

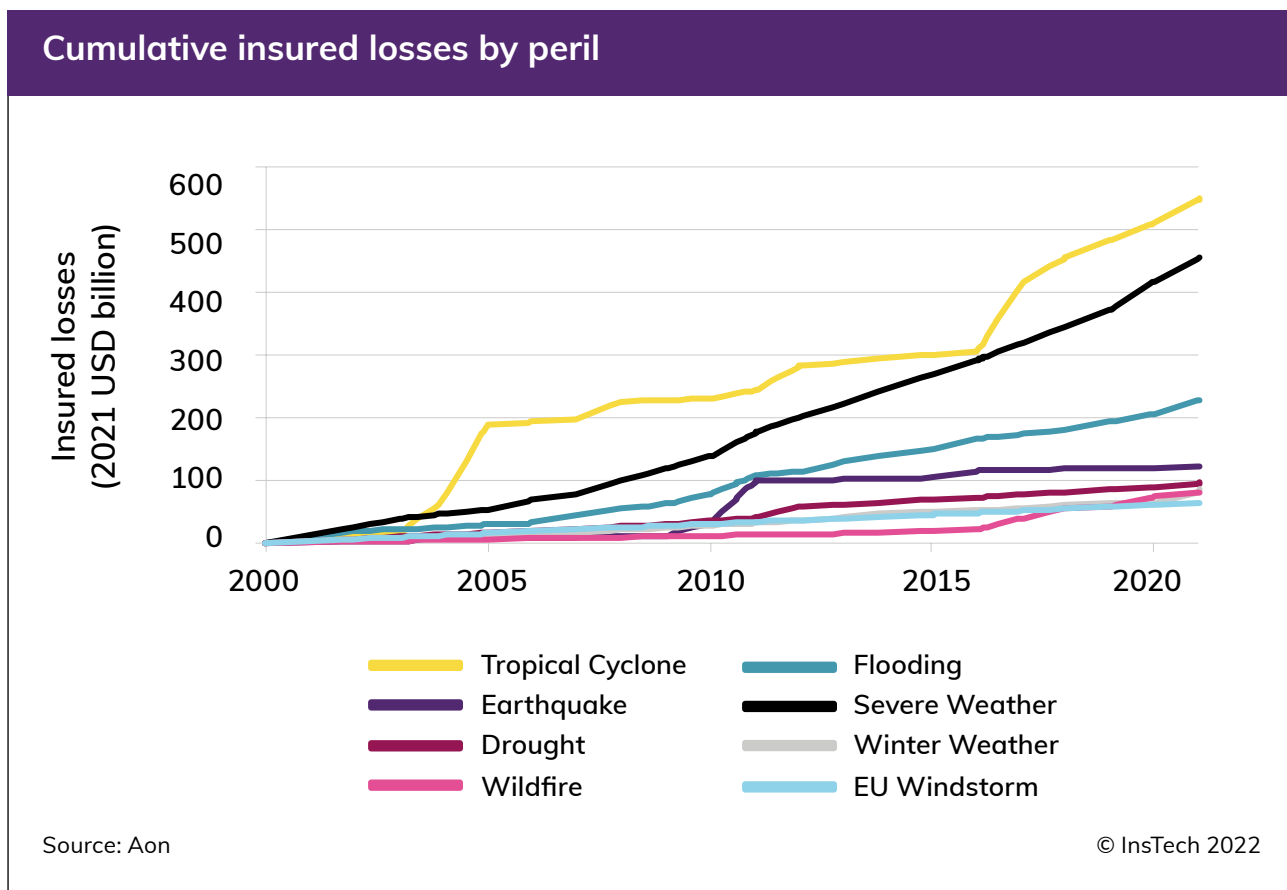


Property Intelligence
the where and what:
The 50+ companies to know



Introduction

It is becoming more important than ever for insurers to understand what they are insuring and where it is located. 2022 has seen windstorms in Europe, floods affecting Australia and Hurricane Ian hitting the US. Hurricane Ian alone is estimated to have cost insurers up to \$74 billion, with the European storm and Australian flooding events both costing the industry over \$4 billion.



As well as climate change increasing the frequency and severity of catastrophic weather events, demographic shifts are having an effect. More people are now living in hurricane paths and flood-prone areas, increasing the risk of losses.

Last year we released our first property intelligence focused report, [Location Intelligence 2021 - the Companies to Watch](#). It covered all aspects of property intelligence including location data, property attribute information, catastrophe modelling and remote claims assessment. This year's report focuses only on the "where" and "what" of property intelligence - understanding where a property is located and what it is made of to help insurers improve risk selection, underwriting and pricing. We covered remote claims in a [report](#) released earlier this year. In early 2023 our next report will focus on "what risks do I face" in relation to property intelligence, particularly focusing on hazard data and modelling.

This report reviews the latest trends and technologies in acquiring information for geocoding, building characteristics and rebuild values, as well as profiling the companies we know providing solutions in this space.

Ali Smedley
Senior Research Analyst, InsTech

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Why this matters

- Accurately locating a property is essential for understanding its exposure to hazards and for managing accumulations.
- There have been notable advancements in technology such as geospatial imagery and computer vision in the last year. These have improved the availability and choices for insurers wishing to access more accurate and timely data.
- New data sources are being found from outside of insurance. Data is being sourced in new and innovative ways but gaps, and hence opportunities for new solutions, still remain - in particular for commercial property.
- Location and property data is increasingly being offered through platforms and third-party distributors and consolidators, as well as directly from the data vendors. This allows multiple data sets to be accessed in one place by insurers, supporting increased adoption of new data sets by underwriters.

Property Intelligence - the InsTech members

 GUIDEWIRE

 RMS

 archipelago

 LIGHTBOX

 addresscloud

 e2Value

 whenfresh

 GEOSITE

 wenalyze

 ARTURO

 zesty^{AI}

 allphins

 FRISS

 S&P Global

 TENSORFLIGHT

 GAMMA
Locate, Analyse, Predict

 RE5Q

 CoreLogic

 CAPE
ANALYTICS

 nearmap

 intelligentai

 Verisk

Property intelligence: the importance of understanding “where” and “what”

Accurately locating a property and understanding its attributes is essential to support underwriting and premium determination for a given property. Whilst “where is it?” and “what is it?” may seem like simple questions, they can be challenging to answer accurately.

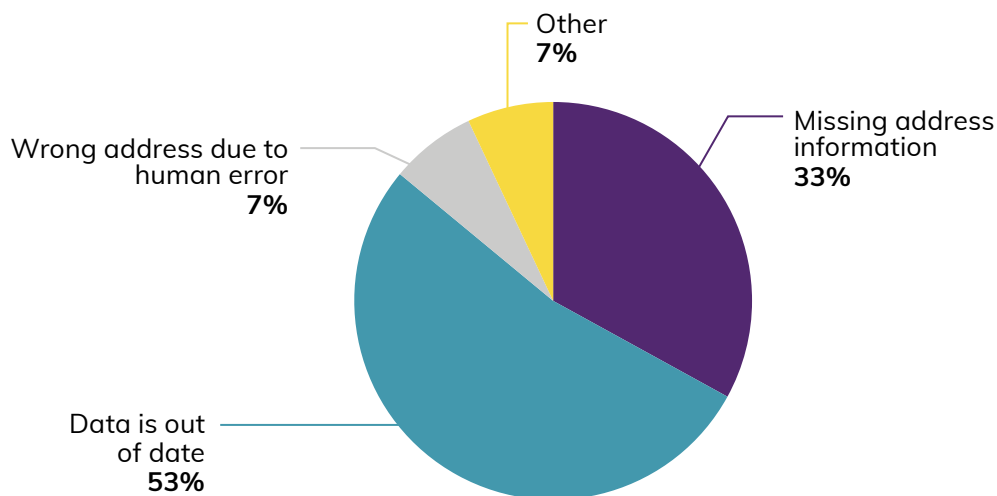
The “where” of property intelligence

Having accurate geographic coordinates of an individual property is important, as some natural hazards can vary significantly over a short distance. The impact of flood and subsidence in the UK, or wildfire, earthquake and flood in the US, can greatly differ over just a few metres. To provide the right insurance at the right price, insurers must have a good understanding of the exact location of their insured assets, otherwise they will be at a disadvantage relative to their competitors.

Insurers receive address information associated with new or renewing policies from the customer, broker or an aggregator. There may be errors where data has had to be manually input, or the data is outdated. The quality can also get downgraded as it moves between third-party systems. A high-quality match on a property or its address is required to be able to search for attribute information or return geocode information.

Respondents to an October 2022 InsTech LinkedIn poll highlighted that missing address information and data being out of date are the two key concerns with regards to the accuracy space information.

InsTech Poll: What concerns you most about the accuracy of determining where a property is?



Source: InsTech

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Geocoding is the process by which building addresses are linked to latitude and longitude information. Despite advancements in geospatial imagery, our conversations with insurers, brokers and data providers reveal that up to 70% of an insurer’s property portfolio can be geocoded inaccurately. This is a particular problem with commercial properties.

