

May 28, 2008

TO: State Directors  
Rural Development

ATTN: Multi-Family Housing Program Directors

FROM: Russell T. Davis *(Signed by Russell T. Davis)*  
Administrator  
Housing and Community Facilities Programs

SUBJECT: Improper Payment Information Act Compliance Report  
Section 521 - Rental Assistance Program

Attached is a copy of this year's Multi-Family Housing (MFH) Improper Payment Information Act Report (IPIA) on an audit that was conducted February - April 2008. The Report (**Attachment A**) details the findings and recommendations of the study that was undertaken to determine the error rate of payments in the Rental Assistance (RA) program.

The report determined that the error rate of gross dollars improperly calculated against the fiscal year (FY) 2007 program outlay to be 8.17 percent. This is approximately triple the rate from last year's audit. The Report revealed that subsidy payment calculation errors were made 7.5 percent of the time on Agency overpayment of subsidy to tenants and 0.3 percent on Agency underpayment of subsidy to tenants, and Agency improper payment of subsidy estimated at \$72.4 million. Unauthorized assistance over- and under-payments of \$100 or less were not counted in the error rate.

The study showed that "no documentation available" and "tenant certification not signed" were the most common source of all errors. These two types of errors accounted for 42 percent of the total number of errors. These errors did not permit the analyzer to determine the accuracy of the tenant certification; therefore, the whole payment was considered improper.

As an Agency, we must improve our oversight of borrowers and management agents to ensure tenant incomes are verified with sufficient supporting documentation on which to make such determinations. Additionally, borrowers and management agents must do a better job of securing documentation and verification, and improve the accuracy of their mathematical calculations.

EXPIRATION DATE:  
May 31, 2009

FILING INSTRUCTIONS:  
Housing Programs

This year, we requested the assistance of the Appeals, Audits & Unauthorized Unit from the Centralized Servicing Center (CSC) to complete the IPIA audit. CSC requested directly from property managers the supporting documentation for selected Rental Assistance payments. In those instances, errors in file documentation were found at the following rates:

1. No documentation - 27 percent
2. Tenant certifications not signed - 15 percent
3. Incorrect certifications provided (even after contacting the manager and asking for correct certification) - 13.5 percent
4. Income miscalculations: wage income and SSI income - 9.6 percent and 7.7 percent
5. Tenant Certifications dated after the effective date of the recertification - 7.7 percent
6. Tenant Certifications not dated - 5.8 percent
7. Missing Zero Income Checklist - 5.8 percent
8. Asset Income errors - 3.8 percent
9. Appropriate deductions (elderly/handicapped and/or dependents) not taken - 3.8percent.

In order to improve Agency oversight and reduce the errors committed by borrowers and property agents, the Agency will be implementing the following corrective actions:

1. Send a letter to property management business partners regarding the importance of the IPIA process and the types of errors that were identified. ***Timeframe - June 30, 2008.***
2. Implement a quarterly audit process that will be conducted by CSC on selected States tenant files. ***Timeframe - July 31, 2008.***
3. Errors found in the FY 2008 report must be followed up by the Agency for corrective actions. ***Timeframe - July 31, 2008.***
4. Issue an unnumbered letter to State Offices regarding the findings from this report. The unnumbered letter will require State Offices, with an average error rate of 2 percent or higher (**See Attachment B**) during the past three years to develop a corrective action plan. The plan will need to include procedures to train field staff, borrowers and property managers in appropriate required documentation and follow-up with tenants and income-verifiers. ***Timeframe - June 30, 2008.***
5. The National Office will continue to pursue access to the Health and Human Services New Hires data and HUD's Enterprise Income Verification System to be shared with State Offices and management agents. ***Timeframe - Ongoing.***

6. Add to HB-2-3560, Chapter 6 - Project Occupancy, a check sheet for property management agents to review when verifying assets, income and adjustments to income and a check list of required tenant file documentation. ***Timeframe - September 30, 2008.***
7. Develop a "Fact Sheet" for MFH tenants explaining their responsibilities and rights regarding income disclosure and verification. ***Timeframe - September 30, 2008.***

Implementation Requirements As stated in No. 4, for all States with a 3-year total overall error rate of 2 percent or higher (**See Attachment B**) a corrective action plan must be prepared. This plan must be submitted by **July 31, 2008**. The plan must identify actions and deadlines that your' State will implement. The implementation must be completed no later than **October 31, 2008**.

Please note that as long as the error rate from the annual audit is above 2.5 percent of program outlays, a subsequent audit is required to be conducted each year until the rate fall below 2.5 percent.

Subsequent to the unnumbered letter, we will provide each State with a list of errors by property for your information. CSC will meet with property managers to resolve these errors, to the extent possible.

If you have any questions regarding this memorandum, please contact Stephanie White at (202) 720-1615, or Janet Stouder at 202-720-9728.

Attachments

## **Purpose**

Congress passed the Improper Payments Information Act in November 2002. It requires Agency financial and program managers to review annually all programs and activities. This review is designed to identify those programs that may be susceptible to significant erroneous payments and report the results in the Performance and Accountability Report. The President's Management Agenda includes an initiative to reduce Federal Government erroneous payments.

