



Issue Date	September 24, 2007
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Audit Report Number	2007-KC-0004
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TO: Brian D. Montgomery, Assistant Secretary for Housing – Federal Housing
Commissioner, H

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FROM: Ronald J. Hosking, Regional Inspector General for Audit, 7AGA

SUBJECT: More Than 80 Percent of Recently Insured Title II Manufactured Housing Loans
Are on Homes With Substandard Foundations

HIGHLIGHTS

What We Audited and Why

We audited the U.S. Department of Housing and Urban Development’s (HUD) Title II manufactured housing loan program. We initiated this review because of the high insurance risk to the Federal Housing Administration (FHA) fund that manufactured homes have historically represented, and prior audit observations of foundation deficiencies with FHA-insured homes.

Our objective was to determine whether, and to what extent, FHA insured Title II manufactured housing loans on properties with foundations that did not meet its requirements.

What We Found

Of the FHA Title II insured manufactured housing loans that closed from 2003 through 2005, at least 50,000 (or more than 80 percent of the financed homes) were installed on substandard foundations. This occurred because current FHA controls cannot be relied on to ensure installers follow required guidelines. As a result, FHA’s insurance fund is not adequately protected, homeowner equity and

resale values are diminished, and the structural integrity and safety of the homes is questionable.

What We Recommend

We recommend that HUD correct program weaknesses to ensure that Title II manufactured housing foundations meet FHA requirements and avoid unnecessary losses to the insurance fund of an estimated \$44.9 million within the next year.

For each recommendation without a management decision, please respond and provide status reports in accordance with HUD Handbook 2000.06, REV-3. Please furnish us copies of any correspondence or directives issued because of the audit.

Auditee's Response

We provided the draft report to HUD on July 2, 2007, and requested a response by August 1, 2007. HUD provided written comments on August 3, 2007.

The complete text of the auditee's response, along with our evaluation of that response, can be found in appendix B of this report.

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BACKGROUND AND OBJECTIVES

The U.S. Department of Housing and Urban Development (HUD) manages the Federal Housing Administration (FHA) insurance program. FHA provides mortgage insurance on loans made by approved lenders. It insures mortgages on single-family and multifamily homes, including manufactured (mobile) homes. FHA is one of the largest insurers of mortgages in the world, insuring more than 34 million properties since its inception in 1934. FHA mortgage insurance provides lenders with protection against losses as a result of homeowners' defaulting on their mortgage loans. The lenders bear less risk because FHA will pay a claim to the lender in the event of a homeowner's default. Loans must meet FHA requirements to qualify for insurance.

FHA insures manufactured home loans under its Title I and Title II insurance programs. It has provided Title I loan insurance on manufactured homes since 1969. The Title I program insures lenders against losses of up to 90 percent of the value of the loan. The maximum loan amount is \$48,600 for only the manufactured home and \$64,800 for the home and the lot on which it is placed. The allowable loan term varies from 20 to 25 years.

Under the Title II program, FHA has provided loan insurance on manufactured homes since 1983. FHA can insure manufactured housing loans under its Title II program as long as the foundations of the properties meet requirements in HUD Handbook 4930.3G, Permanent Foundations Guide for Manufactured Housing (Guide). The loan must encompass the manufactured home and the site on which it is placed to qualify for the Title II program. The maximum loan amount varies by geographical area and the amounts are the same as those allowed on stick-framed homes. The maximum loan term for Title II manufactured home loans is 30 years. FHA does not have a limit for which it will insure lenders against loss for Title II program loans. According to HUD's Single Family Data Warehouse, FHA has insured more than 280,000 Title II manufactured housing loans within the last 10 years with original mortgage amounts of more than \$28.6 billion.

The U.S. Congress has also designated HUD as the government agency responsible for overseeing the federal manufactured housing program. Under this program, HUD's Office of Manufactured Housing issues, monitors, and enforces federal manufactured home construction and safety standards. The U.S. Congress established the federal manufactured housing program to protect the health and safety of the owners of manufactured homes. The intent of the program is to reduce personal injuries, deaths, property damage, and insurance costs and to improve the quality and durability of manufactured homes. HUD's Office of Manufactured Housing is not part of FHA.

Our audit objective was to determine whether, and to what extent, FHA insured Title II manufactured housing loans on properties with foundations that did not meet its requirements.

RESULTS OF AUDIT

Finding: FHA Insured More Than 50,000 Title II Manufactured Housing Loans on Homes Installed on Substandard Foundations

Of the FHA Title II insured manufactured housing loans that closed from 2003 through 2005, at least 50,000 (or more than 80 percent of the financed homes) were installed on substandard foundations. This occurred because FHA lacked reliable controls to ensure installers followed applicable standards. As a result, FHA's interests in the properties were not protected, homeowners were negatively affected, and the safety of the properties was questionable.

We conducted 102 nationwide, on-site inspections of manufactured homes insured by FHA under the Title II insurance program. We limited our inspections to the foundations and determined that 93 of the 102 properties did not meet FHA requirements. Of the 93 properties with substandard foundations, 55 were proposed or newly constructed homes and 38 were existing homes.

We began the review by conducting inspections in Texas, where substandard foundations were reportedly a common problem. These inspections indicated significant noncompliance with FHA foundation requirements. Therefore, we performed additional inspections using statistical sampling methods and used the results to estimate the impact of ineligible properties on the FHA insurance fund.

FHA Insured Manufactured Housing Loans on Homes with Substandard Foundations

Of the 102 foundations inspected, 93 did not meet FHA standards for safety and structural integrity. FHA requires Title II insured manufactured homes to have, with or without a basement, a site-built foundation that complies with HUD Handbook 4930.3G, Permanent Foundations Guide for Manufactured Housing (Guide). Included in the Guide are specific requirements for four structural areas critical to proper installation of the foundation: perimeter enclosure, piers, footings, and anchorage. The Guide states that permanent foundations provide for safety and long-term satisfactory performance.

We used statistical sampling methods to select a nationwide sample of 68 Title II insured manufactured homes to inspect for compliance with FHA foundation requirements. Of the 68 manufactured homes inspected, 59 were on substandard foundations. Statistically projected results from inspections of the 68 homes show that FHA insured at least 50,000 loans on properties that did not meet FHA

standards for safety and structural integrity. The 50,000 estimated loans were about 80 percent of the more than 63,000 manufactured housing loans that closed between January 1, 2003, and December 31, 2005. Details of the sample selection and projection are in appendix C of this report.

We performed on-site foundation inspections to determine whether the foundations complied with the requirements of four critical structural areas defined in the Guide.

Perimeter Enclosure

Of the 102 properties inspected, 51 did not have adequate permanent perimeter enclosures. The Guide requires manufactured homes to have a properly enclosed crawl space with a continuous permanent foundation-type construction. The perimeter must be adequately secured to the unit to exclude entry of vermin and water and allow proper ventilation of the crawl space. The following inspection photograph from a Texas home is an example of a failed perimeter enclosure. This enclosure failed because traditional vinyl skirting is unable to resist the design wind loads required by the Guide.



