

BENCHMARKING REPORT | Q3 2022

Quarterly Cloud Insights: Wire Fraud





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Executive Summary

As financial institutions implement more robust controls against schemes such as wire fraud, criminals respond by evolving their tactics and efforts against more vulnerable customer segments. With the rise in Authorized Push Payments (APP) scams, and the migration of risk to the receiving side of a transaction, the threat of wire fraud scenarios to financial institutions is considerable — and seeing the complete picture of customer transactions and risk is more important than ever.

Given our unique position in the industry, Verafin can provide unprecedented analysis of trends and benchmarking statistics for wire fraud and related scams, such as Business Email Compromise (BEC). We have gathered insights into key fraud trends by analyzing our consortium-based data set in the Verafin Cloud, representing \$4T in collective assets from 2200 financial institutions. This report describes attempted wire fraud trends

and statistics observed from Verafin Cloud data from Q2 2020 to Q1 2022¹. We analyzed four key segments (business, title company, person, and elderly person), domestic and international wire transactions, and benchmarking metrics, including basis points and quarterly transaction statistics. The analyzed data originated from rich wire transactions via FedWire and SWIFT and included cases of fraud identified in the Verafin Cloud.



CLOUD AND COUNTERPARTY STATISTICS A Complete Picture with Consortium-Based Data

As financial institutions face significant threats from sophisticated criminals, consortium-based data is crucial to effectively combat APP fraud scenarios, including BEC and scams targeting consumers. With our growing number of customer partners, we are realizing enhanced identification of potential mule accounts and improved performance of our payments fraud solutions.



TRENDS OVERVIEW Fraudsters Continue to Focus on Seniors

Quarter over quarter, elderly persons continue to be a primary target for wire fraud. In Q1 2022, wire fraud occurrences against elderly persons accounted for nearly half (49%) of all attempts, and by value, attempts against this group accounted for 27% or \$23.3M. While businesses and title companies accounted for 24% of attempted wire fraud occurrences in Q1 2022, the value of attempted wire fraud against this segment accounted for 56% of the total for the quarter.



BUSINESS WIRE FRAUD Finance and Insurance, Construction Higher Risk

By basis points, attempted wire fraud against businesses in Q1 2022 increased slightly in occurrence, and more than doubled in value when compared to Q1 2021. The median value for attempted wire fraud increased from Q1 2021 (\$18.3K) to Q1 2022 (\$28K). Finance and Insurance (23%) and Wholesale and Retail Trade (14%) led attempts by occurrence in Q1 2022, while Finance and Insurance (21%) and Construction (17%) led value. Cloud-based evidence explained away a significant percentage of person wires with a new beneficiary.



PERSONAL WIRE FRAUD Elder Financial Abuse Remains Major Concern

By basis points, attempted wire fraud against persons decreased in value and occurrence. In Q1 2022, the median value for attempted wire fraud against persons was \$9.5K, a significant increase from \$6K in Q1 2021. Elderly persons (people aged 55 or older) continue to be preferred victims for wire fraud, accounting for 68% of occurrences and 71% of attempted wire fraud value in Q1 2022. Cloud-based evidence explained away a significant percentage of person wires with a new beneficiary.



DOMESTIC WIRE FRAUD Increases for California, Massachusetts

By basis points, attempted domestic wire fraud increased in value and occurrence. In Q1 2022, the median value of a domestic wire fraud attempt was \$10K, up from \$8.3K in Q1 2021. California saw a significant increase by occurrence (26%) and Massachusetts surged by value (403%) from Q4 2021 to Q1 2022. Cloud-based evidence continued to explain away a significant proportion of domestic wires with a new beneficiary.



INTERNATIONAL WIRE FRAUD Major Increases for Hong Kong, China

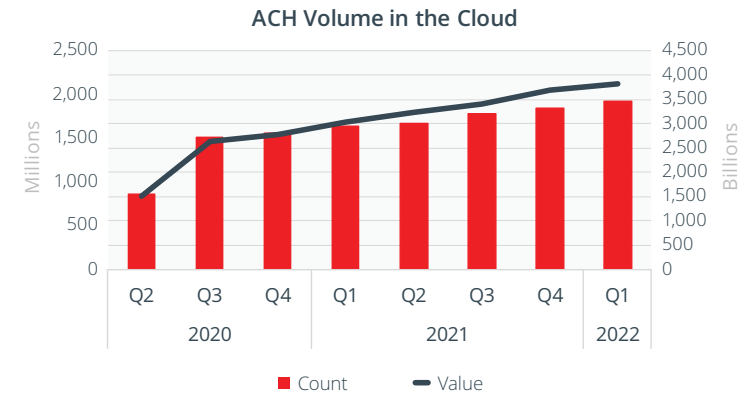
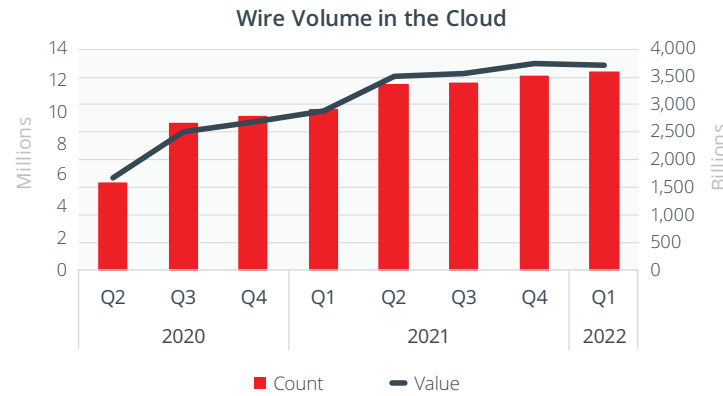
In Q1 2022, the median value of an international wire fraud attempt was \$15.5K, up from \$14.5K in Q1 2021. From Q4 2021 to Q1 2022, Hong Kong saw a significant increase in wire fraud attempts by occurrence (96%) and China a major increase by value (286%). Given the current geopolitical climate, trends related to Russia may evolve considerably in future analyses. Cloud-based evidence continued to explain away a significant proportion of international wires with a new beneficiary.

¹ Due to continual refinement of our Cloud data, values in this report may differ slightly from those presented in reports for previous quarters, with no significant variation in trends observed.

Verafin Cloud Statistics

Wire and ACH volumes in the Verafin Cloud have seen steady quarter-over-quarter increases in both count and value, representing continued growth of institutions leveraging Verafin's payments fraud solutions.