Geocoding often relies on postcodes, which were originally developed for delivering mail. This means that for large facilities, campuses or industrial sites, the geocoding may focus on a delivery door on the edge of the property, rather than the centre of the site. This is not sufficient when estimating flood or other hazards for large properties or sites. Companies such as [RMS](#) and [Archipelago](#) are providing geocoding services to help insurers more accurately locate the properties in their portfolios.

There are other challenges when underwriting certain risks for large commercial properties. Whilst the central geocoded point of a building may not be in a flood zone, another area of the site may be. Companies such as [Geosite](#) are providing elevation data and map visualisations of hazard zones to help insurers underwrite large commercial properties. Map visualisations can also be used across a portfolio to help insurers understand their accumulations.

The “what” of property intelligence

Understanding what a property is used for, for example whether it is a home, restaurant or manufacturing plant, what it's made of and its vulnerability to natural or manmade hazards are key questions that insurers need to answer to underwrite and price accurately.

The average homeowner often has insufficient knowledge, or makes the wrong assumption about their property when completing a policy form. This can lead to incorrect information being entered at the beginning of the insurance process.

Companies such as [Addresscloud](#), [WhenFresh](#), [Arturo](#) and [CoreLogic](#) offer pre-fill services to insurers. When a potential customer enters their address, information such as roof type, house age and number of floors can be retrieved instantly from third-party sources via APIs. As well as reducing the amount of incorrect inputted information, these services can help to improve the customer experience by reducing the number of questions at the point of quote.

It is also important to understand any changes that occur to a property during the lifecycle of a policy. For example, roof degradation may increase the property's vulnerability, and therefore loss potential. Changes also occur with additions to the house, such as a new extension, which increase the property's rebuild cost. Companies such as [Arturo](#) and CAPE Analytics can detect these relevant property changes over time, allowing insurers to reprice at the point of renewal if needed.

New and more accurate data sources are supporting improved location and property information

Improvements in the resolution and accessibility of imagery are allowing vendors to offer insurers higher quality property and location data at a cost that is more accessible.

New data sources, along with techniques that allow multiple data sources to be combined for a single output, are improving the accuracy of property and location data. New data points are being offered by providers. Interest is growing fast for ESG-related information on properties, for example greenhouse gas emission data.

Whilst the amount of accurate data being offered is increasing, incorporating this data into workflows can still remain a challenge for insurers. Ecosystems and data consolidators that allow clients to access multiple data sets in one place, or include this data into existing processes via API, are gaining in popularity.

Aerial and ground imagery - what's changed?

Aerial and ground imagery have been increasingly used by insurers over the last 10 years to locate properties and identify relevant attributes through applying artificial intelligence (AI). Aerial imagery is collected from satellites, aircraft, stratospheric balloons or drones. Ground imagery is acquired from a range of sources including mobile devices, online photographs and crowd-sourced data.

Aerial imagery uses

Aerial imagery supports various insurance use cases. Machine learning can be used to identify property characteristics relevant to pricing and risk selection. Imagery also benefits from being an objective source of truth - if needed, an underwriter can look at the image for human-in-the-loop confirmation.

Different types of aerial imagery have different resolutions and uses. Drones tend to provide the highest image resolution, followed by aircraft and then satellites due to size and distance from the ground. Although the spatial resolution of satellite imagery is lower, it can be more practical for areas that are difficult to access. Different techniques and angles for capturing aerial imagery also have different uses.

Different imagery types and their uses

Ortho imagery



An orthophoto is a top-down aerial image adjusted for displacements caused by terrain relief. Unlike an uncorrected aerial image, an orthophoto can be used to measure true distances. This means square footage and roof sizes can be calculated.

Oblique imagery



Oblique imagery is aerial photography that is captured at an angle of 40 to 45 degrees. Compared to orthophotos, oblique imagery allows users to observe ground features from multiple angles. It has uses such as assessing the number of floors a building has.

Source: InsTech

© InsTech 2022

There is now a wide selection of aerial imagery providers to choose from. Providers such as [Nearmap](#) fly fixed-wing aircraft to obtain their own imagery, whilst other companies like [ZestyAI](#) apply analysis to a range of third-party sources.

When it comes to obtaining property data (of which aerial imagery is a large source) brokers often play a role as advisors and intermediaries. Brokers may use property intelligence data when advising their clients and negotiating and placing insurance. The policyholder, from homeowner, small business owner and up to a large corporate risk manager, also benefit from increased information about their property. To provide unique value to their clients, some brokers are buying aerial imagery and applying their own analysis on top to understand relevant property characteristics. Insurers are less likely to build analysis tools in-house, so often choose a provider that offers property attributes.

The increasing use of mobile device imagery

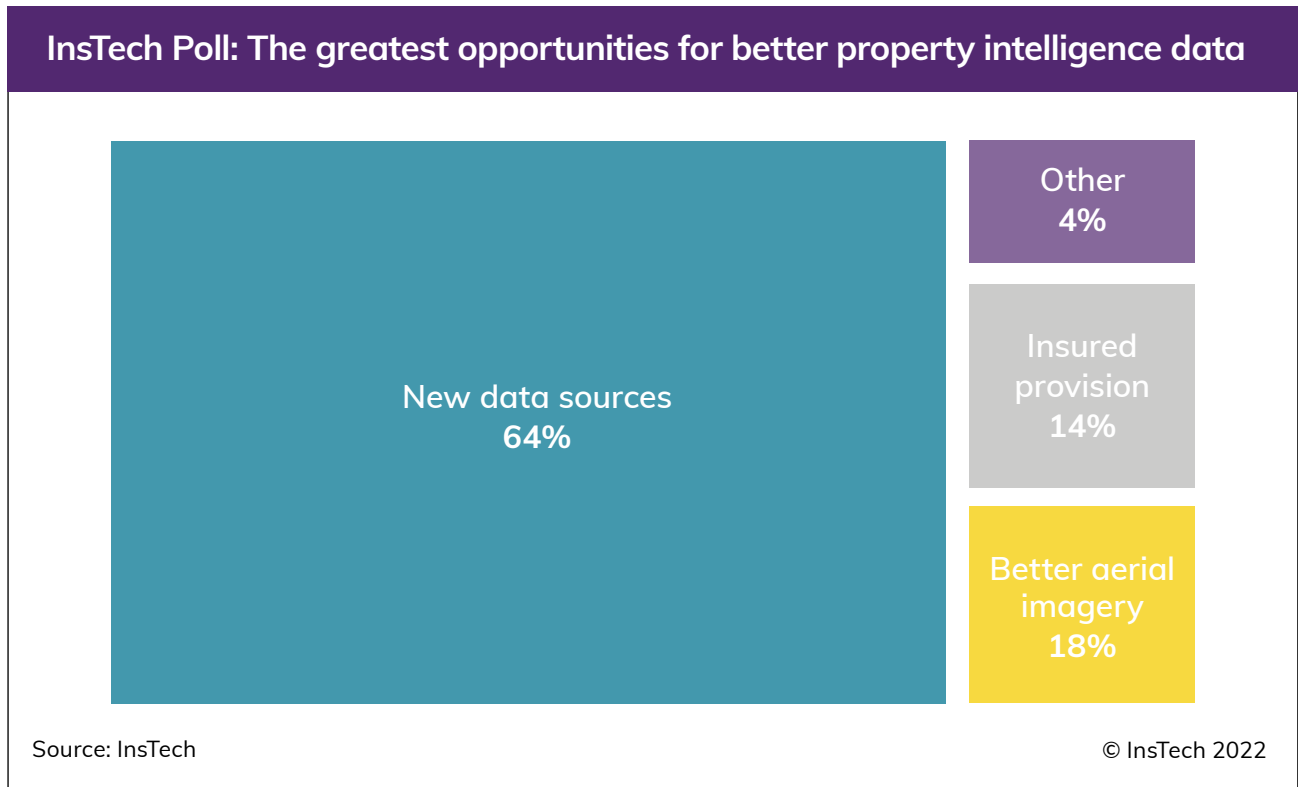
Insurers increasingly rely on third-party data sets, broker knowledge and policy applications to understand the characteristics of the properties that they insure. For a small subset of policies, insurers may request in-person inspections. These tend to be for exterior attributes.

Interior inspections are often reserved for policies perceived to be high-risk or high-value properties. In general, obtaining information on the internal attributes of a property can be a challenge.

To tackle this, insurers are increasingly exploring the use of mobile device imagery. Insurers can ask policyholders to share digital information with them, which can range from simple static photographs to dynamic AI-enabled video calls. Machine learning can be used to automatically identify property attributes.

New data sources for property attributes

Companies are releasing new data sets to cover specific property information gaps. These can be entirely new data sets, sometimes from places traditionally outside of insurance, or from fusing existing data sources. Our final property intelligence poll of 2022 highlighted how much the InsTech community values new data sources, with 64% highlighting them as the greatest opportunity for better property intelligence data. Whilst these new data sources are filling specific property information gaps, there are some areas where data remains sparse, particularly for commercial properties.



