despite lower average FICO score (675) and much higher average LTV (93%). Self Insured loans are the second-highest performing loan type, performing better than Conventional with MI (88.8% performing). The strong performance of the Self Insured product type is further explored and discussed in Finding 4.

It appears that the when the Data Provider is an HFA, there is a difference in results for the Product Type. That is, USDA loans purchased by HFAs, broken out as HFA-USDA in the table above, also perform reasonably well, despite the fact that they are characterized by high average LTV (99%) and low average FICO scores (682): 88.9% are performing. This performance rate compares well to the 98.1% for Conventional loans and about the same as the 88.8% for Conventional with Mortgage Insurance. It also compares favorably with the performance of the OCC government-guaranteed loans (89.2% performing) from Table 5. The performance of HFA portfolios is further discussed in Finding 6.

These comparisons suggest that while traditional underwriting approaches are important determinants of performance, other factors can also influence the success of a loan portfolio, in that a loan portfolio can be successful even if it characterized by relatively low average FICO scores and high LTVs.

### b. MH loan performance and loan characteristics by provider type

		HFAs			ORIGINATORS	
Characteristics:		(#)	(%)		(#)	(%)
Wtd. Avg. amount	97,481			95,911		
Wtd. Avg Ioan age	46			40		
Wtd. Avg. Interest Rate	5.57			5.80		
Wtd. Avg. Age at Default(yrs)	24			47		
Undewriting:						
Average FICO	691			740		
LTV	94			75		
Front-end DTI	24			Not Provided		
Back-end DTI	40			Not Provided		
Product Breakdown:						
Conventional		1,189	16.2%		614	40.3%
Conventional with MI		2,780	38.0%		208	13.7%
Self Insured		290	4.0%		673	44.2%
FHA		2,492	34.0%		28	1.8%
VA		345	4.7%		-	0.0%
USDA		225	3.1%		-	0.0%
Performance:						
PIF	-	1,464	0.0%		224	0.0%
Current	431,490,279	4,839	83.0%	118,221,003	1,223	94.9%
30 Days Delinquent	31,162,227	343	6.0%	1,668,036	24	1.3%
60 Days Delinquent	7,338,690	73	1.4%	1,501,257	19	1.2%
90 Days Delinquent	4,336,009	48	0.8%	1,413,405	25	1.1%
120+ Days Delnquent	29,440,436	263	5.7%	1,737,816	18	1.4%
Foreclosure	16,375,920	291	3.1%	-	-	0.0%
Performing Loans	462,652,506	6,646	<b>88.9</b> %	119,889,039	1,471	<b>96.3</b> %
Non-Performing Loans	57,491,055	675	11.1%	4,652,478	62	3.7%
Total	520,143,562	7,321	100.0%	124,541,517	1,533	100.0%

### TABLE 7 - LOAN CHARACTERISTICS AND PERFORMANCE BY PROVIDER TYPE

A comparison of loan performance by two categories of Data Providers – Originators and HFAs – shows that traditional underwriting criteria have a predictable correlation with performance. Originators, including the participating banks, credit unions and CDFIs, reported a combined dataset with a significantly higher weighted average FICO score than that of all loans purchased by HFAs (740 vs. 691, respectively). Similarly, the average weighted loan-to-value ratio reported by the Originators is significantly lower than that required for all loans purchased by HFAs (75% to 94%, respectively). The Originators dataset performed better than the HFA dataset: 96.3% of loans in the Originator set were performing, while only 88.9% of HFA loans were performing. This is understandable, given HFAs' mission to serve low- and moderate-income households and first-time homebuyers. Furthermore, as discussed in Finding 5, a closer look shows that certain HFAs experienced loan performance comparable to that of the Originators group.

### c. Underwriting parameters and loan performance; variability of performance

The data on loan performance by data provider (Table 8) show great variations. Several data providers of all types and sizes achieve exceptional loan performance of 96% to 99%. Performance rates for other data providers ranged from 71% to 94% with most in the eighties and low nineties.

Many of the best performing portfolios included loans associated with the traditional characteristics of "strong" credit criteria: that is, average FICO scores above 700 and LTV below 80%; however, this was not always true. Some of the best performance was associated with serving relatively hard-to-reach borrowers: for example, an average FICO score of 687 and average LTV of 95. This indicates that it is possible to offer MH mortgages with sustainable and even superior performance to lower-income borrowers, who tend to have less ability to make large downpayments.

## (c.1) Variability of performance by product type

Difference in the mix of products offered is one possible explanation for differences in portfolio performance. The data, however, suggest that the same product can perform very differently by data provider. For example, Table 8 shows that performance for Conventional mortgages ranges from 100% to 92.1%, while for Conventional with Mortgage Insurance, performance ranges from 98.3% to 71.8%.

#### TABLE 8 - LOAN PERFORMANCE BY DATA PROVIDER AND PRODUCT TYPE

*(loan amounts in millions of dollars)* 

	CONVEN	CONV W MI	SELF INSURED	FHA	VA	USDA	TOTAL	ASSET RANGE <sup>(22)</sup>
Org_I	N/A	N/A	N/A	65.7%	N/A	N/A	100.0%	<\$25MM
Org_2	98.2%	95.4%	N/A	l of l	N/A	N/A	<b>97.5</b> %	>\$25MM
Org_3	N/A	N/A	N/A	N/A	N/A	N/A	10 of 10	<\$25MM
Org_4	N/A	2 of 2	N/A	65.7%	82.9%	N/A	<b>67.5</b> %	<\$25MM
Org_5	N/A	88.3%	N/A	N/A	N/A	N/A	88.3%	<\$25MM
Org_6	100.0%	97.1%	100.0%	98.9%	95.2%	100.0%	<b>98.4</b> %	>\$25MM
Org_7	97.8%	86.7%	90.8%	87.9%	80.8%	82.1%	88.2%	>\$25MM
Org_8	l of l	7 of 7	5 of 5	90.7%	l of l	31.6%	91.1%	<\$25MM
Org_9	N/A	89.4%	97.8%	84.0%	75.8%	91.9%	<b>84.9</b> %	>\$25MM
Org_10	l of l	l of 2	N/A	87.2%	4 of 4	N/A	86.6%	<\$25MM
Org_11	N/A	N/A	91.3%	N/A	N/A	N/A	91.3%	<\$25MM
Org_12	92.1%	71.8%	100.0%	82.1%	58.8%	78.7%	<b>74.0</b> %	>\$25MM
Org_13	99.2%	98.3%	N/A	95.6%	94.0%	89.3%	<b>97.0</b> %	>\$25MM
Org_14	100.0%	N/A	89.7%	N/A	N/A	N/A	91.2%	<\$25MM
Org_15	100.0%	95.3%	N/A	N/A	N/A	N/A	<b>95.3</b> %	<\$25MM
Org_16	N/A	N/A	N/A	86.6%	N/A	N/A	86.6%	<\$25MM
Org_17	4 of 8	2 of 2	N/A	82.0%	85.5%	N/A	<b>82.1</b> %	>\$25MM
Org_18	N/A	N/A	N/A	100.0%	l of l	100.0%	100.0%	<\$25MM
Org_19	96.3%	93.7%	N/A	N/A	N/A	N/A	<b>94.1</b> %	>\$25MM
Org_20	N/A	N/A	N/A	N/A	N/A	88.9%	<b>88.9</b> %	>\$25MM
Org_21	N/A	N/A	N/A	N/A	N/A	82.3%	82.3%	>\$25MM
Total	<b>98.</b> 1%	88.8%	<b>91.6</b> %	<b>87.9</b> %	<b>84.5</b> %	<b>88.9</b> %	<b>84.</b> 1%	
Loan Amt	\$131.9	\$214.5	\$37.5	\$210.2	\$29.4	\$701.6	\$1,304.0	
Max	100.0%	<b>98.3</b> %	100.0%	100.0%	<b>95.2</b> %	100.0%	100.0%	
Min	<b>92.1</b> %	71.8%	<b>89.7</b> %	<b>65.7</b> %	<b>58.8</b> %	31.6%	<b>67.5</b> %	

There is even more variation with FHA and USDA loans, generally considered to be relatively higher credit-risk products. Performance for FHA loans ranged from 100% to 65.7% performing. Performance for USDA loans ranged from 100% to 31.6%.

### (c.2) Variability of performance by FICO band

More detailed comparisons illustrate how significant traditional underwriting can be in determining the success of a MH loan across loan types. Table 9, for example, shows the differences in the performance of loans made to borrowers with FICO scores in different "bands" (720+, 680 to 719, 640 to 679, 600 to 639, and < 600) across all product types. Considering the total of all loans, performance consistently declines as expected, as the FICO band scores decline. However, the decline is not uniform across product types. Conventional loans, for example, maintain a high level of performance through the top four FICO bands, but fall off significantly for borrowers with FICO scores of less than 600. Self Insured loans perform nearly as well for borrowers in the 640-679 FICO band (a 97.9% performance rate), but do not perform nearly as well for borrowers with lower credit scores. The performance of FHA-insured loans purchased by HFAs, by comparison, falls significantly with each FICO band: loans made to borrowers in the 720+ FICO band have a performance rate of 95.7%, but the rate falls progressively to 93.9% for the 680-719 FICO band, 88.9% for the 640-679 FICO band, 78.8% for the 600-639 band, and 74.1% for the <600 band.

