



ANNUAL REPORT  
2021



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# LETTER FROM THE PRESIDENT

## LETTER FROM THE PRESIDENT



Dear All Hazards Consortium Stakeholders;

Once again, the past year, like the previous few years, has been one of challenges, victories, setbacks, and innovations for the companies, states, and associations that work together under the Consortium's enabling legal framework.

In early 2021, many of our government stakeholders were dealing with multiple issues, including the COVID-19 pandemic, social unrest following the 2020 elections, supply chain shortages, cyber-attacks, and natural-driven disasters like hurricanes, tornadoes, floods, wildfires, and winter storms.

Little did we know that Hurricane IDA would strike Louisiana in the fall of 2021 and become one of the most damaging hurricanes in modern electric infrastructure history.

In the end, 2021 proved one of the most challenging years for emergency managers in industry and government.

Yet throughout all these challenges, the Consortium's integrated planning framework continued to support the efforts of multiple working groups and partners to address many issues that continually impact our nation's communities and critical infrastructure.

This year's annual report will highlight how hundreds of people and organizations worked together to solve operational problems, develop cross-sector-focused training and exercises, and produce new solutions designed to synchronize information sharing and situational awareness between states and industry during any disaster.

I would also like to take this opportunity to thank all our states, companies, associations, councils, nonprofits, and state, local, and federal agencies for their ongoing participation and support in building a more resilient nation.

Thank you again for your continued interest and support.

Respectfully,

A handwritten signature in black ink, appearing to read 'Chris Geldart'.

Chris Geldart  
President, AHC Board of Directors  
Deputy Mayor Public Safety and Justice,  
District of Columbia, Department of Public Works



# WHO IS AHC?

The All Hazards Consortium (AHC) is a 501c3, state sanctioned non-profit organization operated by industry and government.

It is governed by a Board of Directors and working groups who voluntarily serve a nationwide 50,000+ stakeholder base.

The AHC connects people and organizations into a neutral, FOIA-protected, safe environment to solve problems and help leverage and collective ideas, approaches, and solutions for the public-private benefit.

Since 2005, the AHC and its partners in industry and government have addressed issues in:

- *Crisis Management & Logistics (e.g. preparedness, response, recovery and mitigation phases)*
- *Business Continuity*
- *Cybersecurity*
- *Sensitive Operational Information Sharing*
- *Cross-Sector Interdependencies*
- *Applied Operational Research*

The AHC capabilities are jointly developed with its stakeholders and partners and include:

- *Operational Problem Solving via Use Case Process*
- *Cross-Sector Planning, Training and Exercises*
- *Rapid Research and Prototype Development*
- *Technology Development/Integration*
- *Operational Research & Solution Development*
- *Cross-Sector Operational Information Sharing During Crises*

The AHC provides a safe legal environment, protected from FOIA, that enables a system of year-round activities that include:

- *A National Virtual Conference on Resilience: <https://pro.ahcusa.org/events>*
- *Ongoing Working Groups: <https://www.ahcusa.org/working-groups-overview.html>*
- *Problem Solving Cross-Sector Workshops: <https://pro.ahcusa.org/events>*
- *Development of Information Tools and Resources: <https://www.ahcusa.org>*
- *Develop of Operational Standards and Agreements: <https://www.ahcusa.org/orl-data-standard.html>*
- *Creation of Data Solutions and Resources: <https://www.ahcusa.org/ms-teams-integration.html>*
- *Annual Cross-Sector Planning and Exercises: <https://www.ahcusa.org/sise-virtual-exercise.html>*
- *Joint Operational Training and Education: <https://www.ahcusa.org/storm-school.html>*

## ABOUT THE AHC INSTITUTE

The AHC Applied Operational Research Institute (AHCi) was formed in 2018 to address longstanding issues that face our nation in disaster management, cybersecurity, and research/development to address threats to the national infrastructure.

Operating presently as part of the AHC, the AHCi has the following objectives:

- *Provide more operations-focused education, research, development, testing, evaluation, and transition processes*
- *Promotion of applied operational research philosophies and methodologies to academia, government, and industry*
- *Identify and train the next generation of emergency managers*
- *Address complex issues that require industry and government coordination*
- *Serve as financial mechanism to coordinate federal and private sector investment*



# Institute



# AHC LEADERSHIP

The leadership of the AHC and its working groups is comprised of experienced operational professionals in industry, state and local government, research groups, associations, applied academics, and federal government.

## Board of Directors

### Chris Geldart

Deputy Mayor Public Safety and Justice at DC Government

LinkedIn: [linkedin.com/in/chris-geldart-86b05323](https://www.linkedin.com/in/chris-geldart-86b05323)

### Mike Ambrosio

Retired, Vice President Quality Assurance- Food Safety at Wakefern Food Corporation,

LinkedIn: [linkedin.com/in/michael-ambrosio-85775815](https://www.linkedin.com/in/michael-ambrosio-85775815)

### Kelly McKinney

Director, Emergency Management & Enterprise Resilience

NYU Langone Health

Former Deputy Commissioner, New York City Office of Emergency Management

LinkedIn: <https://www.linkedin.com/in/kelly-mckinney-2a990726/>

### Chris Eisenbrey

Senior Director, Business Continuity & Operations

Edison Electric Institute (EEI)

LinkedIn: <https://www.linkedin.com/in/chris-eisenbrey-28903522/>

### Joe Picciano

President at Preparedness and Resiliency Solutions LLC, New York Langone

Medical Center, Former Director of Preparedness, New Jersey Office of

Homeland Security and Preparedness (OHSP),

LinkedIn: <https://www.linkedin.com/in/joepicciano>

### Joe Bruno

President & CEO at Helen Keller Services for the Blind, Brooklyn, New York

Former Commissioner, New York City Office of Emergency Management

(NYCOEM)

LinkedIn: <https://www.linkedin.com/in/joe-bruno-79b584120>

### Ira Tannenbaum

Assistant Commissioner for Public/Private Initiatives, New York City Office

of Emergency Management, LinkedIn: [linkedin.com/in/ira-tannenbaum-](https://www.linkedin.com/in/ira-tannenbaum-47a4632)

[47a4632](https://www.linkedin.com/in/ira-tannenbaum-47a4632)

### James Sheehan

Program Manager at Newark/Jersey City UASI - Rutgers Police Institute

LinkedIn: <https://www.linkedin.com/in/jamessheehan>

### Roland "Bud" Mertz

Director

Westmoreland County Public Safety

LinkedIn: <https://www.linkedin.com/in/roland-bud-mertz-3a1a9519/>

### Christine Morris

Retired, Assistant Secretary

West Virginia Department of Military Affairs and Public Safety

### Carlos Torres

Independent Consultant, Retired, Vice President of Emergency

Preparedness and Business Resilience, ConEdison Operations

LinkedIn: <https://www.linkedin.com/in/carlos-d-torres-97296324/>

# WORKING GROUPS

The AHC's working groups continued their weekly and bi-weekly problem-solving and cross sector coordination meetings throughout 2021:

- *Multi-State Fleet Response Working Group*
- *Sensitive Information Sharing Environment (SISE) Working Group*
- *SISE-net / GIS (Geospatial Information Sharing) Working Group (formerly GIS Working Group)*
- *State Liaison Working Group*
- *Cross-Sector Virtual Exercise Working Group*
- *Endeavor – Pennsylvania Working Group*
- *Operational Training Working Group*

These groups are comprised of action oriented, results focus professionals who support the complex problem-solving capabilities of the AHC.

Learn more about AHC Working Groups: <https://www.ahcusa.org/working-groups-overview.html>

## MULTI STATE FLEET RESPONSE WORKING GROUP

This group was formed after Superstorm Sandy in 2012 to begin addressing a myriad of operational delays experienced by the electric sector and its mutual assistance resource movement processes. Coordinating with multiple states during disasters has remained its primary objective.

This group is comprised of industry stakeholders across multiple sectors including electric, food, fuel, transportation communications, water, retail, financial, etc.

This group has produced dozens of operational solutions which its members utilize to expedite information sharing and coordination with state and local government during regional national disasters.

In 2017, this working group coordinated massive resource movements for Puerto Rico in response to Hurricane Maria. Utilizing its partnerships with states and solutions the working group had developed, not a single delay was reported during this national coordination effort that moved thousands of vehicles and resources from around the United States to ports of departure in the Gulf and on the East Coast to support power restorations in Puerto Rico and the U.S. Virgin Islands.

*Mike Zappone, Former Eversource Energy Executive, Chair*

<https://www.linkedin.com/in/mike-zappone-b2384b21/>

*Tony Hurley, Former First Energy Executive, Retired, Co-Chair*

<https://www.linkedin.com/in/aenergyman/>



## SISE WORKING GROUP

This group was formed in 2015 as part of a federally funded pilot project with DHS Science and Technology which focused on securing information-sharing and developing agreements between multiple states and industry using the PIV-I (Personal Identity Verification – Interoperable) credentials.

