

The Impact of Fraud on Your Mortgage Operation

A Technical Perspective - Automated Fraud Detection Systems



Steve Halper CEO DataVerify - BIO

- ✓ **Over 30 years of Fraud, QC & Loss Mitigation Experience with reputable firms, such as Fannie Mae (7 years), CitiMortgage, Chemical/Chase, Great Western & CalFed**
- ✓ **Founder and CEO of AppIntelligence where he pioneered automated fraud detection by creating the first anti-fraud automated tools in the mortgage space**
- ✓ **EVP of Strategic Systems for Lehman Mortgage**
- ✓ **Consultant for Fair Isaac on its Enterprise Mortgage Decision Engine**
- ✓ **Consultant for Countrywide on its Enterprise Fraud Blueprint Project**

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Automated Fraud Detection & Prevention

- 1. Description of Available Fraud Tools**
- 2. Current State of Mortgage Fraud**
- 3. Key Characteristics of Fraud Perpetrators**
- 4. Current Fraud Trends Indicated by Automated Fraud Detection**
- 5. A Few Examples of Most Prevalent Frauds Detected by Automated Systems**
- 6. Effective Tests & Evaluations of Automated Fraud Tools**

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Description of Available Fraud Tools

Borrower's Verifications

- 1. Identity Verification Tools**
- 2. Regulatory Screening Tools**
- 3. Borrower Financial History & Condition Tools**

Mortgage Application Verifications

- 4. Employer Verification Tools**
- 5. Employment Verification Tools**
- 6. Self Employment Verification Tools**
- 7. Income Verification Tools**
- 8. Asset Verification Tools**
- 9. Participant Watchlist Management Tools**
- 10. Participant Historical Performance Tools**
- 11. Comprehensive Broker & Appraiser License Review**

Property Verifications

- 11. Neighborhood Flip, Foreclosure & Fraud History Tools**
- 12. Property Flip, Foreclosure & Fraud History Tools**
- 13. Neighborhood Current & Trend Valuation Assessment**
- 14. Property Current & Trend Valuation Assessment**
- 15. Subject Fraud & Valuation History**
- 16. Comprehensive Related Parties Review & Analysis**

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Automated Fraud Systems Currently Identify At Least 29 Types of Fraud:

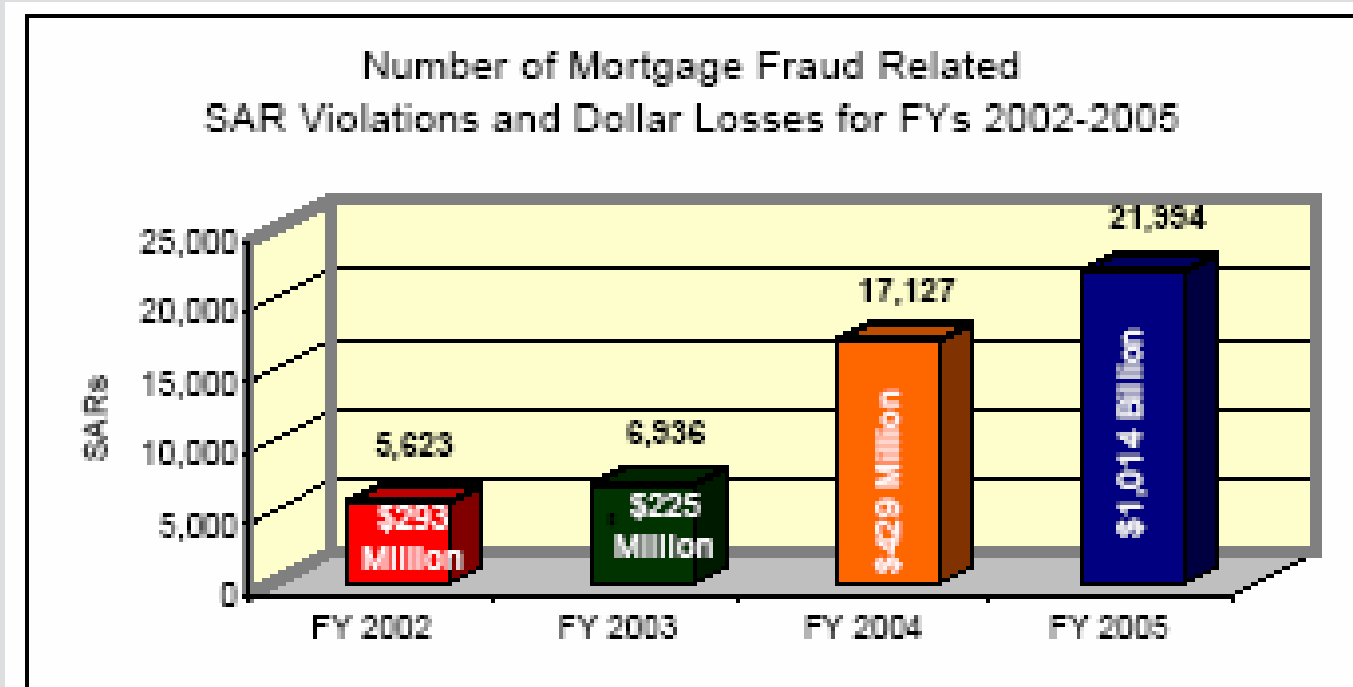
1. Falsification of Employment
2. Occupancy Misrepresentation
3. Fictitious Identity (False Name Fraud)
4. Identity Theft (True Name Fraud)
5. Social Security Misrepresentation
6. Fictitious Company Representative
7. Strawbuyer
8. Falsification of Mortgage Rent
9. Undisclosed Obligations
10. (Phantom) Credit
11. Backwards Applications
12. Equity Skimming
13. Bankruptcy Fraud
14. Incentive Fraud
15. Property Flipping
16. Loan Flipping (Churning)
17. Non-Arms Length Transactions
18. Air Loan
19. Undisclosed Liens or Double Financing
20. Falsified Collateral
21. Appraisal Fraud
22. Renovation Fraud
23. Title Misrepresentation (Quitclaim)
24. Fictitious Lien Release
25. HUD-1/Settlement Statement
26. Closing Violations
27. Silent Second (Simultaneous Borrowing)
28. Builder Bailout
29. Investor Fraud

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FY 2002 – 2005 SARs Mortgage Fraud



