



Setting the Standard:

20+ Years of Tracking Emerging Risks

The transformative power
of tracking emerging risks



Senior Director's Letter:

From Insight to Innovation

For over 50 years, Verisk has been at the forefront of the property/casualty industry, providing insights and solutions related to a wide array of emerging risks from technological to societal, market-related, or environmental. During that time, in response to client demand for assistance with making better decisions about such risks, Verisk created a dedicated team whose sole focus was (and remains) on delivering frequent, critical market intelligence on emerging risks to help create new opportunities: Verisk's Emerging Issues team.

But what is an emerging risk? The definition can be as elusive as the subject itself.

While there's no shortage of definitions, we at Verisk consider an emerging risk to be a new or developing trend that can potentially cause injury or damage and is difficult to properly quantify using traditional data. Because these risks are new, or because we may lack traditional data, emerging risks can be highly disruptive

and evolve unpredictably. These risks may also be systemic—stretching across multiple lines of business, numerous industries, nations, or even spanning the globe.

While they may be hard to quantify (at first), emerging risks can have real business impact. They may influence the frequency and severity of losses or even create entirely new exposure pathways.

Herein lies the challenge—and opportunity.

The challenge: How do you identify emerging risks? Once you've found them, how do you evaluate their potential impact and prioritize them? And how do you leverage those insights for competitive advantage?

The opportunity: The more you understand these risks, the better equipped you may be to seize the opportunity to adapt and evolve your products and practices to address them, or even develop new ones. In the pages that follow, we'll highlight how our emerging risk research has contributed to the evolution of several key lines of business here at Verisk, and how tracking emerging risks can help insurers prepare for the future and stay ahead of the competition.

If you have any questions or want to discuss, please don't hesitate to [contact me](#).

Sincerely,

Andrew Blancher, CPCU

Senior Director, Emerging Issues, Commercial Auto, Management & Professional Liability, and Cyber

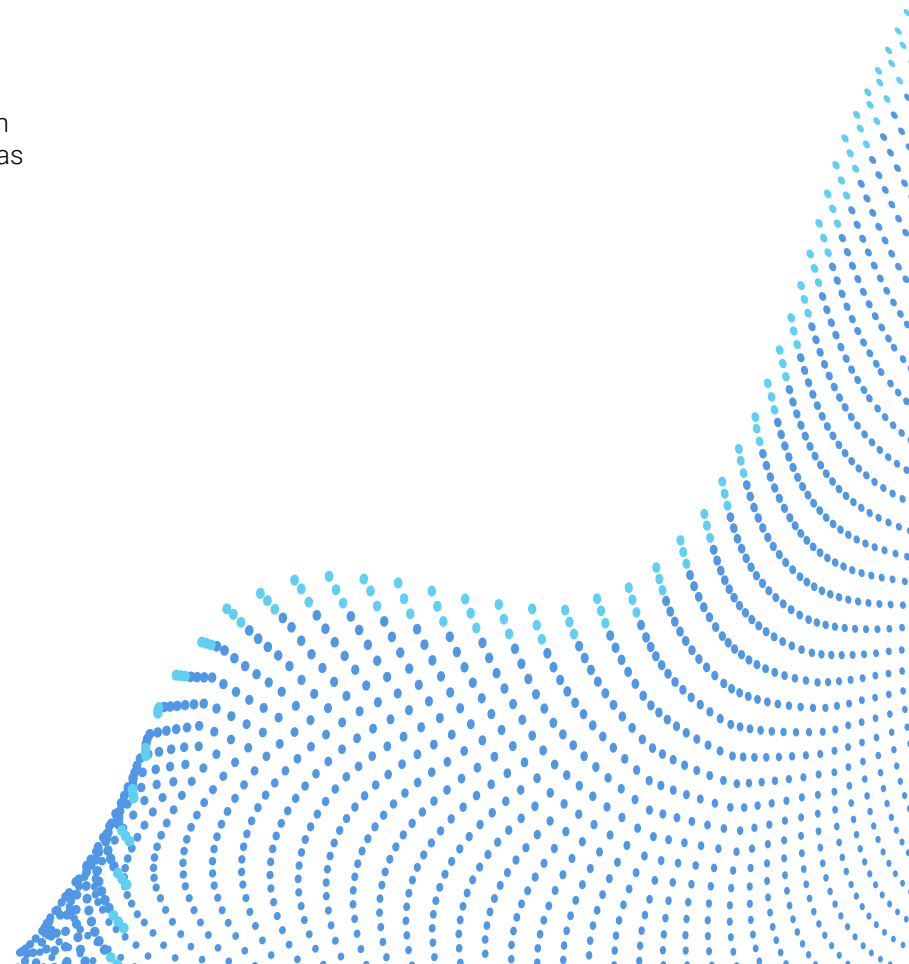
Before They Were in ISO Forms, They Were Emerging Risks

How decades of researching emerging risks helped
put Verisk's customers ahead

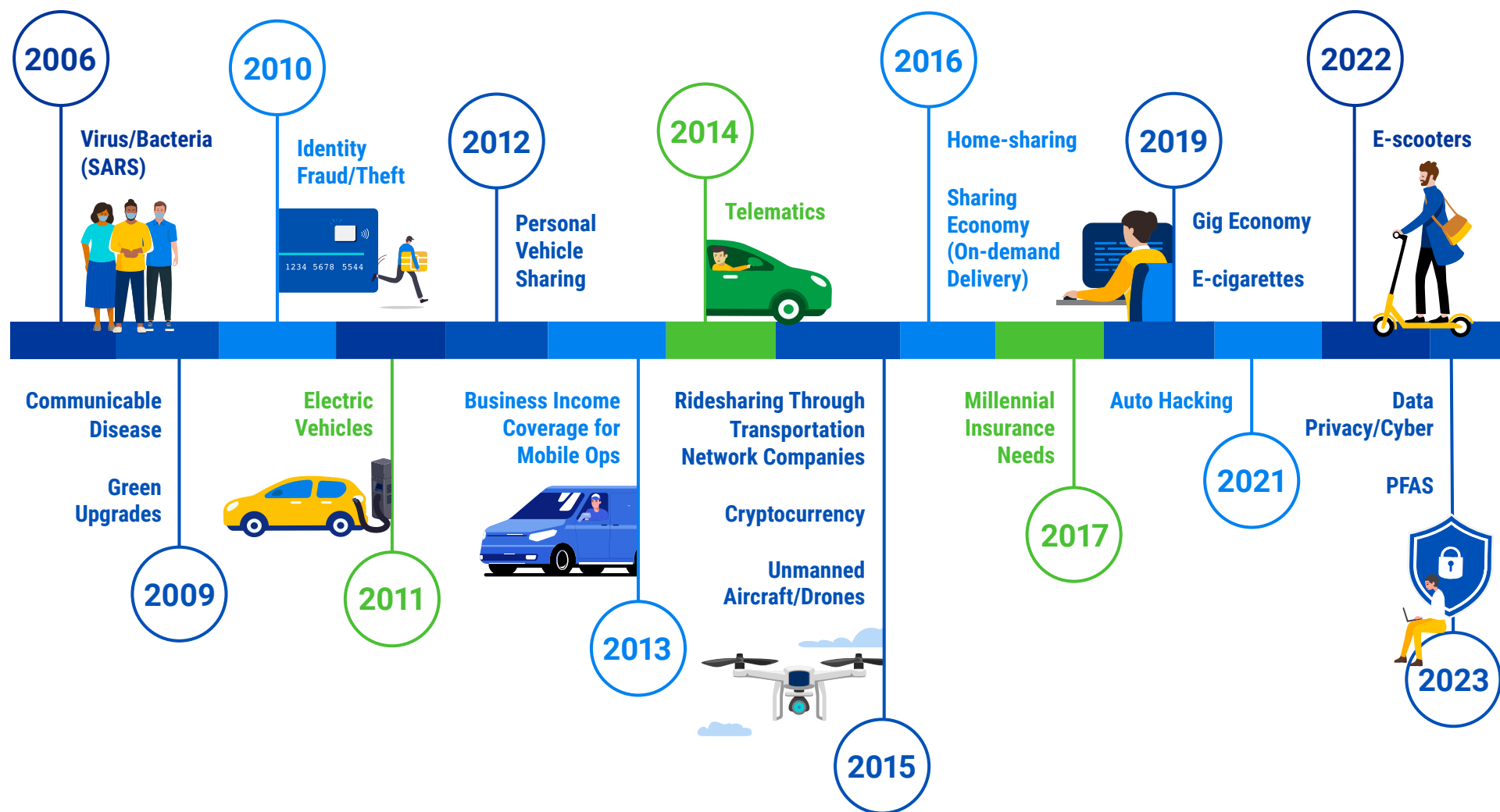
Across multiple lines of business, research from the Emerging Issues team has helped keep Verisk's ISO Forms coverage products responsive to a constantly evolving risk landscape. Emerging risk research may occur for months, or sometimes years, ahead of a filing date.