This group is comprised of industry and local/state/ federal government stakeholders from operations, public information, and policy areas.



This group focuses on developing frameworks that organize, protect, rank, and display data sets for use within a wide variety of products and systems within the SISE community or their government/industry partners.

This group is currently developing several initiatives, particularly the SISE-net initiative designed to synchronize information-sharing on transportation, supply chain and damage assessment data between state and commercial operation centers in support of operational coordination during disasters.

*Kent Kildow, Verizon, Chair*

<https://www.linkedin.com/in/kent-kildow-b714b33/>

## SISE-NET WORKING GROUP (FORMERLY GIS WORKGROUP)

This group was formed in 2018 from member requests in industry and government regarding the need to synchronize situational awareness during regional disasters between industry and government to reduce operational delays during a crisis.



This group is comprised of industry and local/state/federal government stakeholders from operations, public information, and policy areas.

This group focuses on building data sharing standards and agreements for operational decision-making, vetting data sets utilizing the new ORL (Operational Readiness Level) standard, developing new information sources and partners, and finding ways to support data-driven decision-making solutions for government and industry.

The group has already produced many solutions, particularly a national data confidence standard for decision-makers that ranks data sets for confidence in decision-making (the ORL standard). The ORL helps decision-makers know which data sets have been vetted for confidence levels so they can make faster decisions and not have to stop and validate data when looking at GIS related products.

<https://www.ahcusa.org/orl-data-standard.html>

Currently, the group is focused on integrating ESRI GIS software and Microsoft TEAMS into the SISE framework for overall information sharing and collaboration to support crisis management.

## STATE PRIVATE SECTOR LIAISON WORKING GROUP

This group was formed in January 2018 at the request of the private sector to help improve operational coordination with state operations centers following the 2017 hurricane season.

This group is comprised of state emergency management agency representatives who are responsible for the operations of their private sector programs within each state. Originally starting with six states, the group has grown to 18 states including Maryland, Pennsylvania, Virginia, Alabama, Florida, Mississippi, North Carolina, South Carolina, Illinois, Wisconsin, Arkansas, Louisiana, Oklahoma, Texas, Arizona, California, Idaho, Oregon, and Washington,

This group looks at operational issues facing both private sector and states, shares best practices, provides mentorship and training to its members, and works with the private sector stakeholders of the Fleet Response Working Group during disasters to resolve operational issues during crisis response.



In 2021, this group provided regional coordination and operational information-sharing with members of the Fleet Response Working Group and participated in the further development of several tools and apps, a new virtual tabletop exercise for cross-sector preparedness for the upcoming hurricane and winter storm season, training, mentoring new liaisons, and the further development of the SISE and a new operational Fleet Movement App designed to enhance planning and operational coordination during disasters.

*Persia Payne-Hurley, NC EMA, Chair*

<https://www.linkedin.com/in/persia-payne-hurley-74187126/>

*Edie Casella, Co-Chair, IL EMA, Co-Chair*

<https://www.linkedin.com/in/edie-casella-43593913/>



# CROSS-SECTOR VIRTUAL EXERCISE WORKING GROUP

This working group (formed under the SISE Working Group) was formed in April 2021 at the request of the private sector to help synchronize cross-sector planning and situational awareness for the upcoming 2021 hurricane season.



This group is comprised of state and industry emergency managers from multiple states and sectors.

This group is focused on developing a simple, cross-sector, operations-focused virtual tabletop exercises that could be conducted each year to prepare for hurricane season.

In fall of 2021, the working group launched the first virtual, cross-sector tabletop exercise (TTX) in the Gulf Region. The results and findings from the tabletop were captured in a post-exercise report. Several solutions were developed that were utilized a few weeks after the TTX during hurricane IDA.

In December 2021, the working group also conducted a cross-sector winter storm exercise (for the Northeast Region) in the 4th quarter based on the same methodology used for the hurricane season exercise.

Learn More: <https://www.ahcusa.org/sise-virtual-exercise.html>

# ENDEAVOR – PENNSYLVANIA WORK GROUP

The Pennsylvania Emergency Management Agency and the AHC have partnered to create a new private sector-operated working group model that will sustain elections and leadership turnover.

Modeled after the AHC’s Multi-State Fleet Response Working Group (FRWG), this new working group, called ENDEAVOR, was formed in 2018 and leveraged best practices from North Carolina’s nationally recognized private sector program and the FRWG to create a new public/private governance framework in Pennsylvania.

This group is comprised of cross-sector industry representatives and state emergency management agency representatives who are responsible for crisis planning and response efforts within their organizations.



ENDEAVOR PA looks at operational issues facing both private sector and state/local governments in Pennsylvania, shares best practices, provides mentorship and training to its members, and works with the private sector stakeholders of the Fleet Response Working Group during disasters.

For more information visit: <https://www.ahcusa.org/endeavor-work-group.html>

*Patrick Shull, Harristown Properties, Chair*

*Carmela Hinderacher, C&S Wholesale Grocers, Co-Chair*  
<https://www.linkedin.com/in/carmela-hinderacher/>



# OPERATIONAL TRAINING WORKING GROUP

This group was formed in March 2021 at the request of the private sector to help improve operational training for current and future crisis managers.

This group is initially comprised of former industry professionals from the electric sector, each with 40+ years of experience.

This group develops operations-based training focused on understanding the principles of crisis management faster - and how to apply them more effectively - from instructors with 35+ years of experience.

In 2021, this group launched its first training initiative called STORM School, a new online learning environment that provides access to multiple courses at no costs. Additionally, in May 2021 the group launched its first live workshop focused on the preparedness phase of the crisis management planning cycle.



Learn more: <https://stormschool.org/courses-a>

Mike Zappone, formerly Eversource Energy, Co-Chair  
<https://www.linkedin.com/in/mike-zappone-b2384b21/>

Tony Hurley, formerly First Energy, Co-Chair  
<https://www.linkedin.com/in/aenergyman/>

Jim Nowak, formerly American Electric Power  
<https://www.linkedin.com/in/jim-nowak-a9a98443/>

Aaron Strickland, formerly Southern Company  
<https://www.linkedin.com/in/aaron-strickland-23527241/>

Dave Vanderbloemen, formerly Dominion Energy  
<https://www.linkedin.com/in/david-vanderbloemen-125a3189/>

Carlos Torres, formerly ConEdison of NYC  
<https://www.linkedin.com/in/carlos-d-torres-97296324/>

- Storm Preparedness
- + Overview >
- + Overview & Resources >
- + Module 1 – Definition of The Prepare Phase >
- + Module 2 – Strategic Objectives >
- + Module 3 – Tactical and Execution >
- + Module 4 – Top 6 Things to Remember When Preparing >
- + Hire The Experts >
- + Cross Sector Communications & Coordination
- + Predictive Impacts & Proactive Planning
- + Managing Storm Expenses
- + Navigating Crisis Logistics
- + Business Continuity and Impact Analysis
- + Providing Self-Preparedness for New Leaders
- + GIS in Crisis Management (06/01/2022)
- + Coming Soon...

Welcome to STORM School !

**Welcome to STORM School**

Where Experienced Storm Experts Equip New & Emerging Leaders in Disaster Management & Resilience

Storm School was created to help you save time, dollars, and lives.

The instructors have a collective 250+ years of experience in over 1,000+ disasters and incidents and have selected these important topics for emerging leaders to grasp and master first.

By learning from seasoned professionals, you will not have to make the same costly or embarrassing mistakes that many others make when in this career path.

By taking these classes, you will be filled with a new confidence and excitement as you learn the tips, tricks, and traps as shared by each of the instructors during the sessions.

**Courses**  
The courses are centered on crisis management topics.

Over time, the course catalog expands to include new content and new instructors so

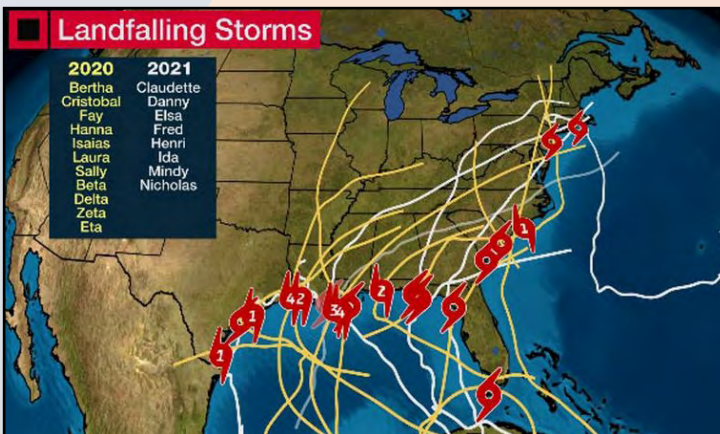
# PROGRAMS

## DISASTER OPERATIONS

### Hurricanes & Storms

Operationally, the AHC and its working groups and partner organizations supported the 2021 crisis response efforts for multiple incidents including:

- February – Tabitha, Uri, Viola
- July – Elsa
- August – Fred, Henri, Ida
- September – Nicholas



The AHC’s operational response capability is activated by its Multi-state Fleet Response Working Group and the Regional Mutual Assistance Groups (RMAGS) in the electric sector.