Data from outside of insurance

New sources of data can range from portals listing properties for sale to aerial imagery originally used by the military sector. Additionally, property data providers that started their business focused on other areas are also moving into insurance. Companies like RE5Q are using their experience in real estate to tackle some of the hardest problems when finding verifiable and timely information for property underwriting. This can involve looking at a range of data sources to come up with a single property attribute.

Real estate to insurance: companies now servicing insurers

EESTATED RE5Q rock.estate SPOTR

Source: InsTech © InsTech 2022

Data fusion

Insurers can spend a lot of time figuring out which property data sources are best to use and when. For example, aerial imagery can be a good source for determining the roof condition but may be less useful for determining other characteristics such as wall material or foundation type. Analysing multiple sources can create more accurate results than any single source of information.

Different data sources may have conflicting information about a given property - for example, one may say a building has seven stories whilst another may state that it has eight. Data fusion is the process of integrating multiple data sources to produce a single output. Property data providers can therefore analyse the same property attribute across various data sources to create a more accurate single data point. However in some cases, insurers want to know about the different sets of conflicting information to make their own choice.

Confidence scoring

Although better quality data is being made available for property attributes, minor variations at an individual property level can make a significant difference, especially when it comes to calculating property rebuild costs. Insurance pricing for individual properties should incorporate an allowance for the uncertainty in the accuracy of the information.

Rebuild values

A rebuild value is an estimate of the amount it would cost to completely or partially rebuild a property, which can occur in the wake of a catastrophe event, water leakage or a house fire. Understanding the rebuild cost of an insured property is critical for making accurate underwriting decisions and ensuring policyholders are paid in full for any losses incurred. If the building is underinsured due to an incorrect rebuild value, customers will be left with a pay-out shortfall.

Insurers can determine the rebuild cost in-house by building their own internal estimation tools. Alternatively, they can obtain a rebuild cost from data and estimator tools offered by companies such as [e2value](#) and [Verisk](#).

Confidence scores are beneficial for certain decision paths where insurers would prefer to err on the side of caution. Insurers may decide to perform physical inspections for buildings with a low level of confidence in the information, where major data sources disagree on the true state of a home's interior.

Confidence scores can be represented in a range of ways, from a percentage score to an A-D rating. Depending on the sophistication of the score, it can be incorporated into actuarial models.

Choosing your data provider

When considering a new property data provider, there are a range of factors to consider. It is important to understand whether the data being offered will fit your needs and whether it will integrate into your existing workflow. The recency of the data being offered and whether this is transparently communicated should also be considered. For example, companies such as [Tensorflight](#) are providing metadata stamps, which allow insurers to understand the exact date and time an image was captured.

Points to consider when choosing your property information provider



Data offering and transparency

- Does your provider explore new data sources and technologies to augment accuracy and address gaps?
- Is there clarity on the data sources and can they be validated?
- How is the data being cleansed and is there visibility on this process?



Confidence scoring

- Is a confidence score provided for each property characteristic?
- Is there transparency into how the confidence score is calculated?
- Is the type of confidence score provided suitable for how it will be used by the insurer? Is it a relative rating or a score that could be used in actuarial models?



Workflow integration

- Does the company understand your workflows and operational objectives?
- How does the company's offerings fit into your legacy systems?
- Does the data complement other datasets and systems that are already used?
- What is the data provider's policy for updating information?
- Are APIs used or does the offering sit on a different platform?



Speed and data freshness

- Is the data provided in near real-time or does it take hours to retrieve?
- Can changes to a property construction or other factors that have occurred over multiple years be detected?
- Is the date at which the information was acquired and analysed clearly communicated? Is the date of the source, such as the date of an aerial image, available?

Source: InsTech

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ESG data for properties

It is becoming increasingly important for insurers to understand the environmental impact of their property portfolios, both for underwriting and investments. Stakeholder interests and the increase in mandatory ESG reporting is driving this, along with insurers' individual ESG goals.

According to the UN's [2021 Global Status Report for Buildings and Construction](#), a 45% decrease in building energy demand is needed by 2030 to reach net zero emissions by 2050. With multiple insurers now having made commitments to reach net zero, understanding the emissions related to portfolio properties and how to reduce them will become even more important.

Companies are now looking to provide insurers with this type of information. To calculate the emissions associated with property portfolios, [Gamma Location Intelligence](#) uses Energy Performance Certificate (EPC) data to tag property data with key performance values. If this data is not available, then a prediction of the EPC grading rating and associated greenhouse gas emissions can be derived from the property characteristics through artificial intelligence models.

Other companies like [RE5Q](#) are providing a range of ESG-related information on properties, such as the presence of air conditioning units, noise pollution and diversity of the board that runs a given building.



LightBox: Providing real estate and location intelligence data for the US

The Problem

A leading provider of technology and AI-based insights to the US property and casualty (P&C) industry required the ability to ingest large lists of sites from its insurance clients, confirm the addresses for processing in their systems at scale, enrich their model with specific property characteristics and then provide an output to their end client near-instantly. Before the partnership with LightBox, to satisfy their client with 100% coverage, the technology company would use human capital to confirm site locations and correct ambiguous site addresses. This process was slow, expensive and error-prone.

The Solution

The vendor implemented LightBox APIs, allowing them to utilise LightBox's extensive geospatial expertise and data assets.

- LightBox provided the tools enabling the consumption of a file of addresses to validate, score and provide exception reporting as needed. LightBox APIs then returned geo-coordinates for the vertices of the parcel and building structure boundaries. Finally, the client used LightBox's unique ID system to identify and confirm all property-related structures.
- The parcel boundaries and building footprint coordinates defined the area for feature extraction of critical elements, including roof material, roof area measurements, tree coverage, pools and trampolines.
- LightBox SmartFabric™, containing more than 200 property characteristics such as construction materials, frame type, square footage, year built and elevation, further enhanced the client's modelling.
- Finally, LightBox's geospatial capabilities allowed for the overlay and consideration of additional spatial data sets. These ranged from neighbourhood characteristics of traffic and crime statistics and demographics to environmental and climate-related hazards. The LightBox "match and append" data service facilitates text, and spatial data joins.

The Result

By utilising core LightBox assets, the technology provider enhanced its models, expanded coverage of its client's portfolio and improved turnaround times. LightBox Data Platform, APIs and SmartFabric™ allow LightBox customers to focus on their value-add and scale their businesses as required.

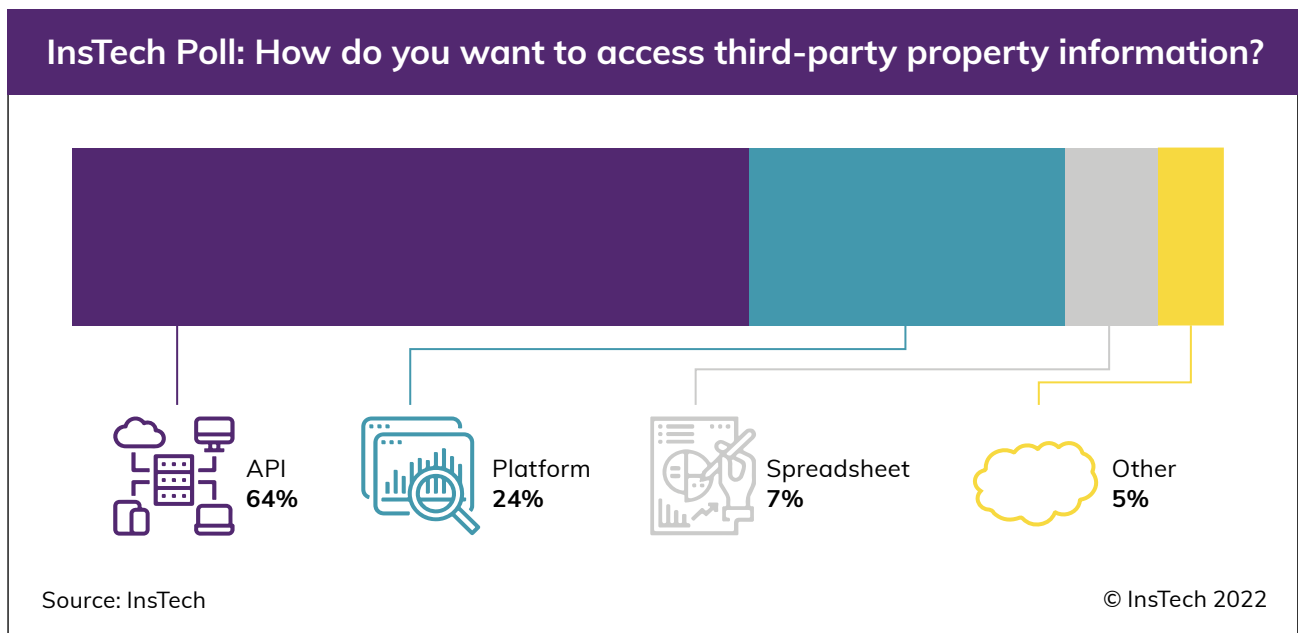
The rise of ecosystems and data consolidators

In most insurance companies, the underwriters or actuaries define the problems they need solving or questions they need answers to. Whilst innovation teams within insurers can source ideas and invest in pilots, underwriters often have the greatest influence on which data or technology the company should buy.