In the graphic below, you can see some of the most notable emerging risks we've tracked over recent years.

Let's break that chart down, taking a tour through several lines of business to learn which key issues contributed to our ISO Core Lines product development, as well as some of the emerging risks we're currently researching.



20+ Years of Tracking Emerging Risks




Risk in Focus: Tracking the ‘Forever Chemicals’

Per- and polyfluoroalkyl substances (PFAS) have been in use for decades, but litigation involving these “forever chemicals” has reportedly surged.¹ Research conducted by both the Emerging Issues team and Verisk’s Arium liability analytics team helped highlight how PFAS was becoming a potentially significant toxic tort, with [Arium’s model showing potential ground-up losses](#) from PFAS litigation ranging from \$123 billion to \$165 billion.

One possible reason for this growing liability event? The pervasive exposure. In what was hailed as a first-of-its-kind study on the nation’s drinking water, researchers from the U.S. Geological Survey (USGS) have reported that [PFAS are likely contaminating](#) at least 45% of the nation’s drinking water and several of the detected PFAS are at levels that exceed the Environmental Protection Agency’s (EPA) interim health advisories. The USGS noted that for two of the PFAS it detected—PFOS and PFOA—every sample had concentrations at levels that exceeded the EPA’s interim health advisory for those two PFAS.

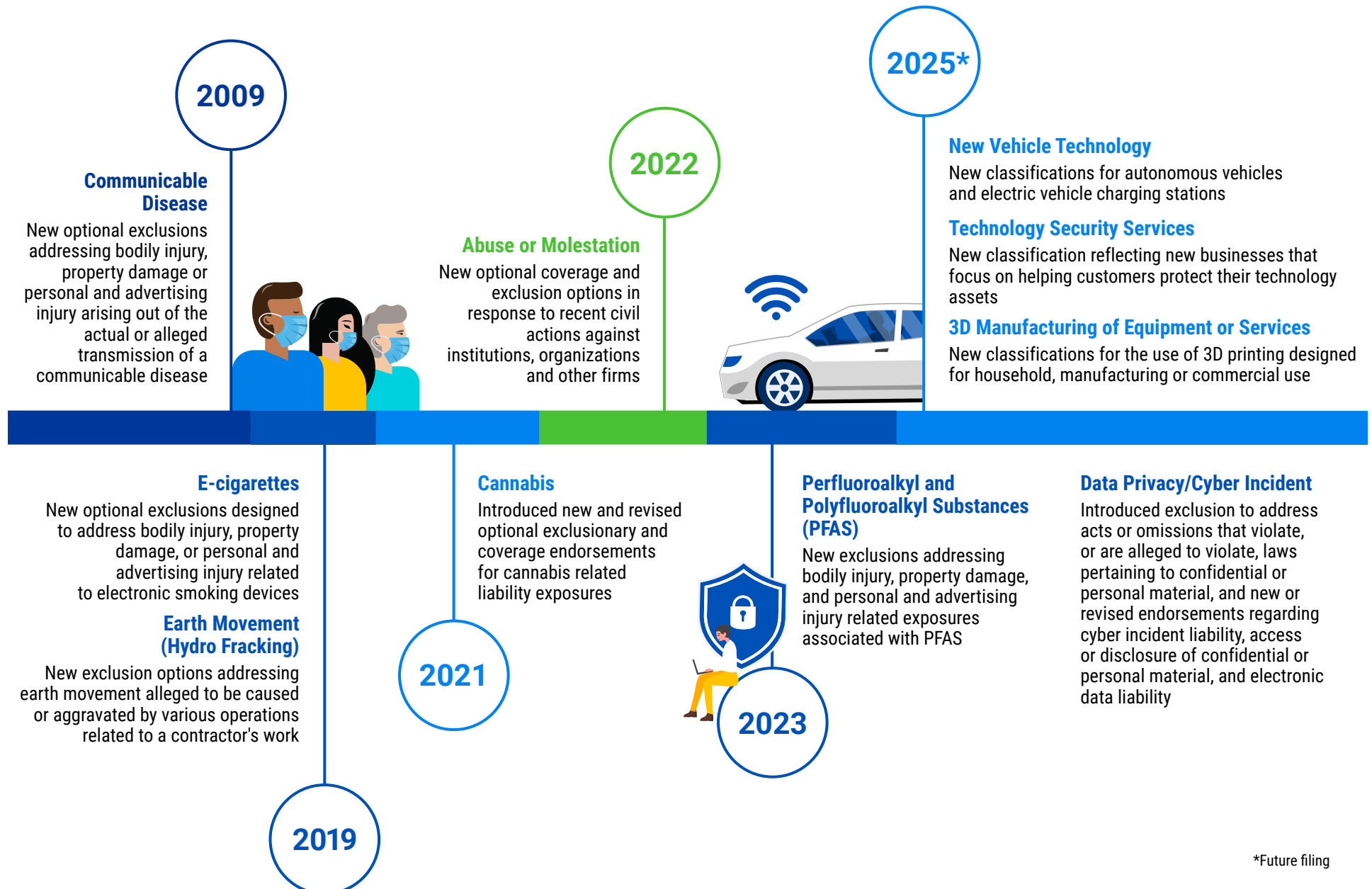
Growing attention to PFAS may also help spur additional litigation. Indeed, [cultural awareness may have already driven an initial spike in 2020](#). In December 2019, the film *Dark Waters* debuted. *Dark Waters* concerned litigation surrounding PFAS, helping to bring popular attention to the issue. While correlation doesn’t imply causation, previous episodes of high-profile cultural inputs have reportedly led to spikes in legal activity. For example, following the 2015 release of the movie *Spotlight*, which chronicled efforts to uncover sex abuse involving priests, at least 15 states extended or suspended their related statute of limitations for bringing sexual abuse cases, opening the door for claims alleging sexual abuse dating back decades. One report indicated that this legislation enabled the filing of more than 5,000 new cases worth over \$4 billion.