This ongoing growth in our data strengthens our consortium-based approach and affords greater insight into emerging trends.



Counterparty Statistics

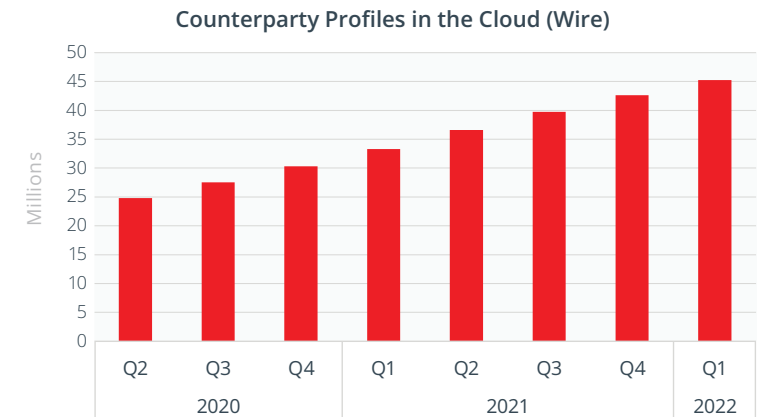
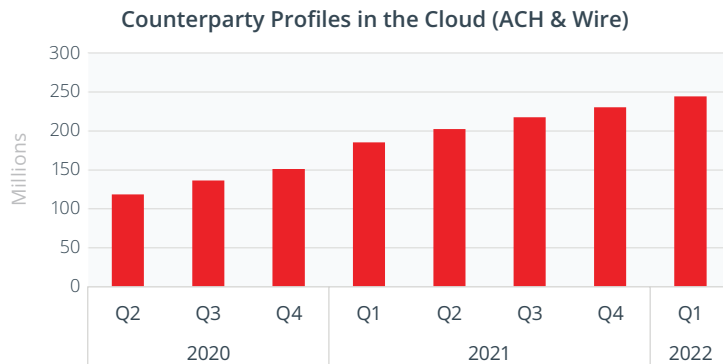
Counterparties are critical to understanding the risk associated with payments fraud, and the ability to identify safe counterparties, as well as potential mule accounts, is key to an effective fraud detection program.

At Verafin, our consortium-based data set allows for a more complete picture of customer transactions, interactions, and relationships, including counterparties that are not Verafin customers. Using information extracted from rich data across the Cloud, Verafin resolves details about entities to form counterparty profiles, helping to better assess the risk associated with the payment. As the size of our Cloud data set increases, so too does our ability to reduce false positives for more effective and efficient investigations.

Wire-only counterparty data is a strong evidence for wire fraud detection due to the low-volume nature of wire as a payments channel. At Verafin, we harness this evidence and supplement our approach with ACH counterparty data, especially when identifying potential demographics for accounts related to a financial institution that is not a Verafin customer. In this scenario, the high-volume nature of ACH as a payments channel allows for more accounts to be profiled.

The amount of counterparty profiles within the Verafin Cloud grew significantly during the analysis period. The number of ACH and wire counterparty profiles grew from 185.4M in Q1 2021 to 244.4M in Q1 2022. For wire alone, the number of counterparties grew from 33.3M to 45.2M compared to the same quarter last year. As the number of counterparties in the Cloud rises, Verafin's analytics can leverage this data for increasingly powerful payee risk analysis to determine the risk associated with a wire sent to a particular receiving account.

The number of ACH and wire counterparty profiles grew from **185.4M in Q1 2021 to 244.4M in Q1 2022**.

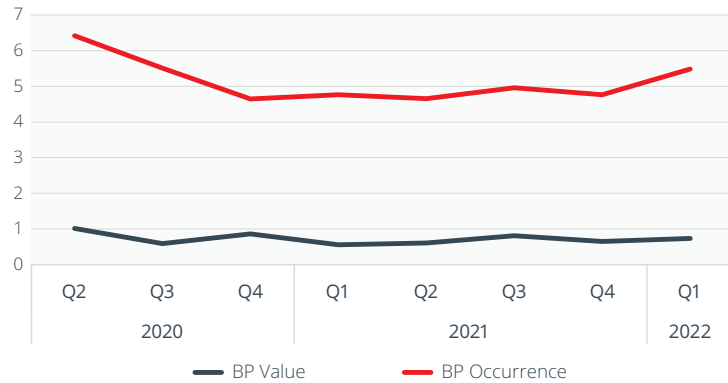




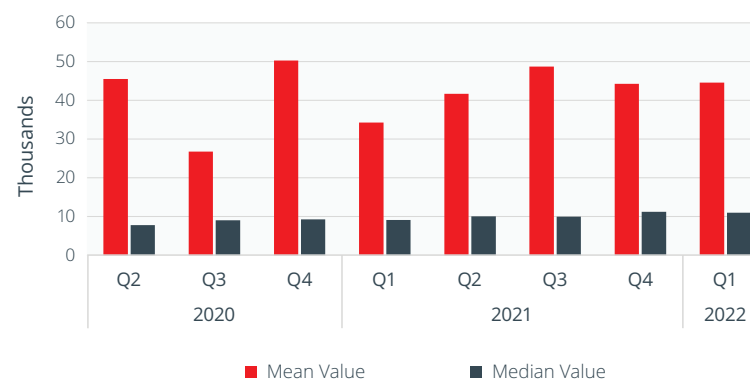
Wire Fraud Insights — Overview

Our analysis provides an in-depth overview of wire fraud trends, which focuses on four segments — business (excluding title companies), title companies, persons, and elderly persons (individuals aged 55 years or older).

Attempted Wire Fraud Basis Points



Attempted Wire Fraud Quarterly Transaction Statistics

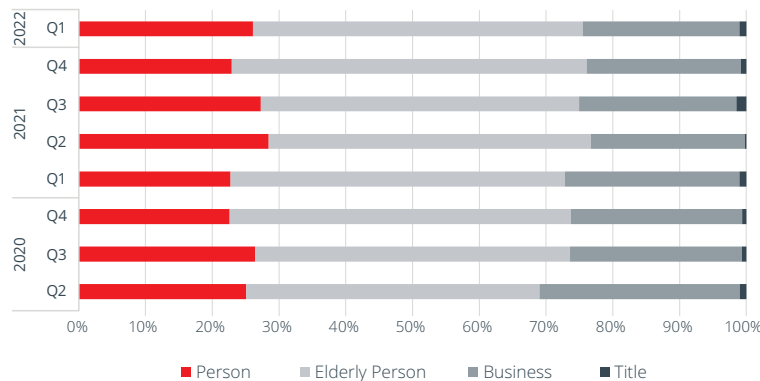


By basis points, attempted wire fraud increased in value and occurrence from Q1 2021 to Q1 2022. From the perspective of quarterly transaction statistics, the mean and median value of attempted wire fraud both increased from Q1 2021 to Q1 2022.