The AHC also operates a virtual help desk which is leveraged by a nationwide community of industry, state and federal operational and informational partners to aggregate and share operational information during major, multi-state disasters (e.g. state/local declarations, waivers, curfews, road closures, situation reports, open/closed status, sector disruptions, etc.).

The AHC’s virtual operations center includes the following capabilities:

1. **STORM CENTRAL WEBPAGE:** a simple publicly available webpage that aggregates and houses vetted and validated state disaster documents (declarations, waivers, executive orders, curfew notices, etc...) for industry for a “specific” incident.
2. **DAILY ALERTS/UPDATES:** Email alerts are sent out daily providing the entire AHC community with cross-sector operational status, impacts and updates from the incident. Information is derived from over a dozen trusted and vetted sources including state emergency operations centers, federal agencies, state agencies, trade groups, information sharing partners, and company fleets on the ground.
3. **OPERATIONAL EMAIL DISTRIBUTION:** The Multi-state Fleet Response Working Group accepts emails, documents, and other correspondence from states that it validates and then forwards out to a private distribution list of industry and government operations officials under the [Fleetmove@fleetresponse.org](mailto:Fleetmove@fleetresponse.org) email address which operates 24x7x365. This help to sync information flows and situational awareness between industry sectors and states.
4. **GOVERNMENT SITUATION REPORTS (SITREPS):** The AHC and/or its stakeholders participate in several state, local, and federal coordination calls associated with the incident. Notes and updates from these are shared in the daily alerts and email updates for the incident.
5. **SECURE CROSS-SECTOR OPERATIONAL CHAT** – In 2021, the AHC initiated several “text chat” groups in response to recommendations from the Cross-Sector Virtual Exercise held in July/August 2021. This allowed vetted state and sector users to share real-time information from the field with each other for cross sector situational awareness and decision support. This capability reduces delays in restoration efforts with electric power, fuel shortages, and informed the Louisiana Governor’s Office on the open/closed status of critical locations for food and fuel.
6. **DE-ACTIVATION** - Once the fleet movement activity is completed, the AHC virtual operations center stands down but continues to monitor and support specific activities as needed.

Learn more: <https://www.ahcusa.org/storm-central.html>

## CYBERSECURITY

Cyber security continued to cause issues across industry as critical infrastructure owners and operators around the world deal with cyber criminals who attempt to steal information, take down critical systems, or cause general havoc. Costs of these attacks grew from the previous years to over \$16 million per day!



Source: Cybersecurity Ventures, FinancesOnline.com article

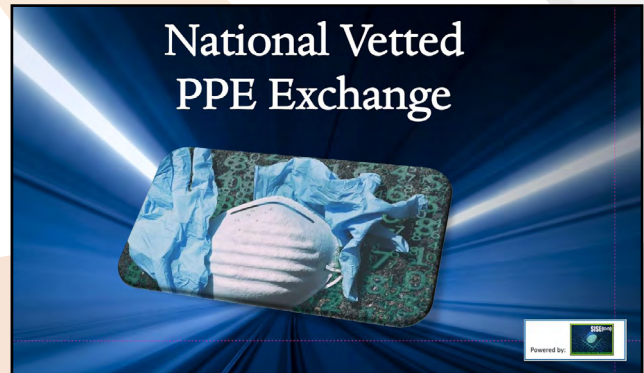
Working with several of the Information Sharing and Analysis Centers (ISACs), sector trade groups, federal agencies, and dozens of other national and regional partner organizations, the AHC remained a part of the education and information distribution network that keeps thousands of public and private sector stakeholders informed of alerts, briefings, developments, research, cyber alerts, potential solutions, and technical updates.



## COVID

COVID-19 did not loosen its grip on government or industry throughout 2021.

Driver shortages, worker fatigue, remote workers and classrooms, and supply chain limitations were just a few of the challenges faced by states and industry. Learning the extent of the issues and understanding how others were dealing with them was a big focus of AHC workgroups, trade groups, and information sharing partners.



Several work groups were involved in assisting with vaccine transportation issues, locating PPE (Personal Protective Equipment) suppliers from reliable U.S. sources ([www.ppenearme.org](http://www.ppenearme.org)), and helping states dealing with challenges associated with their vaccination efforts, return to work issues, and worker fatigue.

The AHC did not play an operational role in most of these areas but continued to provide support via an ongoing series and education and training activities like the Business Resiliency Virtual Discussion Series that leveraged collaborative communities and research to produce solutions that supported the response to COVID-19, reduced operational risks, and increased resilience of the nation's critical infrastructure.

Learn more: <https://ppenearme.org/go-1>



## CROSS SECTOR INTEGRATED PLANNING

The AHC's Cross-Sector Integrated Planning Framework, created in 2010, brings together industry and government stakeholders to jointly address sometimes sensitive issues, conduct planning and problem-solving, hold virtual exercises, collaborate on information sharing initiatives and projects, and facilitate operational coordination during multi-state disasters, storms and other incidents.

The AHC's Cross-Sector integrated Planning Framework is operated under the AHC's 501c3 legal framework which is protected from frivolous FOIA (Freedom of Information Act) requests from non-operational entities (media, competitors, researchers, etc...) The legal framework provides the private sector and states with the legal, governance, policy, process, and technical components that they require to feel comfortable with sharing sensitive operational information with each other and with other sectors.

The framework allows for the creation of committees and working groups to address short or long-term problems.

During 2021, two new working groups were formed along with a joint project in support of the FEAM BRIC (Building Resilient Infrastructure & Communities) Grant Program:

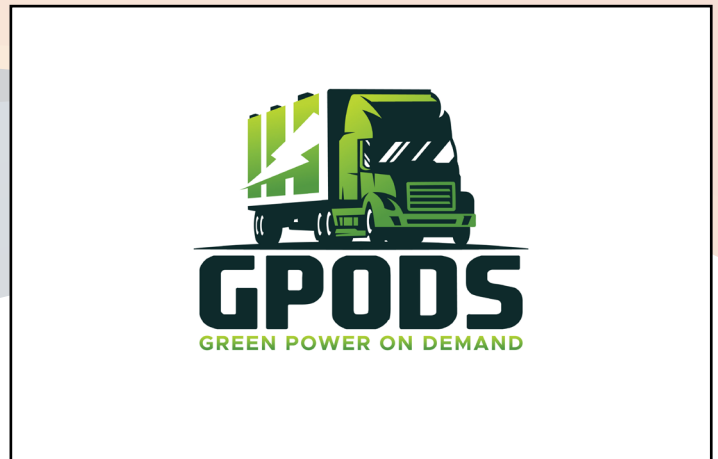
- *Cross-Sector Virtual Exercises Working Group (see p.8)*
- *Operational Training Working Group (see p.9)*
- *A Joint Industry/State Grant Application for Energy Resilience Project for Energy Storage*

## JOINT INDUSTRY/GOVERNMENT FEMA BRIC GRANT APPLICATION

In the fall of 2021 the AHC facilitated a joint grant application for energy resilience that involved a state mitigation grants office and an electric utility under the FEMA BRIC (Building Resilient infrastructure and Communities) Grant Program.

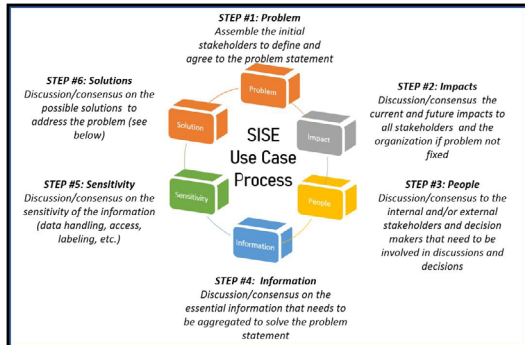
The vision behind this multi-year initiative was to create a long-term, multi-state partnership with states and electric utilities to develop, manage, and provide a proactive and resilient energy storage infrastructure project(s) that lowers the overall carbon footprint, improves grid resiliency and can mitigate the risks associated with electrical outages caused by disasters and natural hazards.

The project focused on the design and implementation of an innovative, mobile, and adaptable electric battery powered infrastructure that lowers overall costs while ensuring resiliency during normal operating days but can be detached and deployed to support a state's and/or local communities' efforts to reduce hardship and suffering of people, and mitigate the risks associated with electrical outages caused by disasters and natural hazards in under-served communities.



# USE CASE DEVELOPMENT (PROBLEM SOLVING)

Since 2015, the AHC's private sector working groups develop a simple and effective problem-solving process referred to as the Use Case Development process.



