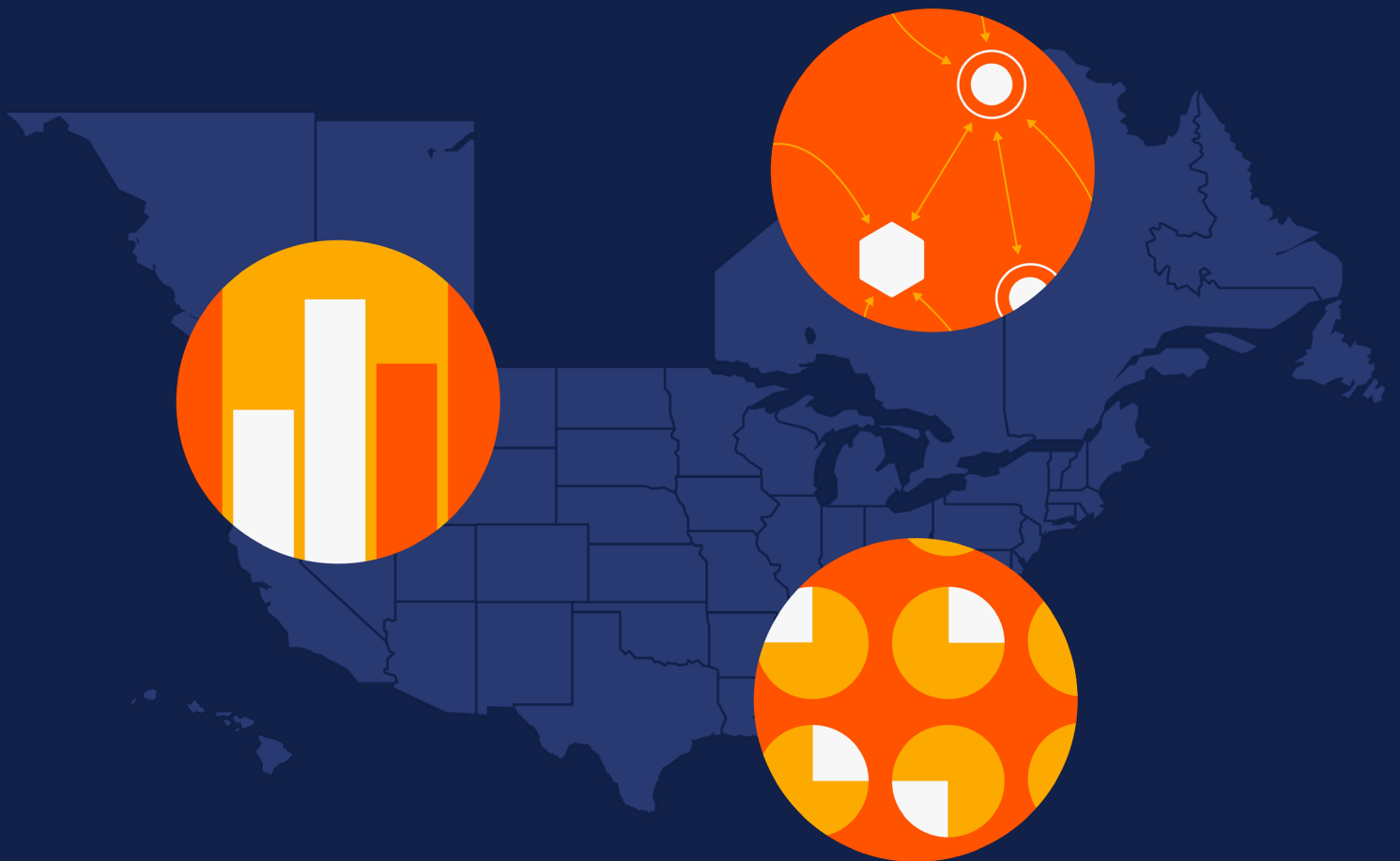


The Chainalysis 2022 State of Cryptocurrency Investigations Survey

The cryptocurrency outlook for the North American public sector



Executive summary

Cryptocurrency presents unique challenges to the public sector. On the law enforcement side, cryptocurrency is touching all forms of crime: drugs, theft, fraud, money laundering – you name it. But cryptocurrency cases differ significantly from those involving traditional finance, and require new tools and methodologies to solve. From regulators' perspective, cryptocurrency has grown from a niche hobby to a trillion-dollar asset class in under a decade, bringing with it concerns over consumer protection, market manipulation, AML/CTF enforcement, and more. Those problems are one reason Chainalysis exists. We work with the public sector to make the complexity of cryptocurrency simple, and help agencies achieve their objectives with crypto as easily as they can with fiat – if not more so.

But every so often, we need a temperature check to confirm we're on the right track. That's why, for the first time, we polled the public sector to better understand their outlook on cryptocurrency: the successes, the challenges, and what they need to become more effective. Here's a quick summary of our key findings:

- **Public sector employees like cryptocurrency but see the downsides too.** The majority of our respondents say cryptocurrency will advance our financial system in a positive way, but also acknowledge that it plays a role in many of their criminal investigations.
- **Cryptocurrency spans all forms of criminal activity.** At both the federal and state & local levels, respondents told us that cryptocurrency is prevalent in a variety of crime types, including narcotics, fraud, theft, and cybercrime.
- **Blockchain analysis tools must provide accurate data and transaction visualization above all else.** Respondents pointed to accurate, reliable blockchain data, and simple visualization as the most important components of any blockchain analysis tool they use. These functionalities matter for both completing investigations and for ensuring positive results in court.
- **Training matters.** Respondents rated effective training programs as another crucial requirement for any cryptocurrency investigative tool they purchase.
- **Public sector employees need more resources.** 74% of our respondents said employees at their agency aren't currently well-equipped to investigate cryptocurrency-related crime.

Keep reading for our full breakdown of the survey results.

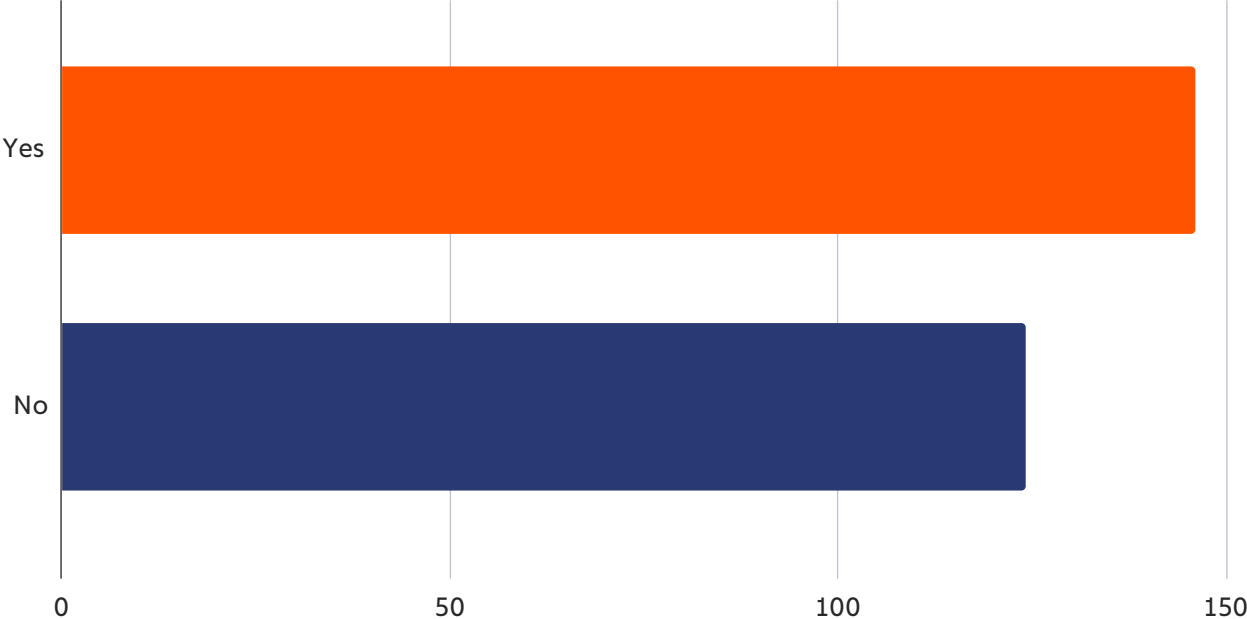
Methodology

We ran this survey for a period of five months and distributed it to relevant public sector employees in the United States and Canada in the following ways:

- Emails to Chainalysis customers, partners, and non-customer contacts
- Emails to customers of partner companies also serving the public sector
- Emails to members of non-profit, public sector associations Chainalysis has partnered with.