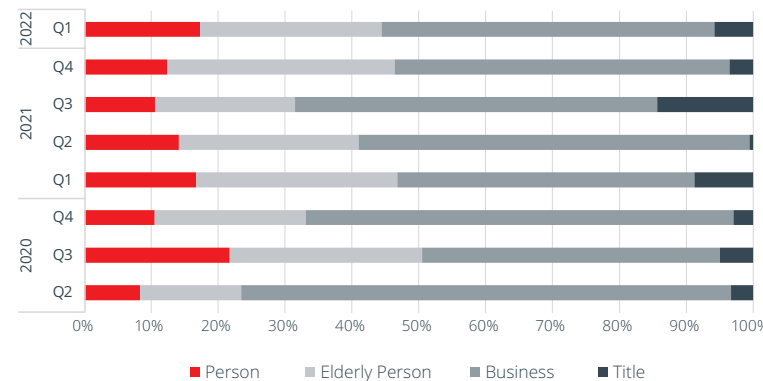
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Attempted Wire Fraud Occurrences by Segment



Attempted Wire Fraud Value by Segment

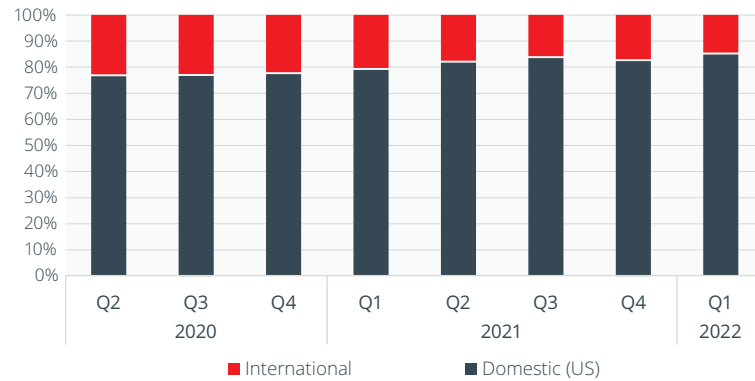


Elderly persons saw the most significant volume of attempted wire fraud occurrences in Q1 2022 (49%).

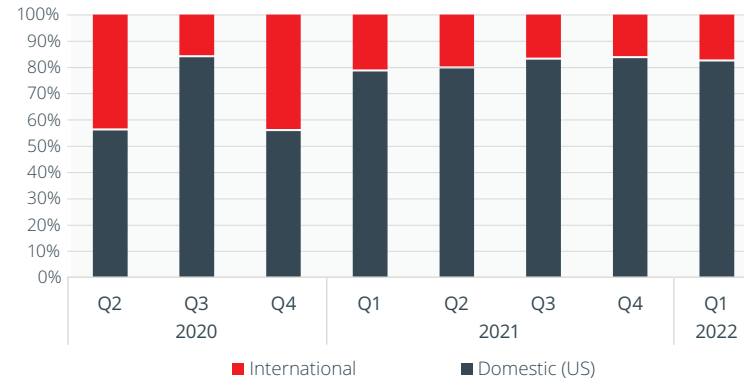
When analyzing occurrences by segment, the percentages for Q1 2022 continue to see similar quarter over quarter trends. Elderly persons saw the most significant volume of attempted wire fraud occurrences in Q1 2022 (49%). The value of attempted wire fraud by segment saw businesses and title companies combined account for 56%, followed by elderly persons at 27% and persons at 17%.

Wire Fraud Insights ... continued

Attempted Wire Fraud **Occurrences** by Destination Type



Attempted Wire Fraud **Value** by Destination Type

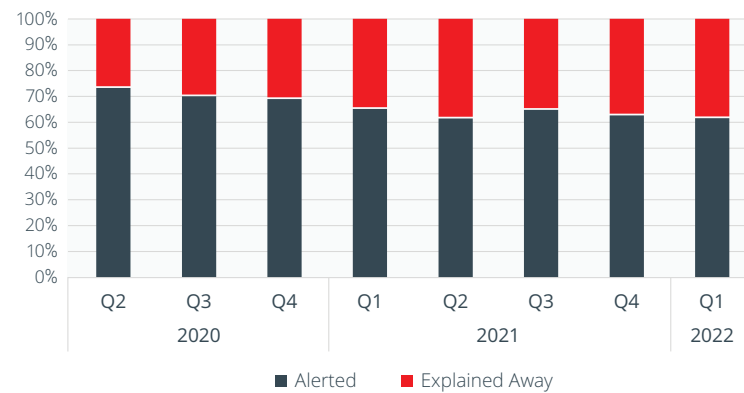


By value, domestic attempts were more prevalent than international, **increasing from Q1 2021 (79%) to Q1 2022 (83%).**

Domestic attempted wire fraud continues to be more prevalent by occurrence than international attempted wire fraud, continuing an upward trend from Q1 2021 (79%) to Q1 2022 (85%). In line with occurrences, domestic attempts by value were also more prevalent than international, with domestic increasing from Q1 2021 (79%) to Q1 2022 (83%).