The Section 521 Rental Assistance Program had program outlays of approximately \$886.9 million in FY 2007. In the Agency's initial risk assessment done in FY 2004, the Program was ranked High for potential erroneous payments. This study will serve as the fifth report and will be compared to the baseline established from the FY 2007 report. For FY 2008, the error rate of gross dollars improperly calculated against program outlays is 8.17 percent.

## **Objective**

The major objective of this study was to determine the rate of error in the Rental Assistance Program in order to discern the magnitude of overpayments and underpayments and payments made in error. In order to respond to the major objective, the study had to determine answers to the following objectives:

- Does income verification support the income claimed by tenant?
- Was there administrative error on the part of property management agent?

## **Background**

The United States Department of Agriculture (USDA) provides rental assistance subsidies to over a quarter-million households. To qualify for assistance, a household must submit an application to reside at USDA Rural Development financed Multi-Family Housing property through a borrower or their property management agent. The application process requires that the individual or family provide information on the amount and source(s) of income, which are verified by the property management agent. This income determination is the primary determinant of a family's rent charge and, in turn, of the amount of housing subsidy provided.

Errors may occur in documenting income and calculating the tenant rent contribution. Tenants may also deliberately conceal income sources. To the extent that a tenant is incorrectly determined eligible for program assistance or is not charged the correct rent, Federal subsidies are misused.

## **How the USDA Rental Assistance Program Works**

By statute, the Rental Assistance program is restricted to households of "very low-income" and "low-income". The Agency's very low-income standard mirrors that of the Department of Housing and Urban Development (HUD) and is set at 50 percent of area median family income, but is adjusted for family size and for unusually high or low income and housing cost patterns. The maximum total family income for eligibility is set at the low-income standard, which equals 80 percent of the area median family income, adjusted in the same manner as the very low-income limits.

For rent determination purposes, a family's total income is estimated on a prospective basis (i.e., their income at the time of certification or recertification is projected forward for one year). Under the MFH regulation, 7 CFR part 3560, tenant households must be recertified and must execute a tenant certification form at least annually or whenever a change in household income of \$100 or more per month occurs. Borrowers must recertify for changes of \$50 per month if the tenant requests that such a change be made. Rent charges must be revised each time a recertification shows changes in a household's income.

## **Scope**

This study undertaken by USDA is the Agency's fifth effort to quantify the cost of errors on the Rental Assistance Program. The Agency used most of HUD's parameters to develop a study similar in objective, but it was conducted by in-house personnel, on a smaller scale, and with a modified scope of work. This year's study was conducted by the Agency's Centralized Servicing Center (CSC) staff instead of the field office staff. The HUD document utilized was entitled "Rent and Income Determination Quality Control Monitoring Guide" dated August 12, 2003. The Agency revamped the questionnaire to be completed by the CSC staff to accommodate Agency's terms and form format.

There were two areas that required investigation:

1. Whether income verifications support the income claimed by tenant; and
2. Errors and omissions that are primarily attributable to property management agents

This review looked at a statistically valid sample of the universe of all rental assistance payments made on behalf of tenants in FY 2007. The sample consisted of 667 rental assistance payments in 667 properties in 48 States and jurisdictions.

The study was conducted by the CSC staff during the months of February – April 2007. Using a statistically-valid sample of rental assistance payments across the portfolio, the National Office provided each CSC with a list of payments to review. CSC sent letters to management companies informing them that a tenant file had been randomly selected for review. Directions

were provided to the management agents as to the required supporting documents that were to be submitted to CSC for review. . The CSC staff then reviewed the supporting documentation received from the management agent in depth to respond to the survey questionnaire.

### **Methodology of the Study**

The Agency utilized the same statistical sampling methodology as used in Fiscal Year 2007:

1. Include all projects receiving rental assistance in FY 2007 in the universe to be sampled;
2. Select the units to be reviewed by a statistically valid method; and
3. Review all rental assistance payments made for the selected units during the fiscal year.

The Agency reviewed the sampling plan developed by HUD for its studies and engaged a statistician from USDA's Rural Development to prepare a similar plan for this report. This report is based on a review of tenants receiving RA during FY 2007. The sampling plan consisted of 667 rental assistance payments from a universe of 3,326,352 or .02 percent. The methodology produced a sample with a 99 percent confidence level. The study required the CSC staff to evaluate tenant files and income calculations prepared by the property managers. The Agency did not test if USDA's Rural Development Deputy Chief Finance Office paid appropriately on the borrower's request for subsidy due to the minuscule error rate from the FY 2004 report and due to the implementation of an automation enhancement to improve data entry.