<sup>&</sup>lt;sup>22</sup> In Table 8, "asset range" refers to the asset size of the organization.

### TABLE 9 - LOAN PERFORMANCE BY FICO BANDS ACROSS ALL PRODUCT TYPES

(loan amounts in millions of dollars)

FICO BAND	CONVEN	CONV. MI	SI	HFA FHA	HFA VA	HFA USDA	USDA G	USDA D	TOTAL	LOAN AMT.	LOAN #
720+	98.7%	98.1%	98.1%	95.7%	90.8%	97.6%	N/A	N/A	<b>97.6</b> %	\$194	2,471
680-719	99.3%	94.8%	100.0%	93.9%	94.6%	90.9%	N/A	N/A	<b>95.4</b> %	\$96	1,180
640-679	96.6%	95.0%	97.9%	88.9%	87.1%	92.1%	N/A	N/A	91.7%	\$100	1,184
600-639	98.7%	90.0%	83.4%	78.8%	80.1%	74.9%	N/A	N/A	82.2%	\$61	726
<600	80.2%	84.9%	81.9%	74.1%	87.3%	of	N/A	N/A	<b>78.0</b> %	\$20	330
Not Provided	95.9%	77.9%	90.3%	85.6%	74.6%	86.9%	N/A	N/A	<b>79.0</b> %	\$833	10,666
Total	<b>98.1</b> %	88.8%	91.6%	<b>87.9</b> %	<b>84.5</b> %	<b>88.9</b> %	<b>76.8</b> %	<b>82.3</b> %	<b>84.1%</b>	\$1,304	16,557
Loan Amount	\$132	\$214	\$37	\$210	\$29	\$21	\$519	\$ 4	\$1,304		
Loan #	1,803	2,988	963	2,520	345	225	5,654	2,059	16,557		

Similar variability is observed when loans are reviewed by institution and FICO band. Five organizations achieved performance in the nineties or better even for the lowest scores (< 600 FICO band). Thus, while FICO is strongly related to performance, it is neither consistently determinative, nor the only factor in determining a loan's success.

### TABLE 10 - LOAN PERFORMANCE BY ORGANIZATION AND FICO BAND

*(loan amounts in millions of dollars)* 

	720+	680-720	640-680	600-640	<600	BLANK	TOTAL	ASSET RANGE
Org_I	6 of 6	6 of 6	9 of 9	2 of 2	3 of 3	l of l	27 of 27	<\$25MM
Org_2	98.5%	95.7%	98.1%	92.3%	70.7%	97.0%	<b>97.5</b> %	>\$25MM
Org_3	76.7%	95.1%	83.8%	44.4%	61.4%	l of 3	<b>67.5</b> %	<\$25MM
Org_4	0 of I	N/A	N/A	l of 2	100.0%	91.1%	<b>88.3</b> %	<\$25MM
Org_5	99.1%	98.6%	98.4%	96.4%	98.0%	100.0%	<b>98.4</b> %	<\$25MM
Org_6	97.2%	88.9%	92.6%	73.8%	91.8%	83.5%	<b>88.2</b> %	>\$25MM
Org_7	93.1%	100.0%	100.0%	3 of 6	100.0%	100.0%	91.1%	>\$25MM
Org_8	89.5%	100.0%	94.0%	6 of 6	2 of 2	82.0%	<b>84.9</b> %	<\$25MM
Org_9	6 of 6	5 of 5	68.3%	73.0%	73.3%	90.0%	86.6%	>\$25MM
Org_10	N/A	N/A	N/A	N/A	N/A	91.3%	91.3%	<\$25MM
Org_11	100.0%	100.0%	86.2%	4 of 5	l of l	72.6%	<b>74.0%</b>	<\$25MM
Org_12	99.2%	97.5%	96.0%	92.3%	85.7%	95.3%	<b>97.0</b> %	>\$25MM
Org_13	9 of 9	100.0%	93.4%	84.1%	83.3%	93.9%	<b>91.2</b> %	>\$25MM
Org_14	100.0%	100.0%	7 of 8	l of l	94.4%	93.9%	<b>95.3</b> %	<\$25MM
Org_15	6 of 6	2 of 3	6 of 7	75.7%	87.7%	3 of 3	86.6%	<\$25MM
Org_16	91.6%	88.9%	82.8%	77.6%	45.1%	61.1%	<b>82.1</b> %	<\$25MM
Org_17	N/A	N/A	N/A	N/A	N/A	100.0%	100.0%	>\$25MM
Org_18	96.9%	95.4%	92.4%	86.9%	79.6%	92.4%	<b>94.1</b> %	<\$25MM
Org_19	97.6%	90.9%	92.1%	74.9%	l of l	86.9%	<b>88.9</b> %	>\$25MM
Org_20	N/A	N/A	N/A	N/A	N/A	82.3%	<b>82.3</b> %	>\$25MM
Org_21	N/A	N/A	N/A	N/A	N/A	77.9%	77.9%	>\$25MM
Total	<b>97.6</b> %	<b>95.4</b> %	<b>91.7</b> %	82.2%	78.0%	79.0%	84.1%	
Loan Amt	\$193.5	\$96.4	\$100.1	\$61.2	\$19.6	\$833.0	\$1,304.0	
Max	100.0%	100.0%	100.0%	<b>96.4</b> %	100.0%	100.0%	100.0%	
Min	<b>76.7</b> %	<b>88.9</b> %	<b>68.3</b> %	44.4%	45.1%	61.1%	67.5%	_

# (c.3) Variability of performance by LTV band

There is a relationship between higher LTV and poor performance, although it is not as clear as for FICO. For the most part, loans of all product types with low LTV ratios perform better than those with higher ones. But, contrary to expectation, for the overall portfolio, the performance of loans with LTV ratios of 80% or less is 89.8% -- slightly worse than the 90.2% performance rate of loans with the next higher LTV band of 80 to 90%.

### TABLE 11 – LOAN PERFORMANCE BY LTV BAND AND PRODUCT TYPE

(loan amounts in millions of dollars)

LTV BAND	CONVEN	CONV. MI	SI	HFA FHA	HFA VA	HFA USDA	USDA G	USDA D	TOTAL	LOAN AMT.	LOAN #
100+	0.0%	86.7%	10 of 10	95.2%	83.6%	87.8%	76.5%	0.0%	79.0%	\$309	3,157
95-99	0.0%	84.4%	91.9%	89.6%	87.4%	91.5%	73.2%	0.0%	81.7%	\$402	5,099
90-94	0.0%	93.9%	87.4%	92.4%	7 of 7	91.5%	81.4%	0.0%	<b>86.7</b> %	\$118	1,646
80-89	0.0%	97.2%	94.0%	91.3%	3 of 3	100.0%	85.1%	0.0%	90.2%	\$105	1,560
Less than 80	98.3%	0.0%	92.0%	90.2%	2 of 2	2 of 4	86.7%	82.3%	<b>89.8</b> %	\$300	4,398
Not Provided	74.8%	90.0%	100.0%	82.0%	85.5%	N/A	42.5%	2 of 2	82.3%	\$70	697
Total	<b>98.1</b> %	<b>88.8</b> %	91.6%	<b>87.9</b> %	<b>84.5</b> %	<b>88.9</b> %	<b>76.8</b> %	<b>82.3</b> %	<b>84.1</b> %	\$1,304	16,557
Loan Amount	\$132	\$214	\$37	\$210	\$29	\$21	\$519	\$ 4	\$1,304		
Loan #	1,803	2,988	963	2,520	345	225	5,654	2,059	16,557	_	

Thus, while LTV is clearly strongly related to performance, it is not the only factor in determining a loan's success.

### (c.4) Performance by debt-to-income ratio band; front-end and back-end ratios

While a significant number of the loans in the MH Mortgage Dataset (13,723 loans) reported a debtto-income ratio (DTI), only a small number of these loans included information indicating whether the ratio was a *front-end* or *back-end* ratio. The issue is significant because the same ratio has a very different meaning if it is a front-end ratio than if it is back-end. Front-end ratios indicate the ratio of monthly housing debt (including principal, interest, real estate taxes and property insurance expenses or PITI) to the borrower's monthly gross income. Back-end ratios indicate the ratio of all monthly debt payments, including auto, credit card and student loan payments, as well as housing payments, to the borrower's monthly gross income.