From Q1 2021 to Q1 2022, **cloud-based evidence explained away a significant percentage of wires with a new beneficiary.**

Wires with New Beneficiary Explained Away Due to Cloud Evidence



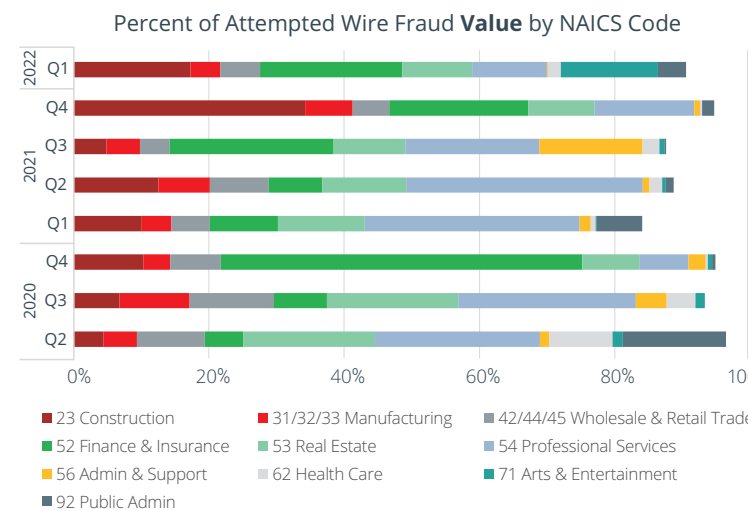
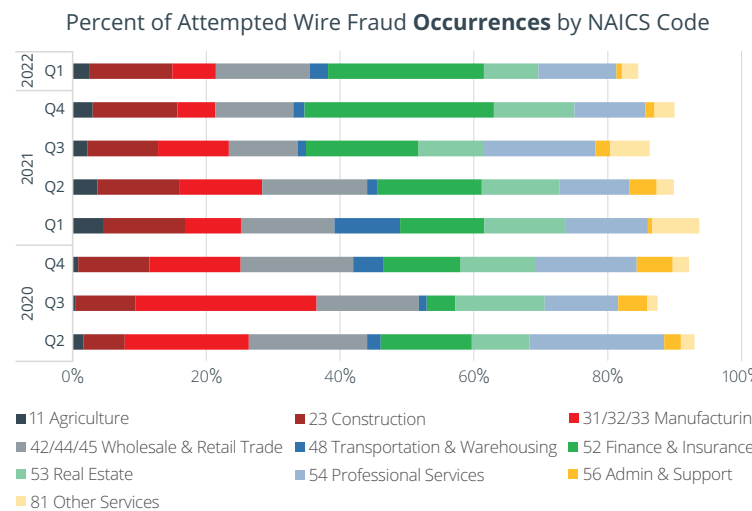
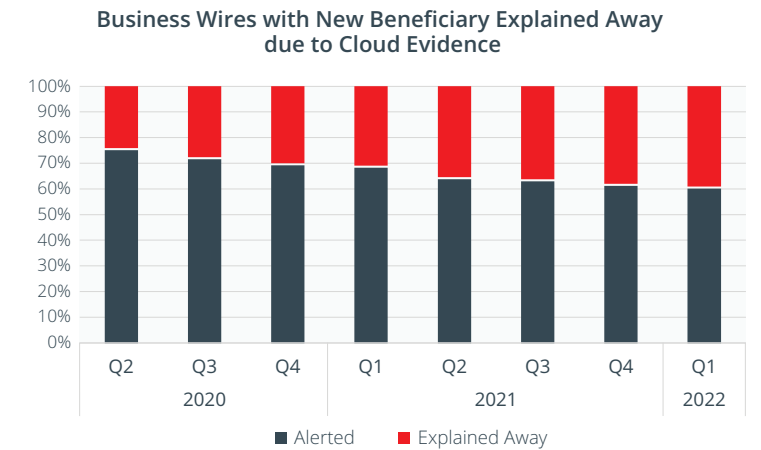
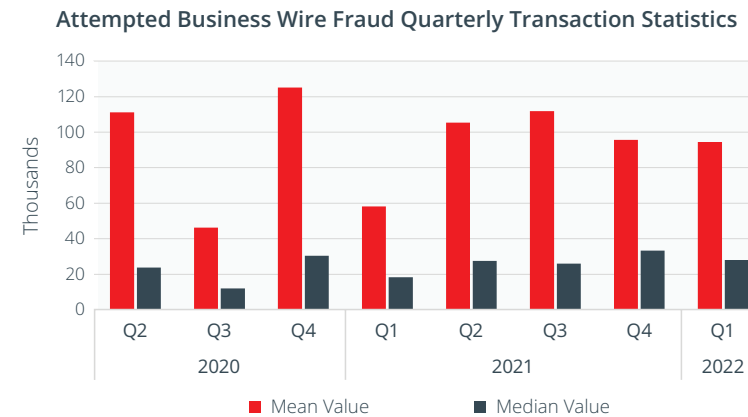
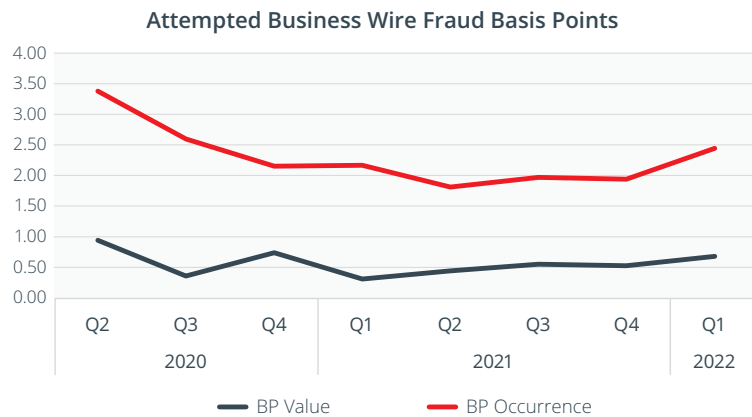
When leveraging a consortium-based approach to wire fraud detection, the amount of data available to analytics is crucial. As the size of the Verafin Cloud dataset grows, more alerts can be explained away by cloud-based evidence. From Q1 2021 to Q1 2022, cloud-based evidence explained away a significant percentage of wires with a new beneficiary. In this scenario, cross-institutional analytics were better able to determine if beneficiaries that were new to the payer could be trusted based on the consortium-based data in the Verafin Cloud.

Business Wire Fraud Insights

From Q1 2021 to Q1 2022, attempted wire fraud against businesses increased in terms of basis points by value and occurrence.

The mean value for attempted business wire fraud significantly and consistently exceeded the median value for all quarters. The mean and median both increased from Q1 2021 to Q1 2022, with the median rising from \$18.3K to \$28K in this period. Analysis by NAICS code showed that ten industry segments accounted for the majority of attempted

wire fraud, with Finance and Insurance (23%) and Wholesale and Retail Trade (14%) leading by occurrence, and Finance and Insurance (21%) and Construction (17%) by value. Cloud-based evidence continued to explain away a significant proportion of business wires with a new beneficiary.