Through all of these channels, our survey achieved a 6.8% response rate, for a total of 300 respondents across 183 agencies. Please keep in mind though that since respondents weren't required to answer every question, each question has a different number of responses.

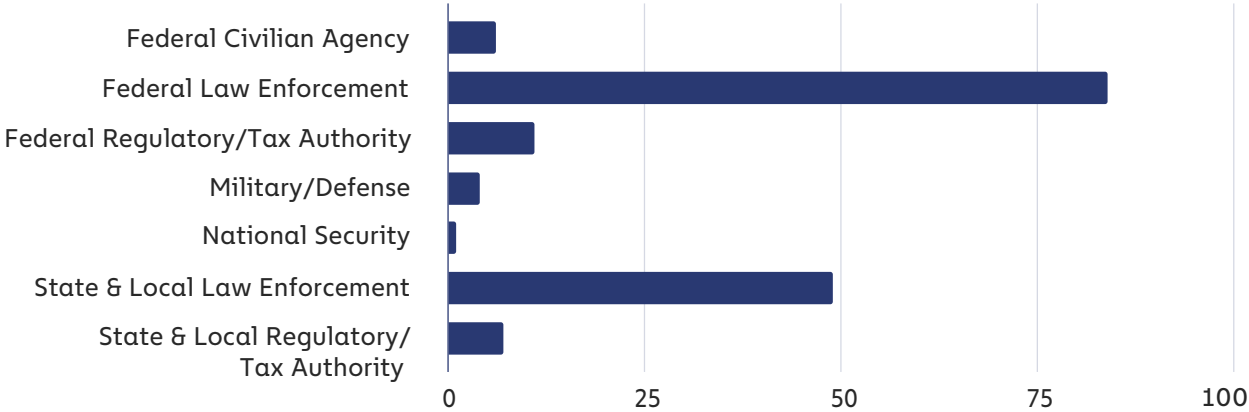
Are you a current Chainalysis customer?



Those respondents include 146 current Chainalysis customers and 124 non-customers, while 30 respondents indicated that they preferred not to answer.

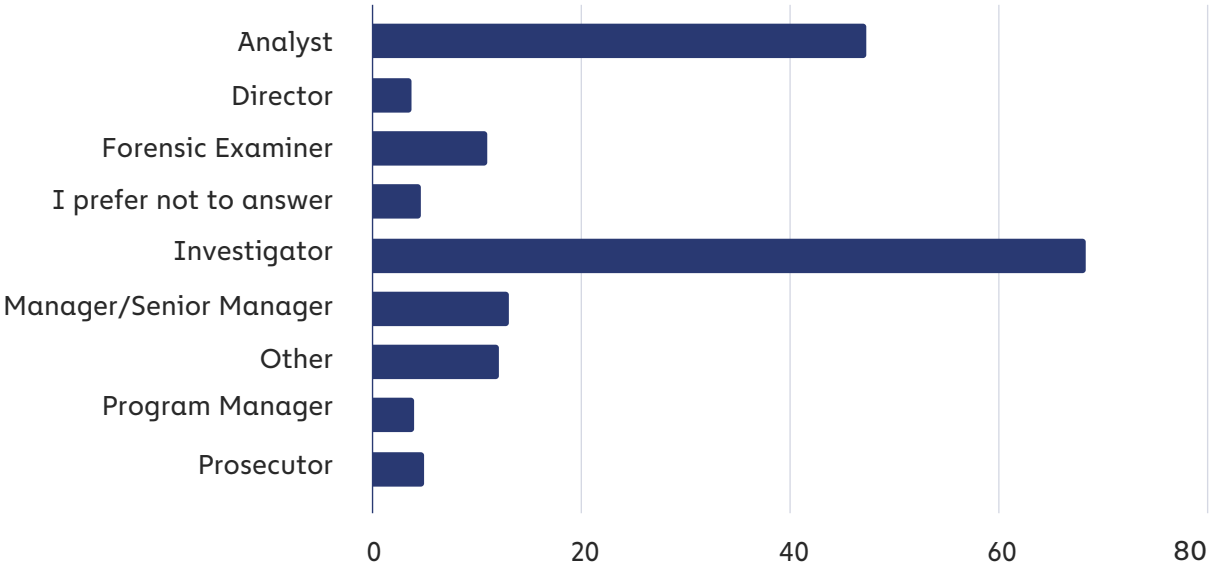
Respondent profile

What type of agency do you work for?



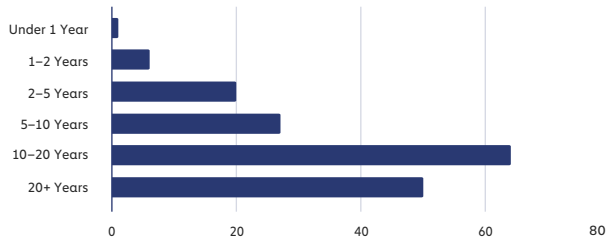
Law enforcement professionals make up the bulk of this survey. 52% of respondents hail from federal law enforcement agencies, while 30% work in state & local law enforcement.

What type of job do you have?

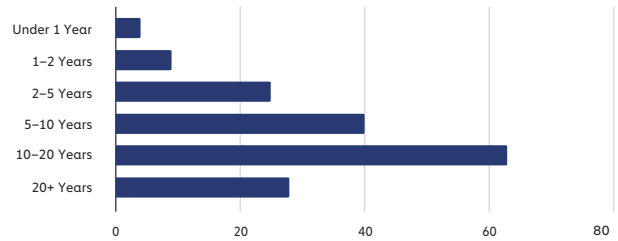


In terms of job roles, 40% of respondents described themselves as investigators, and 28% as analysts. Managers and forensic examiners were also well-represented, especially if we assume that the roles of respondents who skipped this question would break down in similar proportions.

How long have you worked in your field?