The universe of rental assistance payments during FY 2007 was 3,326,352. The only parameter used to determine the eligible universe was the payment of RA. No other data element, such as location, size of property, number of units, and availability of other rental assistance (such as Section 8) was a consideration. The statisticians were provided a data extract from the Multi-Family Housing Information System (MFIS) that contained a list of all tenants receiving RA who occupied the unit as of September 1, 2006 for payment as of October 1, 2006 through September 1, 2007. The data included month of payment, project name, project identifier (case number/project number), and tenant name and unit number. From the data extract, the statisticians selected the sample by a systematic sample technique. See the Appendix for the methodology. Once the sample was identified, CSC issued a letter to the management agents in January 2008. The CSC was trained by the National Office in January 2008 in the review of the tenant files. Detailed instruction used by the field staff was provided to the CSC staff that explained the process, provided the list of tenant payments to be reviewed and provided the data currently maintained in MFIS that was used as the baseline review of the tenant data comparison between the Agency records and the management agent's tenant documents. . There was to be no substitution of the selected payment and if the management agent was unable to submit the file, the payment would be considered improper.

## **Analytic Methods - Findings**

The Agency targeted and analyzed data to determine the four areas below:

1. Identify the types of errors and error rates.

Errors were determined by reviewing documentation from the sample tenant payment list provided from MFIS and comparing results to those found in the tenant file from the property management agent. Calculations reviewed in this manner were all related to income and rent determinations. Errors were determined by reviewing file documentation for verification and for resolution to questions arising from the income calculations. Where insufficient documentation or lack of verification came to light, respondents provided this as an attributed fault code. Respondents were requested to assign fault where errors were detected in the income and deduction calculation portion of the survey checklist. These “fault codes” were:

1. Insufficient Documentation provided
2. Borrower/Agent Error
3. Both (1 & 2)

The following table shows the percentage of fault, or reason, assigned to errors.

<b>Fault Indicators</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>Total</b>
Number	30	11	11	52
Percentage	57.6%	21.2%	21.2%	100%

2. Estimate the national-level costs for total error and major error types.

National level costs for total error and major error types were estimated by following this process:

To determine the number of instances of errors:

- Determine the number of cases and cost of each error in overpayment of USDA subsidy (or underpayment by tenant) in the sample (50 cases of USDA overpayment for a total of \$14,132).
- Determine the number of cases and cost of each error in underpayment of USDA subsidy (or overpayment by tenant) in the sample (2 cases of USDA underpayment for a total of \$392).
- Determine the rate of error per sample by adding the number of overpayment and underpayment cases, and then divide the total error cases by the sample.

### **Perform the Calculations:**

Add number of errors for over and underpayment = total error cases. Divide total error cases by sample size = rate of error or occurrence of error. For 2008 study, the rate of error is 7.8 percent.<sup>(1)</sup>

- To Determine the Total Cost of Errors (TCE) per total Universe of Rental Assistance payments for the period, we can use the formula:

$$I(4,987) * C(\$14,524) = TCE(\$72,431,689)$$

Based on the formula above that cost comes to \$72.4 Million.<sup>(1)</sup>

**(I)** = The number of times that the sample size or interval (667) appears in the data for the universe of rental assistance payments - (4,987 for 3,326,352 records).

**(TCE)** = Total Cost of Errors per Total Universe of Rental Assistance payments for the period.

**(C)** = Total Cost for errors obtained in the sample size (\$14,524.00).<sup>(1)</sup>

- To determine the error rate of the dollar impact, take the TCE (\$72.4 Million) amount and divide by the total amount of actual period outlays for Rental Assistance (\$886.9 Million). The program error rate is \$72.4 M / \$886.9 M or 8.17 percent.

<sup>(1)</sup> Reference Error Rate Determination of Tenant Subsidy Table below.

#### Error Rate Determination of Tenant Subsidy Payment

FY 2008			
<b>Universe of Rental Assistance Units:</b>	<b>3,326,352</b>		
<b>Sample of RA Units:</b>	<b>667</b>		
<b>No. Samples in Universe:</b>	<b>4,987</b>		
	<b>No. Errors</b>	<b>% of Errors</b>	<b>\$ Errors</b>
<b>USDA Cases of Overpayment/Sample</b>	<b>50</b>	<b>7.50%</b>	<b>\$ 14,132.00</b>
<b>USDA Cases of Underpayment/Sample</b>	<b>2</b>	<b>0.30%</b>	<b>\$ 392.00</b>
<b>Total Errors / Sample</b>	<b>52</b>	<b>7.80%</b>	<b>\$ 14,524.00</b>

**Projected Error rate for FY 2008 Outlays at 8.17%**



	<b>Period</b>
	<b>FY 2007</b>
	<b>Millions</b>
<b>Total Cost of Errors / Universe (Projected)</b>	<b>\$72.4</b>
<b>Total Sept 06 - Sept 07 RA Outlays</b>	<b>\$886.9</b>
<b>%Error Rate of Impact vs Outlays</b>	<b>8.17%</b>

3. Estimate the total positive and negative errors in terms of RA subsidy.

The survey required CSC staff to analyze the tenant's file with the Tenant Certification and all accompanying documentation to determine if the subsidy calculation was appropriate for that tenant. The CSC staff was asked to evaluate the following categories in reaching this conclusion:

- a. If Form RD 3560-8, "Tenant Certification" was signed and dated on or prior to the effective date of the form
- b. For Off Farm Labor Housing, is the tenant a United States citizen or qualified alien
- c. Net Family Assets
- d. Imputed Income from Assets
- e. Income from Assets
- f. Wages, Salaries, etc.
- g. Soc. Sec., Pensions, etc.
- h. Assistance
- i. Income contributed by Assets
- j. Other
- k. Deduction for number of Minor, Disabled, Handicapped or Full-time Student 18 or Older
- l. Deduction for elderly status
- m. Medical exceeding 3 percent of total Income
- n. Child Care

The staff reviewer then compared the property manager's supporting documentation and calculations based on the information in the Agency's database, MFIS, with the reviewer's findings and calculations. If there was a difference, it was noted in the survey. The plus or minus calculation was used in determining the tenant contribution towards rent and the subsidy paid for the unit, which in turn determined the amount of overpayment or underpayment of subsidy.

