insurity

2021 HURRICANE GUIDE

How to Move from "React and Respond" to "Prepare and Serve" this Hurricane Season



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Introduction: Shifting from "React and Respond" to "Prepare and Serve"

Hurricane season brings with it much more than the hurricanes themselves: inland flooding, wind, storm surge, hail, and even tornadoes. Beyond the loss exposure, insurers must deal with operational and organizational strain. It's a season when, perhaps more than any other, insurers need to have their proverbial "ducks in a row." This means preparing now for the possibility of the worst.

As evidenced by the 2020 season, hurricane risk is changing. 2020 shattered records, becoming the most active hurricane season in history. The 30 named storms exhausted conventional naming, and for the second time ever, the Greek alphabet had to be instated. While an active season—out of sheer luck—it was not a notable season for insured losses. Had more landfalls impacted areas with higher concentrations of exposure, 2020 would have been a much different story and given many insurers pause to consider the solutions they have in place to proactively mitigate hurricane risk.

Record-breaking 2020 Hurricane Season



"What really blew me away were the explosive intensification events. For instance, Hurricane Eta's wind speeds increased around 80 miles (130 kilometers) per hour in one day. There's rapid intensification, and then there's really rapid intensification, which is what we saw often [in 2020]."

- Jim Kossin, Atmospheric Scientist, National Oceanic and Atmospheric Administration (NOAA)

How effectively you prepare for and respond to hurricanes can either be an asset to your organization or a detriment. By moving from "react and respond" to a more proactive "prepare and serve" approach, you can meet growing customer expectations. To do so, streamlined access to expert data and advanced analytics as events unfold is imperative to managing your operations, costs, and customer satisfaction. Case in point, Texas and Florida have shown declining policyholder satisfaction scores in the aftermath of weather-related events according to a 2018 JD Power claims study.

Customer expectations are growing, and your event response operations must keep pace in order to effectively compete. Use the data and analytics best practices in this document to help your team prepare now. As always, if you're an Insurity customer, be sure to tap into the wealth of insurance expertise and knowledge that our team can provide.

2021 Atlantic Hurricane Season Forecast						
	2021 Predictio	on Last Year	Average Year			
Named Storms	20	30	12.1			
Hurricanes	9	13	6.4			
Major Hurricanes	4	6	2.7			
An average season has 12 named storms, six hurricanes, and three major hurricanes.						

Source: Colorado State University Forecast

Pre-Event: Plan Now for Fewer Downstream Costs Later

Now is the time to make sure you have the capacity to handle what Mother Nature throws your way this season, including using historical data to conduct dry runs (see page 6). It's also important to ensure your data licensing is in place for third-party data providers and modelers. For example, during hurricanes Michael and Florence many of our customers had access to event footprints as they became available from data providers like NOAA, JBA, KatRisk, and Impact Forecasting. These up-to-date footprints coupled with policy exposed limits (PEL), helped insurers understand actual exposure and focus their response efforts.

Take a look at the following best practices. How many boxes can you check?



Pre-event: Best Practices Checklist



Know where to go for your policies in-force:

Which systems house the most up-to-date view of policies in force (PIF), and what is the process for getting your hands on them?

Assess your analytic capabilities:

 What tools do you have at your disposal to understand at-risk properties and what are the caveats of those tools? For example, can you account for actual exposure, not just number of properties or TIV?



Renew or expand third-party data licences now:

- Assess your data licensing and access to inland flood, storm surge, and wind event footprints (see chart on page 7)
- Know how you will use this data to formulate your response and communicate potential exposure to your stakeholders
- Know what partners to have on speed dial and where you can source innovative data and information you haven't anticipated
- Have a pre-approved contingency budget in place for data and analytic needs. Every event is unique and there are pieces of information that you may not anticipate.
 For example, will you need post-hurricane flyover imagery to begin addressing business interruption or additional living expenses (ALE) for policyholders?

Anticipate the questions you'll be under pressure from management to answer, such as:

- What is our loss potential?
- Do we have adequate reserves and reinsurance in place?
- Which major contracts, companies, and/or customers are at risk?
- Do we have a communication strategy to begin outreach to insureds most at risk?