The Emerging Issues team continues to explore how efforts to remediate PFAS contamination and substitute PFAS in products may generate new concerns in the future.



[Click here to visit the Emerging Issues PFAS topic page for more analysis.](#)

Tracking Emerging Risks in General Liability




*Future filing

Risk in Focus: Cannabis

Sometimes, emerging property/casualty risks can be downstream of societal changes. The push to permit adult use marijuana sales at the state level gained significant momentum over the past decade, creating a budding cannabis economy. Today cannabis appears to be undergoing a multifaceted evolution. More states appear poised to permit recreational adult use and/or medical use just as the federal government inches ever closer to [potentially changing the drug's classification under the Controlled Substances Act](#).² A potential shift in scheduling would mean that marijuana would generally be treated like drugs such as anabolic steroids—federally regulated by the Food and Drug Administration (FDA), requiring a prescription to access, and able to be dispensed by a licensed pharmacy. That's quite different from the current marijuana regulatory regime in the 23 states that have permitted recreational adult use.

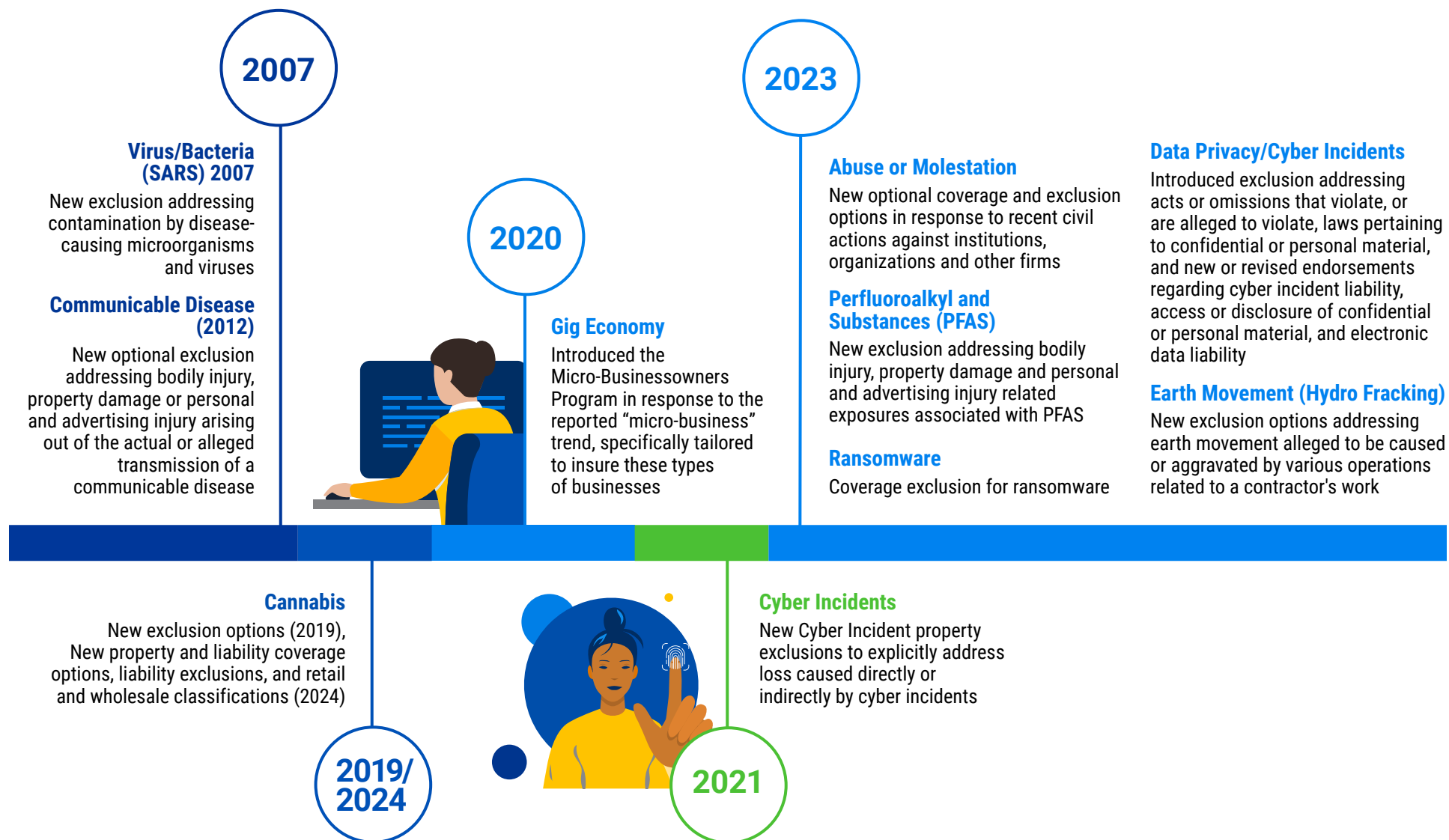
On the other hand, new and generally unregulated [synthetic cannabis products like Delta-8 continue to proliferate](#)—posing a potential health risk to consumers who use them, as well as a possible liability concern for companies that manufacture them and retailers that sell them.

Because of the variety of state-level legislation involving cannabis, [the product's supply chain may also face unique challenges](#). State regulated cannabis is generally grown, distributed, tested, and dispensed all within a state's borders. The upshot of this rather unique supply chain is that natural catastrophes disrupting cannabis cultivation or distribution could have outsized impacts on other cannabis businesses (testing labs, retailers, etc.) in the same state. If, for example, a wildfire disrupts a major cultivator or drives up local prices, a California retailer can't source cannabis from another state to make up the shortfall or get a better bargain.



[Click here](#) to visit
the Emerging Issues
cannabis topic page
for more analysis.