The survey discovered in 50 instances of the 667 payments surveyed that overpayments to tenants totaled \$14,132. These errors occurred 7.50 percent of the time. In 2 instances, underpayments to tenants totaled \$392 and occurred 0.30 percent of the time. These errors, both positive and negative, occurred 52 times in the sample. This is 7.80 percent of the sample. The expectation is that in the universe of rental assistance payments, errors would occur at a rate of 7.80 percent of the universe. The total dollars impact of these errors, \$14,524 per sample, or \$72.4 million on a universe basis, is equivalent to 8.17 percent of the FY 2007 Rental Assistance outlays of \$886.9 million.

4. Whether USDA properly paid the appropriate subsidy requested by the borrower.

The Agency did not test if USDA's Rural Development Deputy Chief Finance Office (DCFO) paid appropriately on the borrower's request for subsidy due to the minuscule error rate from the FY 2004 report and due to the implementation of an automation enhancement to improve data entry.

Proper payment of the subsidy request by USDA occurred nearly 100 percent of the time. This can be attributed to the checks and balances instituted by the DCFO, which ensures that amounts paid match that requested by the borrower. In the fall of 2004, the Agency implemented an internal automation procedure for processing Multi-Family Housing monthly payments. Previously, the field office would enter data, received from the borrower, into the Automated Multi-Housing Accounting System (AMAS). Beginning February 24, 2006, all borrowers with eight or more units are required to submit tenant certifications electronically to the Agency. This represents 96 percent of all properties with RA in the portfolio. The CSC processes tenant certifications that are received electronically. The tenant certification data is compiled into a "project worksheet" that the borrower views via a secured website and approves the "project worksheet" instead of completing and submitting a form to the Agency. This eliminates any key entry problems from the field office staff. Currently, the Agency is processing 91% percent of all subsidy requests through this process.

### **Quality Assurance Issues**

Quality assurance may be the most important aspect of a review of improper payments. Errors made by reviewers could result in skewed dollar figures and incorrect determinations regarding the extent of errors. While efforts to reduce errors should always be undertaken, quality-assured data is necessary to determine success or failure in achieving reduction rates.

This year, the Appeals, Audits & Unauthorized (AAU) Unit at CSC conducted the review. In the past years, the field staff was used to conduct the study. However, the National Office was concerned about inconsistencies in reviews from prior years and wanted a disinterested third party to conduct the review this year. The AAU Unit established an automated review process and conducted their own quality assurance testing by using team leaders to check the reviewer's

work. This eliminated the National Office staff performing quality assurance testing as had been completed in prior years.

### **Effect of Quality Assurance Issues on Report**

Overall, the effect of these quality assurance tests on the fundamental question of overpayment or underpayment is deemed negligible. A review of that portion of the survey indicates that reviewers generally were careful to note if supporting documentation existed to substantiate income claims and, where such documentation did not appear in the file or was unclear, appropriate notations and calculations were made on the survey instrument.

Data from this survey has provided a wealth of knowledge on portfolio activities, general training needs, field staff skill levels, areas of concentration for particular training attention, and especially areas where follow-up is needed with borrowers. National Office staff is now developing an in-depth overview to provide to the States for their edification, training planning and issue resolution.

## Summary

The tasks being evaluated in the annual IPIA report are currently outside of the direct control of Rural Development. We are evaluating several methods by which to achieve compliance by borrowers and their property managers, including:

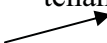
- Institution of penalties for failure to comply;
- Continued pursuit of National wage matching data access for property managers;
- Determine the feasibility of bringing this property management task of certifying tenant incomes to a centralized point under the control of Rural Development.

## Recommendations

The Agency is now implementing a corrective action plan as a result of the findings of this report. Therefore, the results of the corrective actions are not reflected in this report and may have positively impacted the error rate.

The IPIA survey results for this year are substantially higher than prior years. We attribute this to a more controlled, consistent, and accurate review, rather than an actual increase in error rate. We expect subsequent surveys will also be performed by CSC, which we believe will provide more comparable data on which to base IPIA improvements. The increase in error rate is attributed to relatively unchanging atmosphere for borrowers' property managers. We do note that the overall number of errors is less than the prior report, although their combined dollar amount is higher. This year, 27% of the overpayments were attributed to the management agents did not provide supporting documentation that the reviewer could determine if the payment was proper. And, 15% of the tenant certifications were either not signed by the tenant or was not provided. These errors caused the total amount of RA paid to be considered as improper. This account for 42% of the overpayments identified. In FY 2007, the overpayments attributed to tenant certifications not signed by the tenant or not in the file was 19%.