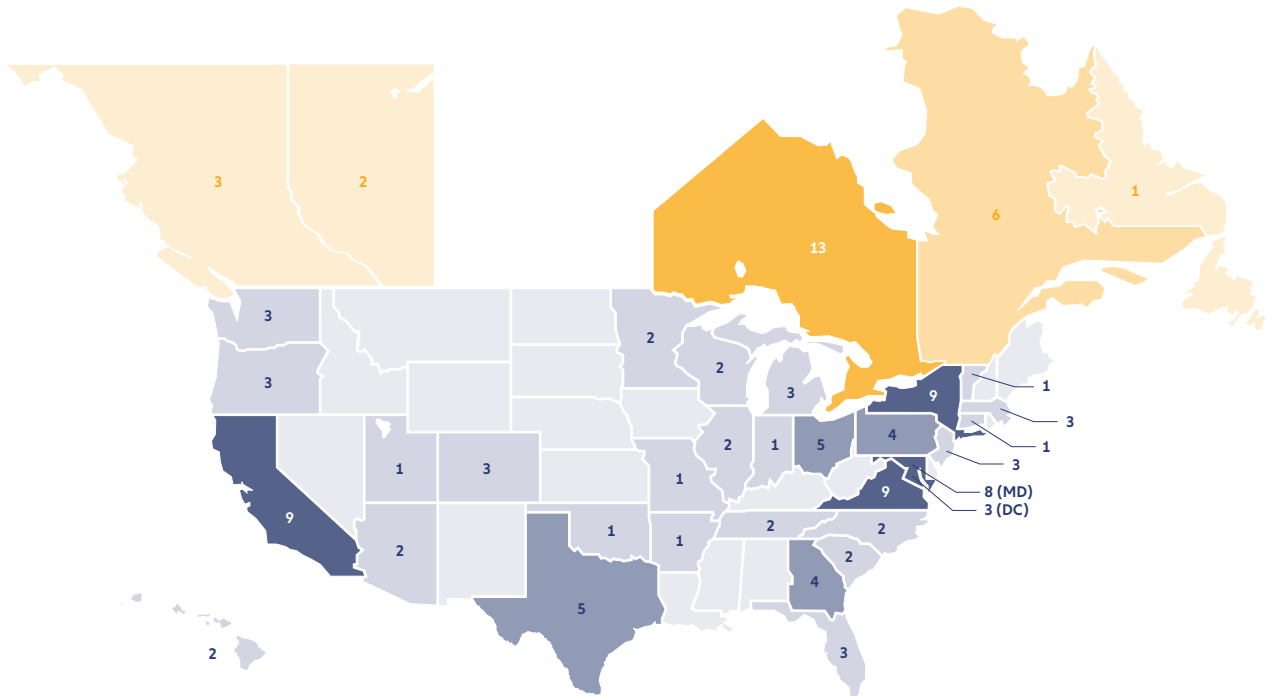
How long have you worked in your current agency?



Most of our respondents have worked in their field for ten years or more, but we also see a sizable number of respondents earlier in their careers.

In which state, province, or territory do you currently reside?

Navy = U.S. states; Yellow = Canadian provinces and territories

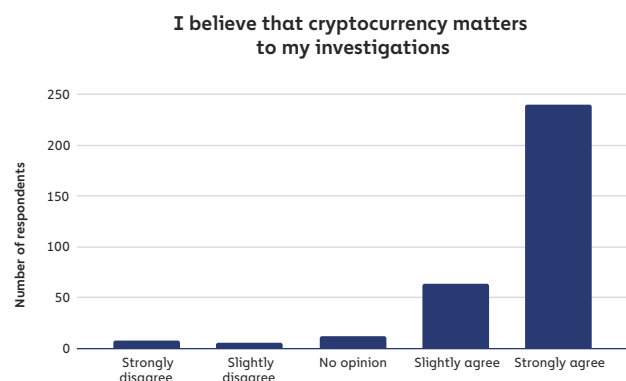
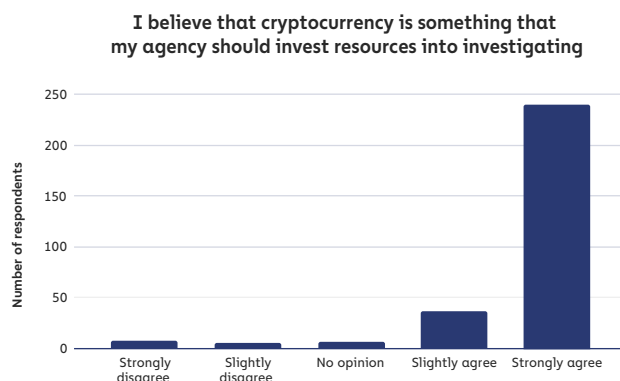
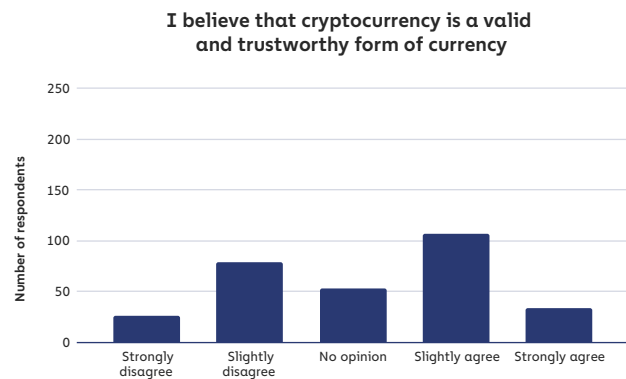
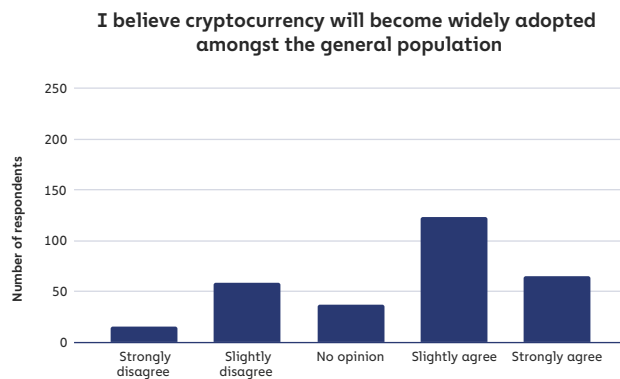
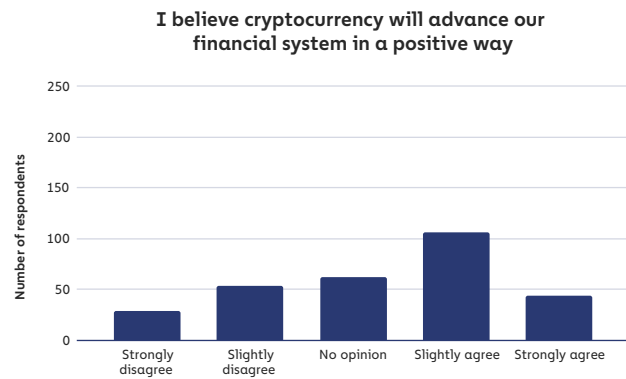
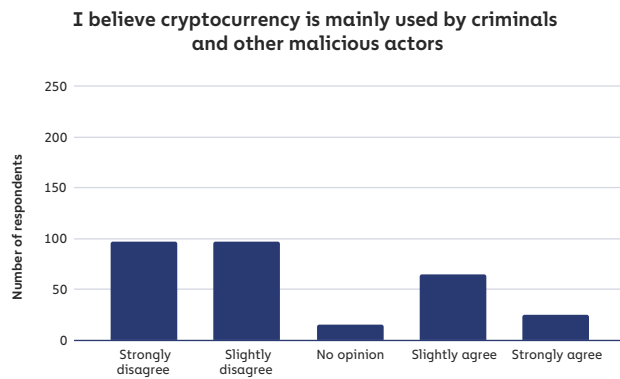


Our respondents hail from all over the United States and Canada, but we saw especially heavy participation from employees residing in California, Maryland, New York, Virginia, and Ontario – not all that surprising given their population sizes relative to other states and provinces. The spread of respondents is in line with our observation that as cryptocurrency usage grows, it’s becoming prevalent in all areas of North America as opposed to a few concentrated ones, which means that law enforcement and regulators across the region must be prepared to address it.

Respondents' current thoughts and attitudes toward cryptocurrency

Below, we asked respondents to rate on a five-point scale their level of agreement with a series of statements on cryptocurrency's legitimacy and relevance to their investigations.

How would you describe your personal perception of cryptocurrency?