Learn more about problem-solving process: URL:  
<https://www.ahcusa.org/working-groups-overview.html>

During 2021, several new use cases were developed including:

**Secure Cross-Sector Operational Planning & Collaboration w/MS TEAMS**  
With an increasing number of industry and government organization migrating to Microsoft TEAMS, how will the SISE leverage TEAMS for planning & response collaboration within its working groups? This Use Case focuses on reducing the reliance on email and private portals with a transition to Microsoft TEAMS to support cross-sector planning, research, problem-solving and crisis response efforts in a multi-sector, multi-agency environment.

## Increasing Data Quality & Confidence for Decision Makers

As disasters increase in quantity and intensity, the need to share information between industry and government is increasing. How do decision-makers manage data quality and data confidence in an environment of “data overload”? This Use Case was created to coordinate the data quality and confidence efforts between the SISE Working Group and DHS CISA to address common issues with data-driven decision-making and create awareness around the growing ORL (Operational Readiness Level) standard, developed by the SISE/GIS Working Group, that can help industry and government increase their confidence in data and synchronize their data-driven decision-making processes.

Learn more about ORLS: <https://www.ahcusa.org/orl-data-standard.html>

## Secure Cross-Sector Operational Chat for Real-time Trusted Situational Awareness

Based on years of experience in industry, when hurricanes and other multi-state disasters strike, most of the operational real-time information is exchanged between people who trust each other via email and chat. How can the SISE be leveraged by operations centers in industry and state government reduce reliance on email and to capture and share specific texts chat threads to support real-time situational awareness and decision support to SISE users? The SISE working group and technology partners have developed a simple mechanism that leverages MS TEAMS to provide a secure operational chat capability during disasters.

## Sync Operational Information Sharing During Disasters Via a Cross-Sector Tabletop Exercise

During a multi-state crisis, industry and government need to coordinate their response effort. This requires that they understand each other's operational processes on specific things like state Declarations & Waivers and Industry Status of Open/Closed facilities or disruptions to supply chains. This Use Case focuses on the development and execution of a new virtual tabletop exercise referred to as the SISE-net Cross-Sector Virtual Exercise, designed to identify the people, processes, and information used by multiple state emergency management officials and sectors to better coordinate before, during, and after the hurricane season.

Learn more about the TTX: <https://www.ahcusa.org/sise-virtual-exercise.html>

## Operationalizing the SISE-net Initiative via Mobile App to Connect State & Industry Operations Centers

During incidents, how can industry and state emergency operations centers leverage the SISE's community of trusted state and industry stakeholders to gain access to information that is rarely shared anywhere? This Use Case focuses on developing a mechanism (a mobile app) for vetted operations center personnel to submit real-time data directly into the SISE for real-time situational awareness and decision support during any type of crisis.

## Reducing External Cyber Attack Footprint and Risks with Cyber-Cloaking

As external cyber-attacks continue to increase for industry or government organizations, how can these external attacks be reduced or eliminated while at the same time reduce an organization's cyber-attack footprint across increasing inventory of devices? This Use Case focuses on leverage a new “cyber cloaking” technology that renders devices or online communities “invisible” to external hackers. A pilot program is being planned in 2022 that will demonstrate the technology and processes needed to allow for cloaked collaboration activities within the AHC's TEAMS environment. This same technology can also be adapted to cloak networks and other devices.

# INITIATIVES

The working groups of the AHC undertook several initiatives during 2021 that cut across several mission areas including:

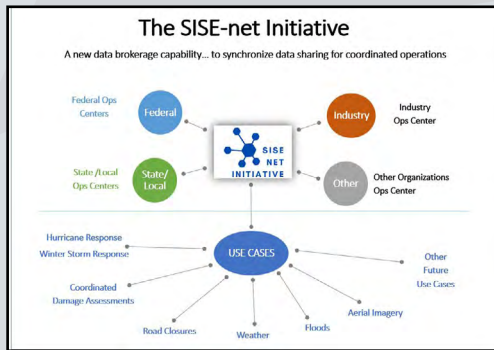
- *Planning, training, and exercising*
- *Sensitive information sharing*
- *Education and training*
- *Cybersecurity*
- *Operational App development*

These initiatives engaged multiple organizations and people in industry and government along with partner organizations that jointly provide the time and energy and resources to develop the initiative and related activities and solutions.

## “SISE-NET” FOR SYNCING SENSITIVE OPERATIONAL INFORMATION DURING DISASTERS

Regional multi-state disasters and crises accelerate the need for trusted, reliable, timely and actionable information in both industry and government.

Decision makers rely on this information for their situational awareness and decision making.



As part of its long-term commitment to the operationalizing of FEMA/DHS ESF#14 Policy, the All Hazards Consortium’s (AHC) leadership and its private sector partners began working with multiple states on the East Coast to develop a secure “operational information” sharing framework to synchronize regional information sharing during hurricanes and winter storms.

The private sector developed the SISE (Sensitive Information Sharing Environment) to provide a trust framework for operational information sharing. The SISE, operated by the private sector, provides the legal, policy, process, and technical components needed to protect sensitive information from non-operational use (e.g. media, FOIA (Freedom of Information Act) requests, competitors, etc...). The SISE provides individual user vetting and verification, along with the data handling and labeling standards required by the data providers to ensure they know who is looking at their data, for what purpose and for how long.

Using the SISE as a safe and private information exchange, industry partitions its information into use cases or modules that are limited only to the SISE users approved for each use case.

During a crisis, the SISE serves up a broad spectrum of operational information that is seen by operations center personnel in state/local government and industry to help sync their situational awareness and decision-making on specific topics.

In 2019, industry launched a new initiative to expand the use of the SISE with state EOC’s (Emergency Operations Centers) and industry for the upcoming 2021 hurricane season.

Referred to as **SISE-net**, this initiative leverages the SISE, to create a trusted, private sector operated, secure network to act as an information hub that serves as a vetted data repository for industry and government to use within their respective decision support systems.

**SISE-net** connects emergency operations centers in states and industry and synchronizes specific information like live weather, live transportation, road closures, emergency resource providers, threats, declarations and waivers, state/industry points of contacts, etc...

The result of **SISE-net** is to provide decision-makers with the most reliable, synchronized data sources so that all stakeholders are looking at the same data at the same instant and support more confident decision-making...faster.

Additionally, **SISE-net** provides a sustained planning and exercise framework that brings states and industry together to discuss and test plans, conduct exercises to identify gaps and understand processes, and solve operational problems together.

Along with providing the synchronization of information during a crisis, the **SISE-net** initiative builds trust among the SISE stakeholders which increases information sharing and promotes cross-sector innovation to address operational problems they all face together.

People trusting each other and working together to solve problems is the ultimate outcome of the **SISE-net** initiative.

Learn more: [https://www.youtube.com/watch?v=MfAU\\_o7HfO8](https://www.youtube.com/watch?v=MfAU_o7HfO8)

# “SISE-NET TTX” FOR SENSITIVE OPERATIONAL INFORMATION SHARING



The SISE-net Cross-Sector Virtual Tabletop Exercise was conducted in July and August 2021. Three virtual meetings were conducted and walked participants and observers through multiple phases of the exercise scenario (Hurricane Sally, which occurred in 2020).

The virtual exercise leveraged the SISE’s data library of past storm data from Hurricane Sally stored on its ESRI GIS platform. Using the actual past storm data provided the participants with a visual discussion tool that drove the conversations during each phase of the exercise.

The Virtual Exercise Committee created the exercise work products to be incorporated into future exercises.

The exercise work products included:

1. **Summary of the 2021 SISE-net Cross-Sector Virtual Tabletop Exercise**
  - A summary of the 2021 SISE-net Virtual Tabletop Exercise for educational purposes
  - <https://www.ahcusa.org/reports1.html>
2. **Summary of the Cross-Sector Lessons Learned Discussion following Hurricane IDA**
  - Operational lessons learned from Hurricane IDA to help improve situational awareness and decision support during hurricane season
  - <https://www.ahcusa.org/reports1.html>
3. **An operational playbook was created to be used for future planning, exercises, and responses to hurricanes.**
  - This playbook will be updated after each exercise and/or after-action reviews following future storms. (under development)

Learn more about the Cross-Sector TTX:  
<https://www.ahcusa.org/sise-virtual-exercise.html>

## Results from the Cross-Sector Exercise

Approximately three weeks after the exercise Hurricane IDA struck Louisiana.

The SISE-net Cross-Sector Virtual Tabletop Exercise helped to prepare the State of Louisiana for IDA by connecting government and industry peers quickly to resolve multiple operational issues with fuel, power, private sector resources, and situational awareness in the Governor’s Office.