For both front- and back-end ratios, a low number is better, indicating that the borrower has more resources to cover living expenses and emergencies. Underwriters generally do not want to see a borrower with a front-end DTI above 33, but a back-end ratio of up to 45 may be acceptable. As a result, it is crucial to know whether a given DTI number represents a front- or back-end ratio for it to be interpreted correctly: 37 would be unusually high for a front-end ratio, but quite acceptable for a back-end ratio.<sup>23</sup> It is generally understood by experienced underwriters and analysts that front-end ratios no higher than 31% to 33%, when coupled with avoidance of high back-end ratios (no more than 43%) tend to be good predictors of performance, and are seen by some as having more predictive power than FICO score.

<sup>&</sup>lt;sup>23</sup> For low-income families, high DTIs can be especially dangerous, because as incomes fall, the margin of remaining income also falls in absolute terms. For example, a family earning \$1,000 per month with a total (back-end) debt-to-income ratio of 50% would have only \$500 of gross income remaining after housing and other debt expenses – and because this is gross income, take-home income would be even lower. A family earning \$2,000 per month with the same DTI ratio, by contrast, would have twice as much gross income for these same expenses. The lower actual income "cash remaining" that low-income families have after debt and housing expenses may not provide them income to offset sickness or temporary unemployment events.

#### TABLE 12 - LOAN PERFORMANCE BY FRONT- AND BACK-END DTI BAND

DTI BAND	FRONT END	BACK END
20 or less	95.4%	89.6%
21-30	92.3%	81.6%
31-40	91.7%	80.6%
41-50	82.0%	74.2%
Above 50	Not Provided	81.3%
# of loans	2,648	I,407

For the relatively small number of loans for which the DTI ratio was specified as either front- or back-end, or where both front- and back-end ratios were provided, the expected patterns were generally observed. For both front- and back-end ratios, performance declines as the ratios rise, so that loans with a front-end DTI of less than 20% have a 95.4% performance rate, but loans with a front-end DTI of 41-50% have only an 82.0% performance rate. The only exception to this trend is that loans with a very high back-end ratio of 50+% perform significantly better (81.3%) than the loans in the 41%-50% DTI band (74.2%). We do not possess more detailed information, such as by-line item credit information, which might illuminate why this may be the case. Furthermore, we do not have the data to explain why the performance rates for all DTI bands are lower for the back-end ratio than for the front-end ratio for the corresponding DTI band, when one might expect that relationship to be the reverse.

From the limited data we received, there is a suggestion that underwriting to front-end DTI at traditional levels will be associated with healthy loan performance as well as sustainable homeownership costs for the borrower.

The majority of provider datasets were not capable of providing accurate readings of front- and/or back-end DTIs. As further discussed in Section V. "Need for Better Data Collection and Analysis," because DTI is such an important underwriting criterion, better data would be of great value for analysis.

### (c.5) Performance by interest rate band

It was theorized that higher interest rates on MH mortgages might be associated with poorer performance, either because the higher monthly payments forced more borrowers into default, or because high interest rates are associated with more risky loans. Accordingly, the relationship between performance and interest rate was reviewed.

It should be noted that interest rate is only one component in the effective cost of a mortgage. A more complete look would consider the combination of interest rate and all fees paid by the borrower. However, as discussed in the Methodology section, the Data Project did not collect information on fees.

Contrary to the hypothesis, Table 13 shows no relationship between interest rate and performance for Conventional loans, which performed similarly regardless of interest rate. For most other product types, performance, as expected, tends to decline as interest rates increase, although the relationship is not nearly as clear as the relationship between FICO band and performance. The Direct and Guaranteed loans reported by USDA show a surprising exception: the loans with very low interest rates (less than 4%) performed worse than those with higher interest rates. (On the other hand, HFA-USDA loans show the expected pattern.) In the case of USDA Direct, this result may be related to the program design, which sets the interest rate and monthly payments by the ability of the borrower to pay. As interest rates are aligned to an applicant's ability to pay using USDA Direct DTI ratios, those borrowers with lower interest rates may have had lower "remaining cash" margins to support all other living expenses and therefore fewer savings or other financial resources to weather temporary financial difficulties.<sup>24</sup>

INTEREST RATE (%)	CONVEN	CONV. MI	SI	HFA FHA	HFA VA	HFA USDA	USDA G	USDA D	ALL	LOAN AMT.	LOAN #
<4	97.9%	92.5%	100.0%	100.0%	100.0%	100.0%	81.4%	62.6%	79.5%	\$34	604
4 to 5	97.3%	94.1%	100.0%	94.5%	94.4%	95.9%	93.8%	92.7%	<b>94.5</b> %	\$207	2,012
5 to 6	98.7%	92.7%	87.7%	87.9%	85.0%	84.7%	87.0%	79.4%	<b>88.5</b> %	\$572	6,216
6 to 8	97.3%	83.8%	96.9%	82.9%	73.3%	88.3%	66.7%	83.3%	76.6%	\$388	4,946
8+	100.0%	87.3%	89.9%	79.4%	100.0%	23.8%	49.4%	83.1%	67.7%	\$99	2,706
Not Provided	100.0%	100.0%	100.0%	86.6%	N/A	N/A	N/A	l of l	<b>92.1</b> %	\$4	73
Total	<b>98.1</b> %	<b>88.8</b> %	<b>91.6</b> %	<b>87.9</b> %	<b>84.5</b> %	<b>88.9</b> %	<b>76.8</b> %	<b>82.3</b> %	<b>84.1</b> %	\$1,304	16,557
Loan Amount	\$ 32	\$214	\$37	\$210	\$29	\$21	\$519	\$ 4	\$1,304		
Loan #	1,803	2,988	963	2,520	345	225	5,654	2,059	16,557	_	

### TABLE 13 - LOAN PERFORMANCE BY INTEREST RATE BAND BY PRODUCT TYPE

(loan amounts in millions of dollars)

### **SUMMARY TO FINDINGS SECTION 3**

The data, in summary, indicate that MH loans can perform extremely well, but often do not. One of the clear drivers of these very different performance records is underwriting. Traditional underwriting criteria – credit history (as reflected by FICO score), LTV and DTI – are clearly associated with loan performance. However, the data suggest that traditional underwriting criteria are not the only predictors of MH loan performance, and that MH loans can be extremely successful even if not underwritten to traditional criteria.

# 4. Self Insured loan product stands out as associated with excellent performance and ability to reach LMI borrowers

In general, strong results are associated with the traditional characteristics of conservative underwriting: good credit scores (i.e. high FICO scores) and low debt-to-income (DTI) and lower loan-to-value (LTV) ratios. The problem is that many low- and moderate-income borrowers – an important market for MH loans – cannot qualify for loans with strict underwriting guidelines (e.g. FICO scores averaging higher than 720 and LTV ratios at or lower than 80%). One problem is amassing a large downpayment from a low income to support a low LTV for the borrower and the lender/investor.

There is a loan product included in the MH Mortgage Dataset which is notable in achieving excellent performance without requiring traditional underwriting or a reliance on government insurance. Self Insured loans, originated or purchased by eight organizations<sup>25</sup> in the MH Mortgage Dataset, combine more flexible underwriting parameters with better performance than comparable products. In fact, the Self Insured loan product is the second-best performing loan product after Conventional loans.

<sup>&</sup>lt;sup>24</sup> See Footnote 23.

<sup>&</sup>lt;sup>25</sup> Hope Credit Union, Idaho Housing and Finance Association, MaineHousing, Minnesota Housing Finance Agency, Montana Board of Housing, New Hampshire Community Loan Fund, Pennsylvania Housing Finance Agency and Self-Help Credit Union.

Self Insured loans require lenders to manually underwrite the loan and consider alternative credit criteria, rather than automatically using FICO scores to accept or deny applicants. The lender prices the loans to cover the additional risk of offering loans up to 98% LTV (low downpayment) without private mortgage insurance coverage. These loans can be retained (not sold to an investor) by the originating lenders, and also some HFAs will purchase them. Importantly, these loans have also been included in securitized pools by some state HFAs, which indicates that rating agencies, which are required to review the loan assets contained in a securitized pool and judge/price their risk rating, have judged these loans and their pricing within a portfolio an acceptable risk for investors.

As shown in Table 6, Self Insured loans feature a relatively low weighted average FICO score (675) and a relatively high weighted average LTV (93%), yet achieve the second best percentage of performance (91.6%) for any of the loan products for which data were received.

A closer comparison between Self Insured mortgages (SI) and Conventional mortgages with Mortgage Insurance (CMI) allows an "apples to apples" comparison. The two loan types are similar because in each case the borrower has a strong enough credit profile to meet the relevant underwriting protocols but does not have the resources for a 20% downpayment. Since the CMI product generally releases insurance when home values fall below 80% LTV, Table 14, which provides a comparison between SI and CMI, shows only SI loans with LTVs greater than 80%.<sup>26</sup>

<sup>26</sup> Table 14 therefore only contains SI current balances of \$32.7 million as opposed to a total current balance of \$37.5 million when all SI loans are included.