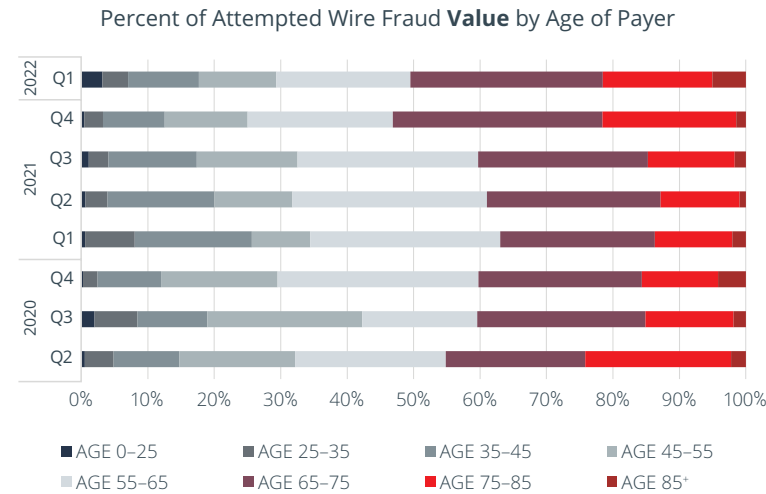
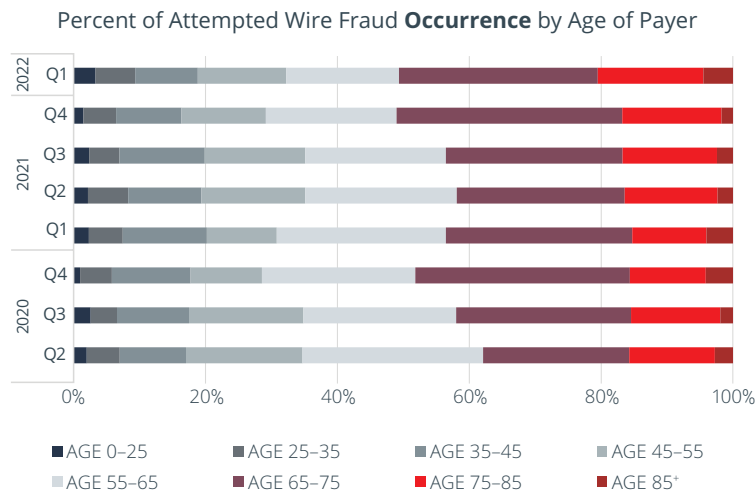
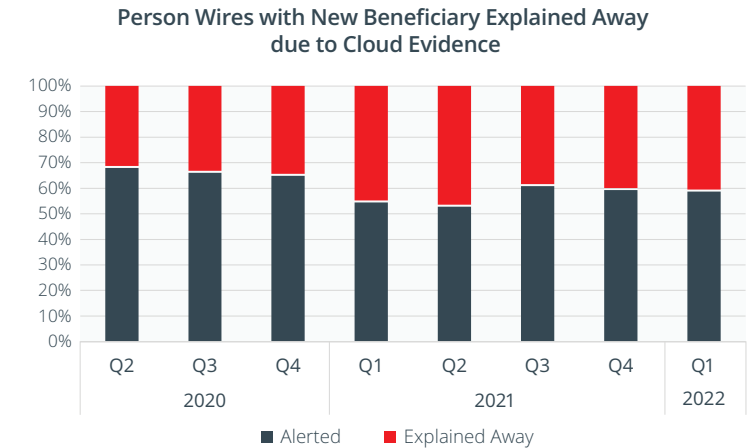
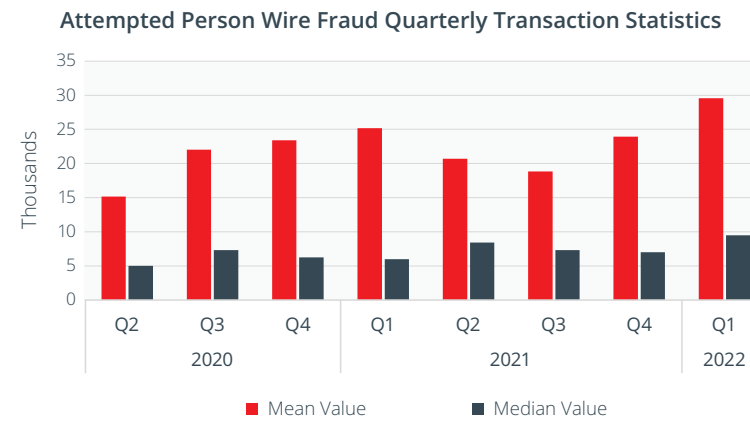
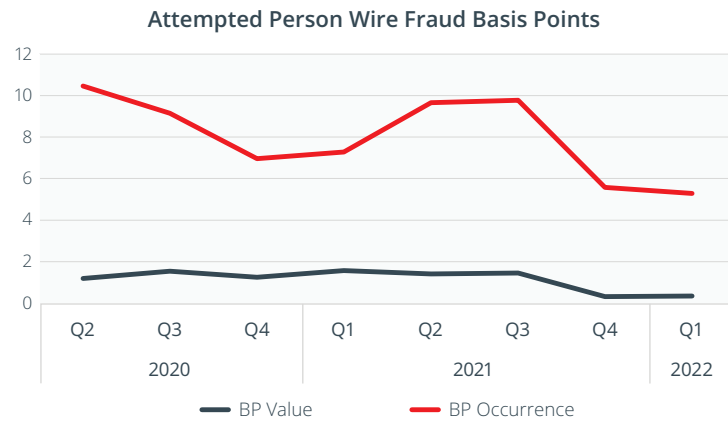
Ten industry segments accounted for the majority of attempted wire fraud, with Finance and Insurance (23%) and Wholesale and Retail Trade (14%) leading by occurrence, and Finance and Insurance (21%) and Construction (17%) by value.

Personal Wire Fraud Insights

By basis points, attempted wire fraud against persons decreased from Q1 2021 to Q1 2022, both in terms of occurrence and value.

The mean and median value of attempted wire fraud against persons increased from Q1 2021 to Q1 2022, with the median rising from \$6K to \$9.5K. The median was consistently and significantly lower than the mean for all quarters. Analysis of attempted wire fraud by age of payer demonstrated that elderly persons (people aged 55 or older)

are preferred victims, accounting for 68% of occurrences and 71% of attempted wire fraud value in Q1 2022. More specifically, the segment for people aged 65 to 75 saw the most wire fraud attempts by value, at 29%. Cloud-based evidence continued explained away a significant percentage of person wires with a new beneficiary.