Recommendations for the FY 2008 report are the following:

1. Send a letter to property management business partners regarding the importance of the IPIA process and the types of errors that were identified. *Timeframe – June 30, 2008.*
2. Implement a quarterly audit process that will be conducted by CSC on selected states tenant files. *Timeframe – July 31, 2008.*  

3. Errors found in the FY 2008 report must be followed up by the Agency for corrective actions. *Timeframe – July 31, 2008.*

4. Issue an unnumbered letter to the State Offices regarding the findings from this report. The unnumbered letter will require State Offices, with an average error rate of 2% or higher during the past three years must develop a corrective action plan. The plan will need to include procedures to train field staff, borrowers and property managers in appropriate required documentation and follow-up with tenants and income-verifiers. ***Timeframe – June 30, 2008.***
5. The National Office will continue to pursue access to the HHS New Hires data and HUD's Enterprise Income Verification (EIV) System to be shared with State Offices and management agents. ***Timeframe – Ongoing.***
6. Add to HB-2-3560, Multi-Family Housing Asset Management Handbook, Chapter 6 – Project Occupancy, a check sheet for property management agents to review when verifying assets, income and adjustments to income and a check list of required tenant file documentation. ***Timeframe – September 30, 2008.***
7. Develop a "Fact Sheet" for MFH tenants explaining their responsibilities and rights regarding income disclosure and verification. ***Timeframe – September 30, 2008.***

## **Appendices**

FY 2008 Sampling Methodology

Sample Letter sent to Management Agents

**Multi-Family Rental Assistance Program****Rental Assistance Survey: Sample Size Selection**

In certain instances, the observations (billing payments) in the population of interest are available in a list, such as a payment list, or in a computer file folder stored on a computer system somewhere. We can obtain the number of records for a certain period of time because that information was stored in a database or record keeping system maintained by Multi-Family Housing Program. For this situation an economical technique is to draw the sample by selecting one random payment record near the beginning of the list and then selecting the  $N^{\text{th}}$  number record there after. If the sampling is conducted in this manner, we obtain a systematic sample. As you may expect, systematic sampling offers a convenient and cost effective means of obtaining sample information. This design gives the desired bound on the error of estimation at a minimum cost. <sup>(1)</sup>

Total Number of Observations \* Cost of Work = Total Cost of Project

The cost to Multi-Family Housing would be too great to observe each payment in the total population of rental payments to applicants. We choose to select the most current records from September 1, 2006 to September 1, 2007. There are 3,326,352 records from the dates stated above. A random sample of this population can successfully obtain accurate information about the Section 521 Rental Assistance Program (RAP).

\*See References below

**Sample Size Calculator**

Before we explain the method that was used to obtain the sample size, certain common terms must be defined.

Definition 1: An Element is an object on which a measurement is taken. <sup>(1)</sup>

Definition 2: A population is a collection of elements about which we wish to make an inference. <sup>(1)</sup>

Definition 3: Sampling units are no overlapping collections of elements from the population that cover the entire population. <sup>(1)</sup>

Definition 4: A frame is a list of sampling units. <sup>(1)</sup>

Definition 5: Confidence interval is the plus or minus figure reported as true value of the parameter a predetermined proportion of the time if the process of finding the group of values is repeated a number of times. <sup>(2)</sup>

## Factors that Affect Confidence Intervals <sup>(2)</sup>

### Sample size

The larger your sample, the more sure that your answers will represent the population

### Percentage

The worst case percentage (50) % can be used to determine a conservative sample to determine a general level of accuracy.

### Population size

Assumes a population size when it is large or unknown

## Sample Size Formula <sup>(2)</sup>

$$SS = \frac{Z^2 * (p) * (1-p)}{C^2}$$

Where:

Z: Z Value (e.g. 1.96 for 95% Confidence level or 2.58 for 99 % Confidence level)

p: pick for an outcome to occur successfully (.5 used for a conservative sample size needed)

q = 1-p: a pick for an unsuccessful outcome

C: Confidence interval, expressed as decimal (e.g., .05 = +/- 5)

SS: Sample Size

$$SS = \frac{(2.58)^2 * (.5) * (.5)}{(.05)^2} = 665.64$$

Correction for Finite Population = 3,326,352 record of payments from Sept 1, 2006 to Sept 1, 2007. <sup>(2)</sup>

$$\frac{SS}{1 + \frac{SS-1}{Pop}} \qquad \frac{665.64}{1 + \frac{665.64-1}{3326352}}$$



$$\text{New SS} = \quad = \quad = 665.51 := 666$$

Where: Pop = population

\*See References below

## **Plan for Taking the Sample**

Once the sample size has been determined with a 99 percent confidence we then turn to using this predetermined sample size in the population of payment records during the current cycle of the Multi-Family Housing Rental Assistance Payments from September 1, 2006 thru September 1, 2007.