Evaluate considerations beyond the property level, such as:

- Business interruption (BI): For example, the building is fine, but flyover data shows the road to get there is flooded
- Agreements: Does the customer's contract have mitigation requirements?
- Coverage: Are there coverage exclusions that should be considered prior to the event making landfall (e.g. all distribution trucks must be moved to a specific "higher ground" garage)

How to Conduct a Hurricane Dry Run

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Complete a stress test using past scenarios to see where your portfolio's location characteristics will likely to drive losses, and assess the impact it will have on your teams

- Use past hurricane events to understand the holes in your processes as well as your organizational triggers (i.e. Do you know what constitutes an "event" and when to start pulling in other representatives within your organization?)
- Visualize your portfolio performance against your past hurricane claims experience and exposure data, then develop risk mitigation measures

Perform "what-if" analyses to see how a historical hurricane would impact your portfolio today:

- What would have happened if Hurricane Irma had hit Florida's east coast as predicted instead of veering to the west? Consider what would happen if another Harvey hit (with this wind speed or storm surge at landfall, we can expect X losses)?
- What if an event closed down your home office? What's the process for redundancies? Can you still serve your customers, and what are your vulnerabilities for handling the influx of claims, etc.?
- Modify historical and active storm tracks to analyze possible exposures
- Display the storm track and its wind speeds

Analytics and geospatial tools that are critical to maximizing your insights should give you the ability to:

- Filter by wind speed, flood depth, etc
- Assess proximity with distance and radius tools
- View and filter highest value properties and associated building characteristics
- View before and after event satellite imagery to identify potential claims hot spots
- Visualize storm track and windfields
- Calculate potential exposure, net of policy structures
- Compare multiple modeler views of risk side-by-side

Walk through your process for accessing data in your systems and using your available analytics tools:

- Know where to go for your in-force policies
- Know the steps to get external or thirdparty data approved and loaded as it becomes available
- Know how often to expect third-party data updates
- Know how to estimate your actual exposure

Now, go fetch a current view of your PIF, trigger moratoriums, stage adjusters and claims vehicles, quantify potential losses to management, and send mock notifications and updates to policyholders, insureds, and customers.

Hurricane Data Available to Insurity Customers

During the 2020 hurricane season, Insurity processed more than 100 datasets (hurricane footprints) from expert providers like KatRisk, Impact Forecasting, NOAA and a host of others via our geospatial analytics solution. Tell us the data you need, and we'll do our best to expedite your request.

Data Provider	Flood depths (inland & surge)	Wind	Event footprint	Aerial imagery	Data updated
NOAA	~	~		✓	Every 4 hours
FEMA	~		~		Post event (only if FEMA releases for an event)
JBA	~	~	~		As available
KatRisk	~	~	~		As available
Impact Forecasting	~	~	~		As available
Ad-hoc customer requested	~	~	~	~	As available or as requested

Insurity can help your organization integrate this data, and address your other data needs. Contact us at <u>info@insurity.com</u>.

During: Understand Your Actual Exposure and Make Sense of All the Data

Now that you have procured access to all the data you'll (hopefully) need, it's time for the hard part: making sense of it. Even with the best technology and in-house GIS experts at your disposal, hurricanes can create a scramble. But, the job of data transforming this data into usable formats and then extracting actionable insight from it, is more efficient with the our event response solution. This is when having an outsourced solution with a dedicated data team removes the technical and timeconsuming burden of working with massive streams of complex hazard and event data.

Your Insurity account manager can work with you and advise you on ways to manage working with sophisticated data from multiple providers—so you can save time and get to the work of understanding and executing on what all the data actually means!



During: Best Practices Checklist



Check for regular data updates:

- Know when to expect updates from various data providers. Be sure to check the data mart regularly, and monitor your email for notifications and updates
- Follow weather-related Twitter accounts like:
- National Weather Service (@nws)
- NOAA (@noaa)
- National Hurricane Center Atlantic Ops (@NHC_Atlantic)
- The Weather Channel (@weatherchannel)
- FEMA (@fema)

Ensure you can understand actual exposure:

 Pinpoint areas with high concentrations of risk and understand actual exposure, not just TIV

Turn around event footprints and models quickly:

- As data becomes available, ensure you're able to get it into usable formats
- Don't underestimate the complexity and time required to transform file formats and load sophisticated data from multiple providers (e.g. more complex shapefiles require pre-processing)

- Ensure you have the in-house GIS expertise to work with complex and sophisticated data, or consider outsourcing to your solutions provider
- Make certain your system can handle more demanding thresholds (e.g. more people trying to use the system during an event, loading of complex and large file formats, etc.)