Tracking Emerging Risks in Businessowners




Risk in Focus: Hacking

Evolving technology is a frequent source of emerging risk. Case in point: the automotive industry's embrace of software and computing components. These components have enabled new vehicle features, but they have also made vehicles potentially vulnerable to cyberattacks. Since 2010, there's been a 344% increase in cyberattacks targeting vehicles.³

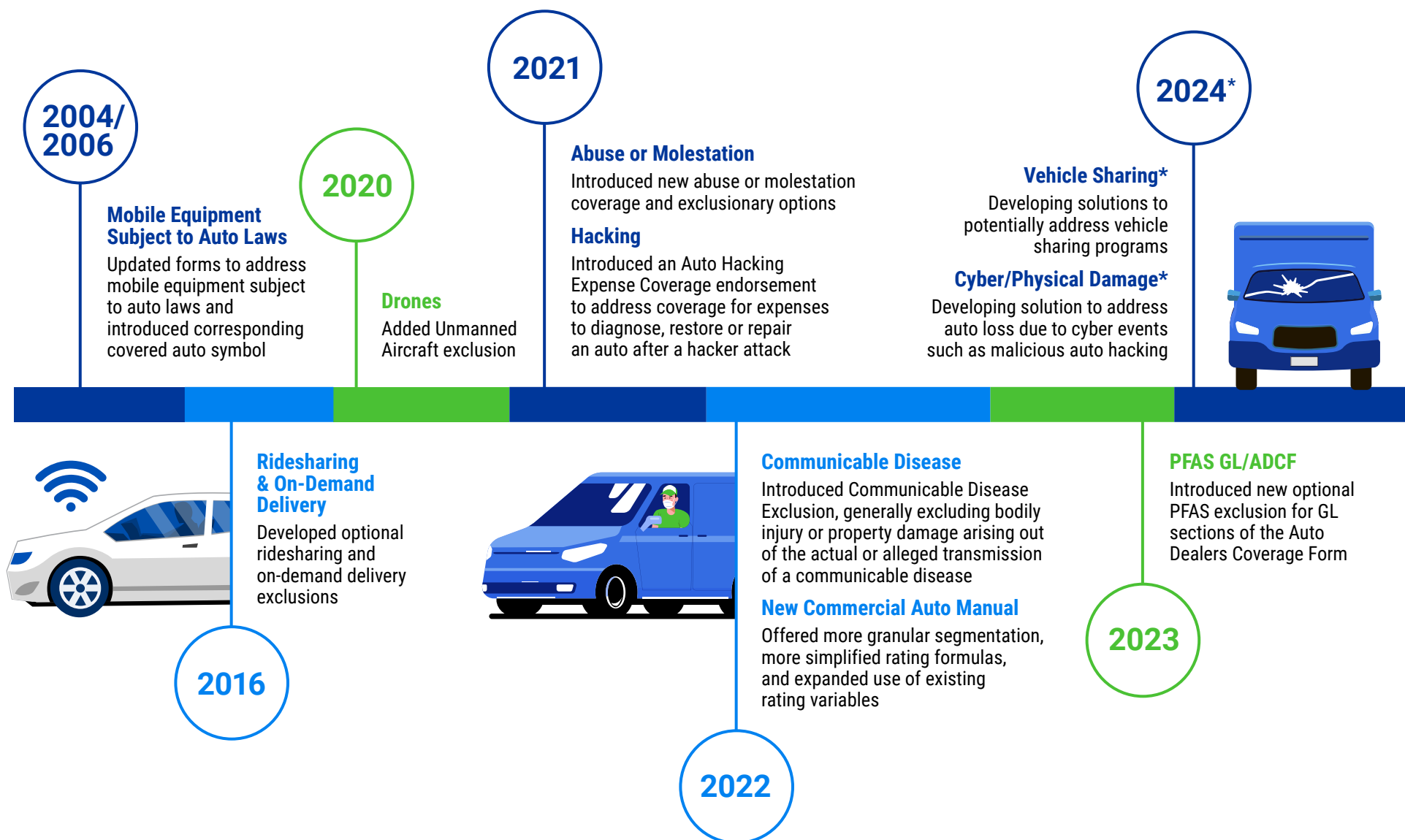
And the surface area for vehicle cyberattacks may be growing. One possible vector? [Electric vehicle charging stations](#). If a charging station is infected with malware, it could pass the infection along to new vehicles. This could potentially damage vehicles or render them inoperable, causing a risk to drivers, passengers, bystanders, and property. And EV charging stations [appear to have numerous potential security vulnerabilities](#): Researchers at the University of Texas at San Antonio conducted a study on 16 charging stations, and found vulnerabilities in all of them. According to one report, EV charging stations already accounted for 4% of all vehicle cybersecurity incidents in 2022.

Vehicle cyber vulnerabilities may not only put drivers, passengers, and vehicles at risk—it may also create data privacy risks as well. Automakers are reportedly embracing the role of “digital identity managers” whereby they profit from the data being accumulated through their customers' financial agreements and through data generated by vehicles themselves.⁴ The more data a vehicle is collecting, the more data (at least in principle) hackers may be able to access and steal in a breach.



Click [here](#) to visit the Emerging Issues Data Breach & Security topic page for more analysis.