- Data provided from the SISE to Louisiana University became instrumental and helping the governor understand what facilities were opened and closed in the aftermath of the storm
- Connections made between state and industry operations personnel streamlined the process to get hundreds of fuel trucks from around the region to replenish fuel supplies in Louisiana
- New private sector data partnerships were created with the SISE framework
- Multiple state liaisons provided support to Louisiana for a wide array of information needs

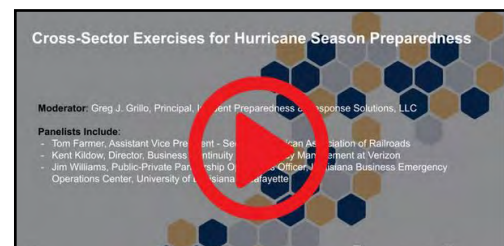
## Exercise Feedback

“What was unique (about this exercise series) from our perspective was the opportunity to engage in more thorough dialogue on the challenges raised in storm response; what all the different components that are involved; what they’re actually doing; what their challenges are; what their priorities are; what the rationale for those decisions; and that their actions are. That was of tremendous value.” **Tom Farmer, Assistant Vice President - Security at Association of American Railroads**

“Having this virtual tabletop exercise allowed us to bring all of these diverse teams together from across a very wide footprint with no operational budget impacts for the teams which allowed for a much broader set of participants. By focusing on different segments of the response in three mini-tabletops, it kept it bite size for all of the participants, allowed us to really focus on the specific area of the response that we needed to, and then assess those lessons and come back together a couple of weeks later to focus on another area.” **Kent Kildow, Executive Director, Physical Security at Verizon**

“It was eye-opening for me to be able to see how we can take all of these diverse sectors who are all trying to do the Lord’s work and restore services and get people as close back to normal as they can and how we can all pull together by doing a virtual exercise.” **Jim Williams, Private Public Partnership Operations Officer at Louisiana Business Emergency Operations Center, Informatics Research Institute, Louisiana University**

Learn more from Panel Session at 2022 National ResilienceEXCH Summit:  
<https://pro.ahcusa.org/d-entry-event/?id=49>



# MICROSOFT TEAMS INTEGRATION INTO SISE

This Use Case was created to address the private sector’s desire to reduce reliance upon emails and portals during disasters and simplify user access to the SISE by leveraging MS TEAM and SISE credentials.



During disasters, email traffic dramatically increases, and inboxes get flooded with too much mail. During disasters, email is inefficient, requires too much time to search and review emails, and is not a good platform for keeping certain information private to a specific group of users.

Additionally, the use of the portal requires users to remember usernames and passwords (not very secure anymore), and firewall software & upgrades often block users from access to specific portals completely.

When information cannot be shared quickly and effectively, delays occur in the decision-making process, which costs time, money, reputations, and lives.

With many organizations moving to Microsoft TEAMS during the COVID pandemic, the use of MS TEAMS has increased with states, industry, and federal agencies. MS TEAMS provides enhanced security, reduces reliance upon email, and adds a universal form of identity management by linking every invited user to a verified organization already using MS TEAMS or a verified email address derived from an invitation email.

The AHC’s SISE-net Working Group (formerly the GIS Working Group), is integrating MS TEAMS into the SISE framework and its ESRI software platform that shares GIS formatted information.

Once completed, the SISE / MS TEAMS integration will provide:

- A more secure information and identity management framework
- A simple way to onboard people into the SISE to access certain information organized by user privileges and “use case”
- A collaborative platform to provide access to structured and non-structured information
- Structured information is already in a GIS format
- Un-structured information is in text messages, chats, emails, PDFs, spreadsheets, phone calls, situation reports, weblinks, etc.....
- A better platform to connect state and industry emergency operations centers into a network to view cross-sector information for their situational awareness without taking possession of it
- A unified platform that will allow all users to see the same vetted, trusted “use case” information at the same instant. Synchronizing Situational awareness.

The operational benefits of this will include:

- Streamlining information flow during a disaster
- Reduce delays caused by untrusted information
- Access to a secure platform that will support cross-sector and multi-agency planning and response activities
- Increased trust between industry and government users

Learn More: <https://www.ahcusa.org/ms-teams-integration.html>

# CYBER CLOAKING

Cyber-attacks continue to rise.

An ever-increasing number of devices increase every organization’s cyber-attack footprint which increases overall cyber risks.

Impacts range across financial loss, stolen or lost information, damaged infrastructure, reduce functions, and more.

The “cyber cloaking” initiative leverages emerging technology that can actually hide or “cloak” any IP device or server(s) rendering them invisible to internal searches, external cyber-hackers, and internet bots.

Several initial technology review calls were conducted with state, industry, trade groups, information sharing councils, and DHS CISA in 2021 to vet the technology before a use case committee was established.

A pilot program was designed is being planned in 2022 to leverage this technology into the AHC SISE environment to be used for certain use cases that involve more sensitive information to be discussed and shared. The pilot will test the cloaking capability to create a community of trust (CoT) environment with TEAMS that will:

- Blocks/cloaks IP visibility – no public IP address, no “call home,” no public DNS and no forced reliance on public Certificate Authority
- Provide multi-layered encryption solution that uses NSA’s Commercial Solutions for Classified Software configured to sufficiently protect classified data while in transit
- Allow access via the AHC’s TEAMS application on any device
- Provide the capability to be highly scalable and affordable

The pilot will bring together 15-20 cross-sector representatives from industry and government to work on work a more sensitive use case (e.g. cross-sector damage assessments, connecting operations centers, conducting more secure briefings to a vetted audience, collaboration on sensitive records, etc...).

The Cross-Sector collaboration will take place in a “cloaked” TEAMS environment within the SISE. Users, files, chats, data, and dashboards will all be cloaked which will increase user and information security while reducing risk from cyber hackers. Additionally, the cloaked environment will leverage the SISE’ user vetting process and the AHC’s FOIA (Freedom of Information Act) protection to further create trust among the users.

Learn More: <https://www.ahcusa.org/cyber-cloaking.html>







# TRUSTED CROWD SOURCING APP DEVELOPMENT

During a crisis or disaster, the need to share information between organizations and government, and industry skyrockets. Much of this information is communicated through text chains, email messages, file sharing, or phone calls.

This information is referred to as “unstructured information,” meaning it is not in an easily shareable format, like information that is consumed in GIS systems where the data can be formatted and displayed on a GIS dashboard or shared through data feeds.

As part of the SISE net initiative, emergency managers in industry and government determined that they needed a more straightforward way to share a few essential data sets during a disaster. The typical way of doing this is signing agreements (which could take years) and establishing data feeds between disparate systems that can cost hundreds of thousands of dollars and software customization to make the systems communicate together.

A simpler process was needed to get started operationalizing the SISE-net initiative.

The SISE-net app allows approved users to submit the information that can be quickly structured in a GIS format and be shared out between users in multiple ways giving everyone synchronized situational awareness across the response community.

The App provides trusted crowd-sourcing on the following information:

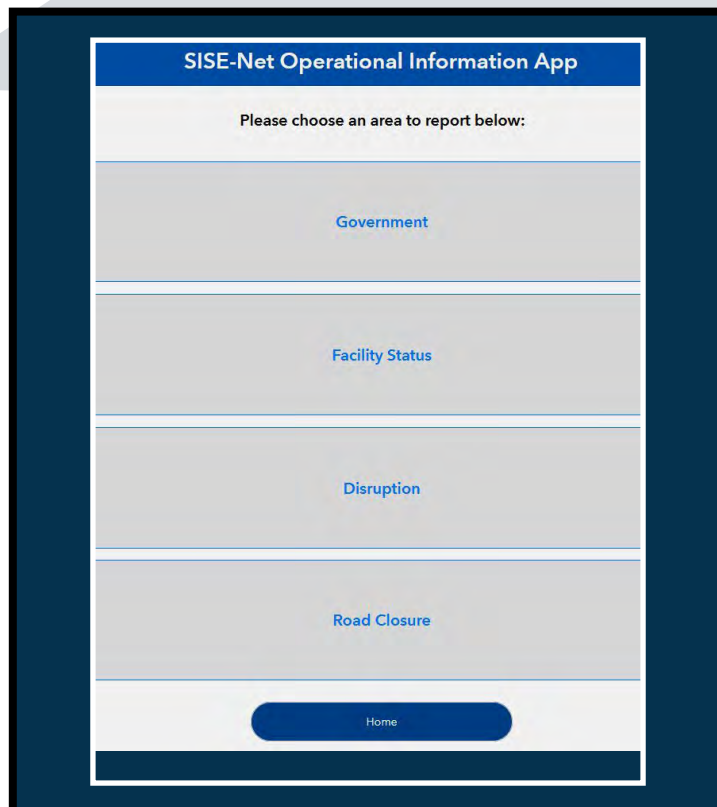
- State or federal emergency declarations, executive orders,
- State or federal waivers
- State guidance, alerts, or updates (road closures, activations, contraflow, boil water, Covid restrictions, etc.)
- Industry status of critical facilities, road closures, capacity shortages, etc.
- Industry operational disruptions (interruptions and/or limitations to normal business operations)
- Industry information requests

The app is tightly scripted and allows users to submit information in under 30 seconds using pull-down menus, simple geolocation selections, and file and picture attachments.

This information is immediately brought into the SISE framework and is made visible to approved users for the duration of the event or incident without allowing possession of the data.