Piers

Of the 102 properties inspected, 73 did not have adequate piers. The Guide requires all masonry piers to have mortared bed and head joints. Dry-stacked piers are not acceptable. The following inspection photograph from a Missouri home shows an example of dry-stacked piers.



Footings

Of the 102 properties inspected, 45 did not have reinforced concrete footings under the piers. The Guide requires that pier footings be reinforced concrete and the base of the footing be below maximum frost-penetration depth. The following inspection photograph from a Missouri home shows an example of a property with no footing under the piers.



Anchorage

Of the 102 properties inspected, 51 did not have adequate anchorage. The Guide requires manufactured housing units to be permanently attached to the foundation by anchorage devices adequate to resist all loads, including resistance to ground movements and uplift caused by wind, earthquake, etc. Anchoring straps or

cables affixed to ground anchors other than footings (or piers) do not meet this requirement. Screw-in soil anchors are also not considered a permanent anchorage. The following inspection photograph from a Texas home shows an example of a screw-in soil anchor.



Appendix D shows detailed results of the on-site inspections for the 68 statistically selected properties inspected and the results projected. Appendix E shows detailed results of the on-site inspections for the 34 additional properties inspected.

As of March 26, 2007, HUD systems showed the following insurance status on the 93 loans.

Status of loans	Number of loans	Original mortgage amount	Claims paid	Losses incurred
Currently insured	55	\$5,629,531		
Claims paid – property sold	27			\$1,771,528
Claims paid – property not yet sold	10		\$1,141,908	
Terminated – no longer insured	1			
Totals	93	\$5,629,531	\$1,141,908	\$1,771,528

FHA Lacked Reliable Controls

FHA lacked reliable, consistent controls over the Title II manufactured housing program. It relied on certifications from engineers and inspectors stating that the foundations complied with FHA requirements. However, it did not proactively monitor or require lenders to monitor the engineers or compliance inspectors attesting to the foundations.

FHA instructions also did not require that engineers complete a standard certification form identifying the FHA requirements to which the engineer was attesting. For loans on proposed and newly constructed manufactured homes, FHA required only that engineers certify that the plans and specifications for the foundation generally complied with FHA requirements. It did not require the engineer to conduct an on-site inspection of the foundation. This process did not ensure that the foundations were installed according to the certified plans and specifications. Of the 68 loans in the statistical sample, lenders provided the certification to HUD on 61 properties. However, our inspections found that 50 of the 61 properties had substandard foundations.

Further, requiring compliance inspections on proposed and newly constructed manufactured homes did not ensure that foundations met FHA requirements. FHA instructions required compliance inspectors to conduct on-site inspections and certify that they had carefully inspected the property and reported all noncompliance, work requiring correction, and unacceptable work. However, FHA instructions did not require compliance inspectors to specifically certify to whether the foundations complied with the Guide. Several FHA compliance inspectors told us that they relied solely on the engineer's certification of the plans and specifications when performing a compliance inspection and did not specifically inspect the foundation for compliance with the Guide. Of the 68 properties in the statistical sample, lenders provided HUD with a compliance inspection on 37 of the 39 properties required to have an inspection. However, our inspections found that 31 of the 37 properties had substandard foundations.

Lastly, FHA's foundation requirements were too difficult to use to be effective. HUD's Office of Manufactured Housing officials told us that they frequently received calls from certifying professionals requesting clarification of FHA's foundation requirements because the guidance was not clear. Certifying professionals, such as engineers, retailers, installers, and compliance inspectors, confirmed what HUD officials told us. Professionals that certified to FHA compliance on the loans in the statistical sample told us that

- FHA guidance was vague, confusing, outdated, and too voluminous to understand and apply.
- FHA guidance was not readily accessible or consistently provided to certifying professionals.
- Direct guidance from HUD's homeownership centers was inconsistent and sometimes contrary to FHA's formal requirements.
- Communication between HUD and compliance inspectors was weak.
- FHA guidance did not clearly define the responsibilities of engineers, inspectors, and installers to ensure that properties met FHA foundation requirements.

Some certifying professionals believe that their responsibility is to ensure that the home is safe and habitable, not to determine whether the foundation meets FHA requirements. Further, they do not always agree with FHA requirements, and these disagreements have encouraged the industry to avoid enforcing certain FHA guidance. Some professionals told us that they followed the applicable state guidance and did not concern themselves with the federal requirements, and others stated that they were not aware that federal requirements existed.

FHA’s Interests Were Not Protected

Title II manufactured housing loans are a more significant risk to the FHA insurance fund than loans for stick-framed homes, even more so when the properties do not meet FHA standards. HUD’s data systems show that FHA’s loss rate (loss amount compared to insured amount) for manufactured homes was nearly twice as high for stick-framed homes for the period 2003 through 2005 and about 44 percent higher over the past 10 years. FHA’s average loss amount on a manufactured home was about 61 percent more than on stick-framed homes for the same three-year period and about 40 percent more over the past 10 years. Further, the claims rates (percentage of loans with claims filed) for manufactured home loans are about twice those for stick-framed homes. The following tables demonstrate the higher risk of loss to the insurance fund for manufactured homes as compared to stick-framed homes.

Three-year period: 2003-2005

Property type	Loss rate	Average loss	Claims rate
Title II manufactured	31.4%	\$30,873	3.98%
Nonmanufactured	16.7%	\$19,191	1.89%

10-year period: 1997-2006

Property type	Loss rate	Average loss	Claims rate
Title II manufactured	37.2%	\$34,099	6.45%
Nonmanufactured	25.9%	\$24,436	3.95%

It is reasonable to believe that a home with a substandard foundation is a greater risk of a higher loss to the insurance fund than a home with an adequate foundation. HUD officials told us that the value of manufactured housing is negatively affected if the foundation does not meet FHA requirements and that HUD was aware that a high percentage of foundations did not meet FHA’s requirements. Further, a HUD management and marketing contractor told us that, without the manufactured housing unit being properly attached to a foundation,

FHA is at risk of the unit being removed from the site, leaving a vacant lot. The same management and marketing contractor told us that many of the manufactured homes that her company received to market and sell were not on foundations that met FHA requirements. In addition, the company's inspection reports indicated that about 80 percent of the manufactured homes in its inventory were installed without eligible foundations.

Homeowner Interests Were Not Protected

Homeowners were negatively affected when purchasing FHA-insured manufactured homes with substandard foundations. For example, homeowners were not getting the permanent foundations that they expected and paid for; therefore, the homes were likely to have been overvalued and the mortgages overinsured.

Homeowners also experienced problems selling their homes to potential buyers seeking an FHA-insured loan. This caused financial detriment to the sellers because the pool of potential buyers is significantly reduced if buyers are unable to obtain FHA insurance on the loan. For example, in a recent case, the lender for an FHA-insured manufactured home loan did not obtain the required engineer's certification for the foundation when underwriting the loan. The home was installed with a substandard foundation. The homeowner later tried to sell the home and found a buyer who expected to use FHA-insured financing. The new lender obtained an engineer's certification, which showed that the foundation did not meet FHA requirements. As a result, the homeowner lost the sale because the buyer could not obtain FHA-insured financing.