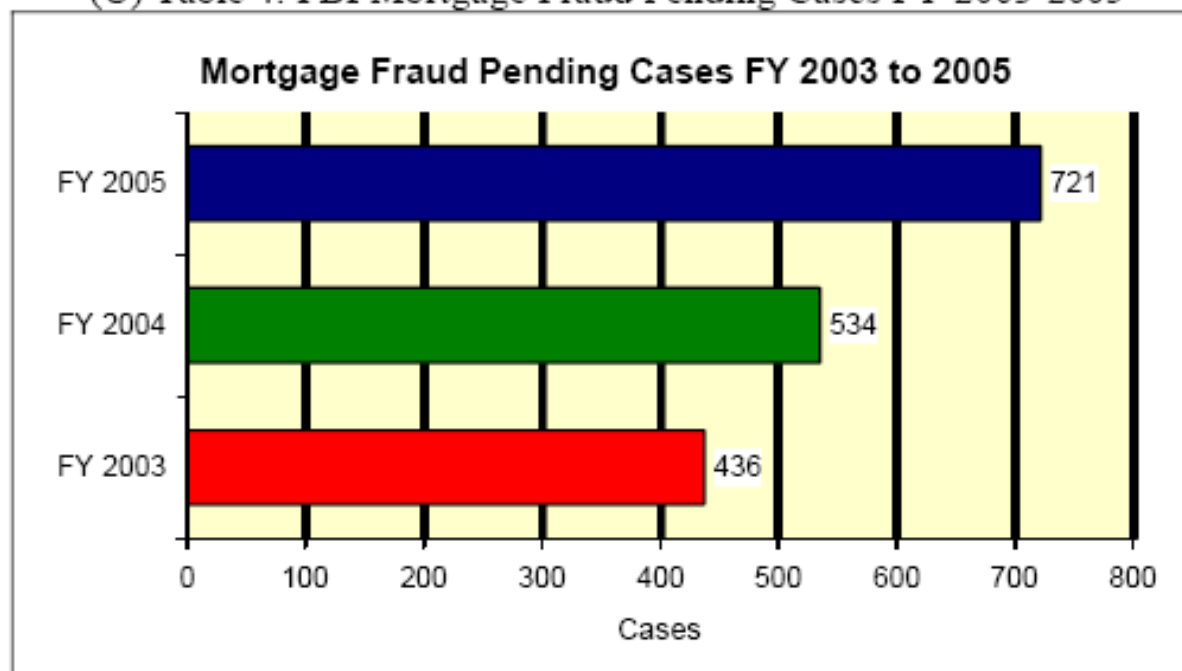
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FBI Pending Cases

(U) Table 4: FBI Mortgage Fraud Pending Cases FY 2003-2005



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The chart below illustrates trends in mortgage fraud as reported to the Mortgage Asset Research Institute (MARI):

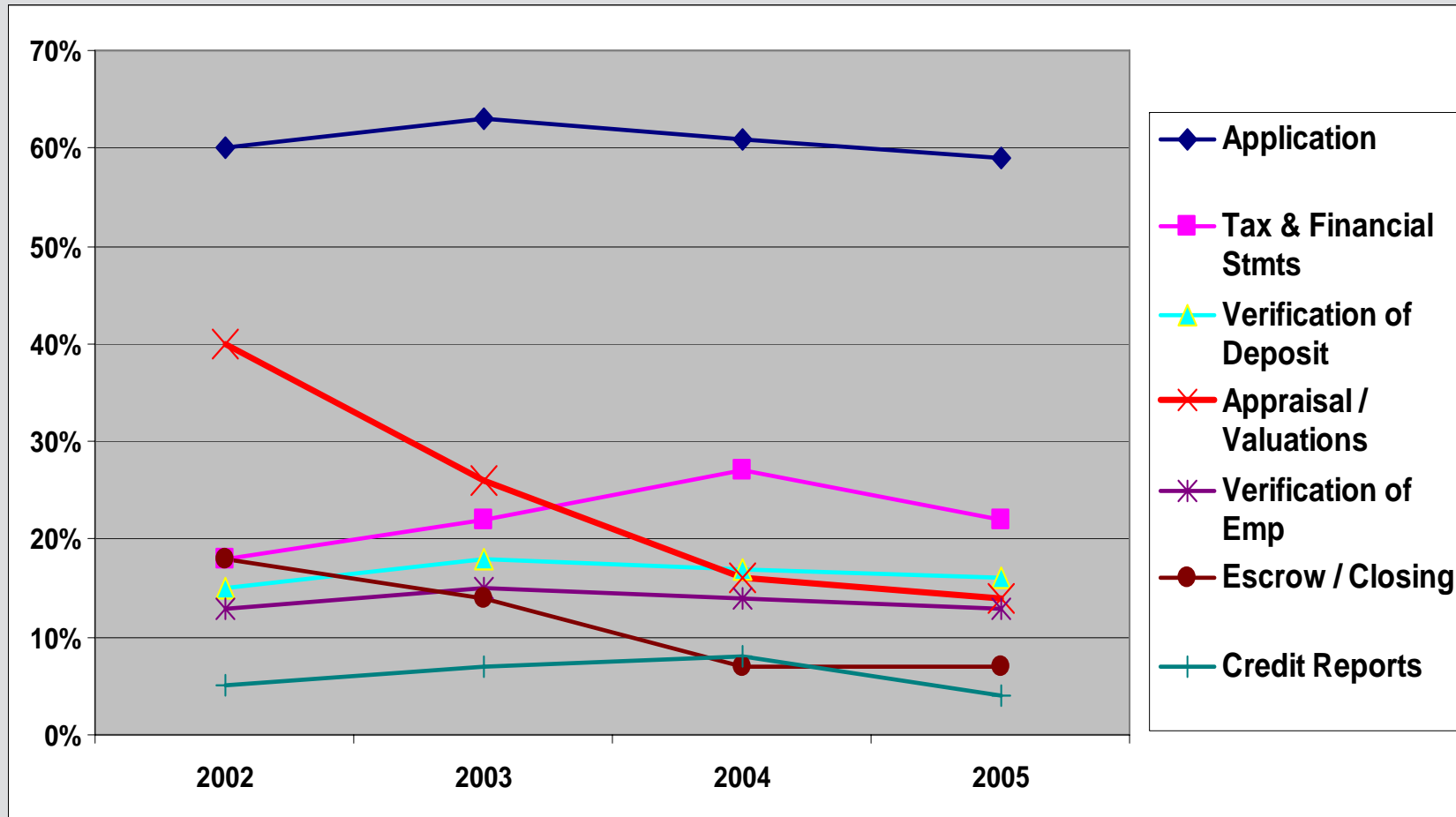
<u>Fraud Type</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>
Application	60%	63%	61%	59%
Tax & Financial Stmts	18%	22%	27%	22%
Verification of Deposit	15%	18%	17%	16%
Appraisal / Valuations	40%	26%	16%	14%
Verification of Emp	13%	15%	14%	13%
Escrow / Closing	18%	14%	7%	7%
Credit Reports	5%	7%	8%	4%