## **Defining a Systematic Random Sample**

Systematic random sample - a systematic sample is selected by first listing the population and assigning numbers to each name on the list starting with one and going to n, the last name on the list. Then calculating a sampling interval, (I), which is equal to the number of cases on the list (n), divided by the required number of cases to be selected for the sample. Then select a random number, (X), which falls in the interval 1 to (I). The first member of the sample is the case numbered (X) on the list the remaining members of the sample are selected by constant addition of (I). Thus the second member is  $(X) + (I)$  and the third member of the sample is  $(X) + 2(I)$  and so on through the list. <sup>(3)</sup>

Referencing the above definition to what is a systematic random sample, we take the following steps to ensure that a true random sample is taken of the monthly billing payments of the Multi-Family Housing Program.

### **Step 1**

Use a random number generator to select a beginning point

This beginning point can be determined by using a formula  $T(p)/SS = I$

Where:

$T(p)$  = the total population

SS = The Random Sample Number

I = The range used to arbitrarily select the starting point and each subsequent point in the population – listing of the payments of assistance from the Multi-Family Housing Rental Assistance Program.

$T(3326352)/SS(666) = I(4995)$

Using Microsoft's Excel random number formula:

$\text{Int}(\text{Rand()} * 4995)$  could yield any number from 1 to 4995 = Random(X)

In our case, we used Microsoft Excel to generate a random number that would be our starting place. That random number is 4133.

Note: Any random number generator may be used to determine the starting point of any sample.

## **Step 2**

Using Random (X) as the starting point we then count systematically (I) until the predetermined sample is completed. <sup>(3)</sup>

Result:

4133,  $4133 + 4995$ ,  $4133 + 2(4995)$ ,  $4133 + 3(4995)$  ...  $4133 + 665(4995)$

$X = 4133$  and  $I = 4995$ , then the starting point is 4133 then continues with 9128, 14123, 19118 ... 3325808 until predetermined sample is complete. <sup>(3)</sup>

Record 4133 in the current database is the first to be selected:

## **08/1/2007 DISCOVERY VIEW**

Next record is  $4133 + 4995$  (9128)

## **08/1/07 KAMUELA SENIOR HOUSING, LP.**

...

Last Record (3325808):

## **09/1/07 ELDERLY HOUSING**

## **Step 3**

Compile the list from the systematic sample to distribute to State, local and field branch representatives to review the record.

## **References**

Reference 1: Elementary Survey Sampling Third Edition by Scheaffer, Mendenhall, Ott

Reference 2: Creative Research Systems, [www.surveysystem.com/sscalc.htm](http://www.surveysystem.com/sscalc.htm)

Reference 3: [www.nyu.edu](http://www.nyu.edu) Mid semester Examination answers V93.0301 Research Methods

## Appendix B

### Example of Management Agent Letter Sent – January 2008

This letter is to inform you that the tenant certification identified below was randomly selected for a review of your file documentation and calculation of Rental Assistance. This review is part of an annual review required to be conducted by the Agency in accordance with the Improper Payment Information Act (IPIA). **Please provide the information identified below by February 11, 2008.**

This year, the Centralized Servicing Center (CSC), which processes your monthly payment, will be conducting the review.

Please submit a copy of Form RD 3560-8, “Tenant Certification,” and supporting documents for the following tenant:

<u>Property Name</u>	<u>Location</u>	<u>Unit No.</u>	<u>Tenant Name</u>	<u>Effective Date of “Tenant Certification” to be reviewed</u>
ABC APARTMENTS	ANYTOWN, USA	10A	DOE, JOHN	03/01/2007

**Note:** The effective date of the certification may not be the current certification.

Please ensure that the supporting documents consist of all documents that were used to complete the “Tenant Certification” identified above. This includes calculation tapes, internal worksheets, and third-party verifications. Examples of supporting documents are as follows:

- **Verification of Employment:** A copy of verification of employment for each adult household member
- **Zero Income Persons:** Include the Zero Income Verification Checklist from your files.
- **Unemployment and Unemployment Benefits:** Tenants receiving unemployment benefits must provide the most recent award or benefit letter prepared and signed by the authorizing agency to verify the unemployment income.
- **Regular, Unearned Income (e.g., Social Security, pensions, workers compensation):** A copy of the most recent award or benefit letter prepared and signed by the authorizing agency.
- **Public Assistance:** A copy of the most recent award or benefits letter prepared and signed by the authorizing agency to verify the amount of public assistance received

- **Alimony or Child Support Payments:** A copy of the divorce decree, separation agreement, or other document indicating the amount of the required support payments. (If the tenant reports that the amount required by the agreement is not being received, the tenant must document that assistance has been requested from the state or local entity responsible for enforcing payment.)
- **Support for Foster Children or Adults:** Documentation indicating the amount of money received for the care of foster children or adults, and the anticipated period of time the support will be provided.
- **Income Tax Return:** For self employment, a complete, legible copy of the most recently filed Federal income tax form may be submitted for each applicant/tenant, unless the person was exempted from filing a return.
- **Verification of Assets and Income from Assets:** Financial institution statements to verify account balances. (For some assets, such as mutual funds or 401(k) accounts, copies of year-end statements can provide information about annual income. Documents from tenants that identify if any asset has been disposed of for less than fair market value.)
- **Disability/Handicapped Documentation:** If the tenant has been living in the property for a while, the necessary documentation may have to be retrieved from the application or prior certification documentation.
- **Medical Expense:** Documentation used to calculate medical expenses.
- **Citizenship:** FOR FARM LABOR ONLY, documentation of U.S. citizenship or immigration status (for all household members) is required.