Based on the data provider requirements, sensitive information is deleted immediately after the incident, and access to the information is ended.

The app has been tested and will be in operation during the 2022 hurricane season.





# INCREASING DATA QUALITY & CONFIDENCE FOR DECISION MAKERS

With the increasing amount of ‘data’ and ‘just in time’ approaches for decision-making and situational awareness, there is an increasing pressure to coordinate industry and government efforts on raising confidence in data and data products.

Why?

- *The use of data from unknown sources increases vulnerability and can compromise safety.*
- *Understanding where data comes from, how reliable the data source is, how secure that data is stored and how often it is updated should be a key concern for any decision maker.*
- *Trusted information means that the data is reliable, validated against common standards or best practices, and can be relied upon by decision-makers to support “data-driven decision making” which accelerates planning, response, assessments, and the movement of goods and services that save lives.*

*Trusted Data: A specific set of data that has been certified in meeting high standards of integrity, security, quality, and reliability. Mission practitioners can place confidence in trusted data, and it contributes to the accomplishment of mission goals and objectives.*

Decision-makers need to know if the data that supports executive dashboards and other data products is reliable and of the highest quality available at the moment.

The U.S. Department of Homeland Security (DHS) Critical Infrastructure Security Agency (CISA) has been partnering with the All Hazards Consortium and its private sector working groups since 2015 on multiple initiatives including crisis response, planning, training, exercising, software development, and the development of the SISE (Sensitive Information Sharing Environment) and its policy, process, and technology development.

In 2021, DHS CISA and the AHC began to coordinate their efforts on data reliability and data confidence.

The initiative is focused on developing a common understanding of the processes and approaches used by government and industry to make data more reliable and trustworthy to decision-makers.

A joint workshop was conducted in 2021 that brought together representatives from industry and government to discuss current efforts underway to enhance data quality and confidence for current and future operational and non-operational environments.

The DHS CISA Enterprise Data Management Model was discussed which:

- *Will institutionalize how CISA manages data throughout the agency*
- *Defines the standards by which data is collected, processed, stored and secured, used, shared and communicated, archived, reused, and destroyed*
- *Assures that CISA’s data is interoperable and shareable within the DHS*

The SISE Operational Readiness Level (ORL) model was discussed which:

- *Creates a framework, processes, and tools for ranking data confidence*
- *Identifies datasets used in decision-making as trusted, vetted data sources*
- *Provide decision makers with a rating to determine the “level of confidence” between one and four*
- *Evolve the process of identifying data, verifying its trustworthiness and availability*
- *Provide for the hosting data in a secure shared environment that will be made available to others as needed*

The SISE hosts a library of ranked data sets to support data understanding and confidence levels that can be leveraged in an operational environment.

This joint effort will continue to drive data efforts to address common issues with data driven decision-making and create awareness around data standards that cross over between private sector and government.

Joint understanding and ranking of data supports the operational data problem-solving methodology (people, processing, tools and data) and drives better data decision-making with knowing the confidence and the quality of the data source.

Going forward, the AHC and DHS CISA will work on improving the processes to better share data sets between DHS CISA and the SISE including leveraging Microsoft TEAMS in the protected SISE environment.

Learn more: <https://www.ahcusa.org/orl-data-standard.html>

*Authoritative Data: A specific set of data used to satisfy a business need that has been officially designated or recognized for that use by a law, policy, directive, regulation, or other authorization. Authoritative data must have an identified trusted source.*



# EDUCATION & TRAINING

## STORM School

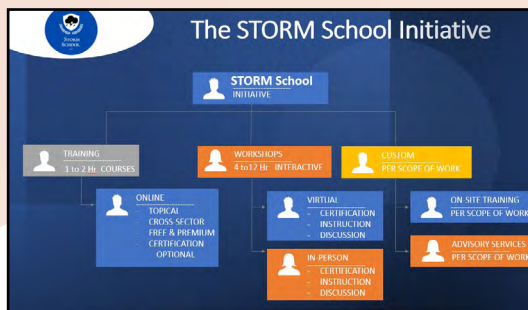
A new cross-sector training initiative was launched in 2021 referred to as STORM School.

STORM School is the first in a series of training and educational initiatives of the AHC's Applied Operational Research Institute (AHCi) that will leverage the AHC's operational partners in the private sector and government who have collectively responded to thousands of storms and disasters over the past 30+years.

The vision behind STORM School is to create a community of new, maturing, and experienced crisis and consequence managers that learns from each other, and leverages the experiences and wisdom of the group to create more informed, active and innovative crisis managers for the future.

### Objectives:

- *Make it easier and faster for participants to learn the principles behind crisis management and how to apply them in various situations.*
- *Help organizations improve safety and avoid costly mistakes*
- *Help participants improve competencies/skills*
- *Allow participants to get certificates of completion*
- *Build a public/private community of crisis managers across the nation*



### Components:

- *Online Training - a growing resource center of online learning*
- *Live Workshops - 2-day intensive workshops with expert instructors*
- *Customized On-site Training - for organizations wanting to train their employees or contractors*
- *Advisory / Consulting Services - for organizations needing to hire outside expertise for a specific issue or project*
- *Annual Summits - Multiple sessions at AHC Annual Summit meeting in January*

STORM School will also leverage the training efforts and content of other industry and government partners that align with the overall mission.

### INITIAL ONLINE TRAINING TOPICS

The initial STORM School topics include:

- **Equipping New Leaders:** Learn how to get up to speed faster in a new leadership role through learning proven strategies and approaches that reduce your learning curve, avoid common mistakes, build confidence in you and your team.
- **Business Continuity and Impact Analysis:** Learn how to quickly identify the top three (3) threats to your business operations and leverage proven strategies and checklists to enhance your business continuity planning to keep your business protected from any present or emerging threat.
- **Navigating Crisis Logistics:** Learn how to increase the productivity, confidence, and safety of your crisis response workforce through well-planned and coordinated logistics.
- **Managing Storm Expenses:** Learn secrets from industry experts to identify, manage and recover the millions you are leaving on the table in un-reimbursed or lost dollars before your next disaster.
- **Predictive Impacts and Pro-active Planning:** Learn how to merge available predictive weather data with historical storm damage to predict the potential impacts of impending storms, build confidence in yourself and your team, and empower proactive planning.
- **Cross-Sector Communications & Coordination:** Learn the operational value and processes to develop, maintain and enhance effective industry and government operational partnerships to coordinate communications, actions and create and sustain trust with stakeholders before, during, and after a crisis.
- **Storm Preparedness Workshop:** Access to workshop session that will provide a step-by-step approach that will make it easier and quicker for you to prepare for any storm, avoid costly mistakes, improve safety, reduce your “anxiety of the unknown” issues that only the experienced pros know about, improve your competencies/skills, and help keep your business open after a storm:
  - *Module 1 – Definition of The Prepare Phase*
  - *Module 2 – Strategic Objectives*
    - *The importance of the ICS (Incident Command System) framework*
    - *Determining Scope and Scale of a Potential Event*
    - *Developing an Effective Action Plan*
    - *Managing Expectations & Communication*
  - *Module 3 – Tactical and Execution*
    - *Internal and IT Systems*
    - *Needed Materials and Equipment*
    - *Property Needs (Facilities, Field Locations, Staging Areas, etc.)*
    - *Employees and Stakeholder Readiness*
    - *Communications Strategy & Messaging*
  - *Module 4 – Top 6 Things to Remember When Preparing*

Learn more: <https://www.ahcusa.org/storm-school.html>

# EVENTS

Over the past two years, the AHC has conducted more workshops and meetings than it has over the past decade.

## 2021 ANNUAL NATIONAL RESILIENCE EXCHANGE VIRTUAL SUMMIT



The All Hazards Consortium (AHC) conducted its first annual National ResilienceEXCH (Exchange) Virtual Summits on January 26-28, 2021.

This Summit was created by the AHC and DHS to establish an environment for sharing strategies, initiatives, research, problem-solving approaches to produce solutions that can reduce risks and increase national critical infrastructure resilience.

This first event featured:

- Over 648 registrants from 215 organizations across the United States and Canada
- Three (3) half days of sessions running from 12:30 to 6:30 pm ET
- 33 Sessions, 60+ speakers, and panelists
- Keynotes from DHS CISA, FEMA, Electric Subsector Coordinating Council (ESCC)
- Recorded and transcribed sessions that were and made available after the Summit
- Industry Diversity: 50% government (60% being state and local), 50% industry

Throughout three half-days, several hundred participants learned, networked, and collaborated with private sector critical infrastructure partners, state emergency managers, and representatives from DHS/CISA, DHS/FEMA, trade associations, academia, industry, and research groups.

The first day focused on “resilience strategies” in industry and government across multiple topic areas.

The second day focused on “resilience initiatives and projects” being conducted around the country.

The third day focused on “resilience training and education” on resilience-related solutions, innovations, and research.