Underwriters rarely have the time to create in-house tools and source property data themselves. Data and tools from third-party providers need to be easy to integrate, available at the right point and provide demonstrable benefits from the beginning.

There is also more data than ever now available to insurers. The rise of third-party distributors and consolidators, such as [Addresscloud](#) and [WhenFresh](#), allows underwriters to access multiple data sets in one place. By using these, insurers are beginning to build internal ecosystems to meet their unique property policy needs and workflows. Alternatively, companies such as [Guidewire](#) and [Duck Creek Technologies](#) offer their own administration ecosystems.

Having a direct API pull is an additional selling point for most data providers and consolidators. We polled our insurance network on LinkedIn towards the end of 2022 to ask how they prefer to access third-party property information. Nearly 65% preferred to receive property data via API, followed by almost 25% preferring access via a separate platform. Almost all data ecosystems and consolidators provide API access.



Property Intelligence - the InsTech members

- Addresscloud
- Allphins
- Archipelago
- Arturo
- Cape Analytics
- CoreLogic
- e2Value
- FRISS
- Gamma LI
- Geosite
- Guidewire
- Intelligent AI
- LightBox
- Nearmap
- RE5Q
- RMS
- S&P
- Tensorflight
- Verisk
- Wenalyze
- WhenFresh
- ZestyAI

The information in the InsTech member profiles has been sourced from our regular engagement with our members and specific discussions related to this report. The following data has been sourced from PitchBook and checked with the relevant company profiled: total funds raised.

In addition to the companies profiled here, InsTech researches over 1,000 companies providing data and technology solutions to global insurers in selected areas. We provide our expanded research to our insurance clients as part of an annual subscription and welcome any enquiries about our offering. In addition, we are always pleased to consider additional data and technology companies as members of InsTech for inclusion in future reports such as this. Please get in touch with hello@instech.co for more information. Full details of what we offer can be found at www.instech.co.

Founded: 2015 **Head office:** Cambridge, UK **Data coverage:** UK, Ireland **Funding:** Unknown

rebuild values geocoding residential and commercial property characteristics pre-fill occupancy type

InsTech Overview

Addresscloud provides location intelligence software services to locate and describe addresses with rooftop-level accuracy. The company also offers curated property attributes for both residential and commercial properties and hazard data provided by its partners.

Property intelligence problem being solved

Alongside its address matching service, Match API, Addresscloud delivers an Intelligence API. This provides information on properties such as age, type, footprint area and rebuild cost. The Intelligence API also provides information on a range of perils such as flood, subsidence and crime, all sourced from commercial providers and government sources, with additional curated insight from Addresscloud such as building and site-level flood assessment.

Insurers such as RSA have used Addresscloud’s API to provide address lookup and validation services for their customers. Aggregators including Comparethemarket use the company’s API for pre-filling property characteristics such as type of house, age and number of rooms to speed up quotation times. Flood Re, the service that determines whether a property can be ceded to the government’s reinsurance programme, also uses Addresscloud’s platform. Commercial insurers and MGAs use the Addresscloud API and visualisation platform to understand geographic risk and exposure at the point of underwriting to make better decisions and avoid costly accumulation issues.

| Clients | Partners |
|--|---|
| C-Quence, Comparethemarket, Eaton Gate, Flood Re, RSA | Acturis, AnchorPoint, Ambiental, Bluesky International, British Geological Survey, Cranfield University, Eircode, Hometrack, JBA, Metswift, NHBC, Ordnance Survey, Royal Mail, Terrafirma |
| InsTech content | |
| <p>Podcast: Near real time hazard data – around us and above us</p> <p>Spotlight: Addresscloud</p> <p>Podcast: Mark Varley: Founder and CEO, Addresscloud: Hitting the spot - getting location accuracy right</p> <p>Report: Location Intelligence 2021 - the Companies to Watch</p> | |

Founded: 2018 **Head office:** Paris, France **Data coverage:** Global **Funding:** Unknown

[commercial property characteristics](#) [occupancy type](#)

InsTech Overview

Allphins provides portfolio exposure data analytics and technology solutions for insurers and reinsurers in specialty lines of business. Initially focused on offshore energy, Allphins has now expanded into other classes of risk including political violence, terrorism and cyber. Allphins is working with 15 clients including TransRe, MS Amlin, Chaucer and Ariel Re among others.

Property intelligence problem being solved

Reinsurers receive large amounts of data about cedents' portfolios in specific formats, with millions of addresses of varied quality. This makes it difficult to manage and quantify their exposure.

Allphins enables reinsurers to upload and digest data from multiple sources, then clean, enrich and standardise addresses, so they can perform exposure analysis at scale and in time for underwriting.

Using Allphins, reinsurers can calculate their exposure to any scenario for both a cedent and a portfolio of cedents. They can also filter on any combination of aggregation keys such as peril, admin zone or event shape, find their worst exposure zones globally and quantify the impact of a market loss.

Reinsurers can use this information pre-underwriting to assess a cedents' exposure to different risk scenarios and understand the marginal impact of a new program to their existing portfolio.

| Clients | Partners |
|---|----------------|
| TransRe, MS Amlin, Arch Re, Blenheim, Greenlight Re, Conduit Re, Chaucer, Lancashire, Ariel Re and IRB Brasil Re among others. | None yet named |
| InsTech content | |
| Spotlight: Allphins: understanding terrorism exposure Podcast: Property Intelligence - new solutions for an old problem Report: Location Intelligence 2021 - the Companies to Watch | |

Founded: 2018 **Head office:** San Francisco, US **Data coverage:** US, Europe, Asia **Funding:** \$72.35M

[geocoding](#) [commercial property characteristics](#)

InsTech Overview

Archipelago is an AI-driven platform that connects and transforms property exposure, loss and risk mitigation data for enterprise commercial property owners and occupiers.

Property intelligence problem being solved

Archipelago helps clients obtain comprehensive and accurate data about their commercial property portfolio. This includes information about building location, construction, occupancy, replacement costs and more.

Insurers need this data to be complete and reliable because it is being used to make financial and risk-focused decisions across different areas of their business. This includes climate impact, catastrophe risk, traditional insurance placement, captive management and alternative risk hedging.

High-quality property data on Archipelago enables companies to have a better understanding of their property and financial risk.

| Clients | Partners |
|---|----------------|
| JLL, Brookfield, LVMH, Prologis | None yet named |
| InsTech content | |
| Podcast: Hemant Shah: Co-founder and CEO, Archipelago: Curing the property pain chain Podcast: Property Intelligence - new solutions for an old problem Report: Location Intelligence 2021 - the Companies to Watch | |

Founded: 2018 **Head office:** Denver, US **Data coverage:** US, Canada, Australia **Funding:** \$33.02M

[geocoding](#) [residential property characteristics](#) [pre-fill](#)

InsTech Overview

Arturo derives property attributes and predictive analytics to support insurers across the policy lifecycle, including underwriting, portfolio risk and claims assessment. By combining multispectral imagery, geographic data and customer portfolio insights with machine learning models, Arturo creates a single platform to deliver property intelligence.

Property intelligence problem being solved

Property intelligence can be provided to insurers for a whole property portfolio or at an individual property level. Over 100 property characteristics are available including roof damage, roof condition detections, exterior property structures, solar panels and more. All of this data can be retrieved in under 300 milliseconds.

These property attributes are collected pre-loss, at the point of underwriting, to help determine existing issues with the property for more accurate quoting. They can also be used in support of portfolio monitoring, enabling insurance carriers to keep tabs on upcoming renewals and riskier policies to reduce underinsurance. Arturo can also analyse property conditions after a catastrophic weather event, assisting in claims triage and event response. Insurance carriers can compare pre-existing conditions to the post-event claim to assist with remote claims assessment.

| Clients | Partners |
|--|---|
| American Family, IAG, LexisNexis Risk Solutions, Openly, Suncorp, Vave, USAA | Aerometrex, ICEYE, Hexagon, Lightbox, Labelbox, Maxar Technologies, Nearmap, Nearspace Labs, Nvidia, UrbanSky, Vexcel Imaging |
| InsTech content | |
| Podcast: John-Isaac Clark: CEO, Arturo: Property insights from above Report: Property Remote Claims Assessment - the 40 Companies to Watch Report: Location Intelligence 2021 - the Companies to Watch | |

Founded: 2014 **Head office:** Mountain View, US **Data coverage:** US **Funding:** Unknown

rebuild values geocoding residential and commercial property characteristics

InsTech Overview

CAPE Analytics uses artificial intelligence (AI) and geospatial imagery to provide property intelligence for insurers and investors to assess a property’s risk and condition. The data provided by CAPE Analytics can be used by insurers to understand the vulnerability of specific structures across the built environment throughout the US. The company also uses machine learning to understand and identify changes in properties over time, with sophisticated ‘triggers’ and rules for determining when a change to a property affects its risk exposure. This data is filed and approved for rating by most US state departments of insurance.