Further, FHA's inadequate controls did not protect the safety of the homeowners. In recent years, consumer group studies by Consumers Union, the Fannie Mae Foundation, and The Mortgage Professor have shown that proper installation and anchoring of the home is a key element in determining how the home will perform in severe weather situations. Manufactured homes that are not on permanent foundations with adequate anchorage are much more vulnerable to damage when natural disasters occur.

If the manufactured home is not installed correctly, it causes an unnecessary risk to homeowners and a greater risk to the insurance fund than HUD intended when insuring the loan.

Proposed Changes Will Not Protect FHA

HUD has proposed changes to its FHA rules for manufactured homes to qualify for insurance. FHA plans to stop using the Guide and rely on new manufactured housing installation standards and a compliance program being established by HUD's Office of Manufactured Housing. However, we do not believe that the new installation rules are sufficient to protect FHA's interest in the loan.

As required by the Manufactured Housing Improvement Act of 2000 (Act), the Office of Manufactured Housing is revising the federal manufactured housing program. When complete, the new model installation standards and Manufactured Housing Installation Program will apply to all manufactured home installations, regardless of the type of financing used to purchase the home. The Office of Manufactured Housing is not part of FHA. It is designing its program to comply with the Act, not to provide HUD with assurance that each home with a FHA-insured mortgage will have a foundation that ensures adequate security for the loan. In fact, the foundation standards being developed as part of the new program are noticeably lower than those contained in FHA's current Guide. In addition, the new program does not include sufficiently reliable monitoring, accountability, and enforcement mechanisms.

The Office of Manufactured Housing's new model installation standards do not require that manufactured homes be placed on permanent foundations. They do not require masonry piers to be mortared, and footings are not required to be reinforced concrete. The standards also do not specify that screw-in soil anchors are not allowed, and they consider skirting to be an optional feature for non-load-bearing perimeter designs.

The purpose of the Office of Manufactured Housing's new Manufactured Home Installation Program is to ensure the use of the new model installation standards in all states. States may choose to administer their own installation program and in doing so, must certify to HUD that their program meets specific requirements. States will certify to HUD that their program includes acceptable installation standards, provisions for training and licensing manufactured home installers, and provisions for inspections of manufactured home installations. In those states that do not administer their own program, HUD must implement the installation program. The HUD-administered program must include the same elements described for the state-administered programs. In HUD-administered states, HUD plans to rely on self-certifications from installers that they have installed the foundations in keeping with the model installation standards. Installers are to self-certify to compliance after receiving an inspection from a qualified inspector hired by the installer.

HUD plans to rely on self-certifications from states and installers that they are meeting federal requirements. HUD does not have a plan to proactively monitor and enforce the new rules.

We do not believe that the changes proposed by the Office of Manufactured Housing are strong enough to protect FHA's interests in Title II insured mortgages. In short, the proposed changes reduce the physical standards for the foundations while not providing for sufficiently reliable monitoring, accountability, and enforcement mechanisms.

Conclusion

As a result of FHA's ineffective foundation standards and reliance on engineers and inspectors to ensure that foundations met standards without having them sign specific, reliable, and enforceable certifications that the foundations met the standards, FHA insured more than 50,000 Title II manufactured housing loans in recent years on properties with substandard foundations. Contributing to the problem was HUD's failure to monitor the engineers and inspectors or hold the lenders responsible for doing so.

If HUD implements our recommendations to strengthen controls over insuring loans on manufactured homes, it could reduce losses to the insurance fund by nearly \$45 million within the next year. This estimate of cost savings is based on the historical rates of substandard foundations, claim rates, and loss rates in the Title II manufactured housing mortgage insurance program.

Recommendations

We recommend that the assistant secretary for housing – federal housing commissioner

- 1A. Correct program weaknesses to ensure that Title II manufactured housing foundations meet FHA requirements and that FHA avoids potential losses of an estimated \$44.9 million within the next year. These improvements should include simplifying or replacing the Guide without reducing its foundation standards; requiring reliable, enforceable certifications from inspectors specifically stating that they inspected the foundation and that each required foundation element is present and adequate; and developing and implementing an effective method of monitoring the inspectors and holding them accountable for incorrect certifications.

SCOPE AND METHODOLOGY

To accomplish our objective, we evaluated Title II manufactured housing loans insured by FHA that closed between January 1, 2003, and December 31, 2005. We also evaluated Title II manufactured housing loans originated, sponsored, or purchased after endorsement by the largest FHA manufactured housing lender in HUD's Region VII and the second largest lender of such loans in the nation.

We reviewed FHA loan files, HUD handbooks including the Guide, and HUD's proposed changes to the federal manufactured housing program. We also reviewed previous HUD Office of Inspector General (OIG) reports related to Title II manufactured housing and interviewed HUD headquarters staff, homeownership center staff, government technical representatives, management and marketing contractors, compliance inspectors, certifying engineers, and borrowers. We also researched manufactured housing industry and consumer groups and performed on-site foundation inspections.

To begin on-site foundation inspections, we selected loans from the indicated Region VII lender's 67 loans in claims status that closed between July 1, 2004, and December 31, 2005. Using property locations from HUD's system data, we identified geographical clusters of the 67 properties. Based on these clusters, we selected 43 loans in Texas for foundation inspections. We conducted on-site inspections of the foundations of 31 of the 43 properties. We inspected the properties for compliance with FHA requirements specific to four areas: perimeter enclosure, piers, footings, and anchorage. We did not inspect 11 properties because we could not gain adequate access to 10 properties and one property was not a manufactured home. We provided the results of our seven initial on-site inspections to a HUD Office of Manufactured Housing engineer. The engineer confirmed our inspection approach and agreed with our conclusions that the foundations failed to meet FHA requirements. We completed the remaining inspections using the same approach as for the initial seven inspections.

Based on the results of that sample, we proceeded to conduct inspections of a nationwide statistical sample of manufactured homes. To conduct the statistical analysis of the foundations, we identified the universe of all Title II manufactured housing loans that closed between January 1, 2003, and December 31, 2005, using data from HUD's Single Family Data Warehouse computer system. The universe consisted of 102,195 loans with original mortgage amounts totaling more than \$10.5 billion. The 102,195 loans included 84,491 loans that were actively insured or in claims status as of August 2006 with original mortgage amounts totaling more than \$8.7 billion. Using the universe of 84,491 loans, we employed an unrestricted attribute sampling plan to select 68 loans and 32 replacement loans for review and on-site inspection of the properties. The sampling plan also allowed statistical projections of the number of manufactured housing units in HUD's Single Family Data Warehouse system that had foundations not meeting FHA requirements. Appendix C provides a detailed explanation of the statistical sampling methodology and results.

We conducted on-site inspections of the statistically selected foundations in the same manner and for the same four areas previously described. We provided the results of the 62 inspections

(59 from the statistical sample and three replacement loans) that we had identified as properties having ineligible foundations to the same HUD engineer for comment. The engineer confirmed that 56 of the properties had foundations that failed to meet FHA requirements but was unable to agree or disagree with our conclusions on the remaining six properties based on the photographs provided.