## 2022 ANNUAL NATIONAL RESILIENCE EXCHANGE VIRTUAL SUMMIT

The AHC held a successful 2nd Annual National ResilienceEXCH Virtual Summit in January of 2022.

This 2022 Summit featured 800+ registrants, 30+ sessions, 80+ speakers. The AHC and its partners created a quick research tool to expedite access to keywords for researchers and analysts.

Access both the 2021 and the 2022 Summit sessions and Tools:

<https://resilienceexch.org/all-access-pass-2022>



### 2023 SUMMIT DATES ANNOUNCED

The 2023 Annual National Resilience EXCH Virtual Summit is scheduled for January 24-26, 2023.

2023 Registration is Open: <https://resilienceexch.org/virtual-summit-jan-2023-a>

Visit [www.ahcusa.org](http://www.ahcusa.org) for coming details.

### BENEFITS TO ATTENDING:

- Allows people to attend who cannot travel and don't have the time to attend a three-day conference
- Allows state/local/federal governments and industry to gain new perspectives on each other's initiatives and projects, and to create awareness of efforts and connect people together to continue the dialog
- Provides a national diverse environment of people, topics, and information about resilience that would take you years to discover and engage on your own time
- Allows registrants to attend all or some of the sessions with access to the Summit's recording library via the All Access Pass
- Provides information and solutions from relevant and experienced experts across three half- days of sessions on a broad array of resilience topics





## BUSINESS RESILIENCY VIRTUAL DISCUSSION SERIES

The AHC continued to offer webinars through our Business Resiliency Virtual Discussion Series, an ongoing series of virtual meetings covering relevant topics with industry experts.

The delivery of these events:

1. *Continued to meet our overall problem-solving mission*
2. *Introduced many new stakeholders to the AHC*
3. *Introduced new topics (i.e., Energy Storage, Crisis Risk Insurance)*
4. *Helped steer us in a new direction for growth*

A broad array of topics were covered including:

- *Civil Unrest Resilience: Challenges, Impacts, and Innovations, How Urban Areas Planned For, Coordinated, Controlled and Mitigated Civil Unrest Events*
- *Microgrids: Achieving Electric Power and Grid Resilience, How Microgrids Are Providing Business and Communities with Reliable Electric Power to Support Critical Services During Power Failures or Outages.*
- *Synchronizing Information for Disaster Response Logistics - Part 1, 2 & 3, Emerging Technology to Expedite the Movement of Private Sector Repair Fleets, Resources, And Supply Chains Across Multiple State Border for Disasters.*
- *COVID & 9-1-1 System Innovations: - How COVID Accelerated Innovation in the 9-1-1 Workforce*
- *Cyber Cloaking - A New Approach to Cybersecurity, Making Things Invisible to Hackers*
- *State BEOC Programs – Lessons Learned from COVID-19, How State Emergency Operations Centers Adapted to Work with Private Sector*
- *Cyber Workforce Development Webinar, Developing Organizational Security and A Cyber Ready Workforce*
- *Employee Cyber Hygiene Strategies, Unique Tools to Help You Determine Exposures, And Mitigation Strategies*
- *Lodging During Disasters, understanding the disaster lodging problem, how it impacts states and utilities and emerging solutions to help address the issue in the future*

## WORKSHOPS

Multiple workshops were conducted by AHC working groups that provided a forum for industry and government representatives to solve problems together and test new technologies or solutions that support cybersecurity, information sharing, and crisis response.

Two (2) virtual cross-sector exercise workshops were designed and implemented in 2021:

- *2021 Hurricane Season Preparation (held in July/August)*
- *2021 Winter Storm Preparation (held in December)*

These virtual workshops were conducted to support virtual exercises and were designed to capture information and processes used by state and industry emergency managers to prepare, respond, and recover from hurricanes in the Gulf and winter storms in the Northeast. After Action Reports were developed after each exercise. Information and data discussed in these exercises will be used to create new solutions and to develop a universal operational playbook for future cross-sector exercises.

Additionally, the STORM School initiative held its first paid intensive Storm Preparedness Workshop, an 8-hour class that was held virtually over 2 days to discuss the strategic and tactical approaches to managing storm readiness. The workshop had 15 attendees including 6 students who were awarded tuition-free scholarships by AHC to include the younger population as well as graduate students looking for a refresher.

Learn More: <https://www.ahcusa.org/storm-school.html>

## LOOKING AHEAD TO 2023

The AHC will continue to offer timely webinars and problem-solving workshops, as well as produce the 3rd Annual National ResilienceEXCH Summit to focus on specific use cases being addressed by a government or industry to provide attendees with valuable insights, best practices, innovations, partners developed, and resources.

**Diversity** — The AHC will launch Women in Crisis and Consequence Management Initiative designed to encourage females to not only enter into and grow within the crisis management and consequence management fields, but to strive for leadership roles. AHC will assemble a prestigious committee to assist female crisis and consequence management professionals to design a strategy that leverages and works with existing groups and their efforts to further this initiative over the next 5 years.

**Affordability** — AHC will support the education of rising emergency managers by offering up to 5 scholarships to all paid 2023 Workshops, available to undergraduate and graduate students. These scholarships are aimed at those who would not otherwise have an opportunity to attend and who would benefit greatly by implementing lessons learned in their communities and careers.

**Cross-Sector Training** — AHC will design programs to educate our stakeholders in various sectors about how other sectors think and work. These trainings would create a deeper understanding of each sector, their unique needs, and plans, and help attendees to critically discern and analyze their assumptions.

**Cross-Sector Exercises** — The AHC will continue to conduct its cross-sector virtual exercises to support natural disasters and improve the SISE-net Operational Playbook.

For more information, visit: [www.ahcusa.org](http://www.ahcusa.org)



### Storm Preparedness Workshop

An Interactive Training for Crisis Managers In Any Sector



# SUPPORTERS AND PARTNERS

Partners and supporters play a key role within the AHC and provide much of the support, information, and communication capabilities throughout the year.

During the 2021 hurricane season, these partnerships coordinated together to share information, coordinate communications, and help the private sector better coordinate with government.

These partnerships are formed for various reasons as outlined below.

## Operational Coordination Partnerships:

These partnerships typically form from a mutual desire to coordinate information and operations before, during, and after any type of disaster.

- *Edison Electric Institute (EEI)*
- *Energy Marketers of America (EMA)*
- *Food Industry Association (FMI)*
- *Association of American Railroads (AAR)*
- *American Public Power Association (APPA)*
- *National Rural Electric Cooperative Association (NRECA)*
- *American Logistics Aid Network (ALAN)*
- *Healthcare Ready*
- *National Governors Association (NGA)*
- *Council of State Governments CSG*
- *American Trucking Association (ATA)*
- *Owner-Operator Independent Drivers Association (OOIDA)*
- *American Water Works Association (AWWA)*
- *Southeast Electric Exchange (SEE)*
- *Participating companies from various sectors: Dominion Energy, Duke Energy, Entergy, American Electric Power, Southern Company, ComEd, , First Energy, Central Hudson Gas & Electric Corporation, Florida Power and Light (FPL), Louisville Gas & Electric, Westar Energy, ONCOR Energy, CenterPoint Energy, National Grid, PSEG – Long Island, ConEdison, Eversource Energy, PEPCO, PECO, Exelon, PPL Electric, Wakefern Foods, Verizon, Asplundh, ComEd, , Pacific Gas & Electric, Northern Grid, ARCOS, C&S Wholesale Grocers, Southern Cal-Edison, Skyline Technology Solutions, ARCOS, AES, Walmart, Associated Grocers, PUBLIX, Perdue ,AT&T, Comcast, Verizon, AmerisourceBergen, Home Depot, FEDEX, Waffle House, South Florida Water Management District, Well Fargo, and more.*

## Research and Development Partnerships:

These partnerships form to share information and understand requirements to support the development of new solutions, policies, processes, that support specific use cases within the AHC work groups.

- *Electric Power Research Institute (EPRI)*
- *American Trucking Research Institute (ATRI)*
- *Idaho National Lab (INL)*
- *Johns Hopkins Applied Physics Lab (JHU-APL)*
- *Lawrence Livermore National Lab (LLNL)*
- *Earth Science Information Partners (ESIP) Federation*
- *National Science Foundation (NSF)*
- *National Institute for Hometown Security (NIHS)*

## Information Sharing Partnerships:

These partnerships form to share information to enhance situational awareness and decision-making during a disaster.

- *National Council of ISACS*
- *Multi-State ISAC*
- *State Fusion Centers*
- *State Emergency Operations Centers*
- *Private Sector Liaisons*
- *National Insurance Crime Bureau*
- *Federal Agencies & Councils: DHS CISA, FEMA US/DOT Federal Motor Carrier Safety Administration, DHS TSA (Roadway, Air, and Port), NOAA, NASA, USGS, CDC, US DOE, US HHS, White House Office of Science Technology and Policy, State, Local, Tribal & Territorial Government Coordinating Council (SLTTGCC)*
- *National Governor's Association*

## Solution Development Partnerships:

These partnerships form to develop specific processes or solutions.