Tracking Emerging Risks in Commercial Auto

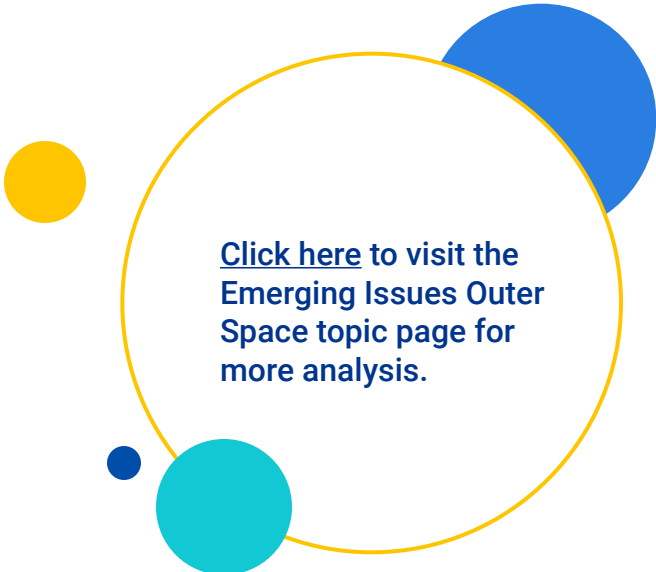


*Future filing

Risk in Focus: Space Weather

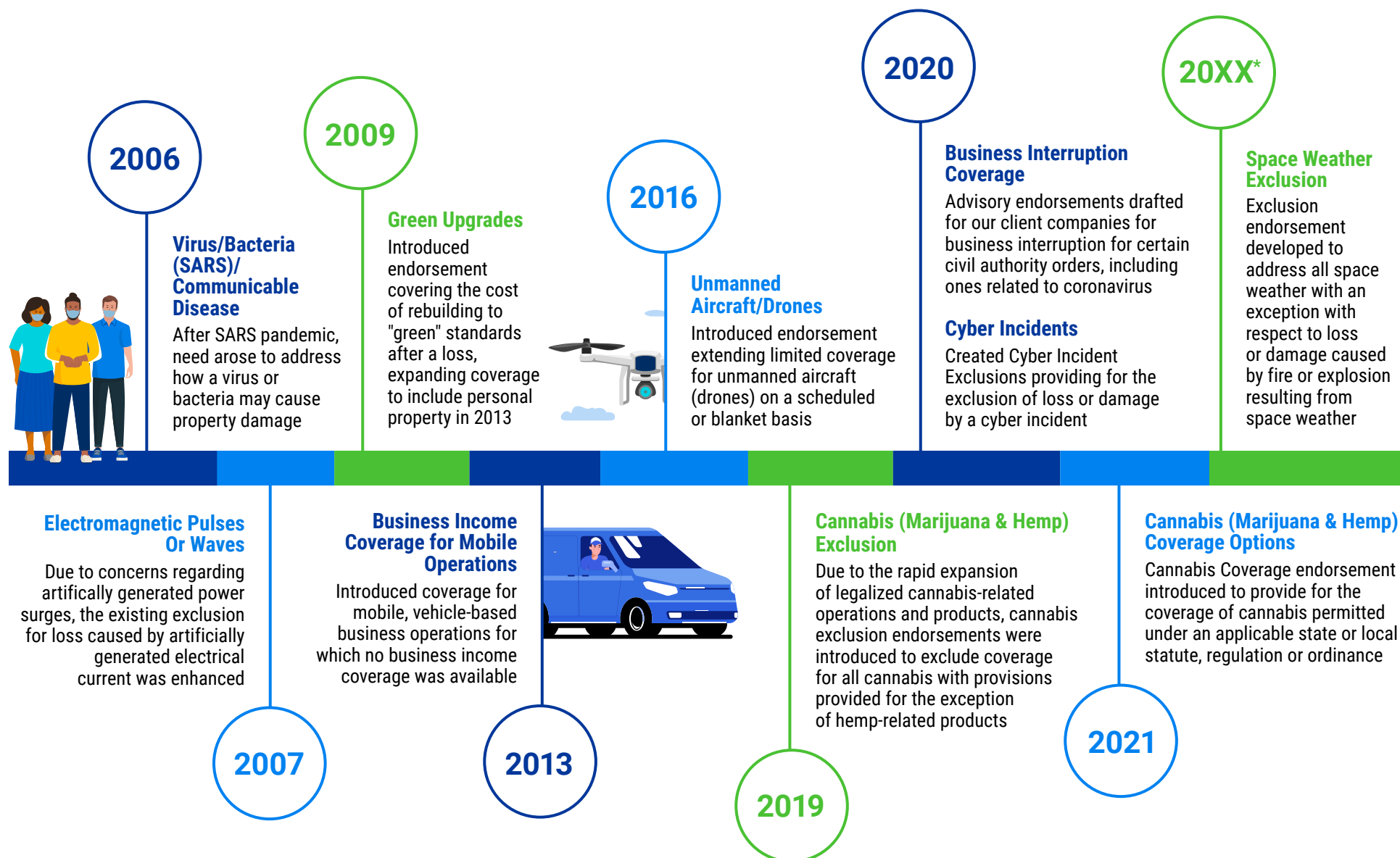
Not every emerging risk originates from terrestrial activity. Space weather events emanating from the sun can be highly disruptive to Earth-based interests. Powerful solar activity can send radiation and particles streaming toward Earth, creating geomagnetic storms that have the potential to be very disruptive. Indeed, [according to research published by Verisk's Emerging Issues team](#) in collaboration with the Illinois State University Innovation Consulting Community, an extreme space weather event of the kind that impacted the Earth in 1859 could trigger insured losses ranging between \$53.2 billion and \$323.9 billion in the United States alone.

The [litany of potential disruptions that space weather can cause include](#): loss of satellites or interference with satellite operation (which extends to global positioning satellites); interference with radio communications; damage to electrical grids; disruption to air travel; and potential climate impacts such as cloud formation and rising temperatures linked to increased absorption of solar energy by the Earth's atmosphere.



[Click here](#) to visit the Emerging Issues Outer Space topic page for more analysis.

Tracking Emerging Risks in Commercial Property



*Future filing


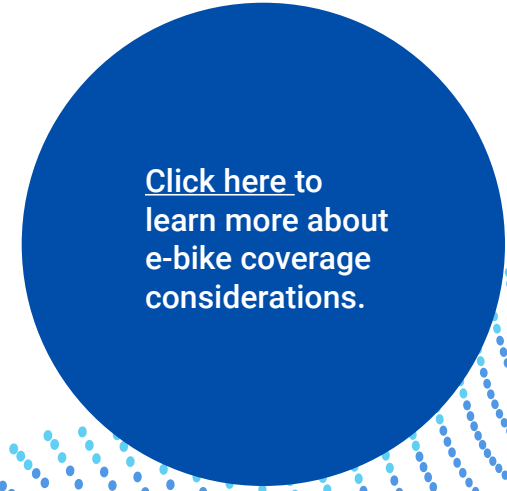
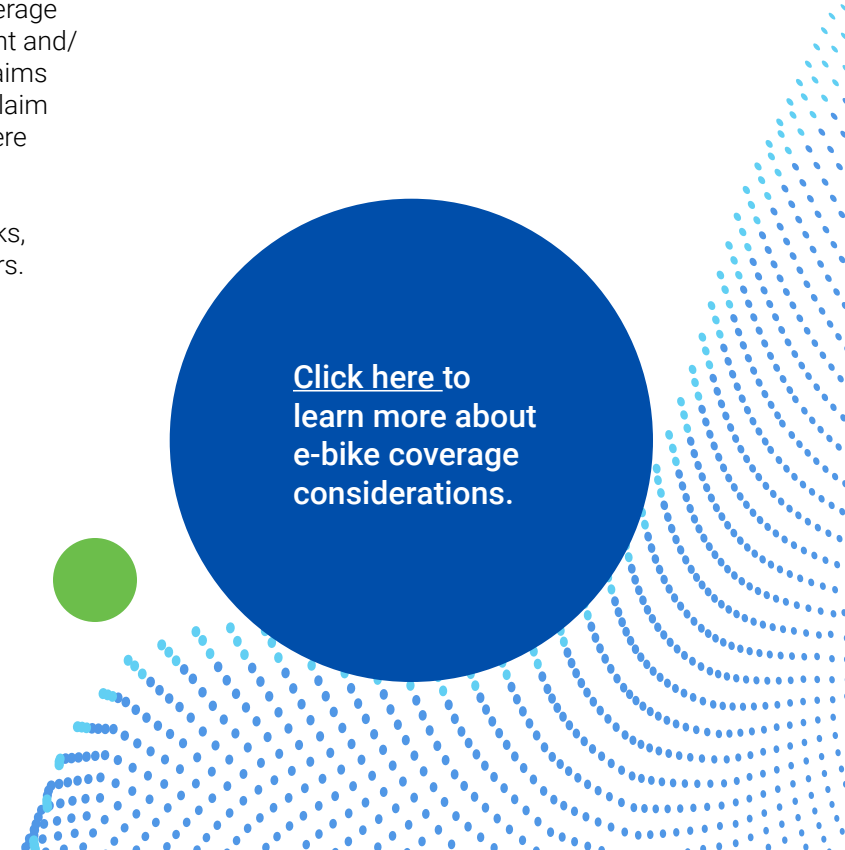
Risk in Focus: E-Bikes

The growth of lithium-ion battery-powered mobility devices show no signs of stopping. In fact, in 2020, during the height of the COVID-19 pandemic, [Americans bought more than twice as many e-bikes as electric cars](#). While e-bikes may offer a faster alternative to conventional bicycles, their speed may also increase the chances of a serious accident.