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MARI FRAUD CATEGORY TREND ANALYSIS



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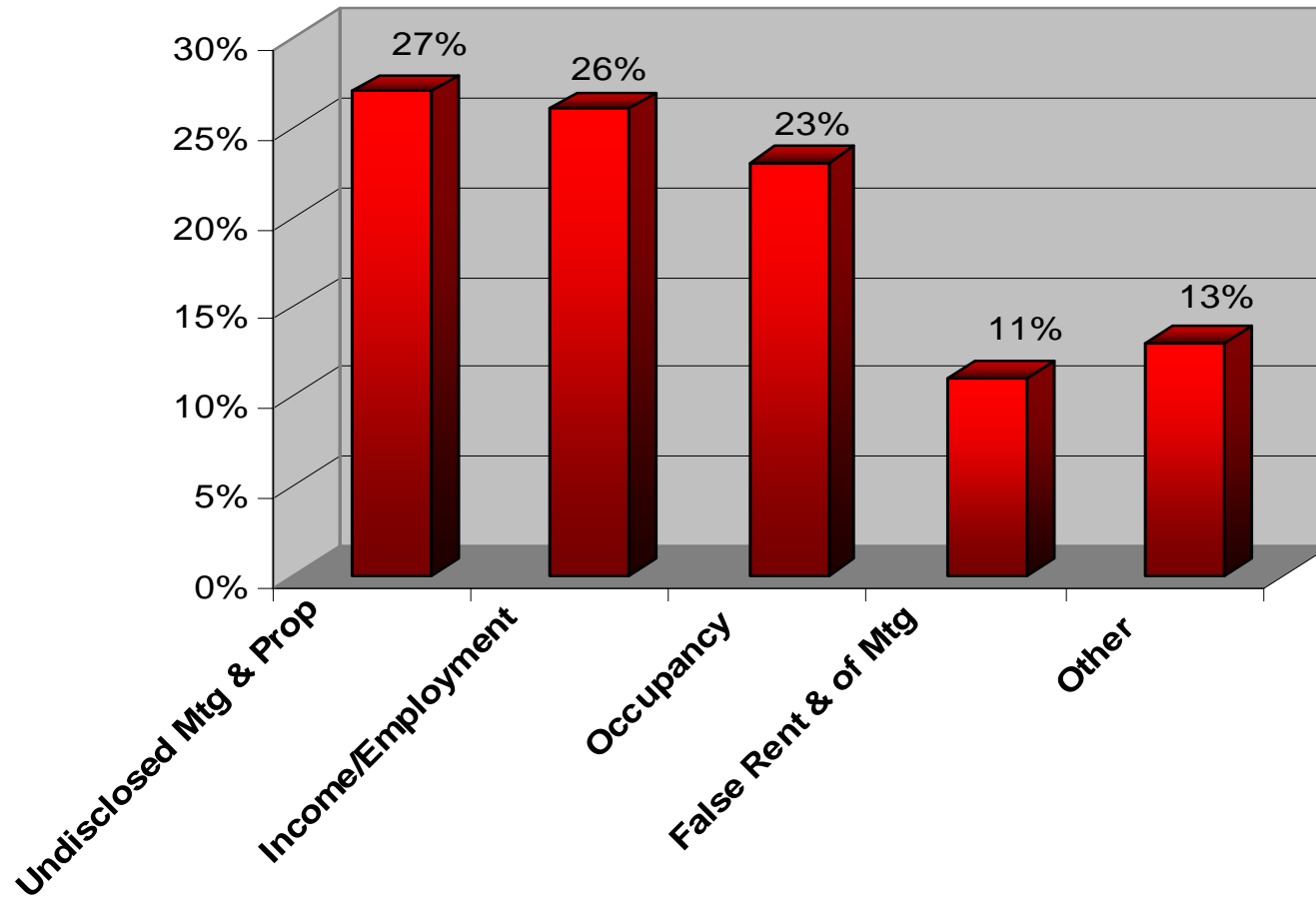
The chart below illustrates trends in mortgage fraud as reported to the Prieston Group, a risk management consulting company offering indemnification services in the mortgage industry. Data is based on 2006 claim experience through September 2006.

<u>Fraud Type</u>	<u>% of Claims By Fraud Type</u>
Occupancy	23 %
Income/Employment	26 %
Undisclosed Mortgage & Property	27 %
False Verification of Rent & Mortgage	11 %
Other Including Appraisal - Valuation	13%