Consider your integration set up and APIs:

 With more sophisticated data flowing in, you need to know if your integrations have the capacity to keep up

Don't fall victim to analysis paralysis:

- Tap into the industry expertise your account manager can provide, such as helping to interpret variations and nuances in models and event footprints
- Use a geospatial analytics solution like Insurity's event response to help you "move the levers" and understand your sensitivity to model outputs

Gaining a Complete View of Risk Means Leveraging Multiple Sources of Data

"How can I gain a more complete understanding of risk?" is a question many of our customers ask during events. The answer: <u>Insurity's event response solution</u> allows you to pull together multiple sources of data into a single session for a more complete view of risk. The ability to compare multiple hazards and/or models in one place is increasingly important with complex events like a hurricane. By coupling NOAA aerial imagery with KatRisk's surge and wind layers, you can understand the drivers behind the losses in the Mexico Beach example shown below. Even the properties that are still standing may have extreme flood damage due to flooding from surge. Your Insurity account manager can be instrumental in helping you access expert data, interpret it, answer critical questions, and use their industry knowledge to apply the intelligence.



Our "comparison slider" tool shows KatRisk's Hurricane Michael wind footprint on the left and KatRisk's Hurricane Michael surge footprint on the right for Mexico Beach. Both footprints are overlaid with NOAA's post-event aerial imagery.

Post-event: Use Data and Visual Analytics to Understand Potential Losses and Quickly Respond to Claims

Immediately following an event, it's important that you have the data and analytics in place to understand and gain an accurate idea of potential concentrations of loss. This information helps you anticipate the extent of claims and pinpoint exactly where those claims will be coming from—without the need to have boots on the ground to get initial estimates. Insurity's event response solution can provide you with "ground truth" data such as FEMA, as well as aerial imagery and analytics, to help you formulate your claims response and deployment as well as investigative efforts.

Post-event: Best Practices Checklist



Respond to claims faster and estimate losses with the right data:

 Again, access to data is paramount. For example, the ability to bring in aerial imagery data may help you pinpoint potential claims and more accurately assess damage before claims are even filed

Plan a debrief immediately following each event:

 Discuss what went well and where improvements can be made

Consult with trusted advisors:

 Tap into industry experts, such as your Insurity account manager, who can provide added perspective and suggestions for improving your process, data sources, and share how the rest of the market responded

Assess and review vendor performance:

 Which solutions providers shined and who wasn't as responsive or attentive to your needs?



Conduct an end-of-season historical analysis/audit:

Understand gaps in your processes, analytics tools, data, and concentrations of accumulations so that you can spot trends and make changes prior to next season:

- How quickly were you able to generate an accurate estimate of losses?
- Were you satisfied with the data and analytics that helped inform your claims responsiveness and accuracy?
- How satisfied were your customers with your responsiveness?
- Are your risk accumulations at acceptable levels in hurricane-prone areas?
- How will the impact of this season's hurricanes influence your underwriting pricing and strategy?



Conclusion: Shine in the Eyes of Your Customers with Data and Analytics that Work for You

Having a robust data and analytics solution that goes beyond public or open source data and simple analytics is absolutely paramount during large-scale events. With data and analytics that work for you, you'll be able to demonstrate the strength of your service and insurance program.

Insurity's geospatial event response solution can create operational efficiency that enables your team to focus on what matters: providing exemplary customer service. Insureds will judge their insurance investment based on your level of response. Insurity's event response solution enables you to be more precise and proactive with your outreach. So when the time comes for your customers to make renewal decisions, your new level of service will ensure solid retention.

<u>Contact us</u> to learn more about Insurity's industry-leading geospatial analytics solutions and how we can help make your event response operations run like clockwork.

Insurity is a leading provider of cloud-based software and analytics for insurance carriers, brokers, and MGAs. Insurity is trusted by 15 of the top 25 P&C carriers in the US and has over 200 cloud-based deployments. Through its best-in-class digital platform and with unrivaled industry experience and thought leadership, Insurity is uniquely positioned to deliver exceptional value, empowering customers to focus on their core businesses, optimize their operations, and provide superior policyholder experiences.