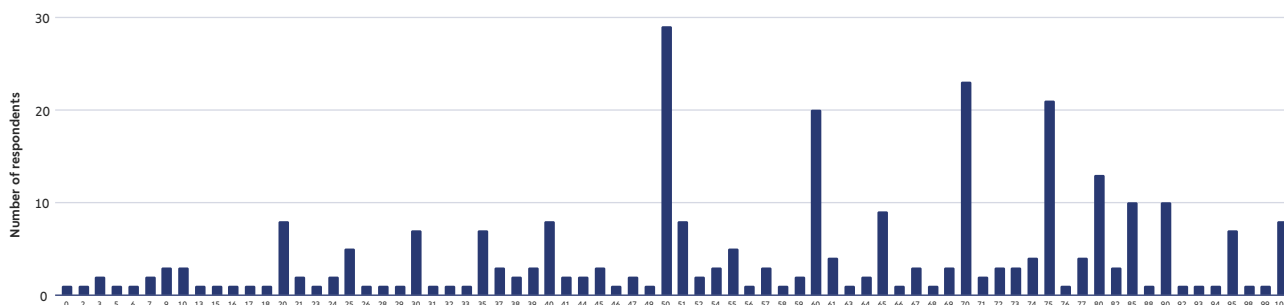


The results tell an interesting story. Respondents overwhelmingly said that cryptocurrency is relevant to their investigations and that their agencies should invest resources into cryptocurrency investigations. However, despite acknowledging cryptocurrency's role in the criminal activity they investigate, respondents don't take a negative view of cryptocurrency – far from it. The majority of respondents agree that cryptocurrency will positively advance our financial system and disagree with the notion that cryptocurrency is primarily used by criminals.

That positive sentiment around cryptocurrency balanced with the understanding that cryptocurrency-related crime calls for investigatory resources aligns with our findings on cryptocurrency-based crime: The growth of legitimate cryptocurrency usage vastly outstrips the growth of criminal usage, but even so, criminal usage represents a high enough dollar figure that the public sector must be prepared to investigate.

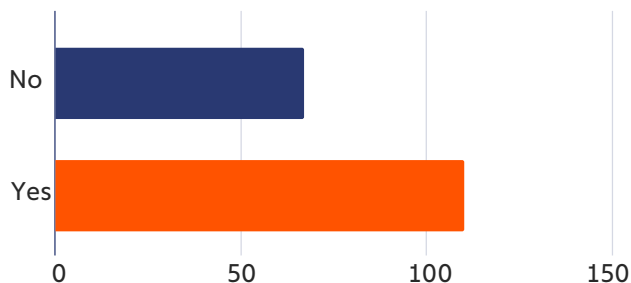
How would you describe your level of understanding of cryptocurrency?

Rate on a scale from 0 to 100 from not knowledgeable to extremely knowledgeable.

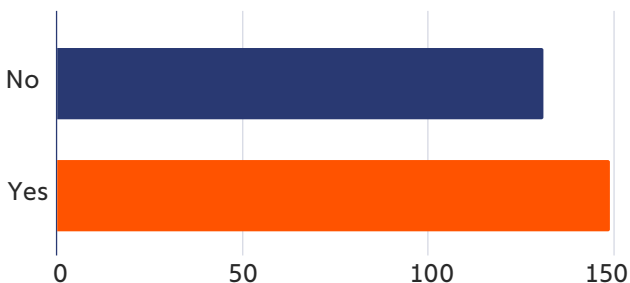


On a scale of 0 to 100, respondents on average rated their level of understanding of cryptocurrency at 58. While most respondents put themselves on the upper half of the scale, that average suggests there's still much work to be done on cryptocurrency education for the public sector – and as we'll explore later, the private sector has a huge role to play in providing that education.

Do you have dedicated investigators/analysts that specialize in cryptocurrency investigations?

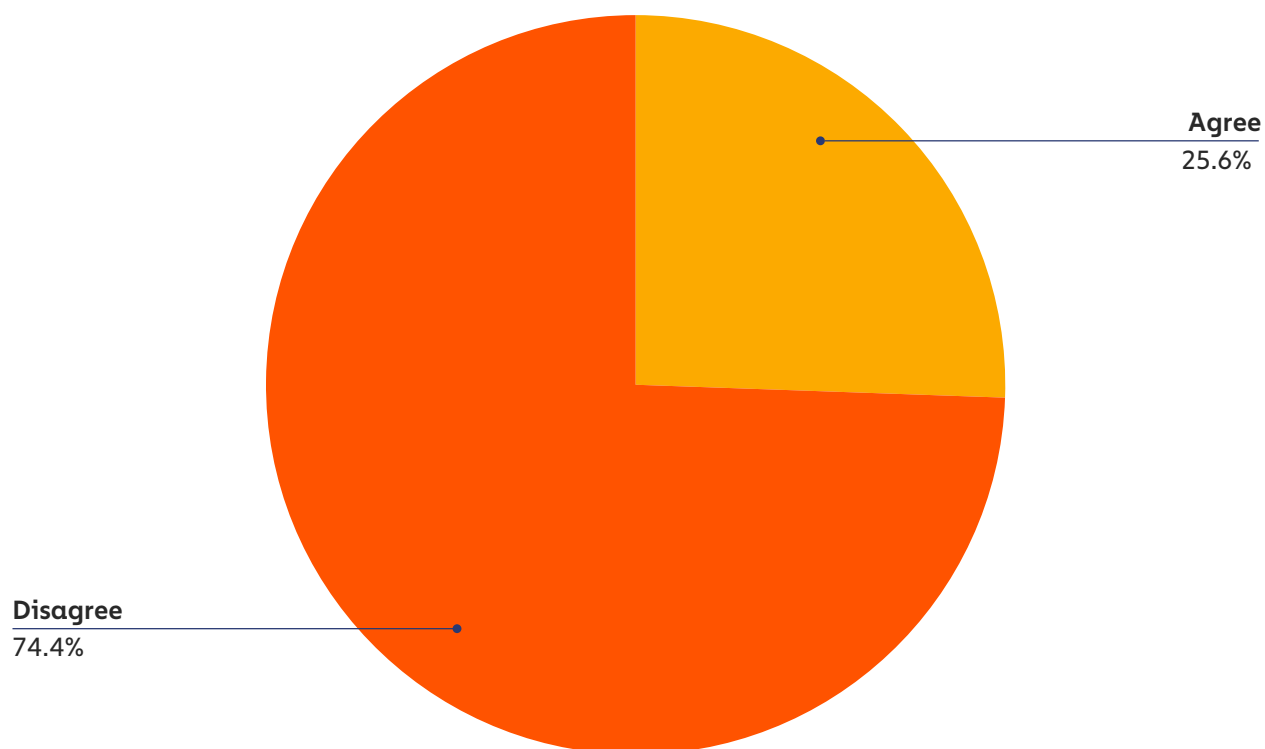


Are you using cryptocurrency forensics/ analytics tools today?



The majority of respondents said that their agency has investigators and analysts specializing in cryptocurrency investigations. However, the survey also indicated that many agencies aren't using specialized tools for those investigations. While it's good news that agencies are dedicating staff to cryptocurrency investigations, those staff aren't in the best position to succeed without blockchain analysis tools.

Agree or disagree: The employees at my agency are well-equipped to investigate cryptocurrency-related crime.



While a majority of respondents report that their agency employs both specialized staff and tools for cryptocurrency investigations, they also seem to think those efforts aren't enough. **74% said that their agency isn't well-equipped to investigate cryptocurrency-related crime.** That's a huge problem not just today, but in the future as well. Cryptocurrency is a rapidly changing industry – in just the last two years, for instance, we've seen a huge shift in activity from centralized services to DeFi protocols, where transactions are more complex and difficult to investigate – so if agencies aren't becoming proficient in cryptocurrency investigations now, their knowledge gaps could compound, causing them to fall further behind the criminals exploiting cryptocurrency regularly.

QUOTES FROM RESPONDENTS

What can your agency do to help you better investigate cryptocurrency-based crime?

“As in a host of other areas, we need more trained, skilled people whom we cannot afford to hire.”

“Hook us up with training.”