Property intelligence problem being solved

CAPE Analytics provides information about building and parcel characteristics, vegetation coverage and dozens of other attributes. The company has developed the automated assessment of roof condition, which replaces and augments the use of roof age information with an attribute that more accurately predicts loss. It also offers a solution for commercial property insurance, with accurate property and building identification, roof and lot condition and other attributes available instantly via web application, batch file or API. The company emphasises the importance of understanding the uncertainty associated with its data and enables insurers to access confidence scores for property identification and AI-generated labels.

The company has recently expanded its property attribute offering. The expanded data sets will include a number of the core property characteristics that influence total premium, focusing on replacement costs. CAPE Analytics does not currently provide internal property characteristics, but it plans to do so in the future.

| Clients | Partners |
|--|---|
| Amica, AXA XL, CSAA, Florida Peninsula, The Hartford, Hippo, Kin, Mercury, Nephila Capital, Security First, State Auto | Duck Creek, Guidewire, Nearmap, Weiss Analytics |
| InsTech content | |
| Report: Property Intelligence: the future of accurately assessing rebuild value Report: Location Intelligence 2021 - the Companies to Watch | |

Founded: 2010 **Head office:** Irvine, US **Data coverage:** US, Western Europe, Asia **Funding:** Unknown

[rebuild values](#) [geocoding](#) [residential and commercial property characteristics](#) [pre-fill](#)

InsTech Overview

CoreLogic provides solutions for the entire property insurance process. This includes data and services at the point of underwriting, 180 global probabilistic models for pricing and portfolio optimisation, weather forensics and claims automation for both indemnity and parametric policies. These solutions are underpinned by structure-level geocoding and a catalogue of physical and financial property characteristics.

The company offers its products and services on a range of technology platforms and has also been expanding integrations with third-party providers. It has a growing Digital Hub Alliance programme for its UnderwritingCenter product.

Property intelligence problem being solved

Understanding where a property is located is key to identifying the risks to which it is exposed. CoreLogic's PxPoint™ geocoder identifies properties to the structure footprint level.

CoreLogic can provide data pre-fill for more than 50 structural property attributes and a range of peril risk scores. The solution covers over 100 million US residential properties and 16 million businesses. The company also provides residential and commercial reconstruction cost values.

| Clients | Partners |
|--|--|
| CoreLogic has more than 500 insurance carriers and the main reinsurance brokers using its products. | Bees360, EagleView, Edjuster, Duck Creek, Flyreel, GIC, Guidewire, Homee, Hover, Local Logic, Nasdaq, Nearmap, SeekNow, SightCall, Xceedance |
| InsTech content | |
| <p>Report: Property Remote Claims Assessment - the 40 Companies to Watch</p> <p>Podcast: Mia Vioulès, AXA Climate & Robert Schablik, CoreLogic: Hailstorm parametric insurance - an innovation success story</p> <p>Report: Parametric Insurance in 2022: the 150+ companies to watch</p> <p>Report: Climate Change Risk Regulation and Measurement: 22 companies to know</p> <p>Report: Location Intelligence 2021 - the Companies to Watch</p> | |

Founded: 2000 **Head office:** Stamford, US **Data coverage:** US, Canada **Funding:** Self-funded

rebuild values geocoding residential and commercial property characteristics

InsTech Overview

e2Value is one of the largest providers of Insurance to Value (ITV) information in the US and Canada. Co-founders Todd Rissel (CEO) and George Moore (CTO) previously worked at Chubb, valuing homes and buildings for Chubb to insure in North America and the Caribbean.

Property intelligence problem being solved

Insurance to Value (ITV) information is required by insurers to quote an insurance policy in the US. e2Value has developed an appraisal methodology over 20 years, which has been shown to be up to 98% accurate in predicting claims costs. Third party data sources such as tax, real estate and mortgage databases are combined with proprietary data and models, utilising local conditions and rebuild costs. Pronto, its core product, requires only an address to profile a structure based on a deep-data dive for size, shape, materials used and location. The e2Value valuation data can then define an insurable value.

Valuations are available for residential, commercial and farm properties and can be performed in less than 2 minutes. Structure Insurance Score (SIS), a product released and developed in conjunction with WTW, simplifies and standardises the identification of properties to accurately distinguish between properties that look similar but have very different risk profiles.

e2Value offers its newest application, Inspect Connect, to enable underwriters to liaise directly with property owners, brokers, and third-party field personnel who can use their mobile device to assist with data gathering and determination of replacement costs.

| Clients | Partners |
|---|---|
| e2Value works with over 800 insurers, lead generators, banks, agents, loss adjustors and inspection companies in the US and Canada. | Applied Systems, Betterview, Bolt, Bullseye Imagery and Inspections, Guidewire (Hazard Hub), MapRisk, WTW, TransUnion |
| InsTech content | |
| Podcast: Property Intelligence - new solutions for an old problem Report: Property Remote Claims Assessment - the 40 Companies to Watch Podcast: Todd Rissel: Chairman & CEO, e2Value: Product launch 2.0 - smart tech, simple solutions Report: Location Intelligence 2021 - the Companies to Watch | |

Founded: 2006 Head office: Utrecht, Netherlands Data coverage: US Funding: \$88.71M

[commercial property characteristics](#) [occupancy type](#)

InsTech Overview

FRISS focuses on automated fraud and risk detection for P&C insurance companies worldwide. Its 'FRISS Score' concept combines text mining, machine learning, anomaly detection, predictive models and network analysis to indicate risks for policies or claims. In 2021 FRISS acquired Terrene Labs, which aggregates third-party data sources to provide underwriters with more information about businesses seeking quotes.

Property intelligence problem being solved

Through FRISS, Terrene Labs provides risk exposure information on small and mid-sized businesses to enable faster and more accurate underwriting by commercial P&C insurers. Key business attributes are analysed using AI-based models which provide a risk score.

The software that the company provides allows insurers to understand what operations are occurring at a given property. It also can identify if multiple operations are taking place. This can be done on an individual basis or for a whole portfolio. FRISS can produce information to give insurers a detailed report about which commercial clients are risky and which are not.

Insurers can access Terrene's risk profile enrichment and insights directly within the FRISS platform, which offers integrations with Guidewire, Duck Creek, Sapsheet and other systems.

| Clients | Partners |
|---|--------------------------------|
| Aegon, Folksam, IAG, Seguros El Aguila | Duck Creek, Guidewire, Sapiens |
| InsTech content | |
| Podcast: Piyush Singh: Founder, Terrene Labs - a FRISS Company: Calling all underwriters - focus on the core, not the chore | |

Founded: 1993 **Head office:** Dublin, Ireland **Data coverage:** Ireland, UK **Funding:** Unknown

rebuild values geocoding residential and commercial property characteristics pre-fill occupancy type

InsTech Overview

Gamma Location Intelligence (Gamma LI) provides software and data services to help insurers better understand location risks. The company’s web services and applications include roof top-level geocoding, map visualisation, RAG scoring, accumulation reporting and spatial hazard modelling.

Property intelligence problem being solved

The company’s main product offering is Perilfinder™. It is a web platform that allows underwriters to visualise and assess property-level and accumulated risks. Perilfinder™ can show the various risks individual properties may face, such as subsidence or flood, as well as some of the attributes of that given property, such as building footprint and age. This information is based on both actual and modelled data.

Property-level attributes can be directly embedded into customers’ business processes through a series of APIs via the company’s Addresslink product. As well as this, Gamma LI can offer this data via a web service for pre-fill at the point of quote. Gamma LI also offers data enrichment and consulting services to identify historic and existing buildings with attribute and risk information.

To calculate the emissions associated with a given property, Gamma LI uses EPC (Energy Performance Certificate) data. If this data is not available, then a prediction of the EPC grading rating and associated greenhouse gas emissions is derived from the property characteristics. In addition, Gamma Location Labs’ BERWOW product allows users to assess the costs and benefits of retrofit measures on their fuel bills and affordability, considering grants, energy savings and green loans. This is available in the Irish market now and will be available in the UK in 2023.

| Clients | Partners |
|---|---|
| Allianz, Aviva, AXA, FBD Insurance, Liberty Mutual, MGA Mutual, Zurich | Ambiental Risk Analytics, BlueSky, British Geological Survey, JBA Risk Management, Metswift, Ordnance Survey, Precisely, SustGlobal, Terraforma |
| InsTech content | |
| Podcast: Richard Garry & Feargal O’Neill: Gamma Location Intelligence: Tracking climate risk - slow, slow then fast Report: Location Intelligence 2021 - the Companies to Watch Podcast: Richard Garry: CCO, Gamma Location Intelligence: Build vs buy - getting the best location intelligence information | |

Founded: 2018 Head office: Palo Alto, US Data coverage: US Funding: \$12M

geocoding residential and commercial property characteristics pre-fill

InsTech Overview

Geosite has created a geospatial platform that enables users to access and leverage spatially relevant data to support day-to-day insurance processing workflows. The data can be used in underwriting, claims, pre-and post-disaster analysis and new product development.