#### TABLE 14 - LOAN PERFORMANCE COMPARISON: SELF INSURED VS. CONVENTIONAL WITH MI

("Grand Total" designates a sum when referring to volume; it represents a weighted average for

other characteristics. Amounts in thousands)

LOAN STATUS	SELF INSURED	CONV W MI	SELF INSURED	CONVEN. W MI	SELF INSURED	CONVEN. W MI
	Vol (\$MM)	Vol (\$MM)	% Total	% Total	Avg Size (\$)	Avg Size (\$)
PIF		-	0.0%	0.0%	\$54,157	\$81,858
Current	\$28.502	\$172.786	87.1%	80.6%	\$62,305	\$96,049
30 Days	\$1.444	\$17.598	4.4%	8.2%	\$68,062	\$97,498
60 Days	\$0.559	\$3.048	1.7%	1.4%	\$50,553	\$96,513
90 Days	\$0.661	\$2.122	2.0%	1.0%	\$49,807	\$88,151
120+ Days	\$1.570	\$7.026	4.8%	3.3%	\$74,749	\$112,564
Foreclosed	\$0.000	\$11.910	0.0%	5.6%	\$97,700	\$108,321
Performing Loans	\$29.946	\$190.385	91.5%	88.8%	\$60,830	\$93,539
Non-Perf Loans	\$2.790	\$24.106	8.5%	11.2%	\$61,918	\$105,870
Grand Total	\$32.736	\$214.491	100.0%	100.0%	\$60,907	\$94,653
LOAN STATUS	SELF INSURED	CONV W MI	SELF INSURED	CONVEN. W MI	SELF INSURED	CONVEN. W MI
	# of Loans	# of Loans	Wtd DTI	Wtd DTI	WTD IR	WTD IR
PIF	135	501		N/A		N/A
Current	498	2,018	35.4	37.5	7.0	5.8
30 Days	23	199	35.1	42.1	7.0	6.2
60 Days	12	34	31.0	38.8	7.3	6.3
90 Days	15	27	34.7	34.2	8.5	6.2
120+ Days	22	67	36.8	41.2	6.6	5.9
Foreclosed	1	142	N/A	43.3	N/A	6.3
Performing Loans	656	2,718	35.4	38.0	7.0	5.8
Non-Perf Loans	50	270	34.8	41.7	7.2	6.2
Grand Total	706	2,988	35.3	38.4	7.0	5.9
LOAN STATUS	SELF INSURED	CONV W MI	SELF INSURED	CONVEN. W MI	SELF INSURED	CONVEN. W MI
	Wtd FICO	Wtd FICO	Wtd Age	Wtd Age	Wtd LTV	Wtd LTV
PIF						
Current	682	715	46.0	53.6	92.8	94.1
30 Days	575	674	Not Provided	70.3	91.6	96.3
60 Days	608	693	49.4	61.8	92.4	98.3
90 Days	Not Provided	677	56.0	47.0	90.7	96.1
120+ Days	620	705	36.4	49.9	93.6	95.8
Foreclosed	N/A	671	N/A	37.5	N/A	97.7
Performing Loans	679	714	46.0	53.9	92.8	94.3
Non-Perf Loans	617	690	40.2	44.0	92.7	97.1
Grand Total	675	713	43.2	51.4	92.8	94.6

"# of Loans" indicates loans originated; balances are current portfolio balances. Wtd DTI is Front-End

Self Insured loans have a lower average LTV than Conventional loans with Mortgage Insurance loans (92.8% versus 94.6%), and the average FICO score is significantly lower for Self Insured loans (675 versus 713) than for Conventional loans with MI. Interest rates are higher for Self Insured than for Conventional with MI (7.0% versus 5.9%).

Average loan sizes are substantially lower for Self Insured (\$60,907) than for Conventional with MI (\$94,653). Weighted DTI is lower for Self Insured loans compared to conventional with MI (35.3% versus 38.4%). The lower average FICO and lower average loan size together suggest that borrowers of the Self Insured product are of lower income than Conventional with MI borrowers.<sup>27</sup>

<sup>&</sup>lt;sup>27</sup> Borrower income was not reported by most providers.

Despite underwriting metrics that are less stringent, and borrowers apparently relatively of lower incomes, the Self Insured loans in the MH Mortgage Dataset perform better than the Conventional loans with Mortgage Insurance, with a 91.5% performance rate versus a 88.8% performance rate.<sup>28</sup> The performance results suggest that the Self Insured product, with its manual underwriting of applicants, produces results that are highly competitive with Conventional mortgages with Mortgage Insurance, and allows nontraditional but creditworthy borrowers to access affordable financing.<sup>29</sup>

It is true that for lenders originating loans, manual underwriting costs more than the use of automated underwriting systems. In general, a loan officer working with an applicant can deliver an earlier outcome through automated underwriting systems which are designed to deliver pre-qualifications on the spot. Manual underwriting, by contrast requires experienced loan underwriters to parse individual trade line items in an applicant's credit report, and to review and understand nontraditional credit. Because of speed and cost considerations, most lenders do not use products that require manual underwriting.

To offset potential higher costs of manual underwriting, Self Insured loans are priced higher (based on review of weighted averages) than Conventional with MI (7.0% for Self Insured versus 5.9% for Conventional with MI). The higher interest rates provide additional margin, while the slight edge in loan performance of the Self Insured product suggests that manual underwriting can pay for itself and even lead to better investor yields. At the same time, the Self Insured product's relatively lower FICO scores and higher LTVs suggest that its marginally higher interest rates may not be a barrier to effectively meeting the home finance needs of LMI borrowers.

In addition to manual underwriting, another factor that may affect the Self Insured product's successful performance is homeownership education and counseling. Some of the organizations providing this product offer this service, however, the Data Project did not collect adequate information to analyze its possible effect.<sup>30</sup>

	CONVEN	CONV. MI	SI	HFA FHA	HFA VA	HFA USDA	TOTAL
1998	714	655	NP	717	726	NP	686
1999	711	702	NP	660	663	720	695
2000	719	709	NP	660	NP	674	695
2001	719	701	NP	671	662	692	691
2002	727	698	NP	687	627	629	695
2003	725	716	NP	673	626	708	701
2004	744	716	NP	655	496	688	697
2005	728	720	706	665	712	686	703
2006	731	718	621	675	675	694	699
2007	725	715	665	663	668	687	693
2008	739	712	659	663	686	647	692
2009	751	725	657	676	605	695	708
2010	759	727	709	686	694	680	706
2011	752	717	686	698	713	713	720

### TABLE 15 - WEIGHTED AVERAGE FICO BY YEAR OF ORIGINATION FOR SELF INSURED AND OTHER PRODUCT TYPES

<sup>28</sup> The SI performance rate here is different than in Table 6 because loans with LTVs under 80% were removed to provide for a better comparison to CMI, as described on page 32.

<sup>29</sup> To gain additional insight into the factors driving the relative performance of Self Insured and Conventional Ioans with Mortgage Insurance, several statistical tests were performed. The results are described in Appendix C.

<sup>30</sup> A study of state HFAs found that 82% of HFAs require homeownership education and counseling for some or all of their products and that 93% do so because they believe it reduces loan delinquencies and foreclosures. Doug Dylla and Dean Caldwell-Tautges, *Winning Strategies: An Analysis of State Housing Finance Agency Support for Homeownership Education and Counseling Services* (Ithaca, NY: Doug Dylla Consulting, LLC, 2012), 1.

("NP" signifies "Not Provided")

In Table 15, we look at a 14-year period, 1998 through 2011, during which the large majority of loans in the MH Mortgage Dataset were originated, in order to see how average weighted FICO scores by product type fluctuated by year and to compare the Self Insured product to others. Self Insured mortgages, relatively young as a product, were first reported in 2005. In general, the average weighted FICO score for Self Insured loans by year is in the same range (mid 600s to low 700s) as the scores for FHA, VA and USDA loans purchased by state HFAs during the same period. This suggests that SI can support lower-credit borrowers in a manner similar to the government insured programs.

Although Self Insured loans have not yet achieved parity in terms of scale with Conventional with Mortgage Insurance loans, their performance and their ability to reach low downpayment, lower FICO and seemingly lower-income families suggest that this loan product deserves more attention from originators and investors. Further, since Conventional with Mortgage Insurance products are currently difficult to obtain in many markets, and when available often do not support low downpayment applicants with lower FICO scores, the use of Self Insured loans can meet a significant market demand in supplementing government insured loans to finance affordable homeownership.

## 5. Performance is driven by high-touch loan servicing

Several of the lenders and investors that participated in the Data Project retain servicing rights to their loans rather than relying upon third-party servicers. Instead, they use their own servicing divisions to employ what recent improvements in the loan servicing industry would call "high-touch" servicing protocols.<sup>31</sup> The data suggest that such "self-serviced" loans owned by these lenders and investors perform significantly better than those serviced by unaffiliated third party servicers that use traditional loan servicing approaches. "Self-serviced" loans perform better regardless of loan type, and perform better even when underwriting metrics are considered.