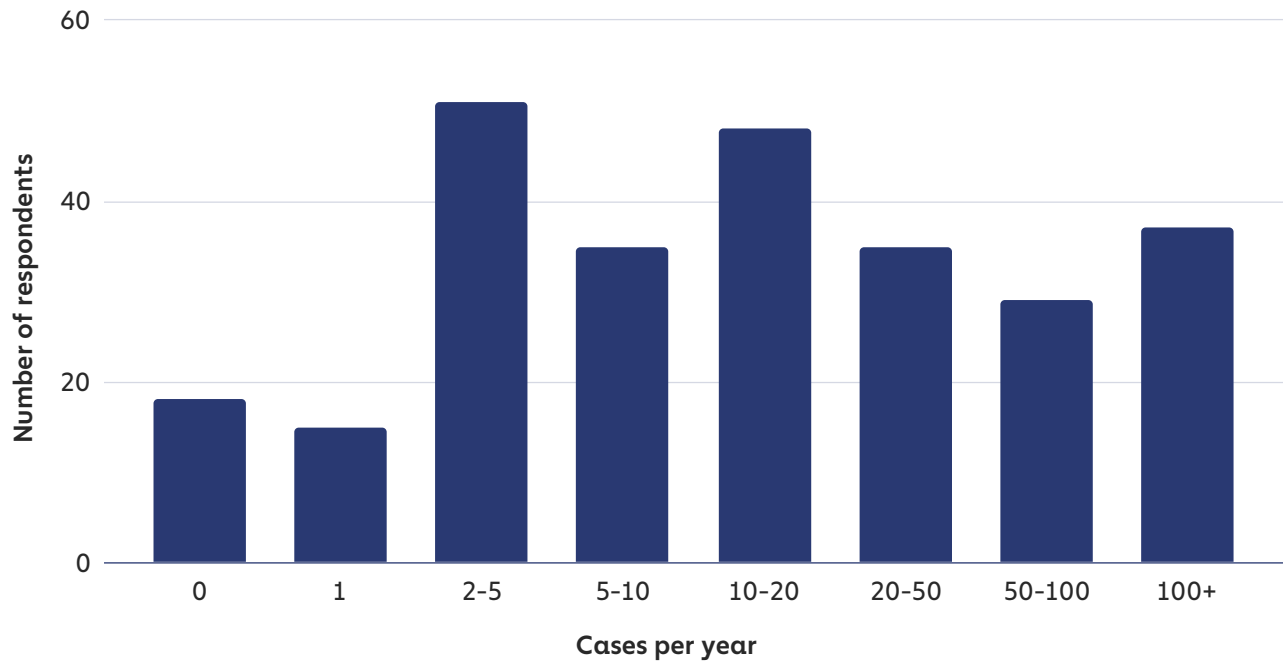
“Host more conferences/ roundtables around cryptocurrency-related crimes where best practices can be shared in appropriate settings.

“Coordinate with other agencies/regions to pool funds together to afford tools.”

“Accept innovation and the need for technology, make investments in tools/investigators where appropriate, and coordinate with other agencies to address jurisdiction problems.”

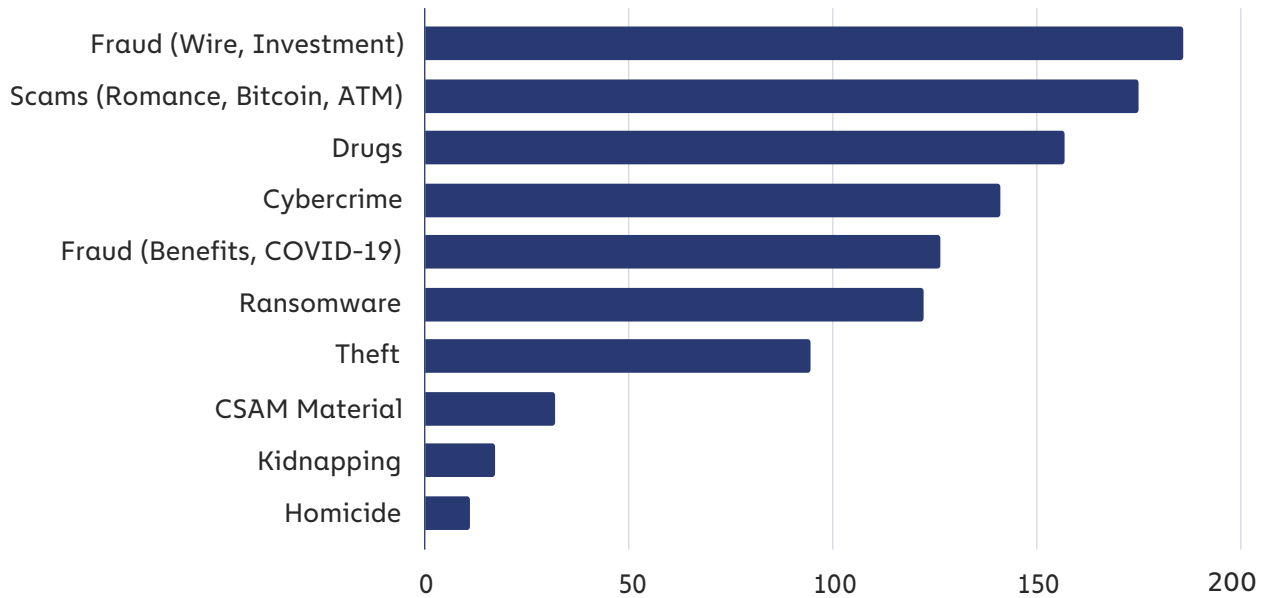
Cryptocurrency investigations today

About how many cases, leads, and/or tips do you see a year that include a cryptocurrency transaction?



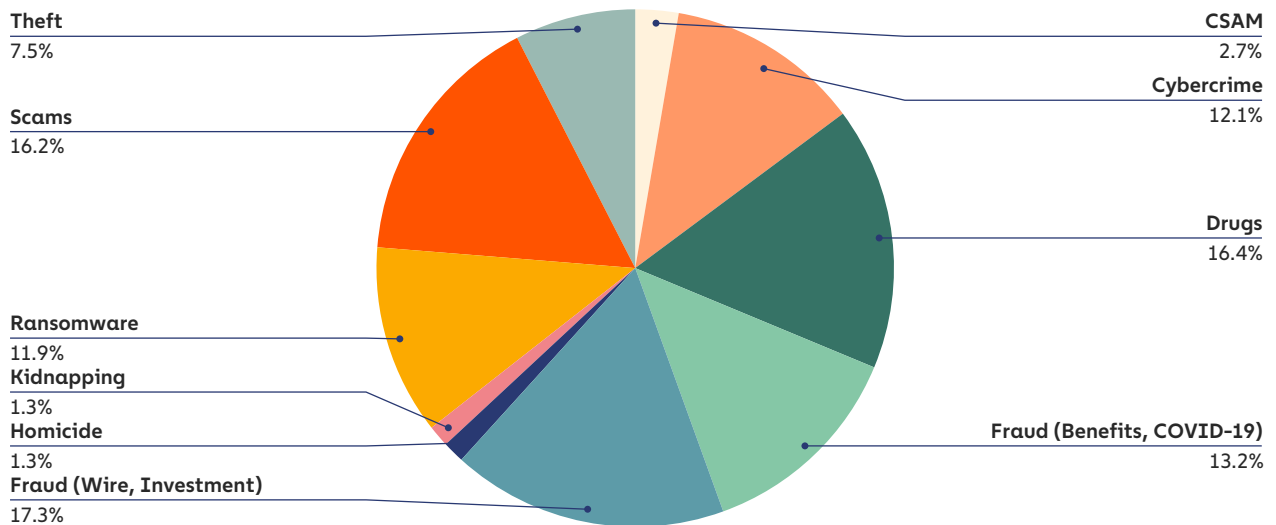
We see a wide range in the number of cryptocurrency-related cases respondents see on the job. However, over half say they see more than ten such cases per year, while 38% said more than 20, and 14% said more than 100.

What crime types are you seeing involving cryptocurrency?

