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Prospectus

Red Flag Incomes Database For Mortgage Fraud Prevention

Important Information about a new Data Product
from SMR Research Corporation.

The Product

Falsification of income, typically over-stated, is the single most common element in mortgage frauds.

The **Red Flag Incomes Database** is designed to flag applicant incomes that may be unrealistically high.

This database is a compilation of the incomes of actual recent mortgage borrowers at the zip code level.

In each zip, Red Flag breaks the incomes of recent mortgage borrowers into percentile groups.

Applicants whose purported incomes are extremely high compared to their zip code neighbors (perhaps exceeding the 98th percentile) can be flagged for further verification.

For example, alleged incomes above the 95th percentile might require full verification of income (VOI). Applicant incomes over the 98th percentile might be those to which you apply other fraud prevention tools, or for which you might want IRS-supplied copies of 1040 forms.

The **Red Flag Incomes Database** is the first product we know of that allows lenders to see whether applicants' alleged incomes appear to be reasonable.

Red Flag was built using reported incomes of more than 27 million actual recent mortgage borrowers whose loans were approved and funded. The database is updated annually.

Clients may obtain licenses to use Red Flag at one location, or at unlimited locations. Clients may also distribute Red Flag to origination partners, including brokers or correspondent lenders.

Red Flag is easy to use and requires no special employee training.

We provide the database as a simple, password-protected spreadsheet or delimited ASCII file, covering more than 25,000 residential zip codes in the mainland U.S. and Puerto Rico. One row in the spreadsheet is one zip code with all the key percentile income information.

NOTE: Red Flag does **not** contain incomes of any named individuals, only zip-level aggregates. Applicants whose purported incomes are very high may be telling the truth. Lenders may **not** (and should not) use Red Flag to make **credit granting decisions**. The sole purpose of the database is to help fight crime through a better understanding of realistic borrower incomes.

Background

As a market researcher, SMR has been the leading supplier of industry intelligence and statistics to mortgage lenders for 20 years.

So, we know – as you do – that mortgage fraud is rising and serious.

The two general fraud categories are **1)** professional, organized criminal fraud, and **2)** fraud-for-purchase (typically prospective home buyers who exaggerate their finances to obtain loan approval).

In both types of fraud, exaggerated or invented income claims are the most common element. Applicants may falsify income on “stated income” loans, or by providing fake copies of IRS 1040 forms, or by providing accomplice names as “employers” for VOI.

But since the vast majority of loan applicants are honest, lenders are understandably reluctant to apply time-consuming and expensive fraud prevention tools to every application.

Red Flag is designed to help “triage” applications, selecting for further review only those whose purported incomes appear to be extremely high based on location.

How It Works

Red Flag's operation is very simple. Here is an example:

You're approached by John Doe. He lives at 22 Doe St., Akron, OH, 44313. John wants to buy a second home in Fort Lauderdale, FL, selling for **\$620,000**.

He should qualify, since Mr. Doe claims to have household income of **\$235,000** per year. He offers his own copies of IRS 1040 forms as documentation.

The underwriter calls up the Red Flag spreadsheet and quickly flips to zip code 44313. There, he sees that the median income of recent borrowers in that zip was only **\$61,000**, and **even the 98th percentile of borrowers had a household income of \$230,000 – lower than Mr. Doe's claimed amount.**

You now know that Mr. Doe is, in effect, claiming to be among the top 2% wealthiest people in his zip code. That may be true. But the flag is up, so you use caution. You might perform full VOI. Or you might ask Mr. Doe to authorize IRS Form 4506-T to get IRS-supplied copies of his 1040 form.

If and when Mr. Doe subsequently disappears, you may well have prevented a huge fraud loss.

If you prevent even one fraud loss using Red Flag, the database pays for itself many times over.

Real World Example

Red Flag is a new idea, but let's test it against an actual fraud. Check out the mortgage fraud story published March 14, 2006, by the internet web site bizjournals.com.

A 38-year-old resident of Alpharetta, GA, was arrested in an FBI sting operation after trying to buy a **\$3.3 million** property in Duluth, GA. To support the deal, he allegedly claimed to have gross income of **\$62,000** per month (**\$744,000 per year**).

Alpharetta does happen to have some extremely high income home owners, so this claim might at first have seemed possible. **But Alpharetta incomes are not that high.** There are three zip codes in Alpharetta. The **99th percentile** borrower incomes in the three recently were **\$461,000, \$453,000, and \$554,000.**

So, Red Flag would have shown that this applicant was claiming to have income far beyond the 99th percentile for his zip. A lender using Red Flag might have prevented this fraud even if the FBI hadn't been playing along.

About The Data

Luckily, only a small minority of mortgages include fraudulent incomes. And lenders still verify incomes one way or another most of the time.

As a result, Home Mortgage Disclosure Act (HMDA) reports **filed by all lenders with the federal government** are almost entirely accurate. The HMDA records show the **gross annual incomes** of borrowers on originated loans. Typically, these are household-level incomes.

Borrower names and addresses are not included in HMDA to safeguard privacy. But borrowers' state, county, and census tract locations are included.