Through September 2006

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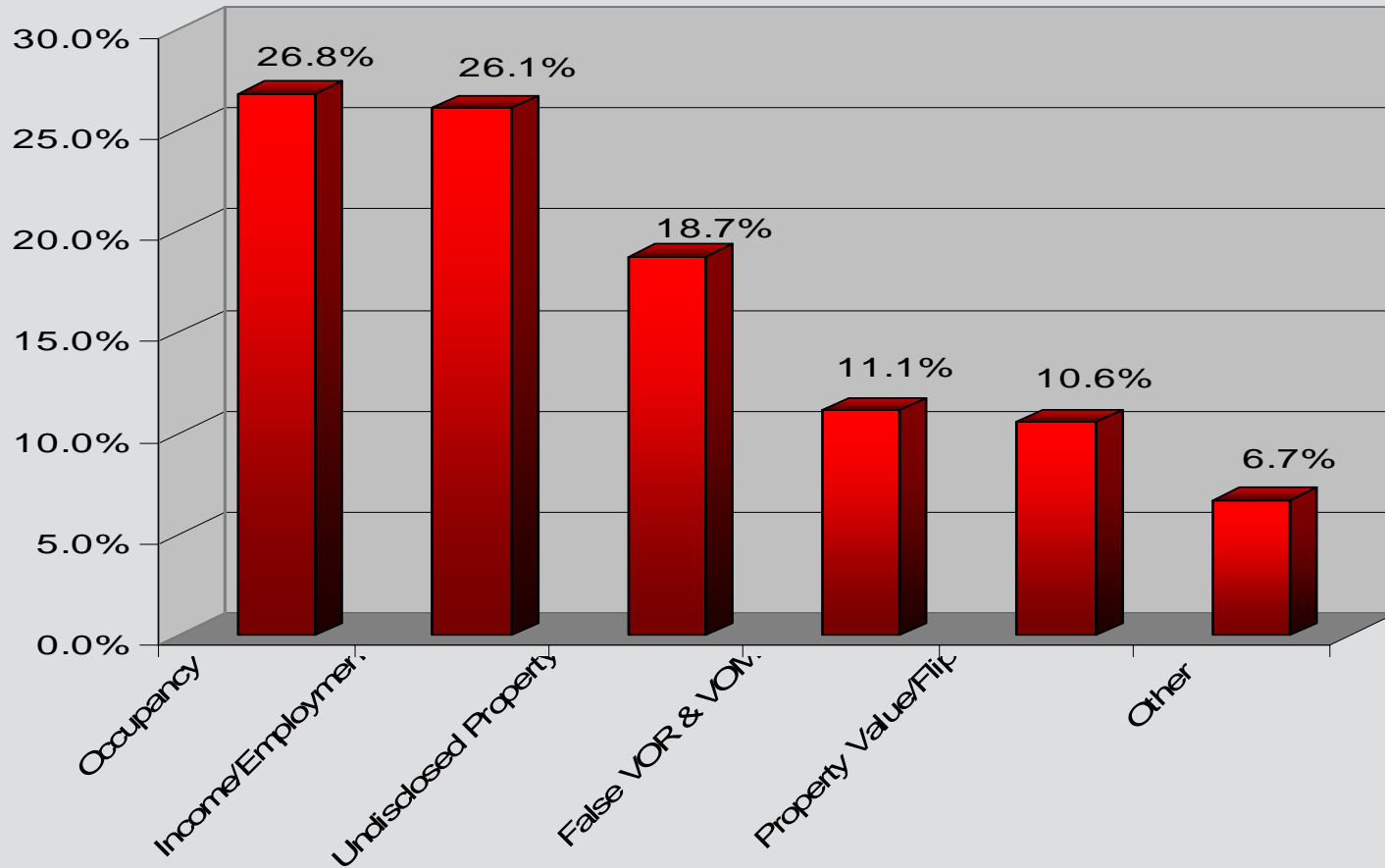


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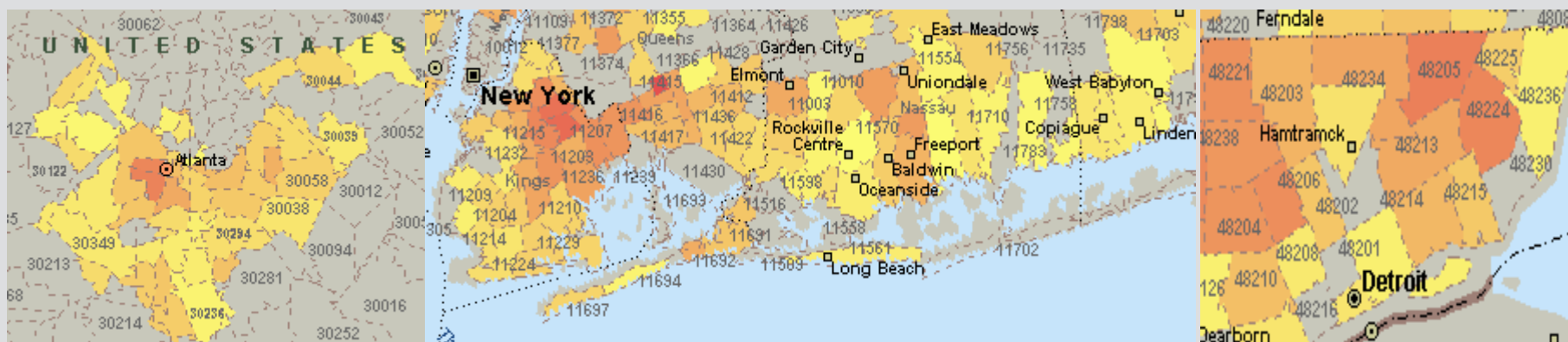