We relied on computer-processed data contained in HUD's Single Family Data Warehouse and Neighborhood Watch systems. We assessed the reliability of the data, performed sufficient tests of the data, and found the data adequate to meet our audit objective.

HUD acquires manufactured homes through foreclosure when borrowers default on the FHA-insured mortgage. Borrowers may default on mortgages for various reasons, such as a reduction in income, excessive financial obligations, and changes in family circumstances. When borrowers default, HUD uses the FHA insurance fund to pay a claim to the lender and acquire the property. When HUD sells the acquired manufactured housing properties, the FHA insurance fund generally incurs a significant loss. Significant losses occur for various reasons. For example, HUD sells manufactured homes as-is, making only necessary safety repairs. HUD rarely offers FHA insurance on the loans because the properties usually do not meet FHA standards, including the standards for adequate foundations. In addition, manufactured homes are more difficult to sell than stick-framed homes and it takes longer to sell manufactured homes; therefore, HUD usually has to repeatedly reduce the price to sell the homes.

To estimate the amount of potential savings to the FHA insurance fund if HUD implements our recommendations, we calculated the potential loss FHA could realize on the loans it will insure within the next year. We estimated the \$44.9 million in savings as follows:

34,041	Average annual number of manufactured housing loans closed during the period January 1, 2003, through December 31, 2005, according to HUD's Single Family Data Warehouse system. This time period produces our best estimate of future program activity because it was the most recent time period that was reasonably available to us during our audit.
x .7498	Percentage of manufactured housing loans correctly coded as manufactured homes in the Single Family Data Warehouse system. We established this percentage by reviewing the property appraisal in the FHA loan file and from on-site inspections of the properties selected in our nationwide statistical sample. We used the most conservative percentage based on the results of our sample (63,354 / 84,491 = 74.98 percent, as explained in Appendix C).
x .80	Percentage of manufactured home loans that closed from January 1, 2003, through December 31, 2005, that we project to have foundations not meeting FHA requirements, based on on-site inspections conducted for our statistical sample.
x .0645	10-year claim rate of manufactured homes, based on Single Family Data Warehouse system data for loans closed from January 1, 1997, through December 31, 2006. This 10-year history produces a more accurate historical claim rate for this program than we would get by using just the loans

originated during our audit period. We did not use a longer period because obtaining older data from HUD's systems is not practicable.

x \$34,099 10-year average loss per manufactured home sold by FHA when borrowers defaulted on the loan, based on Single Family Data Warehouse system data for loans closed from January 1, 1997, through December 31, 2006. This 10-year history produces a more accurate historical average loss amount for this program than we would get by using just the loans originated during our audit period. We did not use a longer period because obtaining older data from HUD's systems is not practicable.

= \$44,909,590 Potential savings within the next year

We conducted on-site foundation inspections in multiple locations nationwide. We performed our audit work from August 2006 through June 2007. We performed our review in accordance with generally accepted government auditing standards.

INTERNAL CONTROLS

Internal control is an integral component of an organization's management that provides reasonable assurance that the following objectives are being achieved:

- Effectiveness and efficiency of operations,
- Reliability of financial reporting, and
- Compliance with applicable laws and regulations.

Internal controls relate to management's plans, methods, and procedures used to meet its mission, goals, and objectives. Internal controls include the processes and procedures for planning, organizing, directing, and controlling program operations. They include the systems for measuring, reporting, and monitoring program performance.

Relevant Internal Controls

We determined the following internal controls were relevant to our audit objectives:

- Policies and procedures that HUD management has implemented to reasonably ensure that Title II insured manufactured housing properties have foundations that comply with FHA regulations, procedures, and instructions.

We assessed the relevant controls identified above.

A significant weakness exists if management controls do not provide reasonable assurance that the process for planning, organizing, directing, and controlling program operations will meet the organization's objectives.

Significant Weaknesses

Based on our review, we believe the following items are significant weaknesses:

FHA's controls over the Title II manufactured housing program were unreliable and inconsistent.

- HUD did not adequately monitor or require lenders to adequately monitor the professionals certifying that manufactured home foundations met FHA requirements.
- FHA's instructions for inspecting and certifying to compliance with its requirements did not ensure that manufactured home foundations were installed within FHA guidelines.

APPENDIXES

Appendix A

SCHEDULE OF QUESTIONED COSTS AND FUNDS TO BE PUT TO BETTER USE

Recommendation number	Funds to be put to better use 1/
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1A	\$44,909,590
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1/ Ineligible costs are costs charged to a HUD-financed or HUD-insured program or activity that the auditor believes are not allowable by law; contract; or federal, state, or local polices or regulations.

Implementation of recommendation 1A, to correct program weaknesses to ensure that FHA insures only those manufactured home loans with property foundations that meet FHA requirements, would allow FHA to avoid potential losses of \$44.9 million within the next year.

Appendix B

AUDITEE COMMENTS AND OIG'S EVALUATION

Ref to OIG Evaluation

Auditee Comments

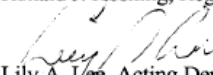


U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT
WASHINGTON, DC 20410-8000

AUG 3 - 2007

OFFICE OF HOUSING

MEMORANDUM FOR: Ronald J. Hosking, Regional Inspector General for Audit, 7AGA

FROM: 
Lily A. Lee, Acting Deputy Assistant Secretary for
Single Family Housing, HU

SUBJECT: Draft Audit Report- Title II Manufactured Housing Loans

This is in response to the Office of Inspector General's (OIG) revised draft audit, dated July 23, 2007, regarding FHA Title II manufactured housing loans. I appreciate the opportunity to respond prior to OIG's publication of its audit.

Overall observations:

Comment 1

The draft audit states that 80 percent of Title II manufactured homes were installed on substandard foundations, i.e., those not in compliance with FHA's adopted Permanent Foundations Guide for Manufactured Housing (PFGMH). As previously discussed during the exit conference, there is currently no universally accepted definition of a permanent foundation, or a *substandard* foundation. In recognition of this fact HUD's Office of Manufactured Housing Programs has promulgated national installation regulations, i.e., the Model Manufactured Home Installation Standards (Installation Standards) that will set the minimum standards for the set up and installation (including foundations) for all new manufactured homes throughout the United States. FHA intends to adopt such standards for its mortgage insurance programs.

Comment 2

Comment 3

Moreover, independent of FHA, the majority of the states currently have regulations governing the installation of manufactured homes, which every new manufactured home would have to comply with, regardless of financing and mortgage insurance restrictions. Additionally, many jurisdictions throughout the country have adopted building codes which address foundation requirements as well as provide for inspections of foundations for compliance. Many of these same jurisdictions would require the foundation supporting a manufactured home to be in compliance with the building code, regardless of any FHA foundation requirements. Frequently, these building codes have foundation requirements that would meet or exceed the requirements found in the PFGMH.

Comment 4

Secondly, we find it difficult to adequately respond to the draft audit without a clear understanding of the factual basis and the sources used for the conclusions and recommendations that were reached. Conclusions and recommendations appear to be based more on assumptions as opposed to facts that would withstand a test for legal sufficiency.