Property intelligence problem being solved

Geosite provides access to many sources of third-party geospatial data. This includes information from satellites, SAR (synthetic aperture radar) data, third-party drones, stratospheric balloons and IoT sensors as well as analytics from geospatial AI companies and climate modelling partners. The Geosite platform aggregates, selects, normalises, and translates the most appropriate geospatial data for different purposes across a range of insurance needs, including property underwriting and claims. Non-technical users are able to gain insights with little to no training. Geosite integrates the data into policy administration systems and workbenches.

Geosite offers geocoding services along with a range of attribute data on both commercial and residential properties. This includes property type, building footprint, property value and parcel data. Geosite offers global coverage for some data sources, but others are more location-specific.

| Clients | Partners |
|---|--|
| Change to "MS&AD, QBE, US Air Force (Search and Rescue) | Fathom, GIC, Previsico, TensorFlight, Reask Earth, Planet, Iceye, Tre Altamira, URSA, 80-20, Near Space Labs, Xplore, Habidatum, Urbansky, Urbanstat, Skywatch, REOR20, Ceres Imaging, Capella Space, Hummingbird Technologies |
| InsTech content | |
| Report: Property Remote Claims Assessment - the 40 Companies to Watch | |

Founded: 2001 Head office: San Mateo, US Data coverage: US Funding: Unknown

residential and commercial property characteristics pre-fill occupancy type

InsTech Overview

Guidewire provides technology solutions to the property, casualty and workers' compensation insurance industry. Its solutions are used to perform various insurance operations including billing, underwriting, policy and claims management. The company acquired property risk data provider HazardHub in 2021.

Property intelligence problem being solved

HazardHub has identified data that is missing or incomplete to help insurers at the point of underwriting for commercial and residential lines. The company sources data from third-party suppliers, but it is also creating its own data sets from the ground up through its own research.

HazardHub collects data for properties from 96% of US counties, providing 60 key attributes. These include property use code, year built, square footage and estimated value range, based on what other similar properties have sold for in their local market. All of these property attributes can be accessed via HazardHub's API. The data can be used to pre-fill insurance applications or it can be incorporated directly into the Guidewire PolicyCenter, or any different policy administration system, to assist with underwriting.

| Clients | Partners |
|--|--|
| Mercury Insurance | Advantage GO, Betterview, CAPE Analytics, e2Value, Insurity Spatial Key, IntellectSEEC |
| InsTech content | |
| Podcast: Property Intelligence - new solutions for an old problem Report: Property Remote Claims Assessment - the 40 Companies to Watch | |

Founded: 2020

Head office: Exeter, UK

Data coverage: Global

Funding: \$1.9M

[commercial property characteristics](#)

[rebuild values](#)

[geocoding](#)

[pre-fill](#)

[occupancy type](#)

InsTech Overview

Intelligent AI creates 'Digital Twins' of locations by integrating information from commercial property owners, information from over 300 data sets, satellite imagery, data extracted from unstructured documents and IoT feeds attached to a given location to provide a comprehensive view of risk.

Property intelligence problem being solved

Intelligent AI offers a platform to commercial property owners, brokers and insurers. The Intelligent Risk & Underwriting Platform provides near real-time location intelligence supporting commercial property risk understanding, risk management, risk selection and pricing. Additionally, the Intelligent AI platform provides insight for other risk classes such as casualty and ESG.

Intelligent AI brings together over 300 data sets covering a building's construction, occupancy, protections and external environment (COPE) with ESG indicators of the building and its surrounding area. This information comes from open data, government data and its own proprietary sources. This data is combined with extracted data from unstructured reports (such as risk reports), satellite image analysis, IoT data and natural catastrophe models to create a Digital Twin with a risk grading for every location on the commercial property owner's asset schedule, not just those locations where a risk surveyor has visited.

InsTech content

Podcast: [Property Intelligence - new solutions for an old problem](#)

Spotlight: [Intelligent AI](#)

Founded: 2018

Head office: New York, US

Data coverage: North America

Funding: Unknown

geocoding

residential and commercial property characteristics

pre-fill

InsTech Overview

LightBox provides real estate and location intelligence data across the US. The company combines a proprietary database of over 150 million parcels and 100 million building footprints and connects them to more than 200 property and tax assessor characteristics, points of interest and spatial data layers. Clients can access LightBox data via GUI, FTP and API. LightBox also offers geocoding, address normalisation and matching services.

Property intelligence problem being solved

LightBox offers building-centric location intelligence data for spatial analysis, data visualisation and geocoding. Insurers use LightBox data for pre-fill, enrichment and to perform risk assessment. Data can be used to disaggregate large groups of buildings at a facility or campus with a single address into multiple structures with individual addresses.

InsTech content

Member page: [LightBox](#)

Founded: 2014 **Head office:** Barangaroo, Australia **Data coverage:** US, Canada, Australia, New Zealand

residential and commercial property characteristics

InsTech Overview

Nearmap captures high resolution aerial imagery and location data on properties in the US, Canada, Australia and New Zealand, among other countries. Nearmap combines geospatial technology with artificial intelligence to help insurers access current and historic property updates, individual and widescale property attribute information and on the ground views of post-catastrophe events.

Property intelligence problem being solved

Nearmap provides a range of attributes relevant to insurance, including roof material, type of construction, square footage, presence of swimming pools and building footprints. Nearmap updates imagery up to three times a year, as well as after any major weather event, to support insurers with validating claims, detecting property changes, assessing risk and underwriting policies.

The company derives its property insights through applying artificial intelligence to imagery, which is acquired by flying its own fixed-wing aircraft. Clients can instantly access Nearmap imagery and insights via its web application, MapBrowser, or via API.

InsTech content

Member page: [Nearmap](#)

Founded: 2018 Head office: London, UK Data coverage: UK Funding: \$8M

[geocoding](#) [residential and commercial property characteristics](#) [occupancy type](#)

InsTech Overview

RE5Q captures and collates property-related data globally. The company uses artificial intelligence to extract and enrich data from thousands of sources. RE5Q works in collaboration with the real estate, insurance, technology, banking and financial services industries, operating through channel partners as well as directly with customers. The company was established by Christophe Reech, Founder and Chairman of Reech Corporations Group.

Property intelligence problem being solved

Finding comprehensive sources of data for property underwriting continues to be a challenge around the world. RE5Q is tapping into data sources previously unavailable to insurers to create new analytics. The company acquires and aggregates data from a range of sources and is able to process both structured and unstructured data. Through applying artificial intelligence, RE5Q can identify a range of property attributes relevant to the real estate and insurance industry.

As well as providing attributes such as property type, building footprint and EPC rating, RE5Q enables access to various analytical tools related to ESG and location data.

InsTech content

Podcast: [Martin Samworth & Seth Rogers: RE5Q: New sources of property data - beyond insurance](#)



| | | | | |
|----------------------|--------------------------------|---|-------------------------|----------------|
| Founded: 1988 | Head office: Newark, US | Data coverage: Global | Funding: Unknown | |
| rebuild values | geocoding | residential and commercial property characteristics | pre-fill | occupancy type |

InsTech Overview

For more than 30 years, RMS has been one of the companies leading how catastrophe risk has been assessed and managed through providing probabilistic models. RMS solutions enable insurers to make decisions related to extreme weather, climate change and other catastrophes. RMS models, data and software are predominantly used for underwriting, managing portfolio risk, defining capital requirements and determining reinsurance costs. RMS was acquired by Moody’s in 2021.

Property intelligence problem being solved

RMS now makes its proprietary global geocoding service, traditionally used by (re)insurers globally within software applications, available for integration into clients’ own systems via API. This provides consumers with a means to create a consistent assessment of location at various points of the underwriting decision process. For the United States, RMS provides an exposure dataset that provides key primary characteristics (such as occupancy type, construction material, year built, height and floor area), as well as some secondary characteristics and other building attributes for over 110 million residential and commercial properties across 190 countries. This data is also available via API for use in form pre-fill and augmentation of existing characteristics collected as part of the underwriting process. With the company’s recent acquisition by Moody’s, this is an area it expects to expand its capabilities.

| Clients | Partners |
|--|----------------|
| RMS works with the majority of the global (re)insurers, brokers and top reinsurance brokers. | None disclosed |
| InsTech content | |
| Report: Climate Change Risk Regulation and Measurement: 22 companies to know Report: Parametric Insurance in 2022: the 150+ companies to watch Report: Location Intelligence 2021 - the Companies to Watch | |

Founded: 1860 **Head office:** New York, US **Data coverage:** US, Europe, Asia **Funding:** No funding - might be because they're public

[commercial property characteristics](#) [occupancy type](#)

InsTech Overview

S&P Global Market Intelligence, a division of S&P Global, provides credit ratings, benchmarks, analytics, data and ESG solutions. For insurers specifically, the company provides data and resources for underwriting, actuarial, product management, risk management and investment management.