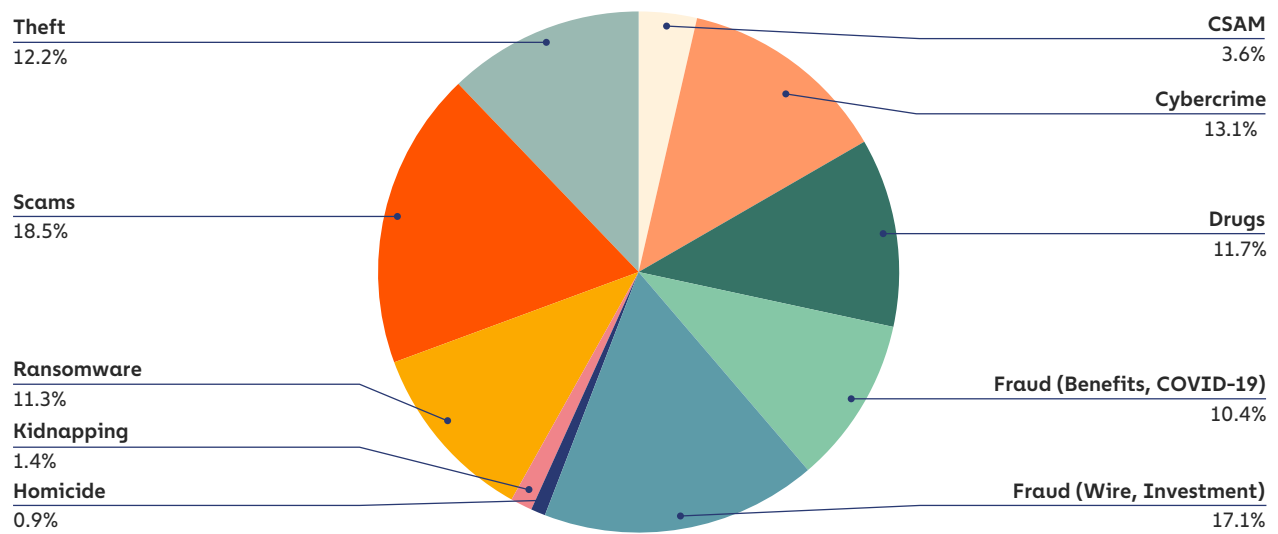


Those investigations span several different forms of crime, with various types of scams and fraud leading the way. Drugs, cybercrime, and of course, ransomware, are also well-represented.

Federal agencies: What crime types are you seeing involving cryptocurrency?



State & local: What crime types are you seeing involving cryptocurrency?



Interestingly, the breakdown of crime types involving cryptocurrency doesn't change much between the federal and state & local levels. The only differences are that we see slightly more drug and benefits fraud cases involving cryptocurrency at the federal level, compared to more theft at the state & local level.

QUOTES FROM RESPONDENTS

Tell us about crime types involving cryptocurrency that you're seeing in your investigations.

| "Money laundering."

| "Civil Fraud relating to income tax matters."

| "I'm seeing some [bot] generated malware incidents that target custodial wallets (ie Trezor) at the time of off boarding crypto to cold storage."

| "Rugpulls, smart contract scams."

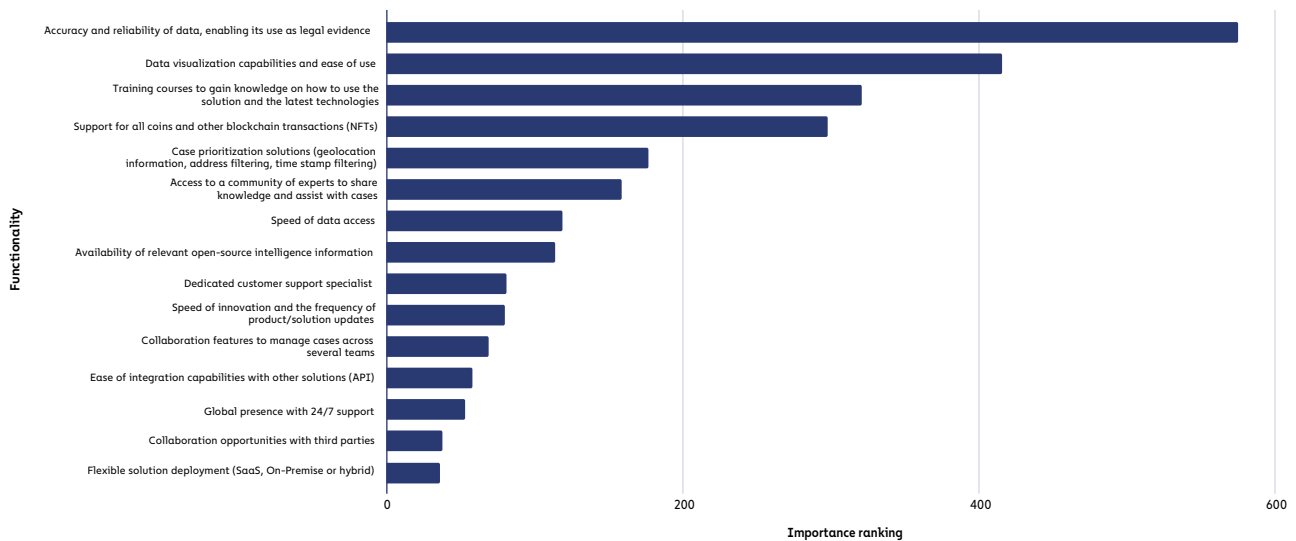
| "I work tax investigations. Crypto is the new toy/shiny object for some [of the people we're investigating]."

What do respondents want from their blockchain analysis tools?

We provided respondents with a list of 15 functionalities for blockchain analysis tools, and asked them to rate the importance of each on a five-point scale. The graph below ranks each functionality's relative importance based on a weighted measurement of those responses.

Which are your top requirements from a cryptocurrency analytics solutions vendor?

Respondents were asked to rate each functionality's importance on a five point scale. This graph assigns each functionality an importance score based on a weighting of those rankings.

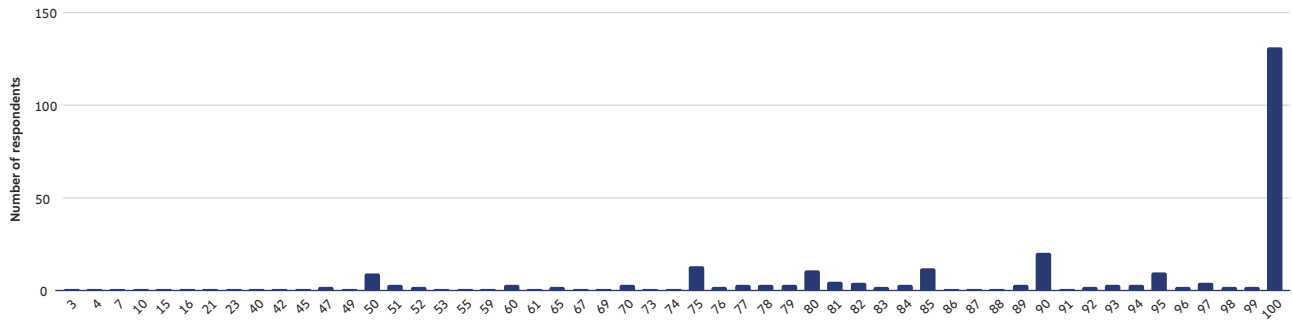


Accuracy and reliability of data were rated as by far the most important functionality, and it's not hard to see why – users need to be able to trust that the addresses they analyze are attributed to the correct organizations and services in order to both carry out investigations and use their findings in court. Chainalysis recognizes the importance of accurate blockchain data, and with a deterministic process for attributing addresses to real world entities, we've worked since 2014 to build the world's most trusted, comprehensive [blockchain dataset](#).

Data visualization was also highly-ranked. In fact, in our follow-up questions, the majority of respondents said visual representations of blockchain evidence were extremely valuable for investigations and extremely effective for telling an effective story to a judge or jury.