People aged 65 to 75 saw the most wire fraud attempts by value, at 29%.

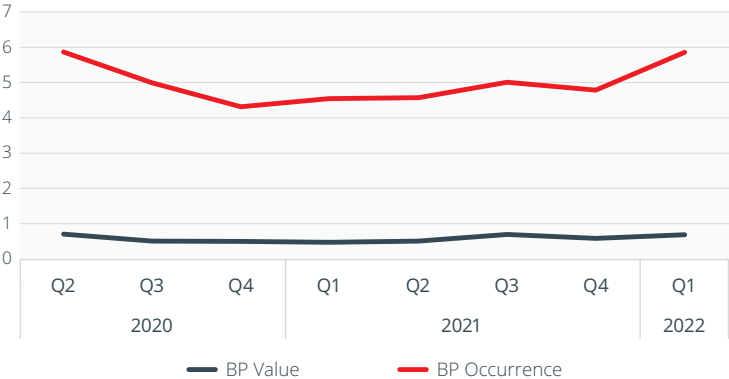
Domestic Wire Fraud Insights

For this report, domestic wires are wire payments with a destination within the U.S. By basis points, attempted domestic wire fraud increased in value and occurrence from Q1 2021 to Q1 2022.

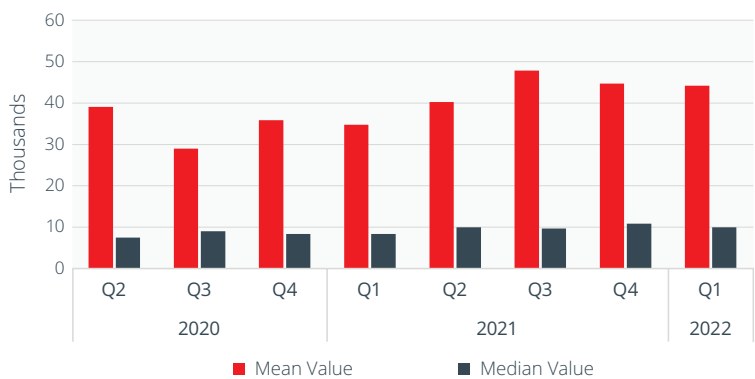
In terms of quarterly transaction statistics, the mean and median value of attempted domestic wire fraud increased from Q1 2021 to Q1 2022, with the median rising from \$8.3K to \$10K during this period. Median values were consistently and considerably lower than the mean values for all quarters. In Q1 2022, the top destination states for attempted wire fraud occurrences within the U.S. were California, Florida, Georgia, Illinois, New

Jersey, New York, Ohio, Pennsylvania, Texas, and Virginia. For attempted wire fraud by value, top states for Q4 2021 were California, Florida, Georgia, Illinois, Indiana, Massachusetts, New Jersey, New York, Texas, and Virginia. Cloud-based evidence continued to explain away a significant proportion of domestic wires with a new beneficiary.

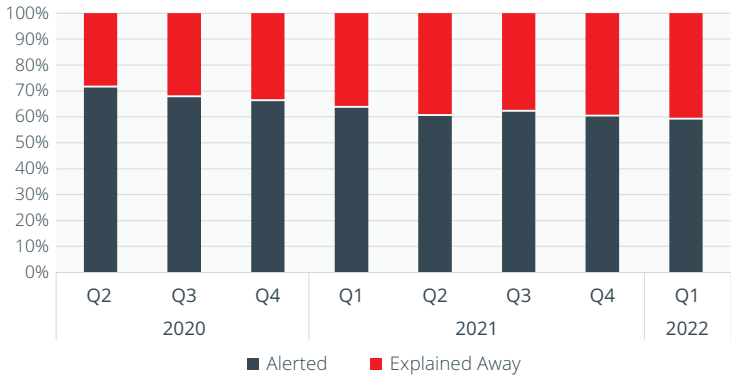
Attempted Domestic Wire Fraud Basis Points



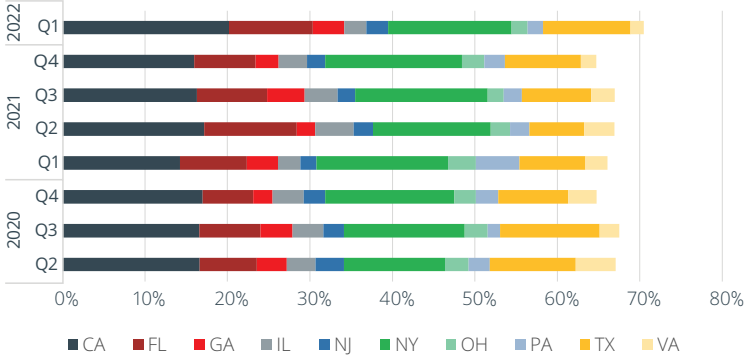
Attempted Domestic Wire Fraud Quarterly Transaction Statistics



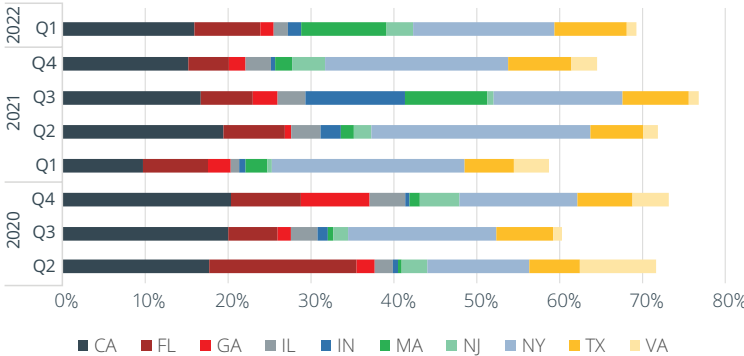
Domestic Wires with New Beneficiary Explained Away due to Cloud Evidence



Percent of Attempted Domestic Wire Fraud Occurrences by Destination State (Top Ten)



Percent of Attempted Domestic Wire Fraud Value by Destination State (Top Ten)



Top destination states for attempted wire fraud occurrences within the U.S. were California, Florida, Georgia, Illinois, New Jersey, New York, Ohio, Pennsylvania, Texas, and Virginia.