While state- and federal-level regulation of e-bikes has been well underway over the past two decades, how e-bikes may generally be handled from an insurance coverage perspective continues to evolve. With a relative paucity of available state appellate case law—and, according to certain prominent e-bike safety advocates, an inadequate or outdated regulatory framework—insurers seeking coverage solutions may have much to consider as e-bike sales continue to increase.⁵

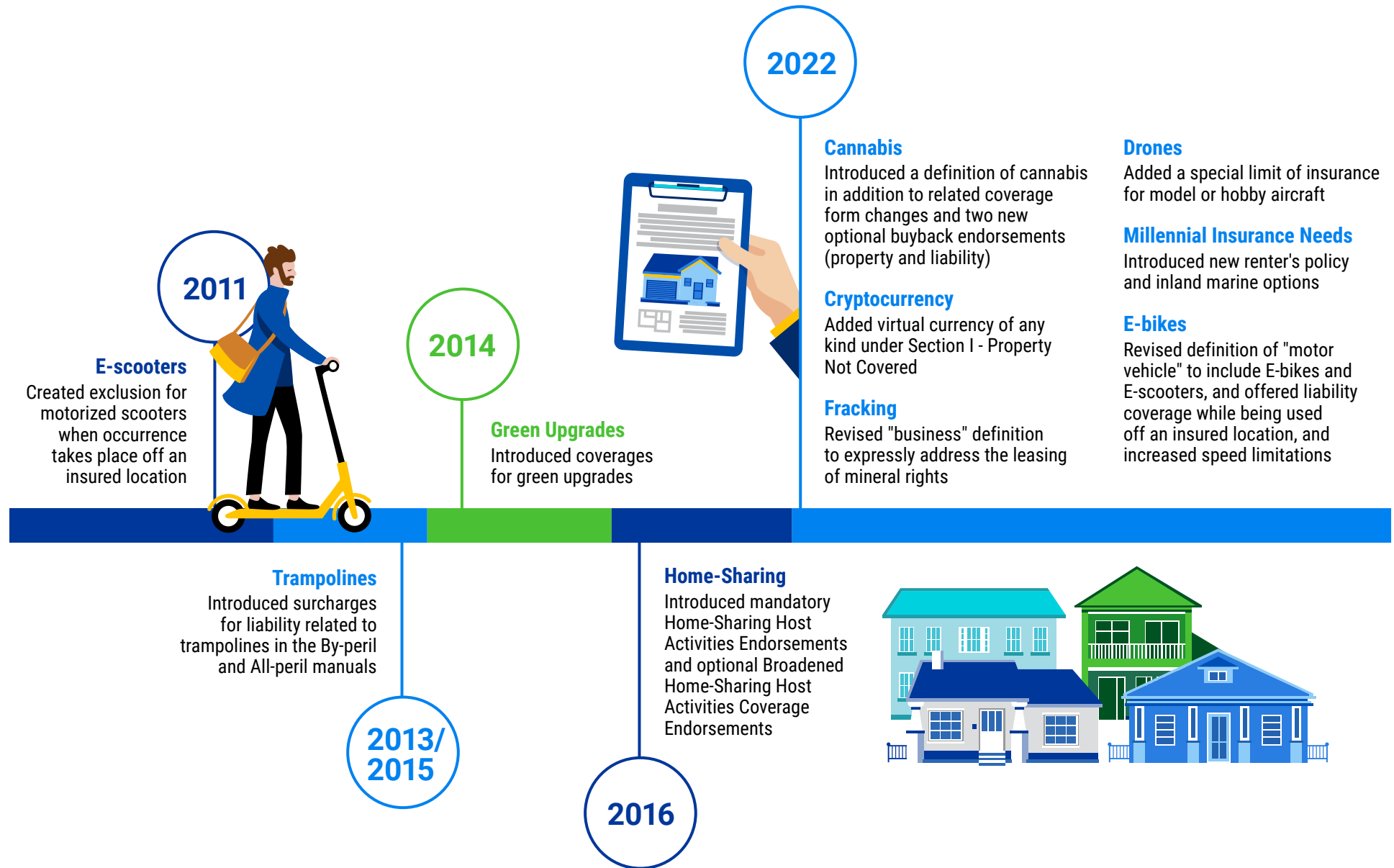
Some of these considerations may be impacted by: whether a state's statutory definition of "motor vehicle" includes e-bikes and if such state has corresponding statutorily required insurance coverage; whether a state has specific statutory requirements regarding coverage for e-bikes; whether there are contractual requirements under an e-bike rental agreement and/or whether insurance policy language may expressly address or otherwise extend to claims related to e-bikes. Enhanced claim severity is also likely to accompany the increase in claim frequency as more studies are showing that e-bikes generally carry a higher risk of severe injuries than traditional bicycles.⁶

The Emerging Issues team continues to research a number of such mobility-related risks, including the potential for lithium-ion battery fires stemming from e-bikes and e-scooters.



[Click here to learn more about e-bike coverage considerations.](#)

Tracking Emerging Risks in Homeowners




Risk in Focus: Vehicle Subscriptions

The ability to put certain vehicle features behind a subscription paywall may allow automakers to generate additional revenue, but it may also complicate matters for insurers. If the underlying hardware is present in a vehicle but the insured hasn't subscribed to it, [how might insurers respond in an accident?](#)

While certain vehicle features have traditionally been made available only in specific models at an additional upfront cost, these features have generally been hardware-limited rather than software-limited. In other words, if you bought a car that didn't have heated seats in the past, it was generally because the physical components that create the heat weren't present, so you generally wouldn't be expected to pay for them.