Attached is a cover sheet that should be submitted with each Tenant Certification and supporting documents.

We request that you fax the documents to 314-206-2332 or 314-206-2210 by **February 11, 2008.**

If faxing is a problem or if you have any questions concerning this letter, you may contact the Audit Unit at 1-800-349-5097, extension 2453, from 8:00 a.m. to 4:30 p.m. Central Standard Time, Monday through Friday.

We appreciate your immediate attention and assistance with this review.

Sincerely,



Stephanie B.M. White  
Director  
Multi-Family Housing  
Portfolio

Management

Division

# SUMMARY OF STATES RANKING OF IPIA ERRORS

ST	FY 2006				FY 2007				FY 2008				3 YR. Totals			
	No. Files Rev.	No. of Errors	% of Errors by State	Overall % of Errors	No. Files Rev.	No. of Errors	% of Errors by State	Overall % of Errors	No. Files Rev.	No. of Errors	% of Errors by State	Overall % of Errors	No. Files Rev.	No. of Errors	% of Errors by State	Overall % of Errors
WA	18	8	44.4%	10.4%	16	7	43.8%	9.0%	15	1	6.7%	1.9%	49	16	32.7%	7.7%
CA	38	7	18.4%	9.1%	32	3	9.4%	3.8%	34	5	14.7%	9.6%	104	15	14.4%	7.2%
MO	28	4	14.3%	5.2%	24	8	33.3%	10.3%	31	2	6.5%	3.8%	83	14	16.9%	6.8%
FL	25	6	24.0%	7.8%	24	5	20.8%	6.4%	23	1	4.3%	1.9%	72	12	16.7%	5.8%
TX	35	1	2.9%	1.3%	34	3	8.8%	3.8%	39	6	15.4%	11.5%	108	10	9.3%	4.8%
IA	19	6	31.6%	7.8%	19	2	10.5%	2.6%	12	0	0.0%	0.0%	50	8	16.0%	3.9%
KS	10	5	50.0%	6.5%	8	2	25.0%	2.6%	10	1	10.0%	1.9%	28	8	28.6%	3.9%
LA	19	5	26.3%	6.5%	19	1	5.3%	1.3%	17	1	5.9%	1.9%	55	7	12.7%	3.4%
AL	22	2	9.1%	2.6%	21	2	9.5%	2.6%	17	3	17.6%	5.8%	60	7	11.7%	3.4%
MN	15	3	20.0%	3.9%	15	1	6.7%	1.3%	16	3	18.8%	5.8%	46	7	15.2%	3.4%
GA	16	2	12.5%	2.6%	20	3	15.0%	3.8%	20	0	0.0%	0.0%	56	5	8.9%	2.4%
IA	19	3	15.8%	3.9%	17	2	11.8%	2.6%	16	0	0.0%	0.0%	52	5	9.6%	2.4%
WI	17	0	0.0%	0.0%	16	5	31.3%	6.4%	19	0	0.0%	0.0%	52	5	9.6%	2.4%
NJ	4	3	75.0%	3.9%	4	1	25.0%	1.3%	7	1	14.3%	1.9%	15	5	33.3%	2.4%
VA	15	1	6.7%	1.3%	17	1	5.9%	1.3%	14	3	21.4%	5.8%	46	5	10.9%	2.4%
AR	16	1	6.3%	1.3%	13	3	23.1%	3.8%	29	0	0.0%	0.0%	58	4	6.9%	1.9%
OH	21	2	9.5%	2.6%	19	2	10.5%	2.6%	15	0	0.0%	0.0%	55	4	7.3%	1.9%
MS	21	2	9.5%	2.6%	26	1	3.8%	1.3%	27	1	3.7%	1.9%	74	4	5.4%	1.9%
NC	34	2	5.9%	2.6%	38	1	2.6%	1.3%	34	1	2.9%	1.9%	106	4	3.8%	1.9%
PA	14	2	14.3%	2.6%	15	1	6.7%	1.3%	17	1	5.9%	1.9%	46	4	8.7%	1.9%
MI	26	0	0.0%	0.0%	25	2	8.0%	2.6%	23	2	8.7%	3.8%	74	4	5.4%	1.9%
NM	6	0	0.0%	0.0%	9	2	22.2%	2.6%	6	2	33.3%	3.8%	21	4	19.0%	1.9%