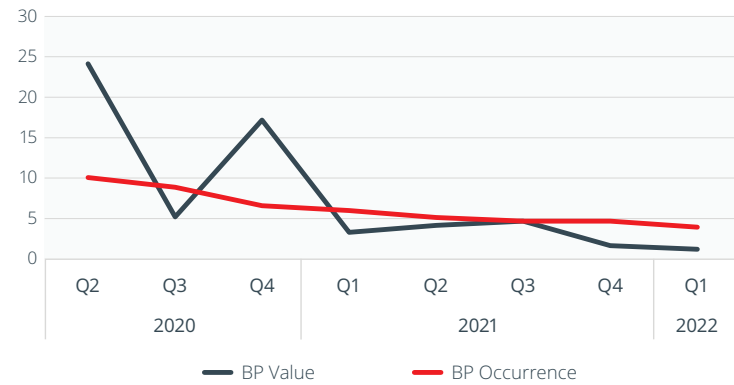
International Wire Fraud Insights

For this report, international wires are wire payments with a destination outside the U.S. By basis points, attempted international wire fraud decreased in value and occurrence from Q1 2021 to Q1 2022.

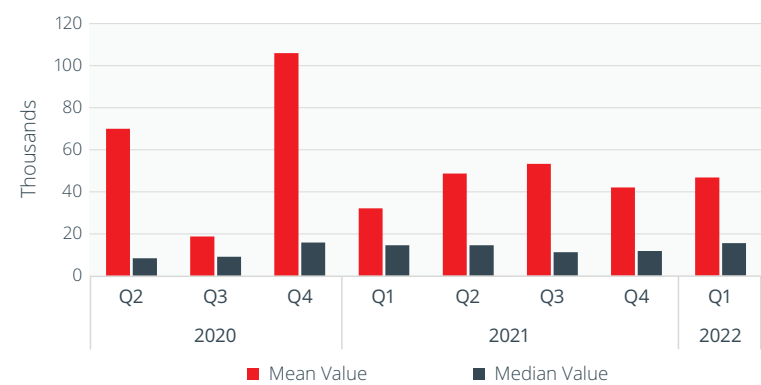
Considering quarterly transaction statistics, the mean and median values of international wire fraud attempts increased from Q1 2021 to Q1 2022, with the median rising from \$14.5K to \$15.5K in this period. Mean values were consistently higher than the median values for all quarters. For Q1 2022 the top ten destination countries for fraudulent wires, by occurrence, were: China, Great Britain, Ghana, Hong Kong, Mexico, Nigeria, Russia, Singapore, Thailand, and Turkey. Given the current geopolitical climate, trends related to Russia may evolve in future

analyses. By occurrence, Hong Kong and China saw significant increases in attempts from Q4 2021 to Q1 2022. By value, the top ten destination countries were Cameroon, China, Great Britain, Hong Kong, India, Indonesia, Mexico, Singapore, Thailand, and Turkey. Notably, Hong Kong and China saw a significant increase in attempts by value from Q4 2021 to Q1 2022. Cloud-based evidence continued to explain away a significant proportion of international wires with a new beneficiary.

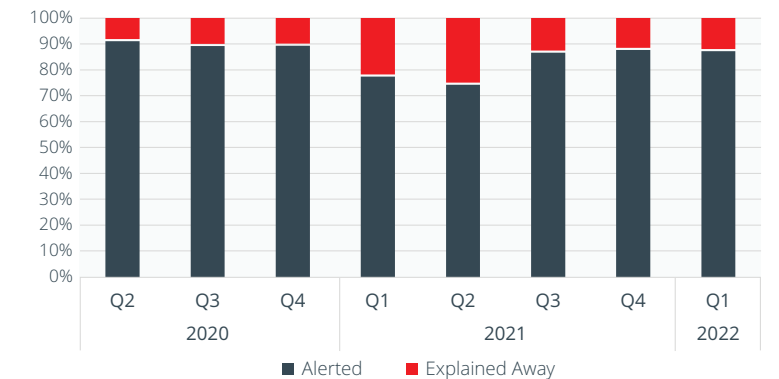
Attempted International Wire Fraud Basis Points



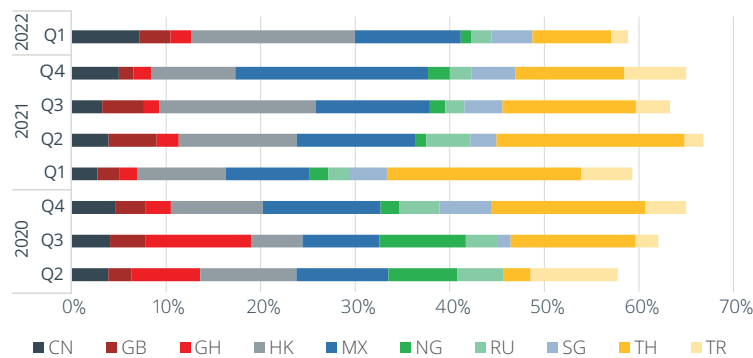
Attempted International Wire Fraud Quarterly Transaction Statistics



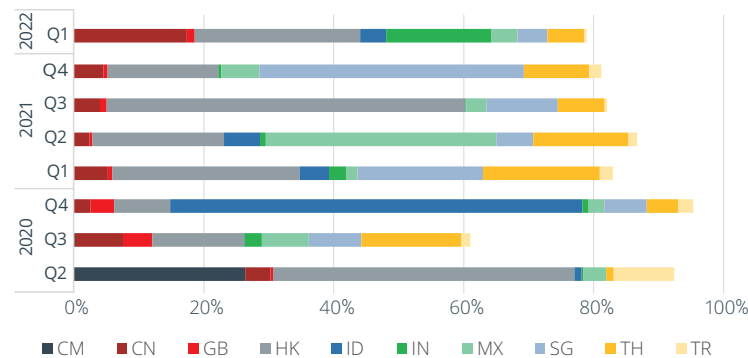
International Wires with New Beneficiary Explained Away due to Cloud Evidence



Percent of Attempted International Wire Fraud Occurrences by Destination Country



Percent of Attempted International Wire Fraud Value by Destination Country



Top ten destination countries for fraudulent wires, by occurrence, were: China, Great Britain, Ghana, Hong Kong, Mexico, Nigeria, Russia, Singapore, Thailand, and Turkey.

Case Study

Stolen Savings

With targeted agents intelligently segmented by sender type, payee risk analysis in the Verafin Cloud and the ability to stop fraudulent wires in real time, Verafin can help protect your customers from loss — including vulnerable seniors such as Mr. Lera. Leveraging our inline blocking capabilities, your institution can intervene immediately to stop fraudulent wires before the funds leave your institution.