This was an unexpected and significant finding from the loan data, as information about loan servicing was not a part of the initial data request. Initial reviews of loan performance indicated that some organizations had particularly strong performance; follow-up with these organizations suggested that their approach to servicing was driving superior loan performance.

For the purposes of comparison, the lenders and investors were divided into three groups to facilitate comparison. All members of the Originator group retain their servicing and/or use "high touch" servicing protocols, and so the Originator group is one category (All Originators.)<sup>32</sup> A second group includes two HFAs, Pennsylvania Housing Finance Agency and Idaho Housing and Finance Association (PA & ID). Both these HFAs require loans to be sold to them servicing-released, meaning that the HFA purchases both the loan asset and the ability to service the loan themselves – to collect payments from the borrower(s), manage escrows and work with the borrower(s) if they become late on payments – or to hire an outside third party servicer to do the work. Both Pennsylvania and Idaho HFAs use their own internal divisions to service the loans using very high-touch protocols. Together, they form a second group for analysis.

<sup>&</sup>lt;sup>31</sup> "High Touch" servicing includes using Fannie Mae-, Freddie Mac- and/or Ginnie Mae-approved and compliant processes that allow the loan servicer to reach out early and often to late paying borrowers, and to offer short and long term loan adjustments and loan modifications as may be required. Failure of loan adjustments and/or modifications leads to a second and even third try. If the borrower is willing to work with the servicer, legal action is the last approach to be used.

<sup>&</sup>lt;sup>32</sup> Originators include BECU, Bank2, Community Development Bank, Hope Credit Union, New Hampshire Community Loan Fund and Self-Help Credit Union

The other state HFAs in the MH Mortgage Dataset, by contrast, retain outside, national third-party loan servicers to provide services for a fee. These other HFAs, other than Pennsylvania and Idaho, constitute the third group for comparative purposes (All Other HFAs).

Two caveats should be noted in the comparisons between the Originator group and the two HFA groups.

- Two of the Originators offer a more limited number or type of loan products (not all the product types listed in the following tables); and
- One large Originator by volume uses underwriting approaches that are more conservative than those of either HFA group.

#### **TABLE 16 - PRODUCT PERFORMANCE BY SERVICING GROUP**

(amounts shown in millions)

	CONVEN	CONV. MI	SI	FHA	VA	USDA	ALL	LOAN AMT	LOAN #
PA & ID HFAs	99.3%	98.0%	100.0%	97.5%	94.6%	90.5%	97.5%	\$201.5	3,627
All Other HFAs	94.2%	82.6%	92.1%	82.3%	80.1%	86.8%	83.5%	\$318.6	3,694
Originators	98.3%	94.5%	90.6%	100.0%	N/A	N/A	<b>96.3</b> %	\$124.5	1,533

The two groups using high-touch servicing, Originators and PA & ID, show better performance than the third group. These results hold across all six loan product types except, in the case of Originators, for the SI product, where Originator performance (90.6%) is slightly worse than for the other two groups. The PA & ID group's performance is significantly better than that of All Other HFAs, and slightly better than that of the Originators.

#### **TABLE 17 - LOAN PERFORMANCE BY SERVICER GROUP AND LTV AND FICO BANDS**

(amounts shown in millions)

LTV BANDS	PA & ID	ALL OTHER	ALL ORIG.	FICO BAND	PA & ID	ALL OTHER	ALL ORIG.
100+	94.7%	94.7%	88.9%	720+	99.2%	94.2%	98.5%
95-99	99.0%	94.8%	95.4%	680-719	98.0%	92.1%	96.1%
90-94	98.5%	93.2%	92.5%	640-679	96.9%	86.9%	97.8%
80-89	98.2%	87.8%	95.5%	600-639	94.0%	70.8%	88.7%
Less than 80	97.3%	81.3%	97.9%	<600	92.3%	64.3%	83.0%
Not Provided	100.0%	100.0%	89.8%	Not Provided	97.8%	80.0%	93.7%
Total	<b>97.5</b> %	83.5%	<b>96.3</b> %	Total	<b>97.5</b> %	83.5%	<b>96.3</b> %
Loan Amount	\$201.5	\$318.6	\$124.5	Loan Amount	\$201.5	\$318.6	\$124.5
Loan #	3,627	3,694	1,533	Loan #	3,627	3,694	1,533

Across virtually all FICO and LTV bands, ID & PA loans perform better than the All Other HFAs group. The Originator (All Orig) group generally also outperforms the All Other HFAs.

#### TABLE 18 - LOAN PERFORMANCE BY SERVICER GROUP AND UNDERWRITING CHARACTERISTICS

(amounts shown in millions)

	PERFORM.	IR	LTV	FICO	AGE	DTI	LOAN AMT	LOAN #
PA & ID HFAs	97.5%	5.5	91.6	701	50	37.3	\$201.5	3,627
All Other HFAs	83.5%	5.7	94.7	691	46	39.1	\$318.6	3,694
Originators	96.3%	5.8	75.0	740	40	NP	\$124.5	1,533

One possible explanation for the superior performance of the portfolios of the PA & ID HFAs and Originators is that they use more demanding underwriting criteria. Table 18 shows details for some of the differences in the underwriting used among the three comparison groups. Loans owned by PA & ID have slightly higher weighted average FICO scores (a 10 point difference) than All Other HFAs, but have weighted average FICO scores that are 39 points lower than the Originators group. They have lower weighted average LTV (3.1% lower) in comparison to All Other HFAs. Interest rates are lower for PA & ID than for All Other HFAs (16 basis points difference). The weighted average age at default (Age) for these two datasets indicate that PA & ID loans take longer (four months on average) to become nonperforming, which could mean either that the applicants had greater resilience from stronger underwriting criteria, or that the early intervention by the servicing systems for PA & ID support better loan performance in the long run.

The PA & ID portfolio and the Originator portfolios perform very similarly, with 97.5% and 96.3% performance rates, respectively. PA & ID achieve slightly better performance even though their underwriting parameters are significantly less conservative than those of the Originators group (i.e., average LTV is higher and average FICO score is lower).

The differences in underwriting parameters between PA & ID on one hand, and All Other HFAs on the other are modest. So, while more conservative underwriting may be a factor in the better performance of the Originator group compared to the All Other HFA group, the difference in the performance of the PA & ID portfolios compared to those of All Other HFAs is so large that it cannot be fully explained by modest differences in underwriting between the two. The loan servicing protocols used by PA & ID thus appear to be the primary driver in their improved loan performance.

#### 6. HFA-purchased USDA loans perform better than the USDA-provided dataset

Lower-income families with lower downpayments and lower credit scoring often rely on government insured or provided loan programs for their mortgage finance options. In looking at one such program, the USDA Rural Development 502 Guaranteed program, the loans purchased by state housing finance agencies perform better than the total set of loans originated through this program. Table 19 compares USDA 502 Guaranteed loans purchased and reported by HFAs to the Data Project to the data received from USDA under the FOIA request for both the 502 Guaranteed and the 502 Direct programs.<sup>33</sup>

In its FOIA request, the Data Project requested the data elements, including FICO scores, shown in Appendix B; however, the response did not include FICO scores. Consequently, Table 19 does not show weighted average FICO scores in the USDA Guaranteed and USDA Direct columns. The relatively low weighted average FICO score for the state HFA-purchased USDA loans of 682, even though there is no data for comparison in the USDA columns, suggests that the participating state HFAs do not only purchase high-credit borrower USDA loans from their approved lenders.

<sup>&</sup>lt;sup>33</sup> USDA RD 502 Guaranteed loans are originated by approved lenders and guaranteed by USDA; some of these are purchased by HFAs. USDA Guaranteed loans purchased by HFAs and reported to the Data Project are denoted "HFA-USDA." USDA RD 502 Direct loans are originated by USDA. While both are designed for qualified low-income households in eligible rural areas, USDA Guaranteed and USDA Direct have different program and underwriting details.