FREQUENCY OF FRAUD FINDING CATEGORIES



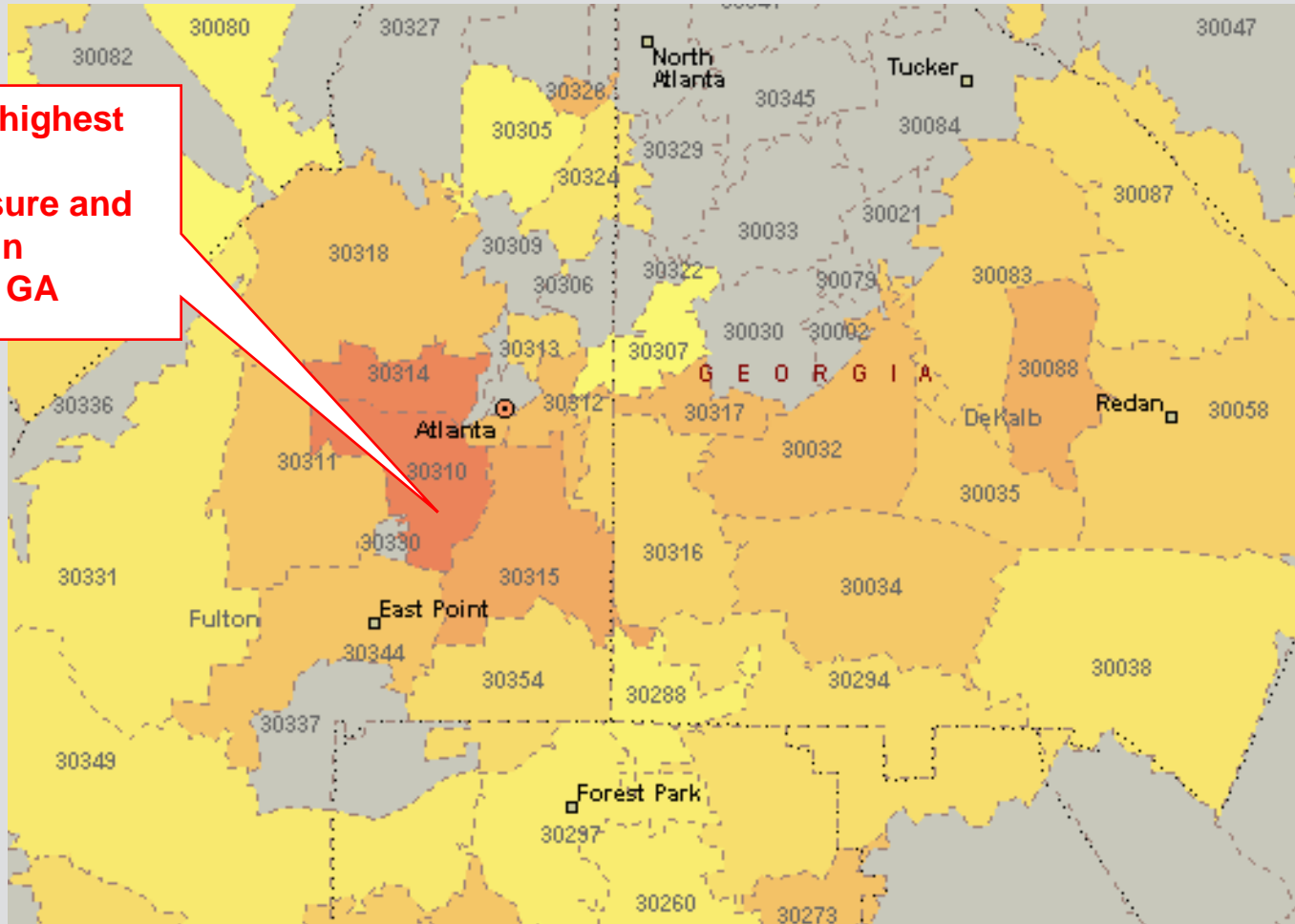
Robust Foreclosure and Default Analysis

- ✓ DataVerify studied correlations between high default and foreclosure areas and the fraud/default risk associated with them***
- ✓ Unique analysis of the foreclosure and default density in the market (1/8 mile to 2 miles)***
- ✓ Analyzes very recent market data (0-90 days) of both foreclosure AND default – unique feature only found in our model***