**SUMMARY OF STATES RANKING OF IPIA ERRORS**

ST	FY 2006				FY 2007				FY 2008				3 YR. Totals			
	No. Files Rev.	No. of Errors	% of Errors by State	Overall % of Errors	No. Files Rev.	No. of Errors	% of Errors by State	Overall % of Errors	No. Files Rev.	No. of Errors	% of Errors by State	Overall % of Errors	No. Files Rev.	No. of Errors	% of Errors by State	Overall % of Errors
PR	9	0	0.0%	0.0%	12	2	16.7%	2.6%	8	2	25.0%	3.8%	29	4	13.8%	1.9%
AZ	7	1	14.3%	1.3%	10	2	20.0%	2.6%	8	0	0.0%	0.0%	25	3	12.0%	1.4%
TN	16	1	6.3%	1.3%	17	2	11.8%	2.6%	19	0	0.0%	0.0%	52	3	5.8%	1.4%
ME	15	1	6.7%	1.3%	14	1	7.1%	1.3%	14	1	7.1%	1.9%	43	3	7.0%	1.4%
OR	11	2	18.2%	2.6%	11	0	0.0%	0.0%	12	1	8.3%	1.9%	34	3	8.8%	1.4%
CT	3	0	0.0%	0.0%	2	1	50.0%	1.3%	6	2	33.3%	3.8%	11	3	27.3%	1.4%
SD	13	0	0.0%	0.0%	12	0	0.0%	0.0%	11	3	27.3%	5.8%	36	3	8.3%	1.4%
IL	15	0	0.0%	0.0%	20	2	10.0%	2.6%	14	0	0.0%	0.0%	49	2	4.1%	1.0%
MA	2	1	50.0%	1.3%	2	1	50.0%	1.3%	1	0	0.0%	0.0%	5	2	40.0%	1.0%
NE	4	1	25.0%	1.3%	5	1	20.0%	1.3%	7	0	0.0%	0.0%	16	2	12.5%	1.0%
NH	4	0	0.0%	0.0%	5	2	40.0%	2.6%	3	0	0.0%	0.0%	12	2	16.7%	1.0%
NY	14	0	0.0%	0.0%	12	2	16.7%	2.6%	13	0	0.0%	0.0%	39	2	5.1%	1.0%
ND	7	2	28.6%	2.6%	4	0	0.0%	0.0%	3	0	0.0%	0.0%	14	2	14.3%	1.0%
SC	15	1	6.7%	1.3%	14	1	7.1%	1.3%	13	0	0.0%	0.0%	42	2	4.8%	1.0%
UT	4	0	0.0%	0.0%	5	1	20.0%	1.3%	8	1	12.5%	1.9%	17	2	11.8%	1.0%
WV	8	0	0.0%	0.0%	12	1	8.3%	1.3%	10	1	10.0%	1.9%	30	2	6.7%	1.0%
CO	7	0	0.0%	0.0%	6	0	0.0%	0.0%	5	2	40.0%	3.8%	18	2	11.1%	1.0%
MD	7	0	0.0%	0.0%	7	0	0.0%	0.0%	12	2	16.7%	3.8%	26	2	7.7%	1.0%
HI	2	0	0.0%	0.0%	2	1	50.0%	1.3%	1	0	0.0%	0.0%	5	1	20.0%	0.5%
NV	4	1	25.0%	1.3%	2	0	0.0%	0.0%	5	0	0.0%	0.0%	11	1	9.1%	0.5%
OK	11	1	9.1%	1.3%	16	0	0.0%	0.0%	13	0	0.0%	0.0%	40	1	2.5%	0.5%
DE	3	0	0.0%	0.0%	4	0	0.0%	0.0%	5	1	20.0%	1.9%	12	1	8.3%	0.5%



**SUMMARY OF STATES RANKING OF IP/A ERRORS**

ST	FY 2006				FY 2007				FY 2008				3 YR. Totals			
	No. Files Rev.	No. of Errors	% of Errors by State	Overall % of Errors	No. Files Rev.	No. of Errors	% of Errors by State	Overall % of Errors	No. Files Rev.	No. of Errors	% of Errors by State	Overall % of Errors	No. Files Rev.	No. of Errors	% of Errors by State	Overall % of Errors
KY	19	0	0.0%	0.0%	17	0	0.0%	0.0%	16	1	6.3%	1.9%	52	1	1.9%	0.5%
MT	5	0	0.0%	0.0%	4	0	0.0%	0.0%	3	1	33.3%	1.9%	12	1	8.3%	0.5%
AK	1	0	0.0%	0.0%	2	0	0.0%	0.0%	0	0	0.0%	0.0%	3	0	0.0%	0.0%
ID	12	0	0.0%	0.0%	11	0	0.0%	0.0%	11	0	0.0%	0.0%	34	0	0.0%	0.0%
RI	1	0	0.0%	0.0%	1	0	0.0%	0.0%	0	0	0.0%	0.0%	2	0	0.0%	0.0%
VT	5	0	0.0%	0.0%	3	0	0.0%	0.0%	3	0	0.0%	0.0%	11	0	0.0%	0.0%
VI	1	0	0.0%	0.0%	0	0	0.0%	0.0%	0	0	0.0%	0.0%	1	0	0.0%	0.0%
WY	2	0	0.0%	0.0%	3	0	0.0%	0.0%	2	0	0.0%	0.0%	7	0	0.0%	0.0%
TOT	665	77	11.6%	100.0%	666	78	11.7%	100.0%	667	52	7.8%	100.0%	1998	207	10.4%	100.0%