#### TABLE 19: UNDERWRITING AND PERFORMANCE CHARACTERISTICS OF USDA LOANS FROM FOIA REQUEST AND FROM HFA PORTFOLIOS

	HFA-USDA	USDA GUAR	USDA DIRECT	ALL HFAS
	ΠΓΑ-ΟΟΟΑ	USDA GUAR	USDA DIRECT	ALL IIFAS
CHARACTERISTICS:				
WTD. AVG. LOAN SIZE	\$ 115,829	\$    , 22	\$88,168	\$ 97,481
WTD. AVG. LOAN AGE (MOS)	40	38	ND	46
WTD. AVG. INTEREST RATE (%)	5.2	6.0	5.1	5.6
WTD. AVG. AGE AT DEFAULT (MOS)	43	41	53	24
UNDEWRITING:				
WTD. AVG. FICO	682	Not Provided	Not Provided	691
WTD. AVG. LTV	99	97	94	94
PERFORMANCE:				
PERFORMING LOANS (\$MM)	\$ 19	\$ 398	\$116	\$ 463
PERFORMING LOANS (#)	205	4,835	1,773	6,646
PERFORMING LOANS (%)	88.9%	76.8%	82.3%	88.9%
NON-PERF LOANS (\$MM)	\$3	\$121	\$29	\$57
NON-PERF LOANS (#)	20	1,044	286	675
NON-PERF LOANS (%)	11.1%	23.2%	17.7%	11.1%
PIF	-	-	\$ 1,049,519	-
CURRENT	\$ 18,823,733	\$ 398,163,339	\$ 114,608,410	\$ 462,652,506
60-120 DAYS	\$ 587,293	\$ 15,721,062	\$ 6,530,340	\$ 11,674,699
120+ DAYS	\$ 1,158,090	\$ 104,658,785	\$ 18,386,412	\$ 29,440,436
FORECLOSURE	\$ 609,439	\$ 158,129	-	\$ 16,375,920
PERFORMING LOANS	\$ 18,823,733	\$ 398,163,339	\$ 115,657,929	\$ 462,652,506
NON-PERFORMING LOANS	\$ 2,880,813	\$ 120,537,976	\$ 29,376,800	\$ 57,491,055
TOTAL	\$ 21,178,555	\$ 518,701,315	\$ 140,574,681	\$ 520,143,562

The weighted average LTVs for these data providers allow direct comparisons. The LTVs are higher for state HFA-purchased USDA loans than for the general market data provided by USDA for the Guaranteed program by two percentage points (97% for the general USDA market and 99% for state HFAs), which suggests that the superior performance of loans purchased by state HFAs is not the result of the use of more conservative underwriting criteria. Weighted average interest rates are lower for the state HFA loans by a full 80 basis points (6.0% for the general market versus 5.2% for state HFAs). Lower interest rates can improve loan performance outcomes, although they may also be a reflection of higher loan risk.

It is interesting to note that the USDA Direct loans report better performance than USDA Guaranteed (82.3% compared to 76.8% performing).

In summary, HFA-purchased USDA Guaranteed loans perform significantly better than the USDA Guaranteed general market data provided through the FOIA request (88.9% compared to 76.8% performing, respectively). From available data, it does not appear that more conservative underwriting is the driver for this improved performance. Factors underlying superior HFA performance as discussed in Finding 5, including manual underwriting and "high touch" loan servicing, and possibly homeowner education and counseling,<sup>34</sup> are likely to also play a role here. Additional data will be needed to more fully analyze this question.

<sup>&</sup>lt;sup>34</sup> See Footnote 30.



# V. Need for Better Data Collection and Analysis

One of the most clear and pressing recommendations that emerges from the Data Project research and findings is for better data collection and analysis. Despite the limitations of the data and the challenges involved in their interpretation, this study demonstrates how data compilation and analysis can produce findings that will benefit lenders, investors, government programs, homebuyers and homeowners. More and better data will allow even more questions to be analyzed and answered.

As a starting point, it is critical for lenders and others to compile and analyze basic loan characteristics and performance data, such as the data fields used by the Data Project (see Appendix B for a full list). The Data Project found that existing systems do not consistently capture and report such data, with the result that some questions could not be answered, and that a great deal of effort was required to clean and standardize the data that were collected. Some Data Project participants had difficulty extracting basic information, sometimes externally maintained and sometimes from multiple databases. Not even a single Data Project participant was able to provide all of the requested basic data fields. Within the basic data fields, debt-to-income ratios, and whether they are front-end or back-end ratios, is one notable example where basic data collection and reporting needs improvement. Whether or not the home meets ENERGY STAR<sup>\*</sup> criteria is another basic data field that was not available, but which will provide essential information about the increasingly important issue of the relationship of energy efficiency to loan performance. Basic data that most participants could not report also included such important indicators as whether the home is new or existing; the age of the existing home; whether the home is single-, double- or multi-section.

In addition to the basic elements listed in Appendix B, we recommend that the following additional data indicators be consistently recorded and reported.

- Applicant counseling and education
- Borrower counseling and education<sup>35</sup>
- Whether borrower received downpayment assistance, what amount and type<sup>36</sup>
- Identification for regulators and investors whether retained self-servicing or third-party loan servicing; and whether standard or high-touch
- Itemized fees, points and other costs, and whether they are included in the financing
- Net loan recovery after foreclosure
- Type of land tenure: fee simple, resident-owned or cooperatively-owned community or other community<sup>37</sup>
- Specific MH loan identification for Home Mortgage Disclosure Act (HMDA) and other regulated and nonbank mortgage lender reporting requirements

Data and analysis are fundamental to understanding the factors that contribute to loan performance. Improved and standardized data collection and reporting is an urgent need, which can provide important support to the nation's affordable housing sectors in many ways, including finds that can improve loan underwriting and investment practices.

<sup>&</sup>lt;sup>35</sup> For both applicant and borrower counseling and education, a consistent methodology for reporting is needed that reflects quality and intensity. The National Industry Standards for Homeownership Education & Counseling (http://homeownershipstandards.com) and HUD's system for approving housing counselors may provide useful guides.

<sup>&</sup>lt;sup>36</sup> One study found that foreclosure rates for homebuyers who used Individual Development Account (IDA) matched savings toward their downpayments were one-half to one-third the rate for other low-income homeowners in the same communities. Ida Rademacher, Kasey Wiedrich, Signe-Mary McKernan, Caroline Ratcliffe and Megan Gallagher, Weathering the Storm: Have IDAs Helped Low-Income Homebuyers Avoid Foreclosure (Washington, DC: CFED & The Urban Institute, 2010), 2, 12-13.

<sup>&</sup>lt;sup>37</sup> Type of land tenure should be recorded because mortgage loans are already available in resident-owned communities (ROCs), for example, in New Hampshire, and are expected to become more widely available in leaseholds in the future.

# **VI. Recommendations**

Our recommendations for action fall into three major categories:

- Improve the quality of data and analysis on affordable loans for manufactured homes to build the evidence base needed to attract more lenders and investment
- Promote product development and innovation among lenders and investors to generate higher volume of affordable MH loans with sustainable performance
- Mobilize a range of stakeholders to integrate the comprehensive MH value proposition

   one that accounts for energy efficiency, cost savings, housing choice and more into
   mainstream policies shaping the future of housing affordability in the United States

Specific steps to consider under each heading follow.

## I. Improve the quality of data and analysis on affordable loans for manufactured homes to build the evidence base needed to attract more lenders and investment

Using data-based analyses to increase understanding of how loans perform will reduce uncertainty and quantify risk. Our efforts to date show that improvements are needed in three main areas:

- Collecting specific data elements, many of which are common to both MH and non-MH loans, that can enhance our understanding of factors that affect loan performance and the ability of products to effectively serve low- and moderate-income borrower populations
- Standardizing data collection, and doing so to the extent possible for both MH and non-MH loans, to ensure greater consistency and to reduce the expense of conflicting reporting requirements
- > Providing for the regular reporting and sharing of data for research and analysis

Specific steps to consider:

- GSEs, investors, lenders and regulators adopt data collection protocols that provide for more complete and reliable data (See Section V of the Report for a complete list and discussion).
  - o Since borrower counseling and homeowner education appear to be correlated with improved loan performance, appropriate indicators should be included in standard data collection protocols

- o NeighborWorks<sup>®</sup> America, HUD and HUD-certified housing counselors and others should help to identify the two to three datapoints that will reflect quality and intensity of borrower counseling and homeowner education, such as compliance with National Standards for Homeownership Education & Counseling and HUD approved housing counselors
- o Net loan recovery after default data are needed to measure loss severity
- In cosponsoring the National Mortgage Database (NMDB), the Federal Housing Finance Agency (FHFA) and Consumer Financial Protection Bureau (CFPB) ensure that MH -- both mortgage and chattel loans -- is fully represented
  - o Distinctions in the MH finance landscape (for example, the market penetration of specialized chattel lenders and the exclusion of much MH from MLS-type databases) are recognized and appropriate adjustments made as needed to capture MH in the NMDB
  - o Datasets from HFAs/National Council of State Housing Agencies (NCSHA) (i.e. State Street HFA database for Treasury), GSEs and others are used to enhance the NMDB
- Fannie Mae and Freddie Mac, with oversight from FHFA, Ginnie Mae and others work with the Mortgage Industry Standards Maintenance Organization (MISMO) and others toward uniform loan data delivery protocols that ensure that MH is fully reflected with sufficient detail to track and analyze MH loan performance, and that the data elements proposed in Section V of the Report are included. MH should also be fully reflected in the Uniform Appraisal Dataset. These efforts are facilitated by the support and cooperation of
  - o HFAs and the NCSHA
  - o Banks and non-depository institutions of all sizes and their associations
  - o Credit unions, their organizations and the National Credit Union Administration (NCUA)
- Chattel lenders, American Bankers Association, Community Bankers Association, GSEs, NCUA, Housing Finance Agencies not already participating, lenders and investors join the original Data Project Participants to share and support the sharing of non-personally identifiable information on MH loan origination and performance on a regular basis with the MH Loan Data Collection Project, to be managed by I'M HOME or a successor organization, in order to increase the body of understanding and contribute to product innovation. To the extent that the National Mortgage Database demonstrates that a separate MH Loan Data Collection effort may no longer be needed in the future, this effort can be redirected toward data interpretation, analysis and applied research.
- HUD, CFPB, USDA, private foundations and other stakeholders provide financial and in-kind support (such as research and software support) to continue the MH Loan Data Collection effort on an ongoing basis and financial support for ongoing research that analyzes loan origination and performance, including geographical and other variations, based on improved data reporting

# II. Promote product development and innovation among lenders and investors to generate higher volume of affordable MH loans with sustainable performance

As illustrated in the Report, a number of lenders and investors have already successfully demonstrated product innovations for manufactured housing mortgages that produce sustainable performance. As the result of future trends such as state-by-state adoption of the Uniform Manufactured Housing Act, demographic pressures for housing affordability and the fact that MH delivers the lowest unsubsidized cost of all single family homeownership types, the market can be expected to grow, as will the need for product innovations.