- *Bent Ear Solutions*
- *Training Outreach*
- *ESRI*
- *Reprivata*
- *Storm Center Communications*
- *Hughes Network Systems*

## Critical Infrastructure Partnerships:

These partnerships form because they have a common interest in critical infrastructure resilience.

- *Regional Consortium Coordinating Council*
- *California Resilience Alliance*
- *Pacific Northwest Economic Region*
- *InfraGard*
- *Critical Infrastructure Partnership Advisory Council*
- *State, Local, Tribal, Territorial Government Coordinating Council*
- *Cross-Sector Coordinating Council*

# JOIN US

## BECOME AN AHC MEMBER

Much of the AHC's activities and solutions are provided at no cost as part of the AHC's public/private benefit mission. Yet for many organizations who want more, the AHC has a robust membership program that provides a wide variety of unique benefits

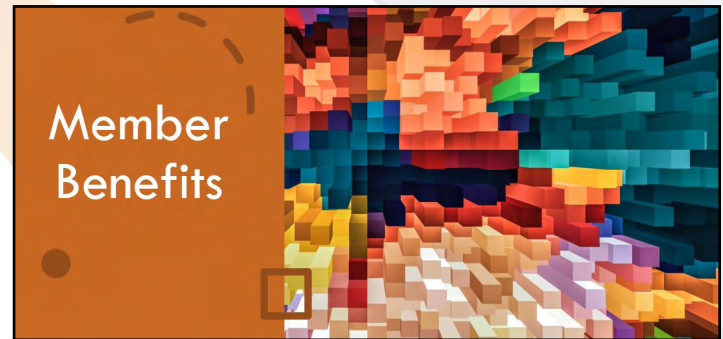
An annual subscription to the AHC's PRO-Enterprise Program provides your company with a new opportunity to solve complex operational problems. Become part of a trusted nationwide problem-solving community of operations professionals who share their resources and pool their investments to develop unique solutions that reduce their risks to natural and made-made threats.

The AHC's PRO-Enterprise Membership program is open to all U.S.-based companies of any size.

The program allows your people to become part of a trusted nationwide problem-solving community of operations professionals who share their resources and pool their investments to develop unique solutions that reduce their risks to natural and made-made threats.

### FEATURES:

- **Trusted Community** - Become part of the trusted AHC Community that will increase your confidence in the people and information you need to answer questions and solve problems quicker.
- **Cross-Sector Planning & Exercises** - Participate in year round cross-sector planning group exercises that help you avoid common mistakes during disasters, expand your trusted pool of advisors, improve safety, and improve your processes to streamline operational missions.
- **Problem Solving** - Participate in problem-solving exchanges that provide you access to new people, perspectives, information, and solutions from our unique, cross-sector environment.
- **Technology & Tools** - Gain access to the unique AHC Solutions (Apps, Dashboards, Data, Services, Training, etc..) available nowhere else in the U.S.
- **Support Services** - Get access to AHC Support Services (technical support, operational help desk during disasters, education/training) that enhance your emergency response efforts, improve your professional skills, and broaden your understanding.
- **Emerging Solutions** - Receive ongoing access to new solutions produced by the AHC working groups at no additional costs (PREMIUM items excluded).
- **Grant Programs** - Ability to participate in certain federal or foundation grant programs involving the AHC and/or its states, companies, trade groups, or research partners.



### BENEFITS:

#### *Join A Trusted Community*

- Provides you with a seat at the table in the problem-solving discussions via working groups and committees with industry, state, and federal government stakeholders.
- Connects you to the AHC's network of operations professionals before, during, and after disasters to provide you with near real-time information and feedback on what government/industry is doing or plans to do during disasters.
- Creates opportunities for new relationships and partners across multiple industry sectors to help you move forward faster to accomplish your objectives.
- Allows you to have the inside track on the development of new solutions that solve operational problems.
- Expands your pool of trusted advisors to solve problems and share experiences and knowledge.

#### *Accelerate Problem Solving*

- Participate in integrated planning meetings with vetted operational stakeholders who identify and prioritize operational problems to jointly address.
- Solve your complex operational problems by participating in the AHC's "use case" development process with action oriented, results focused work groups.
- Get access to the unique solutions produced by the AHC working groups throughout the year (datasets, tools, playbooks, training...).
- Make your problem-solving efforts exciting and more effective by working with like-minded peers with years of experience that you can leverage.
- Gain a new sense of empowerment to solve more problems in the future

#### *Access Technology & Tools*

- The AHC connects you to new data and information to help broaden your aperture for situational awareness and make better informed decisions.
- Membership provide access to unique tools to address your issues in transportation, logistics, weather impacts, supply chain, healthcare, communications, fuel, power, disruptions, facility status, and other resources needed during disasters.
- An AHC membership can dramatically reduce your need for additional consulting and technology costs from leveraging our working groups and their experts.



### ***Receive Services & Support***

- Our members receive a variety of member services that streamline processes, expedite logistics, commercialize research faster, and enhance data-driven decision-making during disasters.
- Access to the AHC's Virtual Help Desk provides you with "members only" information and help coordinate information flow, transportation, healthcare, power, fuel, food, and logistics information requests during disasters.
- Membership connects you to trusted people and information that can answer your questions or connect you to other people and sources quicker than you could find them on your own.

### ***Access Education & Training***

- AHC members have access to education and training resources to help maximize their use of the AHC, its partners in industry and government, and its solutions.
- Members receive access live and recorded sessions and information to help better understand specific issues, technologies, or solutions.
- Members get access to the past working group meetings and problem-solving videos immerse you into the AHC planning process.

### ***See Emerging Solutions***

- AHC PRO Members will have early access to new solutions and be invited to test them & provide feedback.
- Members participate in pilot programs that test new technologies and solutions for specific use cases and provide feedback from your organizational perspective.
- Member can submit ideas for evaluating new technologies for the working groups to consider.

### ***Participate In Grant Programs***

- Members have the opportunity to participate in government grant programs being pursued by the AHC or its stakeholders (e.g. FEMA BRIC (Building Resilient Infrastructure and Communities) program)
- Use Case and solution development grants with federal agencies (e.g. with DHS CISA, FEMA and partner organizations)
- Research partner grants for operational research on development of new information solutions, policy updates, or sector specific problem-solving.

Learn more at: <https://pro.ahcusa.org/pro-enterprise-a>





# BECOME AN AHC SPONSOR

Over the years, organizations that sponsor AHC events and working group have several objectives:

- **Messaging** - reaching a large or specific audience with their message
- **Branding** - promote their company, organization, or product branding
- **Reputation** - to be seen as a thought leader in a certain area
- **Development** - to engage with AHC stakeholders' year-round to develop relationships, business opportunities, identify/validate research requirements and understand user need
- **Feedback** - to gain feedback from users in government or industry
- **Awareness** - to create a nationwide awareness on a solution, initiative of project
- **Problem solving** - to participate in operational problem-solving and planning with industry and government professionals who conduct preparedness, response, and recovery planning all year round via working groups and partner organizations
- **Crisis Response** - participate in a trusted community of industry and government crisis managers who work together and share information during a large scale crisis (hurricanes, regional storms, etc..)
- **Partnership** - to develop new partnerships
- **New Opportunities** - to network with other stakeholders to pursue new opportunities

The AHC offers several sponsorships that are tailored to help your organizational objectives.

Learn more at: <https://pro.ahcusa.org/sponsorship>

## What People Say

*“Leveraging the public-private sector relationship help develop the trust needed to share sensitive and sometimes proprietary information between these sectors with a common goal of mutual success. For example, in 2017, the AHC’s support and coordination with 46 states was critical during our national mobilization of power restoration crews and equipment during Hurricane Harvey and helped reduce transportation delays so crews, material, and equipment could get to Puerto Rico faster and expedite the restoration process.”*

Dave Vanderbloemen  
Retired Director Regional Operations Center and Emergency Preparedness,  
Dominion Energy Virginia

*“In 2020 alone, the AHC’s working groups and partners produced and tested over 15 prototype solutions that addressed operational problems in communications, transportation, pandemic planning, information sharing, operational policy feedback to states, PPE, and power restoration. Nowhere in the country can problems be addresses at this pace while coordinating and working with industry, state, and federal partners in a trusted environment. The solutions being produced are effective approaches to address the unique issues identified during the COVID-19 pandemic.”*

Richard Kildow, Director, Business Continuity & Emergency Management  
Verizon

*“The AHC and its SISE (Sensitive Information Sharing Environment) framework provide its users and decision makers with an advanced cockpit of tools, information, and support teams that are simply not available anywhere else. If they don’t have it, they can easily find it or work with partners to create it. It is amazing to see how fast this public/private community can solve problems with hard-to-find information, new processes and agreements they crate, and technologies their federal and industry partners provide.”*

Mike Zappone, Manager Emergency Preparedness Logistics  
Eversource Energy, Retired

## Sponsor an Event or Working Group