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Our comments about OIG's draft audit follow:

Draft Audit Does Not Prove Losses Are Related to Foundation Issues

Comment 5

The draft audit fails to illustrate the nexus between the projected losses to the FHA insurance fund and any failure to abide by the existing manufactured housing foundation requirement. Instead, the draft report assumes a correlation between the default rate of FHA-insured loans secured by manufactured homes and the home's compliance (or lack thereof) with FHA requirements, including certifications attesting to the home's compliance with the PFGMH. The draft report states, "It is reasonable to believe that a home with a substandard foundation is a greater risk of a higher loss to the insurance fund than a home with an adequate foundation" but there is no indication in the report that any of the homes situated on non-compliant foundations suffered any degradation, structural problems, diminished value due to a non-foundation or that the default was caused by the foundation.

OIG also concludes that FHA will suffer nearly \$2 million dollars in future losses because these loans are non-compliant with PFGMH. To reach such a conclusion, the draft audit should provide reasonable evidence of such a correlation.

Proposed Permanent Foundation Changes Are Necessary and Justified

Comment 6

FHA the Office of Manufactured Housing agrees that the PFGMH is vague, confusing, outdated and voluminous, which is why the Office of Housing is engaged in rulemaking to adopt the Model Manufactured Home Installation Standards and end reliance upon this outdated guidebook.

OIG's Audit Conclusion

Comment 7

The draft audit report ultimately concludes that if HUD implements OIG's recommendations to strengthen controls on manufactured housing, HUD could reduce losses to the insurance fund by nearly \$45 million within the next year. Yet the report never substantiates or supports this claim other than to highlight the high default, claim and loss rates which are symptomatic of the market for manufactured housing industry wide and not just FHA-insured Title II manufactured housing loans.

Comment 8

1) **Audit Conclusion:** Seek Indemnification from lenders on 55 loans on proposed or newly constructed manufactured homes that had substandard foundations.

FHA Response: The audit report does not provide any information indicating that the lender was in non-compliance. The Office of Single Family Housing does not agree that lenders, should be required to indemnify FHA for loans where qualified third parties may have, independently certified incorrectly.

Comment 9

2) **Audit Conclusion:** "If HUD implements our recommendations to strengthen controls over insuring loans on manufactured homes, it could reduce losses to the insurance fund by nearly \$45 million dollars within the next year".

FHA Response: There is no evidence provided by OIG that the failure to abide by the PFGMH is a contributory factor in both the rate of default and the loss severity of the property

OIG's Audit Recommendations

Comment 10

OIG recommended that FHA seek indemnification from the lenders on 55 loans which are secured by manufactured homes that are installed on "ineligible foundations". However, the draft audit did not specify the 55 loans for which indemnification is recommended, nor does it indicate which lenders were not compliant with FHA requirements.

Comment 11

OIG also prepared a separate revised draft memorandum regarding FHA Title II manufactured housing loans endorsed without lender's submittal of the required engineer's certification. The memorandum recommends that FHA seek indemnification from the lenders on each of the 21 loans. However, there is no indication in the memorandum if any of these 21 loans were part of the 55 loans referenced above.

Since it is very difficult to constructively comment on a draft audit lacking in these details, the Office of Single Family Housing requests that OIG determine which, if any, of the 21 loans are part of the 55 loans for which it is also recommending indemnification.

Comment 12

Recommendation 1A: Correct program weaknesses by simplifying the PFGMH; requiring reliable, enforceable certifications from inspectors and developing an effective method of monitoring the inspectors.

FHA Response: The PFGMH is not a FHA handbook but one that was developed under the auspices of the Office of Policy Development and Research. FHA, as well as the Office of Manufactured Housing has determined that the PFGMH is no longer useful or pertinent. Therefore, rather than "simplify" a document that has outlived its usefulness, we believe it to be a more efficient and effective to devolve to nationwide standards. As OIG is aware, FHA is currently engaged in rulemaking to amend the current foundation regulations and adopt the Installation Standards that will set the minimum standards for the set up and installation (including foundations) for all new manufactured homes in the U.S. The Installation Standards, as well as the Manufactured Home Installation Program, both rulemaking initiatives by the Office of Manufactured Housing and required by the Manufactured Housing Improvement Act of 2000, will create one, nationwide standard for the states to meet or exceed in the set up and installation of new manufactured homes as well as providing for the licensing and training of installers and subsequent certifications. OIG has concurred with these rules.

Recommendation 1B, 1C, and 1D: Require lenders to indemnify HUD on a total of 55 mortgages

Comment 13

FHA Response: As stated previously, the Office of Single Family Housing cannot fully respond to the draft report's recommendation of requests for indemnifications until receipt of the comprehensive list of all the loans reviewed and the requested clarifications. Please also note that in order to seek indemnification from an FHA-approved lender the final audit must provide evidence to support that the lender knew or should have known of a violation to a program requirement, and that violation represents a material deficiency.

I am confident that the final audit report will address FHA's preceding comment and those discussed during our meeting on the draft report. So that FHA Single Family can be as responsive to OIG as possible, please include the following information in your final audit report:

- Comment 14**
1. Copies of the 102 foundation inspection reports conducted by a qualified inspector, including:
 - Documentation supporting the findings and conclusions for each report;
 - Documentation verifying that the foundation was non-compliant at the time of endorsement;
 - Description of the inspection methodology and criteria used to determine compliance or non-compliance.
- Comment 15**
2. Any evidence that the mortgagor's default was caused by the non-compliant foundation, and any evidence that missing documentation was not present in the case binder at endorsement.
- Comment 16**
3. Evidence demonstrating that the non-compliant foundation creates higher defaults and property depreciation compared to similar non FHA-insured mortgage properties as well as increased loss severity of FHA loans on manufactured housing with noncompliant foundations versus those that met the PFGMH.
- Comment 17**
4. Supporting analysis and conclusions substantiating OIG's conclusion that non-compliant foundations, at the time of endorsement, increased monetary risk to the insurance fund and/or the purchasers, including quantification of that risk.
- Comment 18**
5. Evidence supporting each case recommended for indemnification verifying that the violation represents a material deficiency and that the lender knew or should have known of the violation.

OIG Evaluation of Auditee Comments

Comment 1 Since 1996, FHA has required Title II insured manufactured homes to have foundations that comply with the Permanent Foundations Guide for Manufactured Housing (Guide). In addition, FHA has required compliance inspectors to know the requirements in the Guide and to inspect properties for compliance with the Guide as well as other applicable requirements. We conducted our inspections to determine whether the properties qualified for FHA insurance, using the Guide as the applicable structural standards. Those homes that did not meet the standards of the Guide are classified as substandard in this report.

Comment 2 The Office of Manufactured Housing is creating national installation standards that will set the minimum standards for the set up and installation (including foundations) for all new manufactured homes. However, as stated in the report, we do not believe that the changes proposed by the Office of Manufactured Housing are strong enough to protect FHA's interests in Title II insured mortgages.