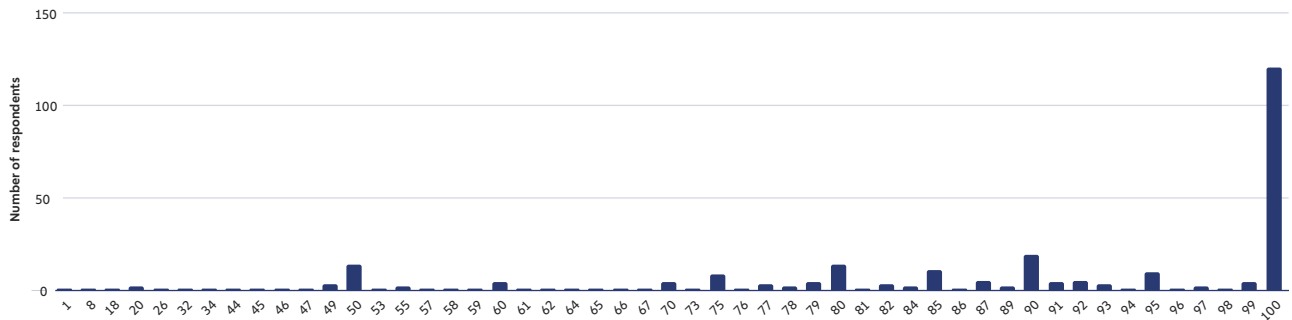
How valuable are visual depictions of cryptocurrency evidence in an investigation?

Rate on a scale of 100 from not valuable to extremely valuable



Do visualizations of cryptocurrency evidence tell an effective story to a judge and/or jury?

Rate on a scale of 100 from not effectively to extremely effectively



Respondents provided several quotes on the importance of visual representations of blockchain data, a few of which we provide below:

“It speeds up the ability to see the path of the money, ie: follow the money.”

“[Chainalysis' visual representations] allow your brain to process the complex and often very overwhelming alphanumeric address chains and fractional amounts of various transactions almost instantaneously...”

“I use the visual depictions in your tool to show the flow of cryptocurrency and to bolster my investigative theory when I pitch a case to the US Attorney's Office.”

Respondents also emphasized the importance of training courses on how to use blockchain analysis tools. One respondent put it well when asked to elaborate on what the private sector could provide to support their efforts:

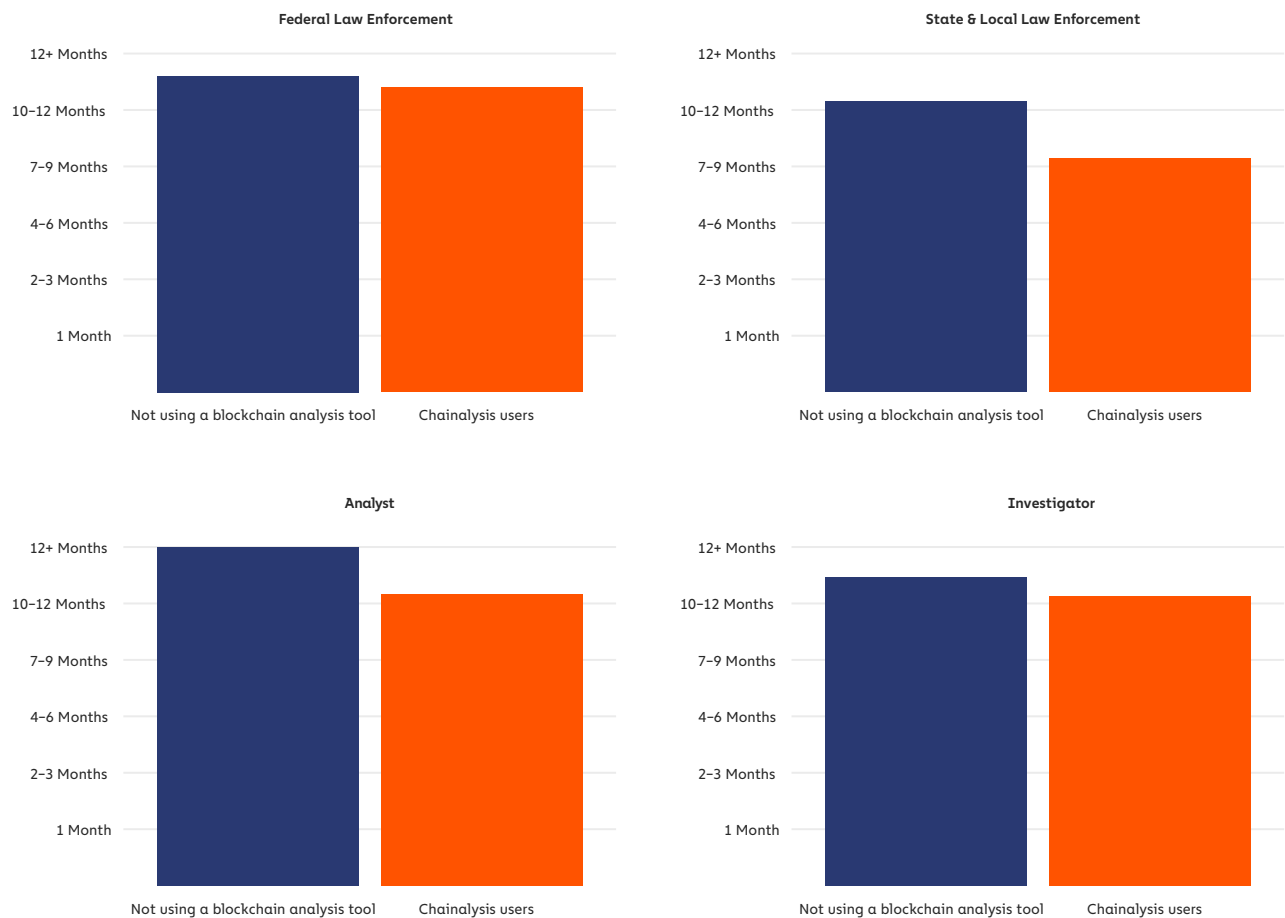
“Training training training. Maybe even occasional opportunities to practice. Provide a wallet to trace and ask a few questions about it. Nothing strenuous - just an optional project for our spare time.”

You can learn more about Chainalysis training courses [here](#), which cover both our tools and cryptocurrency investigative methods generally. We also just launched the [Chainalysis Academy](#), a free, public resource with self-paced courses built by our training team.

How Chainalysis delivers

The survey shows that respondents who adopt Chainalysis get positive results in their cryptocurrency investigations.