Specific steps to consider:

- GSEs, USDA, HUD, FHFA, CFPB and others work to eliminate barriers to MH loans and ensure equal treatment of MH for financing, downpayment assistance and other programs and supports
- Agencies, institutions and associations, such as but not limited to HUD, CFPB, Fannie, Freddie, NCSHA, NFCDCU, CUNA, NCUA, share the findings of the Report widely through conferences and publications both within their own organizations and with other key audiences (such as Ginnie Mae, other secondary market players, private mortgage insurers, financial trade associations) to make the case that MH lending can be done sustainably and to encourage product innovation growing from the Report's findings about specific factors that are associated with exemplary loan performance
- Industry leaders such as Pennsylvania Housing Finance Agency and Wyoming Community Development Authority attract matching funds in support of their stated willingness to commit some of their own capital in order to create and expand sustainable MH mortgage products, and they are joined by others in similar efforts on regional and national levels
- Private mortgage insurers, other intermediaries and investors, supported by GSEs, NCSHA, NFCDCU, CUNA, NCUA and others, utilize the Report's findings to develop and expand products that incorporate features such as lower downpayments with "high-touch" loan servicing, manual underwriting and applicant/borrower education and counseling on a profitable basis
- NCSHA encourages HFAs to proliferate "best practices" in MH products among their members through educational efforts and support of credit enhancement strategies to increase sustainable MH lending among HFAs
- GSEs incorporate MH into their "standard and premium price" offerings and contracts with HFAs and others
- NFCDCU, CUNA and others work to develop products and approaches to increase credit union offerings with support from NCUA for sustainable MH lending by the credit unions it regulates
- CDFI Fund and others support the development of social enterprise-driven product innovations to spur the growth of affordable MH single family lending by CDFIs, community banks and others to meet LMI household needs
- GSEs, HFAs, other investors and lenders provide informed and positive input as states consider adoption of the Uniform Manufactured Housing Act

### III. Mobilize a range of stakeholders to integrate the comprehensive MH value proposition – one that accounts for energy efficiency, cost savings, housing choice and more – into mainstream policies shaping the future of housing affordability in the United States

The value proposition for manufactured housing is compelling and multi-faceted. In today's environment, in which budget deficits and fiscal austerity share the stage with an imperative to find a path toward economic growth and financial security for working- and middle-class Americans, manufactured housing represents an important, positive factor. Some of the many policy opportunities to incorporate the MH value proposition include:

- o Disaster planning and recovery;
- o Veterans and military households' need for affordable housing and financial security;
- o Reduction of federal funds for affordable housing; and
- o Energy efficiency, which will reduce overall housing costs.

Specific steps to consider include:

- Department of Energy, HUD, utility companies and others join with practitioners, researchers, state energy offices, and industry to identify and measure the economic impact of MH energy efficiency
- HUD, other Federal and state agencies, planning groups, utility companies and housing organizations review MH technology, by studying the work of Systems Building Research Alliance and others and commissioning additional research for its potential applicability to issues of health, aging, density, job creation, disaster response, etc.
- HUD requires that MH should be incorporated into Comprehensive Plans where appropriate; state, regional and metropolitan planning offices and commissions, including transit-oriented and "smart growth" efforts, incorporate MH into plans where appropriate
- Lenders and investors, including GSEs, work with The Appraisal Institute, state appraisal organizations and others to expand training programs for appraisers on how to better incorporate energy efficiency into valuation of homes, including manufactured homes, and to implement other recommendations from the report, *Real Homes, Real Value: Challenges, Issues and Recommendations concerning Real Property Appraisals for Manufactured Homes*<sup>38</sup>
- HUD, CDFI Fund and others provide financial and in-kind support to research into ways to expand affordable mortgage finance to MH serving Native American households, including MH on tribal lands
- I'M HOME Network members join with affordable housing networks, housing counseling organizations, Assets & Opportunity Network state and local lead organizations and members and others to educate themselves about MH and to incorporate MH into planning, policy and advocacy activities
- Assets & Opportunity Network organizations and members are educated about and integrated into state efforts that emerge around the Uniform MH Act

<sup>&</sup>lt;sup>38</sup> LeBaron, op cit.

## APPENDIX A COMPARISON OF CHATTEL AND MORTGAGE LOAN COSTS AND PAYMENTS

Comparisons between the costs of an MH Mortgage loan and an MH Chattel loan are not an easy "apples to apples" comparison. For the purposes of this effort we will say the loan applicant is purchasing a multi-section MH home with a number of accessories from a broker/dealer who is moving it, building a foundation acceptable for chattel loans and placing it on a lot. The "all in" price will total an amount that allows for \$100,000<sup>39</sup> in loan financing. The broker/dealer financing arm is offering the applicant either Mortgage or Chattel financing.

To support a better comparison, the following are some assumptions about the transaction about the loan applicant and the lender/investor:

APPLICANT/TRANSACTION ASSUMPTIONS: The applicant has a mid-FICO score between 650 – 680 and a 5% downpayment. We will assume the applicant, and the transaction is "approved" for this loan under all requisite debt-to-income ratios and all other underwriting requirements (although the lower monthly payment that the Mortgage loan provides would allow a much lower-income applicant to be qualified).

MH HOME FOUNDATION ASSUMPTIONS: MH home foundation requirements for a Mortgage loan are more stringent than for a Chattel loan. We will add an additional \$6,000 to the Mortgage loan amount to accommodate these more stringent requirements.

LOAN PRODUCT COMPARISONS: This applicant will be offered an FHA-insured Mortgage loan for this purchase (through a wholesale lender) and a Chattel loan through a major chattel lender<sup>40</sup> Current rates may be different. Both loans are presented with zero origination (no points) fees.

LOAN FEE COMPARISONS: There is a variation among rates and fees charged by different lenders. The Chattel and mortgage loan fees used are from published and available schedules. There may be other fees and expenses involved in specific circumstances that can significantly increase Chattel or Mortgage fees including: lot rent(s); prepaid interest; HUD or other Mortgage insurance; others.

TIGHTENING OF CREDIT STANDARDS IN LOAN UNDERWRITING: We believe that in the current market environment, an applicant with a FICO score below 650 will have a very difficult time securing a Mortgage but could get a Chattel loan provided his/her FICO score is not lower than 630 (or the equivalent of 630 using alternative credit underwriting allowances). There is then a thin slice of applicants who can only access financing in the Chattel, but not Mortgage, market (generally, between 630 – 650 FICO). This generalization may not hold for all applicants but does for the vast majority, as each homebuyer brings many strengths (and weaknesses) which could allow a lender to waive certain loan underwriting requirements.

There are Chattel lenders whose loan interest rates are lower than those provided below, however these lower rates require a much higher FICO score, which over 70% of home buyers do not possess.

<sup>&</sup>lt;sup>39</sup> \$100,000 may be high for a chattel loan amount, but allows a more direct comparison with a mortgage amount of an equal size.

<sup>&</sup>lt;sup>40</sup> The chattel rate comes from USBank's August 2010 schedule.

#### MONTHLY PRINCIPAL AND INTEREST CALCULATIONS

- FHA insured real estate \$106,000 mortgage with a 5.375% fixed rate with a 30 year term through a wholesale lender,
   P & I (monthly) = \$594
- 2) Chattel loan of \$100,000 with a 10.99% fixed rate with a 15 year term (maximum term allowed) through their wholesale division,
   P & I (monthly) = \$1,136

#### CLOSING COSTS (NOT INCLUDING DOWNPAYMENT)

- The FHA mortgage loan, on average (national) closing costs are approximately 3 5% of the sales/loan size. Mortgage loans require many fees including: title insurance; recording; appraisal; flood cert; tax transfer and/or sales tax = FHA Closing Costs = \$3,250
- 2) Chattel loans require lower closing fees, but these fees vary widely depending upon the state in which the closing takes place. These fees can include: appraisal; flood cert; title cert and tax transfer and/or sales tax. Very often these and other fees can be added into the financing by the chattel lender so it can be difficult to compare chattel loan closing costs to mortgage closing costs. If the above costs were not added to financing they would approximately equal = Chattel loan Closing Costs = \$1,275

#### CONCLUSIONS:

From these assumptions and this comparison, the closing costs for a Chattel loan are much cheaper than the closing costs for a Mortgage loan, approximately \$2,000 less in total.