For example, the proposed changes require the installer to install the foundation in accordance with the manufacturer's specifications. However, the proposed rule does not require the compliance inspector to verify that the installer installed the foundation in accordance with the manufacturer's specifications. The proposed changes require only that the inspector verify that the property meets the minimum installation standards established by HUD, which could be significantly less than the standards set by individual manufacturers. Therefore, if the manufacturer has established more stringent installation standards to ensure that its specific manufactured home is properly supported and safe for the occupant, no party is responsible for ensuring compliance with the more stringent requirements.

Overall, the proposed changes reduce the physical standards for the foundations while not providing for sufficiently reliable monitoring, accountability, and enforcement mechanisms.

Comment 3 We conducted 102 foundation inspections of Title II insured manufactured homes in 30 states. The inspections showed that 80 percent of the foundations did not meet the Guide's structural requirements. These results indicate that current state regulations are not effective.

Comment 4 The report clearly details the factual basis and the sources used for the conclusions and recommendations reached. Since HUD did not provide specific examples, we are not able to more fully respond to this comment.

Comment 5 This report does not attempt to correlate the default rate of FHA-insured manufactured home loans to the properties' compliance (or lack thereof) with

FHA foundation requirements. However, it does conclude that the amount of loss to the insurance fund will be higher on homes with substandard foundations. This conclusion is logical, and is supported by reliable sources. Several HUD personnel knowledgeable of FHA-insured manufactured homes and the resale of those homes told us that the value and marketability of manufactured housing is negatively affected if the foundation does not meet FHA requirements. For example, being unable to offer a home as eligible for FHA insurance reduces the potential pool of purchasers, which negatively affects marketability of the property. In addition, it is a generally accepted practice for appraisers to make appraisal adjustments for noncompliance with applicable requirements and other deficiencies when assigning a value to a home.

As stated in the report, in accordance with the objectives of this audit, we conducted on-site inspections of Title II FHA-insured manufactured home properties to determine whether the foundations complied with the Guide. We did not inspect the homes for structural damage caused by substandard foundations and this report does not imply that there was structural damage in the homes we inspected. The central point of this report is that HUD should not have insured the loans on the properties because the properties did not comply with FHA foundation requirements.

Regarding the \$2 million in future losses that would be saved if HUD required indemnifications on these loans, we have removed those statements from the report. Please see comment 8 below for more details.

Comment 6 We do not object to FHA ending its use of the Guide; however, FHA needs to ensure that manufactured homes insured with Title II insurance are on adequate foundations. FHA needs to be sure that any new installation standards and program procedures it uses will adequately protect the insurance fund and the interests of the homeowners. As is explained in the report and other parts of this appendix, we do not believe that the proposed installation rules are sufficient to protect FHA's interest in the loans.

Comment 7 We maintain that HUD could reduce losses to the FHA insurance fund if it strengthens controls for insuring manufactured housing. We used FHA's historical default, claim, and loss rates solely for estimating the amount of those reduced losses. The methodology we used and the assumptions we made are discussed completely in the finding and the scope and methodology section of the report.

Comment 8 We believe that HUD should hold lenders responsible for loans on properties that have substandard foundations. Lenders are responsible for determining that properties are acceptable for mortgage insurance, and as part of the underwriting process, provide the compliance inspectors that inspect proposed or newly constructed properties for compliance with FHA requirements. Therefore, lenders on these properties should be held responsible for submitting loans for insurance

that did not comply with FHA foundation requirements, as these loans should not have been insured.

However, as described in the finding, one of the weaknesses in this program is that prior to endorsement, FHA does not require a specific inspection of the foundations on these homes, nor does it require that the compliance inspectors sign reliable, enforceable certifications that the homes are installed on adequate foundations. Therefore, we agree that HUD would have difficulty requiring indemnifications from the lenders that originated these loans. Accordingly, we removed the recommendations that HUD seek indemnification from the lenders.

Comment 9 As explained more fully in comment 5 above, this report does not attempt to correlate the default rate of FHA-insured manufactured home loans to the properties' compliance (or lack thereof) with FHA foundation requirements. We concluded that, for various reasons, the value of a manufactured home is negatively affected if the foundation does not meet FHA requirements; and the failure to abide by the Guide is a contributory factor in the high losses incurred on manufactured homes.

Comment 10 As explained more fully in comment 8 above, we have removed the recommendations that HUD seek indemnifications from the lenders.

Comment 11 In conjunction with this report, we issued a memorandum (OIG Memorandum #2007-KC-0801) to HUD regarding FHA Title II manufactured housing loans that were endorsed without the lenders having submitted the required engineer's certification. In the memorandum, we recommended that HUD seek indemnification from the lenders for 21 loans submitted without the engineer's certification. As is explained in comment 8, we have removed from this report the recommendations that HUD seek indemnifications from the lenders for loans on properties identified as having substandard foundations. Therefore, the loans questioned in the memorandum do not conflict with this audit report.

Prior to issuing the draft report, we provided HUD with a list of the 21 loans that were missing engineers certificates. We also provided the Office of Manufactured Housing with the inspection results for seven of the properties that failed our preliminary inspections and for all the statistically selected properties that failed our inspections. We offered to provide HUD with a list of all loans included in our indemnification recommendations, but HUD did not want it. We will provide all requested information when we issue this report.

Comment 12 FHA has for many years required (and currently requires) parties involved in the processing of manufactured home loans for FHA insurance to follow the Guide requirements. As previously stated in comment 6 above, we do not object to FHA discontinuing use of the Guide. However, FHA must ensure that relying on the new model installation standards and installation program will adequately protect the value of the properties that secure the insured loans, which in turn protects the

FHA insurance fund. This should include installation requirements that ensure an adequate foundation; requiring reliable, enforceable certifications from inspectors specifically stating that they inspected the foundation and that each required foundation element is present and adequate; and developing and implementing an effective method of monitoring the inspectors and holding them accountable for incorrect certifications.

As stated in comment 2, we are aware that the Office of Manufactured Housing is currently engaged in rulemaking that will set the minimum standards for the set up and installation (including foundations) for all new manufactured homes. OIG reviewed the Office of Manufactured Housing's proposed changes for the model installation standards (FR-4812-P-02, March 2006) and FHA's proposed changes to use the model installation standards and installation program (FR-5075-P-01, January 2007) as its standards for insuring manufactured homes. In concurring with the two proposed rules, we expressed concerns to HUD about the enforcement of the model installation standards. We also expressed our concerns about enforcement to HUD's Office of Single Family Housing staff in headquarters, given our audit results. We concurred on these proposed standards, while noting our concerns, to allow the rulemaking and public response process to go forward timely. OIG received the proposed rules for enforcement of the model installation standards for review and comment on September 14, 2007. We will respond to these proposed rules by the deadline.

We strongly believe, given the incidence of noncompliance observed in our audit tests, that FHA lenders must ensure that inspectors conduct a site inspection of the installed home and foundation.

Comment 13 As explained in comment 8, we maintain that HUD should hold lenders responsible for loans on proposed or newly constructed properties that have substandard foundations. However, since FHA's controls in this area are not strong enough to hold anyone accountable for the substandard foundations, we removed the recommendations that HUD seek indemnification from the lenders.