Property intelligence problem being solved

S&P Global Market Intelligence provides property-level asset data through its Real Estate Property offering. The company tracks over 100,000 properties in North America, Europe, Asia and the emerging markets. These are categorised into property types such as multi-family, office, regional, shopping centre, industrial, healthcare and hotel.

Other property attributes that S&P provides include size, exact location, purchase and sale terms, as well as planned acquisitions, constructions, expansions and renovations. Property financials are also available and include occupancy rates, rents per square foot, net book value, appraisal values and encumbrances.

InsTech content

Podcast: [Climate Change Risks and Opportunities Today](#)

Report: [Climate Change Risk Regulation and Measurement: 22 companies to know](#)

Founded: 2016 **Head office:** New York, US **Data coverage:** UK, US, Europe, Australia **Funding:** \$8.68M

rebuild values residential and commercial property characteristics occupancy type

InsTech Overview

Tensorflight automates commercial and residential property inspections for underwriting, risk assessment and claims processing. Multiple image types are being reviewed to create a proprietary buildings database of properties. Tensorflight uses a patented approach to analyse images from multiple perspectives of the whole property. Property attributes provided include building footprint, square footage, number of stories, replacement cost, construction type, roof attributes and many more.

Property intelligence problem being solved

Tensorflight's proprietary AI engine and computer vision technologies help to reduce inaccuracies within property data, significantly decreasing both the cost and time spent on inspections by insurers. The company's technology is designed to return an answer for anywhere in the world, but the accuracy can vary by location. For each property attribute, Tensorflight provides a confidence score and data age.

Insurers can gain access to Tensorflight's capabilities and insights in multiple ways. The company offers a direct API integration into policy administration systems, data systems, agent and broker portals and pricing platforms. Its inspection capabilities, measurements and property attributes can be accessed via a web application. Schedule of values can be uploaded by email or web portal.

Tensorflight is currently working to create more advanced inspection systems for commercial and residential buildings, as well as expanding the range of property attributes that it provides.

| Clients | Partners |
|--|-----------------|
| QBE, Zurich, Strategic Insurance Group | Airbus, Geosite |
| InsTech content | |
| Spotlight: Tensorflight: automating property inspections Report: Property Remote Claims Assessment - the 40 Companies to Watch Report: Location Intelligence 2021 - the Companies to Watch | |

Founded: 1971 **Head office:** Jersey City, US **Data coverage:** US, UK **Funding:** Unknown

rebuild values geocoding residential and commercial property characteristics occupancy type

InsTech Overview

Verisk is a leading source of information about insurance risk. To serve its clients, Verisk draws upon its experience in data management and predictive modelling. The company analyses data and converts information into practical tools that customers can use to make better decisions around risk. Over the years, Verisk has consistently acquired analytics and data businesses to support the full value chain within insurance, including AIR, Sequel and Business Insight, which now form its catastrophe modelling, specialty insurance and general insurance solutions respectively.

Property intelligence problem being solved

Through its product set and acquisition history, Verisk has positioned itself as a comprehensive source of residential and commercial property data, with solutions and tools to help address the main location and risk intelligence needs that an insurance company may have.

Verisk offers an entire suite of products to help its customers understand residential and commercial property risk, including building characteristics, rebuild values, occupancy and property use, ownership status, postcode and address-level perils data, aerial imagery, catastrophe analytics, quote enrichment and premium analysis. The company’s property databases have information on more than 12 million commercial buildings in the US, and residential property in the US and the UK including reinstatement values. For the Lloyd’s and London markets, Verisk also provides end-to-end management solutions to underwriters, brokers and MGAs, including policy administration, policy wordings, rating rules and exposure management.

Partners

Duck Creek, EIS Group, GIC, Guidewire, Lexis Nexis, Loqate, Percayso Inform, Socotra

InsTech content

In conversation with Verisk: [Address-level risk assessment](#)
 Report: [Property Remote Claims Assessment - the 40 Companies to Watch](#)
 Report: [Location Intelligence 2021 - the Companies to Watch](#)

Founded: 2018 **Head office:** Valencia, Spain **Data coverage:** Europe **Funding:** \$2.08M

[commercial property characteristics](#) [occupancy type](#)

InsTech Overview

Wenalyze aggregates third-party data sources to help commercial insurers validate, update and enrich data about their clients. The company specialises in providing data about small and medium-sized enterprises.

Property intelligence problem being solved

Wenalyze provides key business attributes about an insurer’s prospective or existing clients. These include address locations, multiple addresses and industry codes. This allows commercial property insurers to understand the location of the commercial properties it is underwriting and what business operations are occurring at the properties. A correct activity classification allows insurers to avoid premium leakage.

Wenalyze’s data can be used to inform risk selection and underwriting or for portfolio management, to identify changes in company attributes over time, which are common for small and medium sized businesses.

| Clients | Partners |
|---------------------------------------|----------|
| Zurich, HISCOX, +Simple, Bankinter | Cytora |
| InsTech content | |
| Member page: Wenalyze | |

Founded: 2012 Head office: London, UK Data coverage: UK Funding: \$3.4M

rebuild values geocoding residential property characteristics pre-fill occupancy type

InsTech Overview

WhenFresh provides UK insurers, mortgage lenders, local authorities, utilities, the Bank of England and other big data users with residential property data and related decisioning solutions. The company brings together WhenFresh's proprietary datasets with over 200 private and public data sources in one place, accessible via a single, simple API on a pay-as-you-go basis.

Property intelligence problem being solved

WhenFresh has created what it refers to as the UK's 'Residential Property Supermarket' providing insurers, mortgage lenders and other big data users with a single, accessible source for all the property data they need to immediately and remotely make better-informed, less risky decisions. For its data partners, WhenFresh validates, and in some cases enhances, data from a wide range of sources and provides a single route to market for providers of property location, hazard, risk and climate data. Using a platform such as WhenFresh is of particular benefit for niche data suppliers. Examples of data not easily accessed elsewhere include proximity to water, trees and other potential risks; roof materials, shape and slope; presence and type of cladding on tall buildings; remote property & rental valuations; rebuild costs and much more.

The company has in-house data science and technical teams. In addition to supplying data items. WhenFresh is able to build what it refers to as bespoke data-driven decisioning engines and apps to customer specifications.

| Clients | Partners |
|--|---|
| Seven of the UK's top 20 insurers, Locket, Uinsure | Zoopla, Ambiental Risk, Bluesky International, CLS Data, Cranfield University, Percayso Inform, Spatia, eSurv, Land Registry, OS Mastermaps, CityLets, Royal Mail, DLUHC, Liberty Tech, MIAC, DEFRA |
| InsTech content | |
| Podcast: Property Intelligence - new solutions for an old problem Report: Location Intelligence 2021 - the Companies to Watch | |

Founded: 2015 Head office: San Francisco, US Data coverage: US Funding: \$56M

[geocoding](#) [residential property characteristics](#) [pre-fill](#)

InsTech Overview

ZestyAI uses AI and aerial imagery to identify key building features and model the potential impact of catastrophic and attritional loss events. ZestyAI’s climate models apply machine learning property data and are trained using climate science and actual loss. The output from the models is a risk score for each property, which is offered for wildfire, hail, wind and flood.

Property intelligence problem being solved

ZestyAI’s Z-PROPERTY offering provides insurers with information such as roof condition, roof complexity (including facet count), building area, debris and whether or not there is a swimming pool on a property. This information is available for both residential and commercial properties across the US. Z-PROPERTY data is delivered via API, batch file, or through the Z-VIEW web-based property browser.

The product is also able to detect property changes on a yearly basis, which is used by insurance carriers when looking at policy renewals. ZestyAI’s uses aerial imagery, IoT sensors, satellite imagery, building permits and more for data inputs.

| Clients | Partners |
|--|-----------|
| Amica, Berkshire Hathaway, Cincinnati Insurance Companies, Farmers Insurance, Zurich | Aon, IBHS |
| InsTech content | |
| Podcast: Kumar Dhuvur: Co-founder & Head of Product, Zesty.ai: Making climate risk insurable Report: Property Remote Claims Assessment - the 40 Companies to Watch Report: Location Intelligence 2021 - the Companies to Watch | |

Property Intelligence - non-members

- Aerometrex
- Airbus
- Albedo
- Athenium Analytics
- Betterview
- CDL Software
- Ecopia AI
- Emapsite
- Esri
- Estatic
- Flyreel
- Geospatial Insight
- Geospatial Insurance Consortium (GIC)
- Korem
- LexisNexis Risk Solutions
- Loqate
- Maxar Technologies
- Planck
- Planet Labs
- Precisely
- Rock Estate
- Spotr
- Ticinum Aerospace
- True Flood Risk
- Urban Sky

The information in these profiles has been sourced from the relevant company websites, discussions with our members and wider conversations with the insurance community. The following data has been sourced from PitchBook: total funds raised.

In addition to the companies profiled here, InsTech researches over 1,000 companies providing data and technology solutions to global insurers in selected areas. We provide our expanded research to our insurance clients as part of an annual subscription and welcome any enquiries about our offering. In addition, we are always pleased to consider additional data and technology companies as members of InsTech for inclusion in future reports such as this. Please get in touch with hello@instech.co for more information. Full details of what we offer can be found at www.instech.co.