Using a **proprietary programming method**, SMR has translated incomes at the census tract level to the zip code level. This method runs the HMDA data against the federal government's largest geographical database, which links tracts to zip codes for each part of each street in the entire U.S. and Puerto Rico.

The sampling used to create Red Flag was enormous. SMR utilized **27 million income figures**, a number equal to more than **55%** of all U.S. owner-occupied homes with debt. The sampling size was so large as to make the error margin extremely small.

All incomes used came from originated loans where underwriting would have been done fully. We used only records of loans produced on owner-occupied properties to limit incomes to bona fide residents in each zip. Records of "piggyback" second mortgages and home equity lines of credit were excluded to avoid double-counting of incomes separately reported on first-lien loans.

Other local income data sets are old and out-of-date. Median household incomes provided by the Census Bureau by census tract are for year 1999, and pertain to both home owners and renters. Red Flag incomes were built from actual borrower data in **2003** and **2004**; **2005** income data will be added soon.

Spreadsheet Contents; Lender Use

The product currently covers some 25,000 residential five-digit zip codes. Only a small number of thinly populated zips (typically rural) are excluded.

Zips covered in Red Flag include approximately **98%** of the U.S. population.

We do not include "unique" zips solely used by non-residential office buildings or shopping centers. Red Flag does include some zips used only for post office boxes, mainly in places where PO boxes are very commonly used instead of street addresses.

Each spreadsheet row begins with the five-digit zip, and then shows:

1. Median gross annual income (50th percentile)

2. Gross annual incomes for the:

- **80th** percentile of recent borrowers,
- **85th** percentile of recent borrowers,
- **90th** percentile of recent borrowers, and
- **95th, 96th, 97th, 98th, and 99th** percentiles of recent borrowers.

The database supplies the information; lenders must decide how to use it.

You might flag for full or enhanced verification any purported incomes over the 95th percentile, or any other level you choose.

You might also choose to apply different strategies based on the percentile you select. For example, purported incomes over the 95th percentile might trigger full VOI or other fraud tool use. Incomes over the 98th percentile might trigger use of IRS Form 4506-T.

Multiple Location Use

You can install Red Flag at branch offices, at regional processing centers, or at headquarters. Usage at multiple locations is a major safeguard.

Unhappily, there have been instances when branch employees have conspired with brokers, appraisers, or others to perpetrate fraud. By using Red Flag in regional or headquarters locations, you can audit apps from those locations.

A Tough System To Beat

Professional fraudsters are clever folks, but they're going to find Red Flag a hard system to beat.

As long as you verify the identity and home address of the applicant, the numbers are what they are for that zip code. **The only way around the flag is for the criminal to claim a moderate income, which in turn would qualify him only for a moderate-sized loan.**

It's our impression that most frauds involve very large purported incomes. If the income claimed is modest and passes the Red Flag hurdles you set, you will still have accomplished something – knocking down the average size of fraud losses.

Red Flag is password protected. Each client gets a different password. We recommend that clients limit access to the password and the data strictly to a small number of trusted employees. For extra security, clients may use their company password to open the file, and then create separate passwords for each employee who will use the file.

Census Tract-Level Version Is Available

If your company has software to determine the census tract location of applicant residences, then you may want the census tract version of the Red Flag Incomes Database.

At the tract level, the income data are great to use. On average, there are about two census tracts per zip code. **This means the income percentiles are even more precise by tract than by zip.**

But before you order the census tract-level Red Flag database, make sure you really do have the ability to translate street addresses to census tracts at the point of sale.

Mortgage lenders do need to determine the census tract locations of loan applicants in order to file their annual HMDA reports. But usually, this work is done on the back end. At the point of sale, we believe most lenders are unable to match property addresses with U.S. census tracts.

If your firm is one of the rare outfits that can do census tract matching at the point of sale, then we do recommend the tract-level version of Red Flag.

Pricing for the tract-level version is the same as for the standard zip-level version. Also, like the zip version, the tract version comes in either Excel spreadsheet or delimited ASCII files.

Pricing

Red Flag is less expensive than most other fraud tools. **There are no per-use charges; only flat fees to acquire the database.**

Our licenses let you to use your version of Red Flag as long as you wish and as often as you want. Currently, we offer **Version 2005** (created in 2005). But, we do update the income figures annually, so you may want to get a new license each year to stay up-to-date.

Fees are:

One To Five User Systems: \$2,950

Full Company Unlimited Use: \$4,950 (database may be made available to any employees; no third parties permitted)

Third party usage: If you would like to make Red Flag available to brokers or correspondents, please call us: 908-852-7677. Prior to calling, please have in mind the maximum number of broker or correspondent copies you will need.

Note: As advertised in our research study, **Giants of the Mortgage Industry, 2006**, clients for that study can get Red Flag at a **discounted price**. The discount is **15%**.

Getting Started

Assuming your employees know how to use an Excel spreadsheet, you're ready to start using Red Flag Incomes today.

Think about how many users you'll have, then give us a call at 908-852-7677. Stephanie Rady, director of data products, will help you. We'll furnish a license agreement. When we get that back, we can send you your Red Flag CD-ROM.