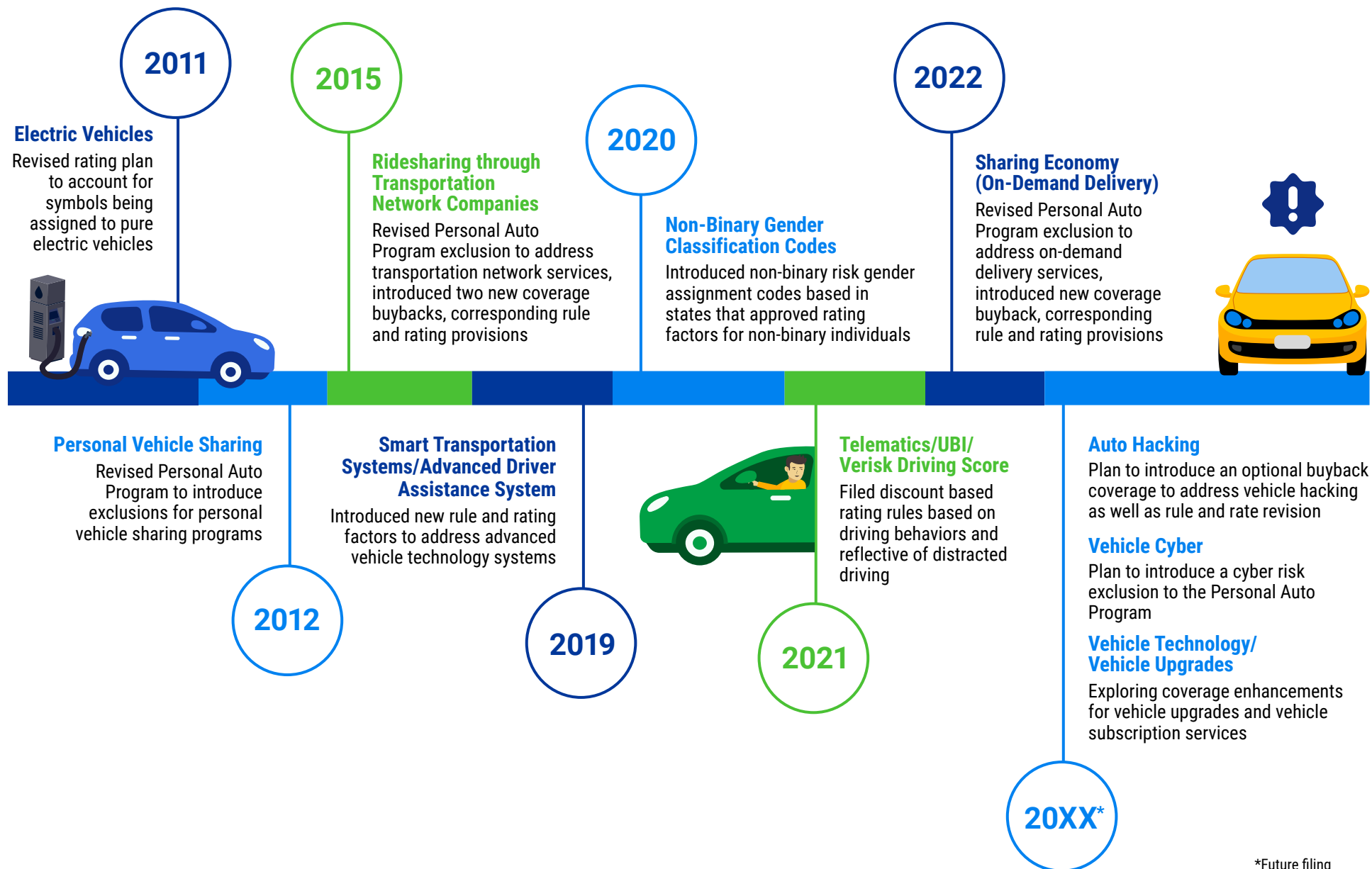
Contrast this to vehicles using a subscription model: All of these vehicles would likely come with the hardware required to heat your seats, but this functionality would likely be locked unless you pay a monthly fee.

Having to include these hardware features up front may increase the overall cost of new vehicles, which potentially could lead to higher premiums, and increased cost for repairs (and thus insurance claims) for features that the owner may not use or even have access to at the time of the accident.



[Click here to learn more about the potential implications of vehicle subscription services.](#)

Tracking Emerging Risks in Personal Auto



*Future filing

Risk in Focus: Non-Fungible Tokens

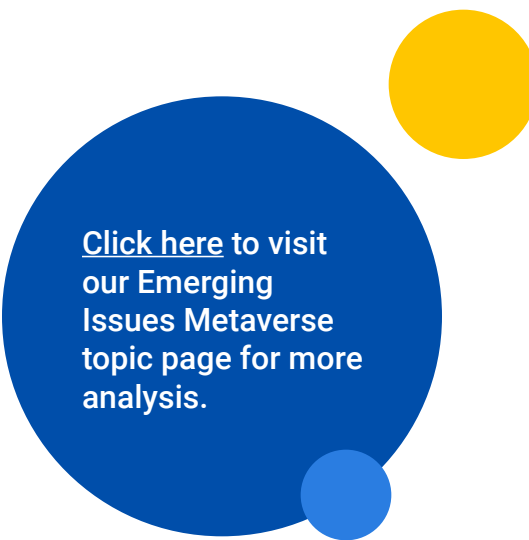
Virtual assets, such as [non-fungible tokens \(NFTs\)](#), can cost their owners real money. The digital assets market, from virtual currencies to NFTs, has grown significantly in the last few years, and is expected to continue to expand.

While we have started to see NFT-related civil litigation emerge over the last couple of years, with most actions filed in federal courts, these cases typically address trademark or other intellectual property-related claims. In terms of insurance coverage case law, according to one observer, most claims are resolved prior to litigation, in part due to some insurers seeking to avoid potentially setting unfavorable legal precedent.⁷

While the blockchain technologies that maintain NFTs are typically viewed as secure, there have been instances where entities holding blockchain assets have experienced data breaches. In 2021, a cryptocurrency exchange's database was breached. Hackers first gained unauthorized access to their customers' accounts through a social engineering technique and then exploited a flaw in the exchange's account recovery protocol to steal digital assets from at least 6,000 customer accounts.⁸