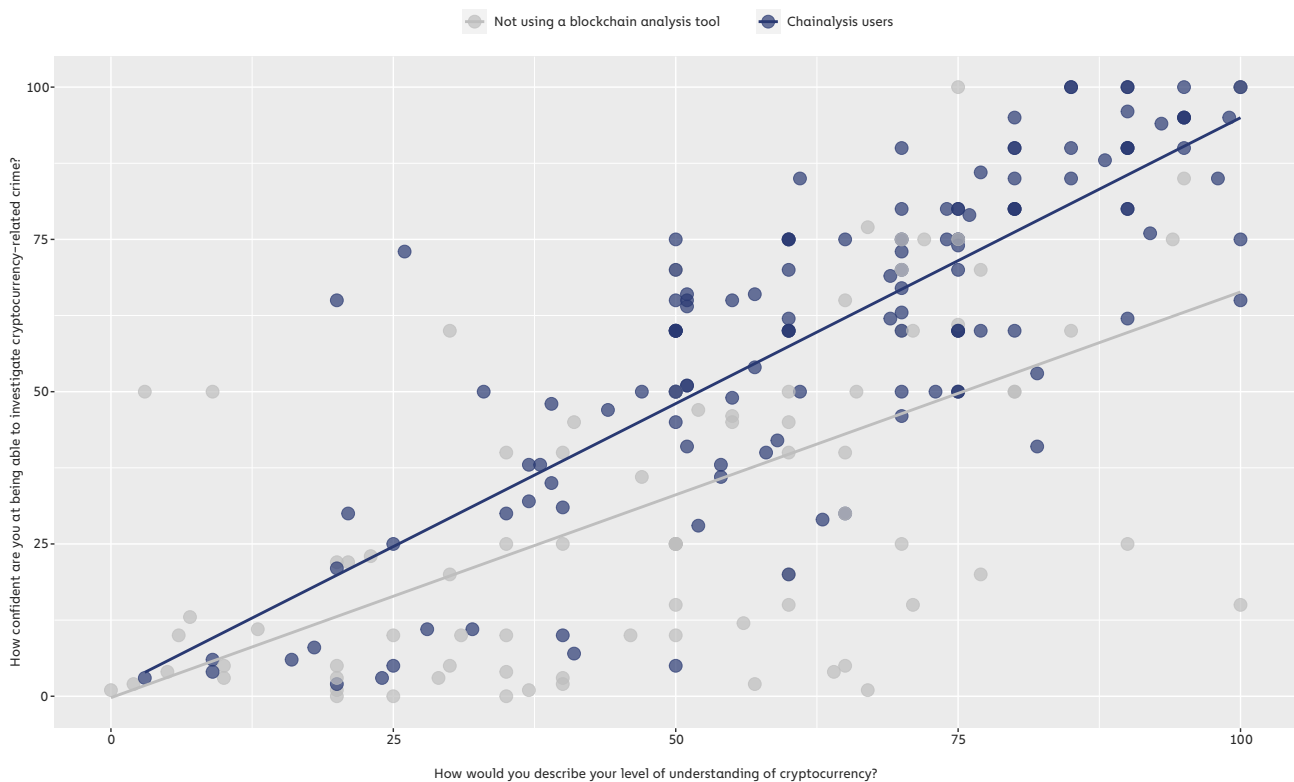
Estimated cryptocurrency investigation duration by agency type and role



Across both agency types and job roles, Chainalysis users report shorter investigation durations for cases involving cryptocurrency compared to respondents not using a blockchain analysis tool.

Respondents also feel that Chainalysis helps them better convert their knowledge of cryptocurrency into action and tangible results in investigations. We examined this by charting users' self-reported understanding of cryptocurrency against their confidence in their ability to solve cryptocurrency-based crime for both Chainalysis users and respondents not currently using a blockchain analysis tool.

Self-reported cryptocurrency knowledge vs. Confidence in investigating cryptocurrency-related crime for Chainalysis users and non-users



The graph shows that respondents not using a blockchain analysis tool feel comparatively less confident in their ability to investigate cryptocurrency-based crime than Chainalysis users, especially when they report a strong understanding of cryptocurrency. In other words, Chainalysis helps the strongest cryptocurrency experts within a given agency take full advantage of all that they know. This data underscores the importance of both selecting the right tool for blockchain analysis and working with a provider that can effectively train investigators to use that tool.

In conclusion

Cryptocurrency is here to stay, and that means it's going to keep showing up in more criminal investigations. Law enforcement and regulatory agencies need to establish a winning strategy for dealing with this new asset class **now** in order to keep up with the bad actors who seek to abuse it.

We have three key recommendations:

- 1. Onboard the right tools with trustworthy data.** Cryptocurrency investigations require robust blockchain analysis tools that turn crypto transactions into simple visualizations, are backed by accurate address attribution data, and add new features to keep pace with this ever-changing industry.
- 2. Invest in training.** Survey respondents were vocal about the importance of training, and they're absolutely right. Cryptocurrency investigations require new skills, and agencies need to partner with teams who can teach them effectively.
- 3. Partner with the private sector.** Cryptocurrency is always changing, and all of that innovation is coming from the private sector. Public sector employees can benefit from partnering with people working in the space to stay on top of the newest services and transaction methods — cybercriminals certainly will be.

As the blockchain data provider sitting at the intersection of the public and private sectors, Chainalysis is eager to help law enforcement and regulatory agencies meet the challenges ahead in cryptocurrency. Please contact us if you'd like to learn more about how we can do that through our blockchain analysis tools, training programs, investigative services, and more.

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Complete visibility into cryptocurrency

Compliance

Ensure you meet evolving local and global regulations

Defi

Safely participate in the DeFi revolutions

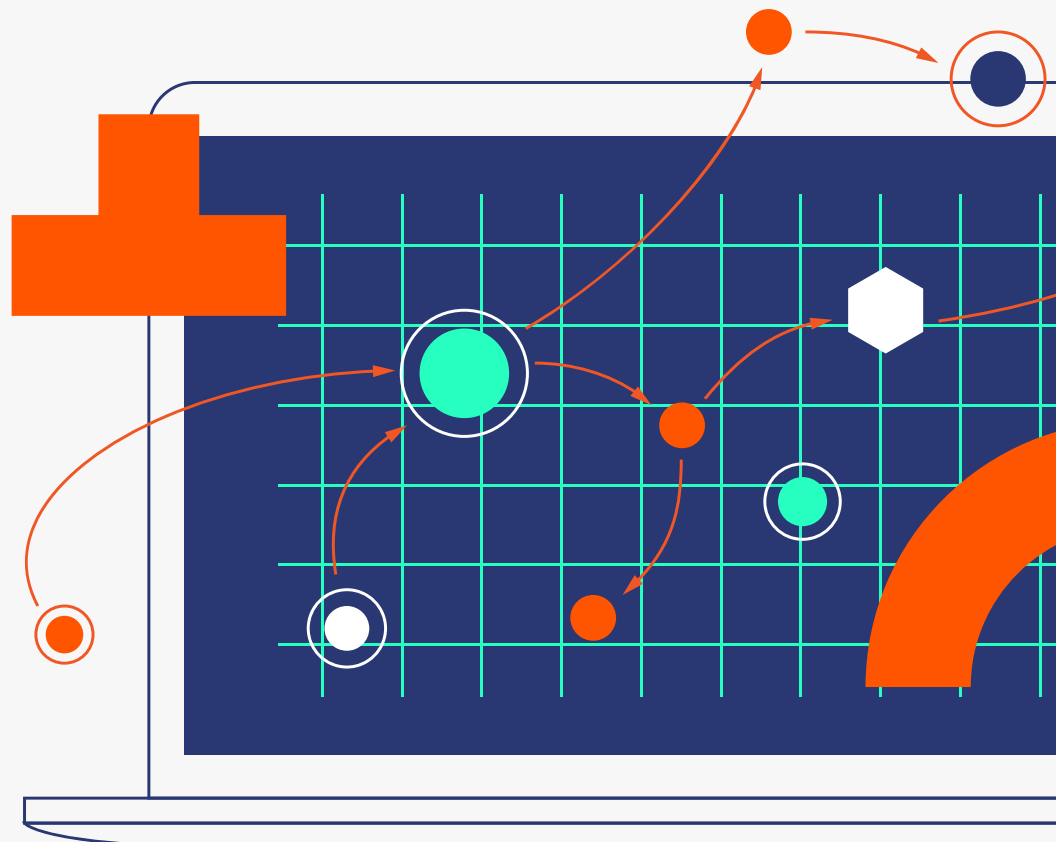
Investigations

Detect and investigate crypto crime

NFTs

Ensure safe access and controls for NFTs

Learn more about our solutions at www.chainalysis.com



Building trust in blockchains

About Chainalysis

Chainalysis is the blockchain data platform. We provide data, software, services, and research to government agencies, exchanges, financial institutions, and insurance and cybersecurity companies in over 70 countries. Our data powers investigation, compliance, and market intelligence software that has been used to solve some of the world's most high-profile criminal cases and grow consumer access to cryptocurrency safely. Backed by Accel, Addition, Benchmark, Coatue, GIC, Paradigm, Ribbit, and other leading firms in venture capital, Chainalysis builds trust in blockchains to promote more financial freedom with less risk. For more information, visit www.chainalysis.com.

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