Comment 14 During the audit, we kept HUD informed of our foundation inspection process and results, including providing evidence of noncompliant foundations.

Independent auditors from our office conducted the on-site inspections. Before conducting any inspections, we held discussions with HUD's Office of Manufactured Housing about the foundation areas that we intended to inspect and how to conduct the inspections. As a result of the discussions, we developed a process to conduct and document our observations, using photographs and field notes.

During the on-site inspections, the auditors observed readily identifiable characteristics of the foundations to determine whether they met FHA standards. Specifically, the auditors observed whether the

- perimeter enclosure was constructed using a permanent foundation-type material that enclosed the crawl space (not vinyl siding).
- concrete blocks in the piers were mortared together (not dry stacked).
- piers were placed on concrete footings (not directly on the ground).
- anchoring devices were encased in concrete (not screw-in soil anchors).

After conducting several inspections, we provided inspection photographs to an Office of Manufactured Housing engineer. The engineer confirmed that our approach was reasonable and agreed with our conclusions that the foundations failed to meet FHA requirements. We completed the inspections using the same approach and provided the results of the 62 failed inspections from the statistical sample to the Office of Manufactured Housing. Its engineer confirmed our conclusions of substandard foundations in 56 of the 62 cases. The engineer declined to agree or disagree with our conclusions on the remaining six loans because he relied solely on our inspection photographs and considered the photographs for these properties to be inconclusive. In these six instances, the auditors observed the same noncompliance as in the other 56 cases. Therefore, we are confident that if we had been able to obtain clearer photographs, the Office of Manufactured Housing would have agreed that the six properties contained noncompliant foundations.

HUD requested documentation verifying that the foundation was noncompliant at the time of loan endorsement. The structural areas inspected were not areas of the foundation that the homeowner would likely alter, or be able to alter, after the property was installed and the loan endorsed. Therefore, we believe all of the exceptions noted during our inspections were for conditions that were present at the time of loan endorsement.

Comment 15 As explained in comments 5 and 9, the report does not attempt to correlate the default rate of FHA-insured manufactured home loans and the properties' compliance (or lack thereof) with FHA foundation requirements. However, our audit work demonstrated that a home with a substandard foundation is a greater risk of a higher loss to the insurance fund than a home with an adequate foundation.

To reach our conclusions regarding the missing engineer's certifications reported on in the related OIG memorandum, we reviewed the official FHA loan file submitted by lenders to HUD for each loan. We relied on the contents of those files to conclude whether the required documentation was missing at the time of endorsement.

Comment 16 As is explained in several comments above, we concluded that loans on homes with substandard foundations are at a higher risk of resulting in greater amounts of loss to the insurance fund. We did not conclude that substandard foundations create higher default rates.

As this was a review of FHA-insured Title II manufactured home loans, focusing on compliance with FHA foundation requirements, we did not compare default rates and property depreciation of FHA-insured manufactured homes to those of non-FHA insured manufactured homes. In addition, we cannot compare the loss severity of loans on homes with noncompliant foundations to those with compliant foundations because FHA has not experienced losses on any of the properties we inspected that had compliant foundations. Each of those loans is currently active or has been paid in full and is no longer FHA insured.

Comment 17 FHA experiences losses related to substandard foundations primarily in two ways. First, as is explained more fully in comment 5 above, homes are not worth as much when they are installed on substandard foundations. As the details of each home vary based on factors such as location and quality of the foundation that does exist, it is not practicable to quantify the specific amount of additional monetary risk.

Second, FHA experiences losses on loans that it should have never insured. Properties that do not meet FHA requirements do not qualify for FHA insurance and therefore, FHA should not have insured the loans on properties with noncompliant foundations. Now that FHA has insured the loans, it has unnecessarily placed the insurance fund at risk of loss. FHA frequently incurs a loss on resale of manufactured homes, so the insurance fund will incur losses when selling homes that HUD acquires when borrowers default on the insured loan. As explained in the report, we estimate the annual monetary impact of these losses at approximately \$44.9 million.

Comment 18 As is explained more fully in comment 8 above, we have removed the recommendations that HUD seek indemnifications from the lenders.

Appendix C

STATISTICAL SAMPLING METHODOLOGY AND RESULTS

Purpose of the Sampling

The objective of the audit was to determine whether FHA insured Title II manufactured housing properties with foundations not meeting FHA requirements. To accomplish the objective, we used an unrestricted attribute sampling plan that allowed us to

- (i) Validate the Single Family Data Warehouse information used to compile the universe and make statistical projections of the number of loans that were correctly coded as manufactured housing units and
- (ii) Estimate the number of FHA loans that did not meet its foundation requirements when insured.

Definition of the Audit Population and Tests Performed

We initially quantified the audit population by querying HUD's Single Family Data Warehouse and obtained detailed data for loan records that met the following criteria:

- Factory fabricated code "3" (manufactured housing)
- Insurance status code "A" (active) or "C" (claims)
- Closed during the period January 1, 2003, through December 31, 2005

We identified 84,491 loans with original mortgage amounts totaling more than \$8.7 billion that met our universe criteria for data reliability testing.

For each loan sampled, we obtained and performed a detailed review of the loan case file; determined whether the loan was correctly coded as a manufactured housing property; and for the subset of the population we estimated as valid manufactured housing units, conducted an inspection of the insured property's foundation. The inspections focused on four structural areas:

- Perimeter enclosure
- Piers
- Footings
- Anchorage

Based on the inspections, we assessed whether the foundation met construction requirements established in FHA's Guide and determined whether the property was eligible for FHA insurance. For those manufactured housing properties with foundations that did not comply with

one or more of the requirements, we considered the property to have failed the inspection and concluded that it was not eligible for FHA insurance.

Sample Design

Using unrestricted attribute sampling methodology, we determined that a sample size of 68 manufactured housing loans was sufficient using a 90 percent confidence level, a desired sampling precision of 10 percent, and an estimated error rate of 50 percent. Accordingly, from the universe, we randomly selected 68 manufactured housing loans for inspection of the associated properties.

Statistical Estimate of the Universe

One of the sampling plan objectives was to validate the accuracy of data obtained from the Single Family Data Warehouse. Because we made additional random selections to replace loans that were incorrectly coded as manufactured housing units to preserve the integrity of calculated sample size of 68, we sampled 83 loans for data validation purposes. Of the 83 sampled, 68 loans (82 percent) were correctly coded as a manufactured housing unit. Based on these results, we are 95 percent confident that the minimum number of loans correctly coded as a manufactured housing unit in the database obtained from the Single Family Data Warehouse was 63,354. In other words, we conservatively estimate that the number of correctly coded manufactured housing loans in the original population of 84,491 loans was 63,354. This estimated population served as the universe to estimate the number of manufactured housing units with foundations not constructed in compliance with prescribed guidelines. Statistical projection details to estimate the universe were as follows:

Information on the universe and sample size	
Total number of manufactured housing coded loans in the universe obtained from the Single Family Data Warehouse	84,491
Total number of manufactured housing loans sampled for data validation purposes	83
Total number of sampled loans correctly coded as manufactured housing units	68
Statistical parameters and evaluation	
Confidence level	90%
Actual sampling precision for estimated number of correctly coded manufactured housing units	6.9%
Estimated number of correctly coded manufactured housing units (point estimate)	69,222
Estimated lower limit of correctly coded manufactured housing units	63,354
Estimated upper limit of correctly coded manufactured housing units	<u>75,088</u>

Statistical Projections of Units Failing Foundation Inspections

Based on the results of the foundation inspections performed on the 68 sampled manufactured housing units, we are 95 percent confident that the minimum number of units not in compliance with one or more of the foundation construction requirements and failing the inspection was 50,688. Accordingly, we conservatively estimate that at least 50,688 of the 63,354 (80 percent) estimated manufactured housing unit loans closed during the period January 1, 2003, through December 31, 2005, were not eligible for FHA insurance. Statistical projection details were as follows:

Information on the universe and sample size	
Total estimated number of manufactured housing loans in the universe	63,354
Total number of manufactured housing units sampled and inspected	68
Total number of manufactured housing units sampled that failed the foundation inspection	59
Statistical parameters and evaluation	
Confidence level	90%
Actual sampling precision for the estimated number of manufactured housing units failing the foundation inspection	6.8%
Estimated number of manufactured housing units failing the foundation inspection (point estimate)	54,969
Estimated lower limit of manufactured housing units failing the foundation inspection	50,688
Estimated upper limit of manufactured housing units failing the foundation inspection	<u>59,249</u>

Appendix D

ON-SITE INSPECTION RESULTS: NATIONWIDE STATISTICAL SAMPLE

Units failing to meet FHA requirements

FHA case number	City	State	Perimeter	Piers	Footings	Anchorage
023-2109580	Page	AZ				X*
043-7233987	Susanville	CA		X	X	X
091-3639967	Jacksonville	FL	X	X	X	X
091-3767821	Jacksonville	FL	X	X	X	X
091-3820218	Pensacola	FL	X	X	X	X
091-3870374	Sparr	FL	X	X	X	X
091-3875099	Middleburg	FL	X	X	X	X
093-5543795	Mulberry	FL	X	X	X	X
093-5888468	Holiday	FL	X	X		
094-5053087	Osteen	FL	X	X		X
105-1216836	Byron	GA		X	X	X
105-1249840	Maysville	GA		X	X	X
105-1713312	Hephzibah	GA		X	X	X
105-1983922	Colbert	GA			X	X
105-2263248	Sumner	GA		X	X	X
151-7529894	Greenfield	IN			X	X
151-7934376	Laporte	IN		X		
183-0040280	Weir	KS		X	X	X
197-3489475	Santa Clarita	CA		X	X	X
201-3233594	Brandenburg	KY			X	X
222-1642528	Melder	LA	X	X		X
262-1542407	Midland	MI	X	X	X	X
263-3628226	Farwell	MI		X	X	X
271-9229485	Wabasha	MN	X	X		X
281-2963219	Ashland	MS	X	X	X	X
291-3229382	Lampe	MO		X		
291-3310443	Neosho	MO		X	X	X
311-1773702	Belgrade	MT		X	X	X
361-2767379	Alamogordo	NM		X		
361-2926216	Belen	NM		X		X
372-3274974	Bradford	NY		X	X	X
372-3468633	Caledonia	NY	X	X	X	X
381-6911809	Erwin	NC			X	X
381-6954016	Blanch	NC			X	X
381-6992224	Siler City	NC			X	
381-7122586	Siler City	NC			X	X

381-7274079	Salisbury	NC			X	X
381-7467063	Troutman	NC			X	X
413-4186630	Franklin Furnace	OH		X		
413-4253770	Springfield	OH			X	X
422-2672341	Sand Springs	OK		X		X
461-3981659	Winnesboro	SC		X	X	X
481-2508396	Dayton	TN		X		
483-3263702	La Vergne	TN			X	
483-3517991	Chapel Hill	TN		X	X	
491-8593531	Ben Wheeler	TX	X	X	X	X
492-7189614	Rogers	TX	X	X		X
492-7251757	Alvarado	TX	X	X		X
492-7336362	Justin	TX		X		
492-7417122	Joshua	TX	X	X		
493-7890045	Rosharon	TX		X		
494-2961154	Amarillo	TX	X	X		
495-6673856	Kyle	TX	X	X		X
521-5809301	Elsinore	UT			X	X
541-7301197	Goodview	VA		X	X	
541-7333204	Bumpass	VA			X	X
561-7688462	Auburn	WA		X	X	X
561-8075995	Shelton	WA		X		X
569-0604953	Washougal	WA		X	X	X
Totals			19	45	39	45

* X = Unit failed in the inspected area

Units meeting FHA requirements

FHA case number	City	State
011-5216444	Huntsville	AL
151-7587244	Rolling Prairie	IN
263-3717303	East Jordan	MI
263-3722247	Grant	MI
331-1217414	Winnemucca	NV
371-3379633	Plattsburgh	NY
381-7020561	Greenville	NC
381-7603099	Roxboro	NC
562-1979071	Burbank	WA

Appendix E

ON-SITE INSPECTION RESULTS: PRELIMINARY SAMPLE AND STATISTICAL REPLACEMENT LOANS

Units failing to meet FHA requirements

FHA case number	City	State	Perimeter	Piers	Footings	Anchorage
011-5443543	Talladega	AL		X*		
091-3916401	Middleburg	FL	X	X	X	X
491-8297077	Denison	TX	X	X	X	X
491-8358311	Midlothian	TX	X		X	
491-8435725	Farmersville	TX	X	X	X	
491-8455900	Kaufman	TX	X	X	X	
491-8459575	Wills Point	TX	X	X	X	
491-8493185	Lindale	TX	X	X	X	X
492-7121166	Tom Bean	TX	X	X	X	X
492-7199112	Alvarado	TX	X			
492-7223467	Springtown	TX	X	X		
492-7224535	Corsicana	TX	X	X	X	
492-7225661	Granbury	TX	X	X	X	
492-7237500	Justin	TX	X	X	X	
492-7248026	Temple	TX	X	X		
492-7271023	Sanger	TX	X			
492-7274951	Oglesby	TX	X	X	X	X
492-7285202	Joshua	TX	X	X	X	
492-7346309	Justin	TX	X	X	X	
492-7369873	Justin	TX		X	X	
493-7555494	Hockley	TX	X	X		
493-7691105	Humble	TX	X	X		
493-7812094	Humble	TX	X	X		
493-7823789	Liberty	TX	X	X		
493-7836572	Magnolia	TX	X	X		
493-7852257	Humble	TX	X	X		
493-7905563	Humble	TX	X			
493-7950103	Silsbee	TX	X			
495-6888120	Speaks	TX	X			
495-6942334	Spring Branch	TX	X	X		
495-6977374	Kyle	TX	X	X		
495-7026437	Cedar Creek	TX	X	X		
495-7041428	Victoria	TX	X	X		
495-7174354	Canyon Lake	TX	X	X		X
Totals			32	28	15	6

* X = Unit failed in the inspected area