Strengthening your Wire Fraud Program

Through big data analysis in the Cloud, Verafin continues to observe fraudsters focusing their efforts on seniors and vulnerable populations via APP scams, such as low-risk, high-reward investment schemes. The following anonymized case study highlights one such scenario observed in the Cloud, and how Verafin's robust Wire Fraud solution detected the suspicious activity and alerted a financial institution to an ongoing fraud impacting one of their customers.

John Lera, a lifelong business owner, was 75 years old and excited for retirement. In preparation, he restructured his company and assets to allow more flexibility and freedom with his financial decisions. This included significant payouts from his business to his personal accounts.

One day, Mr. Lera received an email about an investment opportunity that would generate significant returns for him in retirement. Unfortunately, this opportunity was an investment scam — and as a senior with existing wealth, Mr. Lera was a prime target.

Fraudsters typically initiate their scams by requesting a small amount of funds, and then escalate their requests over time. On the instruction of the email sender, Mr. Lera began sending low-value wires through his financial institution, Makana Bank, for the purposes of the investment. Unknown to Mr. Lera, he was directing the wires to a receiving account under the fraudster's control.

When the wires were initiated, they were analyzed by Verafin in real time and suspended for potential fraud. The wire recipient was new to Mr. Lera, but more importantly, was new to the Verafin Cloud. This was a strong indicator that the recipient was a potential money mule. An analyst within Makana Bank's wire team reviewed the alert, and seeing it indeed involved a high-risk recipient, contacted Mr. Lera to validate the transaction. The analyst determined that Mr. Lera initiated the transaction but did not complete additional probing questions about the nature of the wires. As a result, the wires were released, and the payments sent.

Over time, the scammer began asking Mr. Lera for larger sums to be sent to offshore investments and Virtual Asset Service Providers (VASPs). In response, Mr. Lera began wiring hundreds of thousands of dollars to these accounts. Verafin alerted on the wires sent to offshore investment accounts and suspended them for further review; they were also sent to accounts without an established history of receiving payments across the Verafin Cloud. The wires destined for VASPs were flagged, based on our crypto-specific evidence; Mr. Lera did not have a history of sending wire payments to VASPs. Following their due diligence process, Makana Bank notified Mr. Lera that these high-risk wires may not be recoverable if he was a victim of fraud.

Despite warnings from Makana Bank, Mr. Lera trusted that the investment opportunity was legitimate and insisted that the wires be sent. Makana Bank released the wires and again allowed the payments to be completed.

Eventually, Mr. Lera became concerned that he was the victim of an investment scam and contacted Makana Bank for assistance. The bank sent requests for the funds to be returned, however the probability of recovery is typically low once the funds have been transferred. Makana Bank soon discovered that the funds had largely been withdrawn or converted to cryptocurrency and moved to other digital wallets.

Ultimately, Makana Bank was able to recover less than 10% of the \$500K in fraudulent wires sent on Mr. Lera's behalf. They reviewed the case and determined there were potential opportunities to improve their process for dealing with APP fraud by better informing and challenging customers about the potential risk associated with wire fraud. Specifically, improvements to their scripting when dealing with high-value customers, and are expected to help mitigate these forms of fraud in the future.

Effectively Prevent Loss

with Robust Wire Fraud Detection

The dollar value and international nature of many wire transfers make them inherently risky. With criminal schemes such as BEC becoming a growing problem, financial institutions need enhanced monitoring to prevent loss.



Verafin's efficient and effective real-time Wire Fraud solution applies industry-leading, cloud-based analysis to a wide range of risk factors indicative of fraudulent wire activity to generate high-quality alerts that help you take quick and decisive action.

Intelligently Segmented Agents.

A wire that is considered unusual for an individual may not be risky for a business. Verafin's wire fraud agents are segmented by payer — person, elderly person, business, and title company — allowing for more targeted analysis based on the specific fraud risks and scams for that group. With segmented wire agents, investigators have greater control over the type and risk value of the alerts they receive which can be individually configured according to your institution's clientele and risk tolerance.

Cross-Institutional Wire Receiver Analysis.

Verafin utilizes cross-institutional data in the Verafin Cloud to analyze if the receiving account of an outgoing wire transfer has a trusted history of activity. This unique evidence helps boost your confidence, minimize risk, and greatly reduce false positive alerts.

This process leverages:

- Over 140 million wires, with 4 million added each month
- 40 million unique payee accounts, with 950,000 new accounts added each month
- 40% of the payee accounts are from the top 10 largest financial institutions in the United States

Real-Time Inline Analysis.

Analyzing a potentially fraudulent wire transfer once it is gone is often too late. Verafin integrates directly with the industry's prominent wire transfer systems to analyze wires in real-time. By alerting you to potentially suspicious wires inline, Verafin gives you the option to stop the transfer directly from the application before it is released to the Federal Reserve.

Visual Wire Details.

Verafin provides investigators with all details pertaining to the wire transfer in one location. Quickly interpret the full range of wire transfer information with historical transfer graphs, interactive flow of funds diagrams and visual transaction overviews that include payer, value, payee, and receiving institution data.

Uncover Third-Party Scams.

You are alerted when it appears your customer is being victimized by a known criminal deposit scam — such as BEC — before the funds are transferred.

VERAFIN

About Verafin

Verafin is the industry leader in enterprise Financial Crime Management solutions, providing a cloud-based, secure software platform for Fraud Detection and Management, BSA/AML Compliance and Management, High-Risk Customer Management and Information Sharing. 3500 banks and credit unions use Verafin to effectively fight financial crime and comply with regulations. Leveraging its unique big data intelligence, visual storytelling and collaborative investigation capabilities, Verafin significantly reduces false positive alerts, delivers context-rich insights and streamlines the daunting BSA/AML compliance processes that financial institutions face today.

Verafin is the exclusive provider for Texas Bankers Association, Western Bankers Association, and CUNA Strategic Services, with industry endorsements in 48 U.S. states.

Learn more

For more information on this topic, or how Verafin can help your institution stay a step ahead of financial crime, call 866.781.8433.

To access Verafin's archive of webinars, white papers, success stories and other materials focusing on fraud detection and BSA/AML compliance topics relevant to financial institutions across the country, check out our online Resource Center at www.verafin.com.