Aerometrex



Founded: 1980

Head office: Glynde, Australia

Funding: Unknown

Aerometrex provides aerial imagery, 3D modelling and geospatial technology services. The company's imagery is updated up to four times a year. Its online subscription service, MetroMap, provides access to this aerial imagery and geospatial data via web application. Insurers can use it to access current and historic imagery, allowing changes over time to be identified.

Airbus



Founded: 1970

Head office: Leiden, Netherlands

Funding: Unknown

Airbus provides geospatial imagery and data from a range of sources, including its own optical and radar satellite constellation. Through its OneAtlas platform, customers can access the company's current and historical satellite imagery library and digital elevation models. Airbus provides daily-updated imagery for certain cities with imagery resolutions down to 30 cm.

Albedo



Founded: 2020

Head office: Texas, US

Funding: \$60.22M

Albedo is developing low-flying satellites to capture high resolution imagery, both visible and thermal. The company's 10 cm resolution visible imagery will be able to show roof discolouration as well as indicate the presence of pools, trampolines and solar installations.

Athenium Analytics



Founded: 2012

Head office: Dover, US

Funding: \$38.49M

Athenium Analytics provides software and analytics solutions to insurers. The company uses artificial intelligence and geospatial imagery to identify property characteristics such as roof type and material and the presence of pools and trampolines. Clients can also use its tools to manage their portfolio exposure. The company's clients include AXA, Tokio Marine HCC and Berkley.

Betterview



Founded: 2014

Head office: San Francisco, US

Funding: \$19.25M

Betterview began as a drone-based property inspection platform and service. In 2018, Betterview launched its property data administration system and began to use third-party drones to support its data gathering. Betterview uses computer vision and geospatial imagery to deliver data, analysis and insights on commercial and residential properties throughout the US.

CDL Software



Founded: 1977

Head office: Manchester, UK

Funding: Unknown

In partnership with Loqate, CDL provides access to property intelligence data. Loqate supplements consumer-declared information with data on over 50 attributes relating to over 29 million residential properties in the UK, including building volume and business usage. This enables insurers to evaluate risk more effectively and produce better-informed rating decisions. This data can also be used to pre-fill questions associated with home insurance applications, which is incorporated in CDL's Chorus platform.

Ecopia AI



Founded: 2013

Head office: Toronto, Canadá

Funding: : \$0.09M

Ecopia AI uses artificial intelligence to convert high resolution images of the earth into HD Vector Maps. The company has built a geocoding engine which uses machine learning to match each address to the correct building. It offers over 173 million building footprints and over 240 million addresses across the US.

Emapsite



Founded: 2000

Head office: Farnborough, UK

Funding: Unknown

Emapsite has developed a range of address-related services including address matching and geocoding. The company's Addressible data set contains over 30 million addresses, 1.8 million postcodes and 1.4 million business names across England and Wales. Emapsite's clients include Hiscox, Direct Line and Lloyds Bank.

Esri



Founded: 1969

Head office: Redlands, US

Funding: Unknown

Esri provides a geospatial technology system, ArcGIS. The company offers access to historic and real-time data and imagery. Clients can access Esri's street-level address data for 149 countries that covers over 90 percent of the world's population. The company also offers a geographic information system to create, manage, analyse and map indoor data to help clients better understand a facility's operations.

Estated



Founded: 2017

Head office: Boulder, US

Funding: : \$3.02M

Estated offers property intelligence software to the real estate, insurance, home services and lending industries. The company provides data on over 150 million residential and commercial properties across the US. This data includes square footage, roof type, market value and ownership information, all accessed via API. Estated's clients include Swiss Re, State Farm and Kin Insurance.

Flyreel



Founded: 2016

Head office: Denver, US

Funding: \$20.34M

Flyreel's "AI assistant" guides homeowners through automated interior and exterior property inspections using the homeowners' smartphone and Flyreel's computer vision technology. Flyreel's technology is able to automatically identify property details like objects, materials and potential hazards, helping to speed up the underwriting process.

Geospatial Insight



Founded: 2012

Head office: Coleshill, UK

Funding: : \$6.93M

Geospatial Insight applies artificial intelligence to satellite and drone imagery to provide insurers with property-level data and insights. Through the PropertyView product, insurers can access building data such as roof material, number of stories and square footage. This data is available for locations across the world.

Geospatial Insurance Consortium (GIC)



Founded: 2017

Head office: Boulder, US

Funding: Unknown

Geospatial Insurance Consortium is a member organisation collating geospatial imagery. The group partners with Esri and other aerial imagery and mapping organisations. GIC provides insurers with aerial imagery and geospatial data in over 25 countries. Insurers can access this imagery to support remote external property inspections. GIC also provides building footprints and property attribute data including roof type and material.

Korem



Founded: 1993

Head office: Quebec, Canada

Funding: \$2.10M

Korem is a reseller and integrator of geospatial technologies and data. The company provides data integration services, geospatial analysis and visualisation, geocoding and address management solutions. Korem's data and technology partners include Precisely, CoreLogic and LightBox.

LexisNexis Risk Solutions



Founded: 1970

Head office: New York, US

Funding: : Unknown

LexisNexis offers a property data enrichment solution which combines multiple predictive attributes for individual addresses. The company provides 27 characteristics including rebuild cost, square footage, listed-building status and roof type. This property data can be integrated at the point of quote through the LexisNexis Informed Quotes platform, which connects to all major software houses.

Loqate



Founded: 2009

Head office: Worcestershire, UK

Funding: \$0.02M

Loqate provides global address data and management services. The company provides suggestions to auto-complete addresses on forms, with its search algorithm accounting for address input nuances per country. The company also provides an address verification tool for both existing properties and buildings that are in the process of being planned or constructed.

Maxar Technologies



Founded: 1969

Head office: Westminster, US

Funding: : \$277.79M

Maxar Technologies designs, manufactures and operates a constellation of satellites. The company provides high-resolution imagery and insights, which are extracted using artificial intelligence. Maxar's partners include CAPE Analytics and McKenzie Intelligence Services.

Planck



Founded: 2016

Head office: New York, UK

Funding: : \$71M

Planck provides data on commercial properties for more than 50 major business segments, including restaurants, construction and manufacturing. It uses third-party sources and open-source data, including online images, text, videos, reviews and public records.

Planet Labs



Founded: 2010

Head office: San Francisco

Funding: \$586.03M

Founded by three NASA scientists, Planet designs, builds and operates a fleet of over 200 earth imaging satellites. The company uses this to provide a near-daily global imagery stream. The company also offers a historic image archive. Clients can access and integrate the company's imagery and data through web-based tools, APIs or GUIs.

Precisely



Founded: 1968

Head office: Burlington, US

Funding: \$440M

Precisely provides insurers with geocoding, location insights and property data enrichment services. The PreciselyID connects an insurer's policyholder addresses with the company's data enrichment portfolio of over 400 data sets containing more than 9,000 attributes.

Rock Estate



Founded: 2017

Head office: Brussels, Belgium

Funding: Unknown

Rock Estate offers data and geocoding services for residential properties across Belgium. Using satellite imagery and open data, the company provides attributes including building footprint, number of stories and the presence of objects such as swimming pools and solar panels. Rock Estate also provides rebuild value estimates based on a property's address.

Spotr



Founded: 2015

Head office: The Hague, Netherlands

Funding: \$3.04M

Spotr uses aerial, satellite, drone and street-level imagery to inspect commercial buildings. The company can provide information on roof material, building footprint and property condition, as well as detect property changes over time. Spotr also provides rebuild values and highlights which properties within an insurer's portfolio are underinsured.

Ticinum Aerospace



Founded: 2014

Head office: Pavia, Italy

Funding: Unknown

Ticinum Aerospace is a spin-off from the University of Pavia that has commercialised research from the Remote Sensing Group. It provides insurers with property attributes extracted from street-level imagery. The company also offers crop monitoring capabilities, helping to alert clients about possible diseases appearing in fields. Ticinum Aerospace's partners include ICEYE, ERN and GEM (Global Earthquake Model).

True Flood Risk



Founded: 2017

Head office: New York, US

Funding: Unknown

True Flood Risk provides property data for flood risk. Its solution measures the first-floor elevation (FFE) of a specific address for most US addresses (and 250 million globally) and provides an estimated flood insurance premium based on the property elevation and history of floods in the area. Additional attributes that can be provided include the presence of a basement and structure type. The company also offers real-time weather tracking and flood risk simulations for residential and commercial properties.

Urban Sky



Founded: 2019

Head office: Denver, US

Funding: \$5.14M

Urban Sky has created a remote-sensing stratospheric balloon. The high vantage point allows the company to collect thousands of square miles of imagery per flight, which can occur daily. Urban Sky's imagery targets urban areas with wildfire risk, rural areas with utilities and energy infrastructures and areas with little or old existing coverage. Due to miniaturisation and improvements in the balloon's reusability, Urban Sky can deliver aerial imagery more cheaply than satellites, aircraft or drones

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