However, the difference in monthly payments between an FHA Mortgage loan (\$594) and a Chattel loan (\$1,136) equals \$642 per month. In less than four months (\$642 x 4 = \$2,568), the borrower using the Mortgage loan would have recovered the higher closing costs and would continue to save \$642 per month during the remaining loan term.

## **APPENDIX B** FULL SET OF DATA FIELDS IN THE ORIGINAL PROJECT DATA REQUESTS

Property - Real Estate or Chattel Fee Simple – Y/N Occupancy - Primary Y/N Property Zip Code State County Mid FICO Purchase Y/N **MI** Company MI Coverage (85, 90, etc.) Single-, double- or multi-section Loan Type - Conventional, FHA, VA, etc. Principal & Interest (only) PITI Lien Position, first - Y/N Loan - Chattel, Mortgage or RISC Documentation – Note or Mortgage Self Employed - Y/N Debt-to-Income Ratio Interest Rate @ Closing Appraisal Type Downpayment (actual amount)

Original Appraised Amount Loan-to-Value Ratio Loan Amount Amortization Term Original Term Model (home) Year Manufacturer Home Sales Company Unit Invoice Cost New Home - Y/N Prior Bankruptcy Current Loan Amount Remaining Term Balloon - Y/N First Payment Date Paid Through Date (as of) Mid FICO Update Current Months Delinquent Interest Paid Through Date If ARM, current rate Date of Foreclosure Outstanding Principal @ Foreclosure Costs Accrued from Foreclosure Disposition of Foreclosure

## **APPENDIX C** STATISTICAL ANALYSIS

To gain additional insight into the factors driving the performance of the Self Insured and Conventional Loans with Mortgage Insurance, several statistical tests were performed. As discussed in Finding 4, the descriptive statistics suggest that the Self Insured loan product performed better than Conventional loans with Mortgage Insurance despite a lower average FICO score and higher average LTV. It was decided that further statistical tests should be conducted to explore these relationships in greater detail.

#### RESULTS OF PEARSON'S CHI-SQUARE TEST

To provide a more rigorous analysis of whether there was difference in the performance of the two loan types (Conventional mortgages with Mortgage Insurance and Self Insured mortgages), the Chi-Square test for association of two categorical variables was conducted. The analyses indicated that there was no statistically significant relationship between loan type and loan performance. In other words, Self Insured loans perform no worse than Conventional despite the differences in the borrower profiles (i.e. the borrowers of Self Insured loans with Mortgage Insurand loans having higher LTV ratios and lower FICO scores on average than borrowers of Conventional loans with Mortgage Insurance).

#### RESULTS OF SPEARMAN'S RHO TEST

Bivariate analysis (the Spearman's r test) was conducted to test the relationship between interest rate, LTV, FICO and performance for both Conventional loans with Mortgage Insurance and Self Insured loans. Similar results were obtained for both loan types (see Table 20). LTV and interest rate were moderately correlated with performance for both loan types. FICO score was weakly correlated with performance for both loan types.

Because interest rate is correlated with FICO and LTV, it was decided that a multivariate analysis would be more useful in looking at the relationships between the dependent and independent variables. In multivariate analysis, one is able to examine the relationship between each independent variable and the dependent variable, controlling for all of the other independent variables in the model.

#### RESULTS OF LOGISTIC REGRESSION TEST

Logistic regression was conducted to test the relationship between interest rate, LTV, FICO score and performance for both loan types (i.e. LTV, FICO and interest rate were independent variables, and performance, expressed as a binary variable, was the dependent variable).<sup>41</sup>

The results for the Conventional loans with Mortgage Insurance indicated that higher FICO scores and lower LTV ratios were correlated with better performance. Interest rate was not a statistically significant driver of performance. (The results for FICO and LTV were statistically significant.)

The results for same tests on the Self Insured loans were considerably different. Higher FICO scores were correlated with better performance, although the relationship was not as strong as was the case with Conventional loans with Mortgage Insurance. There was no statistically significant relationship with either LTV or interest rate.

<sup>&</sup>lt;sup>41</sup> Interest rate, which is often collinear with FICO score, was controlled for by adding FICO score and LTV into the model separately. A logistic regression of interest rate alone produced significant results for each loan type, but the results became increasingly insignificant as FICO and LTV were added to the model.

Moreover, there is a striking difference in the relationship between LTV and performance for Self Insured loans: as LTV increases, the Self Insured loans are more likely to perform well. This contrasts with the typically observed relationship between loan performance and LTV: that, all other things being equal, lower LTV ratios are correlated with better loan performance.

#### SUMMARY OF FINDINGS OF STATISTICAL ANALYSIS

These findings support the premise that Self Insured loans perform as well as or better than Conventional loans with Mortgage Insurance in spite of the less conventionally desirable underwriting profiles, and because of factors other than traditional underwriting variables. The results of this statistical analysis lend support to the premise that factors other than these traditional underwriting variables may be more strongly associated with loan performance for Self Insured loans.

#### TABLE 20: RESULTS OF SPEARMAN'S R AND LOGISTIC REGRESSION ANALYSES

BIVAR	RIATE ANALYS	IS SPEARMA	MULTIVARIA	<b>TE ANALYSIS</b>	LOGISTIC RI	EGRESSION	
CMI LOANS	SPEARMAN'S R	R SQUARED	Р	В	Р	EXP(B)	ODDS
FICO	0.30	9%	< 0.00	0.015	0.000	1.015	1%
LTV	0.44	19%	< 0.00	-0.057	0.008	0.944	-6%
Interest Rate	0.46	21%	< 0.00	-0.192	0.302	0.825	-18%
SI LOANS	SPEARMAN'S R	<b>R SQUARED</b>	Р				
FICO	0.22	5%	< 0.00	0.008	0.088	1.009	1%
LTV	0.42	17%	< 0.00	0.063	0.303	1.065	6%
Interest Rate	0.48	23%	< 0.00	-0.448	0.151	0.639	-36%

*Dependent Variable = Performance* 

## APPENDIX D TABLES NOT INCLUDED IN NARRATIVE

	CONVEN	CONV. MI	SI	HFA FHA	HFA VA	HFA USDA	TOTAL
1998	13.2%	45.3%	Not Provided	0.0%	0.0%	0.0%	27.4%
1999	21.6%	23.4%	Not Provided	26.5%	68.6%	0.0%	<b>25.9</b> %
2000	12.3%	22.7%	Not Provided	46.0%	Not Provided	19.9%	<b>26.2</b> %
2001	14.9%	7.5%	Not Provided	36.6%	42.0%	50.0%	24.0%
2002	13.0%	22.0%	Not Provided	33.3%	78.5%	61.5%	<b>29.2</b> %
2003	18.4%	18.6%	Not Provided	45.4%	64.8%	29.8%	29.3%
2004	4.3%	14.8%	Not Provided	40.3%	49.5%	26.9%	21.8%
2005	11.5%	16.8%	0.0%	55.2%	33.2%	31.1%	28.3%
2006	14.7%	19.1%	82.7%	46.0%	46.0%	26.2%	31.9%
2007	13.8%	16.6%	44.1%	50.7%	50.7%	44.4%	32.1%
2008	13.0%	26.8%	45.8%	51.0%	28.9%	53.3%	35.5%
2009	3.9%	16.3%	59.3%	39.8%	73.0%	30.7%	25.1%
2010	5.1%	16.8%	25.2%	38.5%	19.9%	46.2%	<b>27.9</b> %
2011	4.9%	17.1%	32.3%	33.0%	20.6%	4.8%	19.2%

#### TABLE APP. D:1 PERCENTAGE OF NON-PRIME LOANS BY YEAR (PRIME = 680 FICO OR BETTER)

(1) Percentages based on current loan volume of only those loans with FICO data available

#### TABLE APP. D:2 AVERAGE AGE AT DELINQUENCY BY ORGANIZATION

	AGE (MOS)
Org_I	49.3
Org_2	Not Provided
Org_3	Not Provided
Org_4	32.9
Org_5	Not Provided
Org_6	36.2
Org_7	34.1
Org_8	21.0
Org_9	25.9
Org_10	33.4
Org_11	Not Provided
Org_12	43.5
Org_13	57.9
Org_14	Not Provided
Org_15	52.0
Org_16	Not Provided
Org_17	24.9
Org_18	Not Provided
Org_19	Not Provided
Org_20	35.5
Org_21	57.8
TOTAL	40.2

#### Notes:

These are all the results for delinquent loans that had a value for "first payment date," "interest paid to" N = 2058 of a possible 2230 nonperforming loans