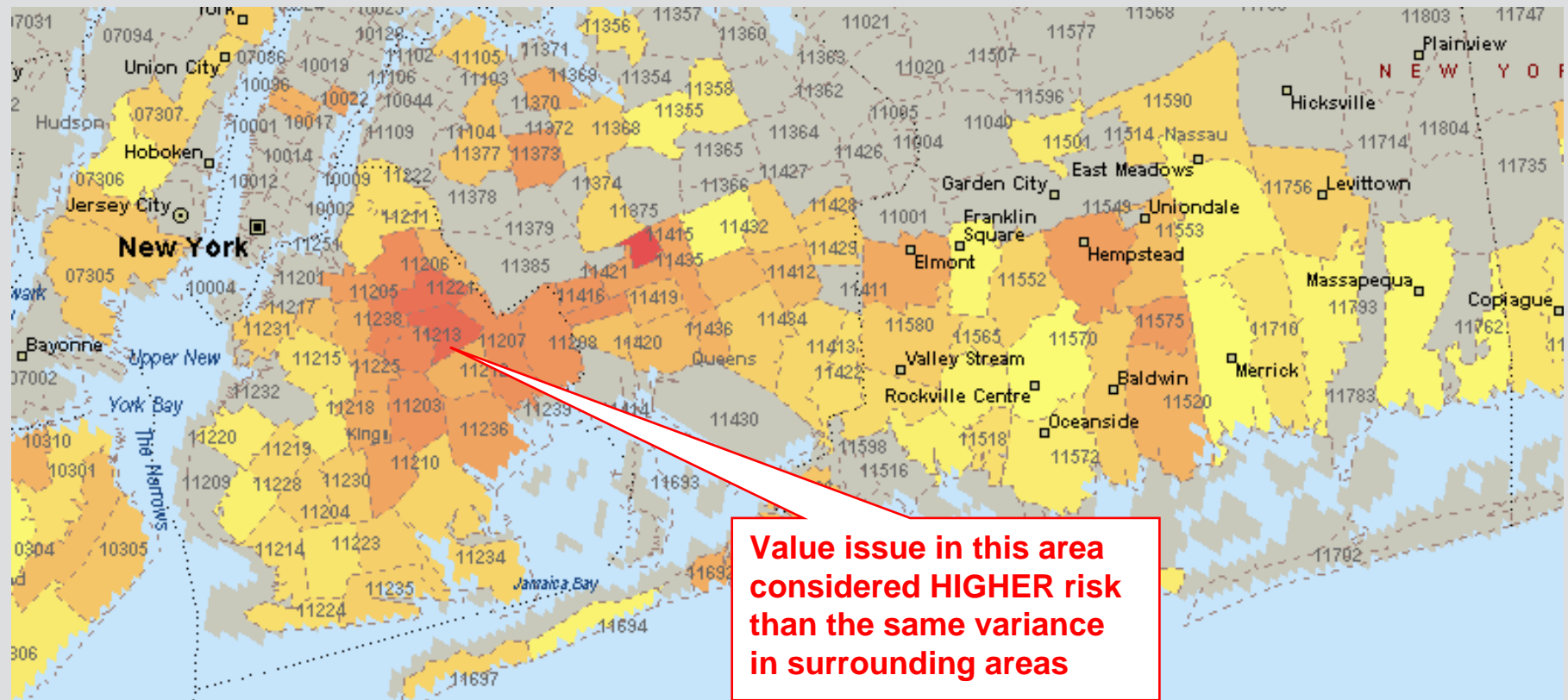


Market Analysis Example: Atlanta, GA

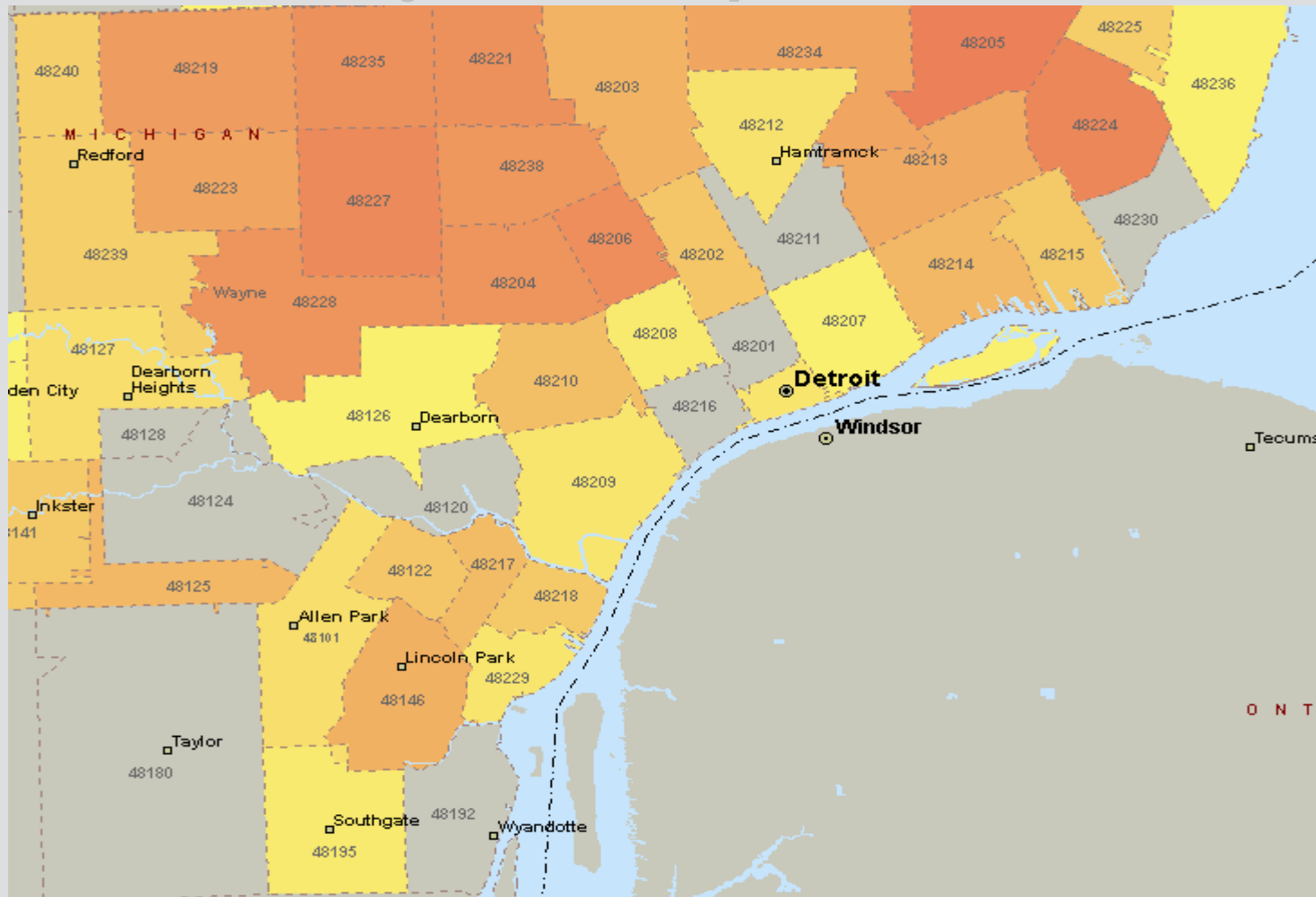
Area of highest risk of foreclosure and default in Atlanta, GA



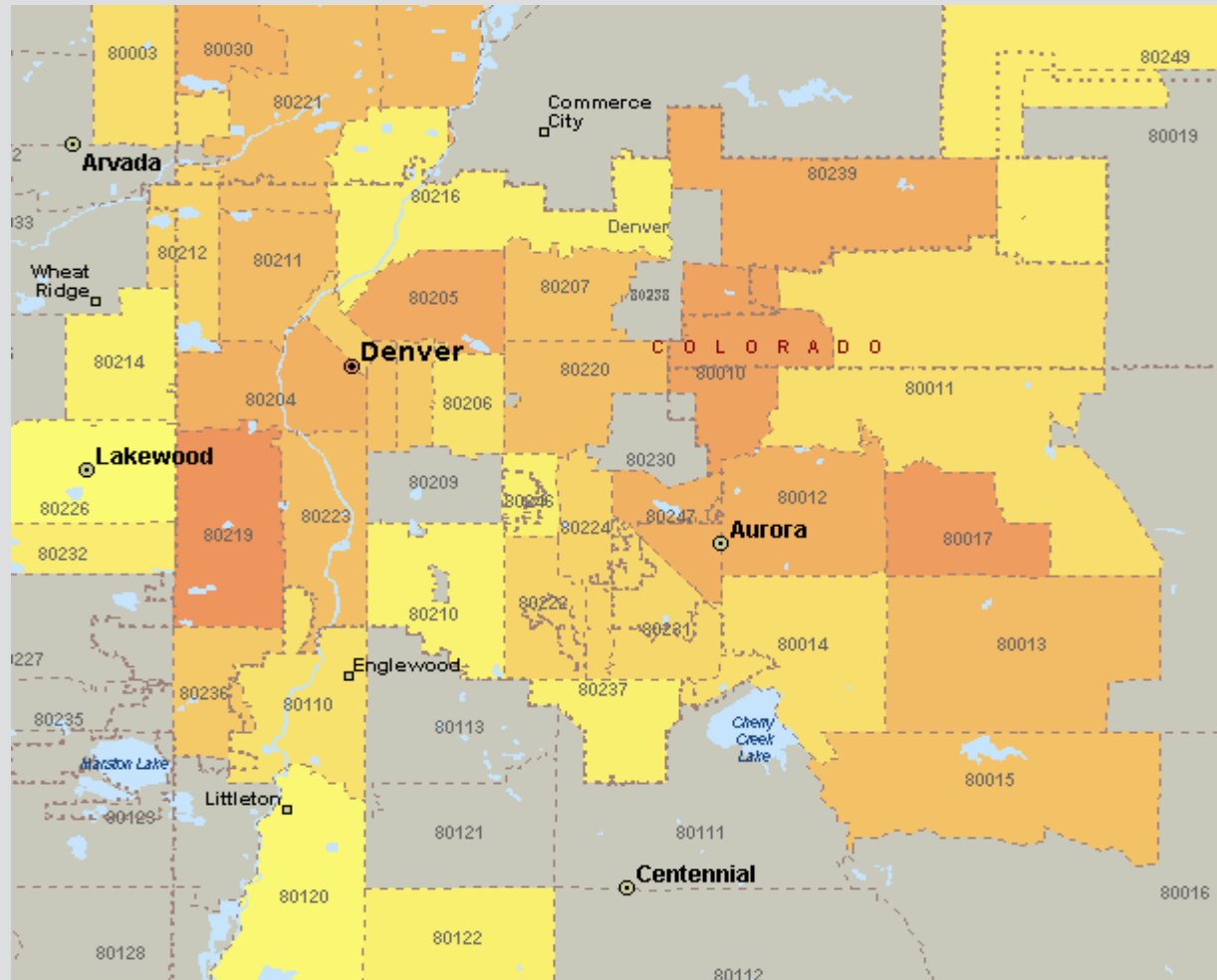
Market Analysis Example: New York



Market Analysis Example: Detroit, MI



Market Analysis Example: Denver, CO



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Key Characteristics of Fraud Perpetrators