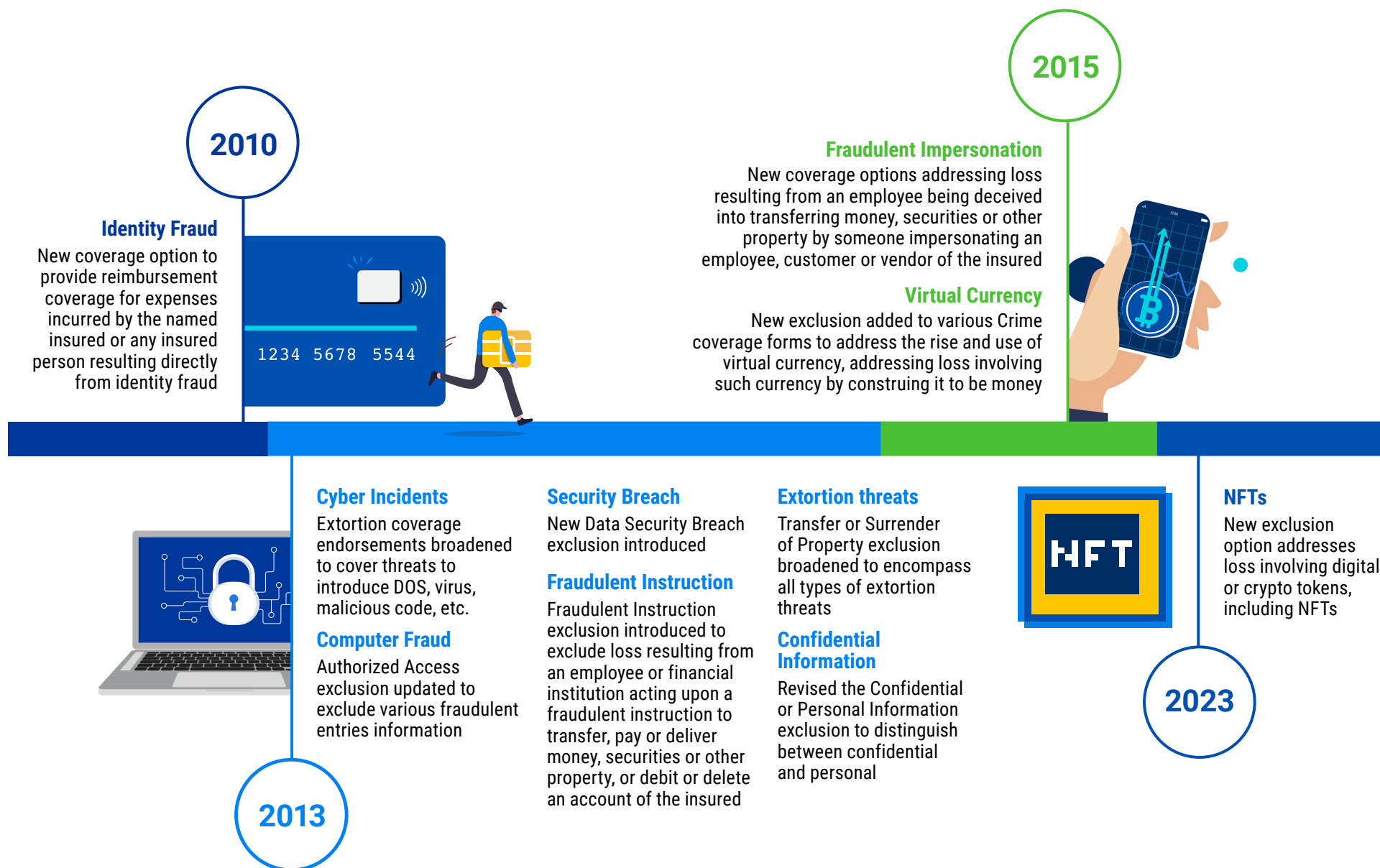
NFTs may be susceptible to theft, posing another potential exposure for insurers. Also, if an NFT is considered a security, in addition to any filing or compliance requirements noted earlier, it may also trigger Directors and Officers (D&O) liability insurance coverage implications which typically address litigation and investigations involving securities.⁹ There may also be environmental exposures relating to creating or maintaining such NFTs.

The Emerging Issues team is exploring new and evolving use cases for digital assets and virtual currencies and how they may interact with emerging risk exposures generated by metaverses.



[Click here to visit our Emerging Issues Metaverse topic page for more analysis.](#)

Tracking Emerging Risks in Crime



Emerging risks: Are you prepared?

What risks will insurance products be responding to in the future? There's no crystal ball (sorry), but we can offer you the next best thing: access to our **Emerging Issues research**. From tracking new technologies like generative AI, environmental forces such as the climate crisis, or societal trends including the legalization of cannabis, the Emerging Issues team is here to support your business' product development, strategic planning, and more.

Verisk's Emerging Issues team provides market intelligence on over 60 emerging risks, supporting Verisk's effort to **identify, contextualize**, and potentially **productize** emerging risks.

You can engage with our research through:

- Our website
- A weekly newsletter
- Webinars
- Audio Content
- Events and conferences
- Scheduled whiteboard sessions

Sign up for our newsletter so you don't miss our latest updates and events, providing you with valuable market intel on the risks the insurance industry is (or likely will be) tackling in the months and years to come.

Our weekly newsletter includes original research articles on key emerging risks, curated newsfeeds, audio content and webinars with subject matter experts, and emerging risk updates from across Verisk.

Join thousands of property/casualty insurers and risk management professionals who make Verisk's Emerging Issues Weekly Newsletter a part of their workflow.



[Click here to sign up today.](#)

Productization: Incorporating Emerging Issues Insights into Insurer Operations

Emerging Issues market intelligence can be used across multiple insurer business units. These insights might help inform:

- Underwriting guidelines
- Application questions
- Insurance policy forms and endorsements
- Claims handling
- Risk classification
- Actuarial pricing/stat code revisions to collect data
- Risk management
- Strategic planning

CONCLUSION: Are You Ready for the Future of Risk?

In a world of risks that are more complex and interconnected than ever, capitalizing on emerging risk market intelligence is vital to your business. For over two decades, Verisk has helped insurers stay at the forefront of emerging risks. While the risks keep changing, our commitment to helping you understand and capitalize on the opportunities of the future remains steadfast.

Have questions or suggestions for future risks we should track?

Reach out to
emergingissues@verisk.com.

¹ “Companies Face Billions in Damages as PFAS Lawsuits Flood Courts,” Society of Environmental Journalists, May 2022. <https://www.sej.org/headlines/companies-face-billions-damages-pfas-lawsuits-flood-courts>

² “FDA review supports reclassifying marijuana as less risky drug,” Medical Xpress, January 2024. <https://medicalxpress.com/news/2024-01-fda-reclassifying-marijuana-risky-drug.html> & “Map: Where marijuana will be legal in 2024,” The Hill, December 2023. https://thehill.com/homenews/nexstar_media_wire/4371873-map-where-marijuana-will-be-legal-in-2024/

³ “Q&A: Upstream CEO on Protecting Trucks Against Cyberattacks,” Trucking Info, November 2022. <https://www.truckinginfo.com/10187365/qa-upstream-ceo-on-protecting-trucks-against-cyberattacks>

⁴ “Automakers poised to become digital identity stewards,” Automotive World, February 2024. <https://www.automotiveworld.com/articles/automakers-poised-to-become-digital-identity-stewards/> <https://www.automotiveworld.com/articles/automakers-poised-to-become-digital-identity-stewards/>

⁵ Industry letter, People for Bikes, May 2022. https://peopleforbikes.cdn.prismic.io/peopleforbikes/9f82d6e1-b64a-4483-a9ae-9100e8a71970_IndustryLetterofSupport_May2022.pdf.

⁶ “E-bikes show distinct pattern of severe injuries,” by Vishwadha Chander, Reuters, December 25, 2019, <https://www.reuters.com/article/us-health-ebike-injuries/e-bikes-show-distinct-pattern-of-severe-injuries-idUSKBN1YT0MV>.

⁷ “Crypto Risks, uncertainty prompt uptick in insurance exclusions,” by Daphne Zang, Bloomberg Law, August 5, 2022. View at URL: <https://news.bloomberglaw.com/insurance/crypto-risks-prompt-uptick-in-insurance-exclusions>. Accessed February 24, 2023.

⁸ Coinbase says hackers stole cryptocurrency from at least 6,000 customers.” Reuters, October 1, 2021, <https://www.reuters.com/business/finance/coinbase-says-hackers-stole-cryptocurrency-least-6000-customers-2021-10-01/>. Accessed February 24, 2023.

⁹ “Thefts, Fraud and Lawsuits at the World’s Biggest NFT Marketplace,” by David Yaffe-Bellany, The New York Times, June 6, 2022, <https://www.nytimes.com/2022/06/06/technology/nft-opensea-theft-fraud.html>. Accessed March 17, 2023.



+1.800.888.4476 / contactus@verisk.com / core.verisk.com