1. Technologically Advanced –

- ✓ Utilize the latest LOS, AUS, Doc Imaging Systems
- ✓ Utilize Latest OCR and Word Processing Programs To Manipulate Key Docs, Such As Credit Reports
- ✓ Utilize Latest Appraisal Software to Create Flawless Appraisals
- ✓ Utilize Tax Prep Software to Create Flawless Tax Returns

2. Seek Path of Least Resistance –

- ✓ Migrate Loans Away From Automated Fraud Systems
- ✓ Migrate Toward Subprime (Less Stringent Guidelines)
- ✓ Migrate Toward Low Doc Programs (i.e. Stated Income)
- ✓ Migrate Toward Wholesalers & Investors Requiring Less Data

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Key Characteristics of Fraud Perpetrators - Continued

3. Take Extreme Measures to Protect Stealth Aspect of Schemes

- ✓ Utilize Straw Buyers
- ✓ Utilize Investment Vehicles, Such As LLC's, Investment Clubs, Etc.
- ✓ Operate Under Multiple Licenses, Branches, DBA's, Businesses
- ✓ Establish TPO Relationships With Dozens of Buyer/Investors
- ✓ Aggressively Deny Any Claims (Lender's Legal Avoidance)
- ✓ Keep Fraud Exposure Just Below Lender & Legal Thresholds
- ✓ "Spread the Stealth"

4. Superior Mortgage Insider Knowledge

- ✓ Convicted Fraud Perpetrators Hired As Speakers, Writers, Consultants, and Trainers
- ✓ FBI Statistics Indicate that 80% of Known Fraud Cases Involve An "Insider"
- ✓ Bountiful Fraud Scheme Cross Training Opportunities Available
- ✓ Incentive Compensation Structure Provides Significant Motivation

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Current Fraud Trends Indicated by Automated Fraud Detection

Valuation No Longer Primary Fraud Benchmark

- ✓ **AVM sales comparables 3 to 6 months or more old**
- ✓ **Appraisal sale comps 3 to 6 mos. old & MLS aged also**
- ✓ **Double digit appreciation markets flattening or declining**
- ✓ **AVM tools are no longer the only risk indicator to consider**

Foreclosure and pre-foreclosure activity ramping up

- ✓ **Foreclosure “Hot Spot” increases indicate correcting markets**
- ✓ **Pre-foreclosure “Hot Spot” indicators predict market corrections**
- ✓ **Higher risk loans more susceptible to market corrections**
- ✓ **Both fraud for property and for profit amp up loss severity and frequency**

Mortgage insiders contributing to mortgage fraud epidemic

- ✓ **FBI stats indicate 80% of known frauds involve insider**
- ✓ **FBI stats indicate mortgage fraud increased 3 fold over past two years**
- ✓ **As volumes decline volume compensated insiders create volume at all cost**
- ✓ **Risk/returns huge benefit to insiders**

Many Lenders reverting back to “Know Thy Customer” business mantra

- ✓ **Borrower’s payment capability & history key decision point**
- ✓ **Objective, borrowers with character & ability to pay in down times**

Fraud focus has shifted from primarily collateral to:

- ✓ **Borrower’s Identification**
- ✓ **Employment & Income**
- ✓ **Third Party Fraud History**
- ✓ **Borrower’s Other Assets & Obligations**
- ✓ **Hidden claims against borrower**

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DataVerify, Inc. Detection of Fraud Trends

Types of Fraud Trends Identified

- Loan Churning
- Strawbuyer/Front Buyer
- Property Flipping
- Builder Bailouts
- Investment Scams
- Property value inflation
- Income and employment Discrepancies
- Undisclosed mortgages
- Equity Skimming

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Latest Fraud Schemes & Defenses

Investor/Occupancy Fraud –

Key Characteristics:

- ✓ *Investors buying multiple properties claiming all as “primary residence”*
- ✓ *Highest risk due to domino effect if investor gets in trouble or cold feet*
- ✓ *Investors often hide behind LLC or other small business or investment vehicle*
- ✓ *Popular investor alternative to sluggish stock markets*

Defense/Detection Tools:

- ✓ *Perform nationwide property ownership sweeps to detect multiple ownership*
- ✓ *Perform Other Business Ownership searches to identify multiple ownership under other businesses or DBA names*
- ✓ *Perform related parties searches to identify parties related to investor/borrower or other parties to transactions revealed in searches*

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The Scam

- A brother, sister, and mother persuaded dozens of residents to buy real estate in Indiana.
- The mother used her church as a recruiting ground for victims who unknowingly signed loan applications.
- An appraisal service provided inflated appraisals.
- A title company closed the mortgage loans without the borrowers being present.



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The Loan Application

- The borrower was applying for numerous loans for various properties.
- The income of the unsuspecting victim varied from loan to loan.

Automated Fraud Systems should...

- Track the number of applications sent through by one borrower for different subject properties.
- Retain the income used to apply for various loans to compare to other loans the borrower applies for.

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The Subject Property

- Current property value exceeds the appreciate rate for the market area.
- The seller owned the property for less than 12 months.

Automated Fraud Systems Should Detect...

- The rapid increase in the appreciation rate for the subject property.
- The quick turnover of the property, which identifies a false increase in value from one sale to the next.

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The Neighborhood

- The neighborhood sales have recently sold for significantly higher prices in a short amount of time.
- The appraised value exceeds the value range for the market.

Automated Fraud Systems Should...

- Identify rapidly increasing markets around the subject property, which could contain potentially fraudulent comparables.
- Provide recent sales comparables to confirm the appraised value is overstated.

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The Scam

- Another couple sold homes at highly-inflated prices to first-time buyers with average or below-average credit scores.
- They also engaged in fraud to induce a lender to make the loans.



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The Loan Application

- The income was found to be excessive for the job title and the location.
- The employer name did not match the address and phone number returned.

Automated Fraud Systems Should...

- Salary range verification tools are used to determine the accuracy of the borrower's income.
- The reverse phone and address search notifies lenders that the employer information provided by the borrower is inaccurate and potentially fraudulent.

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The Subject Property

- The rapid selling of the same properties within a certain market along with...
- The collection of inflated values created a flip market.

Automated Fraud Systems should...

- Track the transaction history of the subject property along with the changing sales price, which enables the lender to detect a flip market before they become part of it.

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The Participants

The repeated participants
on low scoring loans...

Lender

Seller

Appraiser

Broker

Closing Agent

Automated Fraud Systems Should....

- The participants in each loan must be tracked and graded to provide for better future data.
- The Watchlists must be updated to include any unwanted participants.
- The license verification should be completed and reviewed on the participants.

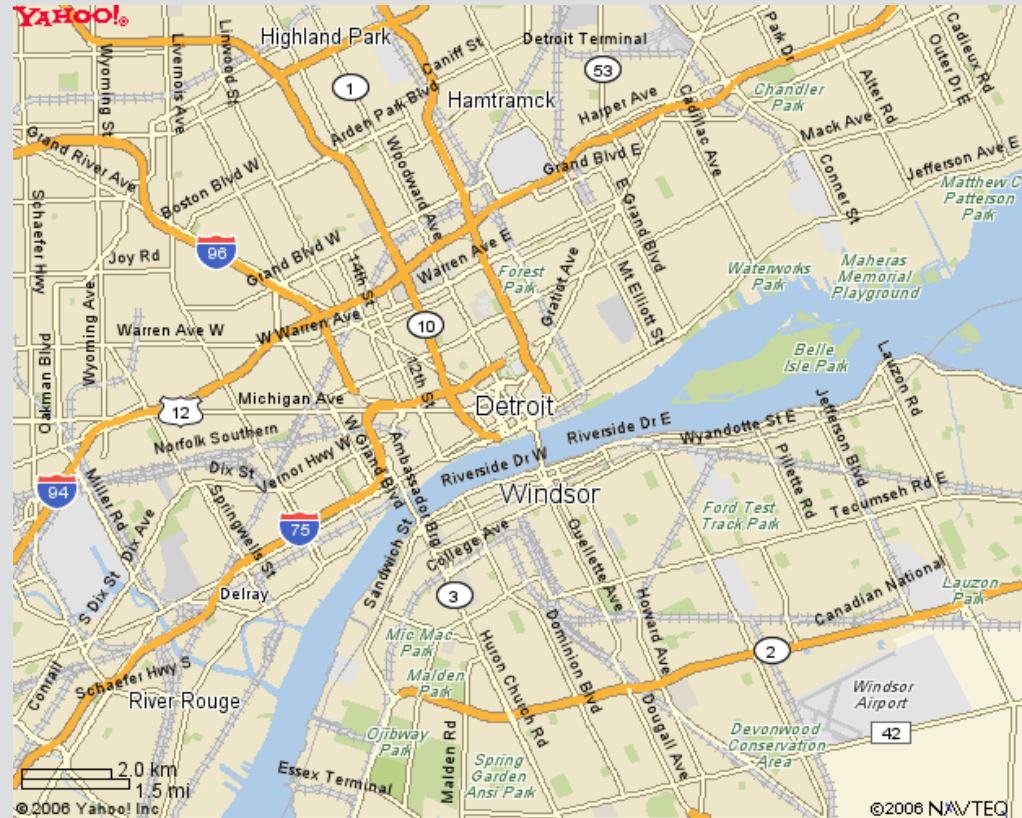
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The Scam

- Conspiracy among bank employees, appraisers, title companies and others involved in mortgages in affluent Detroit suburbs.
- A strawbuyer was used to purchase the property.
- An appraisal company provided inflated appraisals.
- The title agency closed the transaction with false HUD-1s.



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The Loan Application

- The strawbuyer's information was used to apply for the loan.
- The employer does not make sense in context of the loan.
- The borrower's are associated with other businesses not disclosed.

Automated Fraud System Should...

- Identify any incorrect information provided by the borrowers; such as, address, phone number, and employer.
- Provide a detailed picture of the borrower in conjunction with all of the various participants.
- Identify all businesses the borrower is involved in to confirm undisclosed self-employment.

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The Subject Property

- The subject properties had inflated values.
- The same appraisers were supplying the inflated appraisals.

Automated Fraud Systems Should.....

- The AVM should provide an accurate account of the subject property along with valid comparables.
- The appraiser's license should be verified and the average loan score should be retained for future reviews.

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Effective Tests & Evaluations of Automated Fraud Tools

With average credit losses on a single fraud loan ranging from \$50,000 to 60,000 parties interested in automated fraud prevention systems typically want to test applicable systems for: 1 – Accuracy (Hit Rate), 2 – Efficiency (Lowest False Positive Rate), 3 – Automation of Production Workflow and 4 – Cost/Benefit (ROI).

Based on experience with hundred's of tests over the past decade, these are the some of the test parameters that every automated fraud system test should consider carefully:

Test Size:

- 1. Optimum size ranges from 50 to 500 loans (including percentage of frauds)**
- 2. Tests approaching 500 or larger tax the reviewer's resources**
- 3. Reviewers should drill down to the various types of frauds identified (flag level)**
- 4. Such reviews on very large tests could take several resources weeks to complete**

Test Population:

- 1. First & Early Payment Defaults**
- 2. Large Losses or Repurchases**
- 3. Different Loan Categories of the Above**
- 4. Large Population of "Clean" Loans (Preferably Scrubbed)**

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Effective Tests & Evaluations of Automated Fraud Tools – Continued

Test Process:

- 1. Provide Demos of Each System to Test Reviewers**
- 2. Test Transmission and Return Response for Each Vendor Prior to Test**
- 3. Transmit Data Simultaneously to All Test Vendors**
- 4. Time Responses To Ensure Electronic Vs. Manual Verification Process Is Tested**
- 5. Once All Test Results Are In, Declare Test Over and Share Vendor Results With Them**
- 6. Schedule Conference Calls to Review Results With Vendors To Clarify Any Questions**

Final Evaluation:

- 1. Compare Hit Rates By Vendor & Calculate Loss Savings Based On PreFund Discovery**
- 2. Compare False Positive Rates & Calculate Additional Time Spent Reviewing Non Frauds**
- 3. Calculate Automated Manual Processes & Increased Productivity & Time Savings**
- 4. Compare System Cost to Credit Loss, Automation, Legacy System Replacement**
- 5. Estimate Ancillary Benefits of Improved Loan Quality on Pricing and Investor Relations**