ANNUAL REPORT
2018
ALL HAZARDS CONSORTIUM

Re-Inventing Emergency Response and Information Sharing for Industry & Government

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LETTER FROM THE PRESIDENT

January 2019

Dear All Hazards Consortium Stakeholders;

Having been around the AHC since its founding in 2005, I have been able to experience it from multiple perspectives including, state government, the federal government, the private sector, and now as the Director for the District of Columbia Department a Public Works.

My path is not unusual for many of the AHC's stakeholders. The AHC has provided a framework that has sustained the brain trust of government and industry stakeholders over these past 14 years.

We have all watched it grow and mature as an organization; to become one of the nation's most admired public-private partnership organizations in the disaster management and operational information sharing space.

2018 was a year of innovation and growth. Coming out of the severe 2017 hurricane season, the AHC's role was pivotal in helping the private sector better coordinate with state and federal agencies on disaster response, several key projects and initiatives, research, and operational innovations.

Our partnerships with local, state and federal government have strengthened along with our industry partnerships with multiple sectors including electric, communications, transportation, health, finance, food, water, retail and several others.

Looking ahead to 2019, the AHC's Board, working groups, and committees will continue to leverage our national network of stakeholders and partners to address real-world issues in disaster management.

On behalf of the Board of Directors, I would like to thank all of you who have participated with us throughout the years. For our new stakeholders, I want to welcome you to one of the most innovative organizations that I have ever had the pleasure to be associated with.

It is my honor to serve as president of this dynamic and evolving organization and I am pleased to announce the release of the 2018 Annual Report of the All Hazards Consortium.

Thank you for your interest and support.

Respectfully,

Chris Geldart
President, AHC Board of Directors
Director, District of Columbia, Department of Public Works

Governance

Five-Year Strategic Plan

The Board of Directors is developing a new five-year strategic plan, aimed at the continued development of relevant programs that support the government and private sector objectives. The plan will continue to leverage and expand the AHC's programs in disaster management, cyber security, applied research and development, and sensitive information sharing. Additionally, the plan will include new objectives in the areas of training, staffing of senior advisers and officials, and the use of artificial intelligence in outreach and education initiatives.

Working Groups and Committees

Several new committees were formed in 2018:

SISE Strategic Advisory Committee

This new committee was established to advise the SISE (Sensitive Information Sharing Environment) working group called the SISE Strategic Advisory Committee. Members of this committee include representatives from FEMA, Department of Homeland Security, Department of Energy, Department of Transportation, multiple states, and multiple sectors of the private sector.

GIS/ORL Committee

This committee was established to develop and operationalize the new ORL (Operational Readiness Level) standard in the private sector for the purpose of increasing decision maker's confidence in data, during disasters.

State Private Sector Liaisons Committee

This committee was established to enhance regional communications, planning and operational coordination, between multiple states and the private sector during disasters.

Use Case Development Committees

New "use case" committees were established to develop use cases that will support data-driven decision making in the areas of:

- *Enhancing Fuel availability data*
- *Enhancing Lodging availability data and public/private operational agreements*
- *Enhancing commercial road availability data during disasters*
- *Developing a private sector network of pre-staging and mustering sites to support disaster response*

INNOVATIONS

Several innovations occurred during 2018 as a result of trusted partnerships between industry and government. Some of these include:

Development of A New State Private Sector Integration Model

In 2018, the AHC worked with Pennsylvania Emergency Management on a new model that leveraged the AHC's Multi-State Fleet Response Working Group's (FRWG) legal framework and governance structure, to create a private sector -driven sustainable working group model, designed to survive elections and turnover in government, integrate with their state/county emergency operations centers, and create operational solutions year-round. The ENDEAVOR group has already developed use cases and solutions to enhance statewide transportation situational awareness, decision support and policy deconfliction.

Leveraging Federal Government Innovation

The AHC coordinated with the US Department of Transportation's Federal Motor Carrier Safety Administration (FMCSA) and their DOT Mobility Center, to leverage a new capability created during HARVEY in 2017, which aggregated road closure information from multiple sources into a single on-demand service. The service provided near real-time routing directions to responders during hurricane FLORENCE, reducing the private sector's transportation delays caused by closed roads. This service expedited the utility supply chain movements of food, fuel and medical resources into the impacted areas in and around North Carolina.

Expediting Utilities Crossing The US/Canadian Border

The AHC working groups and partners continued to work with electric utilities on the US/Canadian border crossing process, to reduce long and costly utility movement delays during regional storms in the Northeastern U.S. that required mutual assistance support from Canadian utilities. Recently, delays of up to 12 hours were reduced to less than 45 minutes which resulted in expediting power restoration efforts for the impacted communities and businesses.

Pre-Staging of Private Sector Resources Before Hurricane FLORENCE

With electric utility fleets moving from around the Eastern U.S. into North Carolina during Hurricane Florence, regional pre-staging / mustering locations were established in southern Virginia and North Carolina along i-95 at WALMART Superstore locations for inbound utilities. This pilot program streamlined the entire mobilization process and proved highly successful and provided closer coordination between the utilities and the North Carolina Office of Emergency Management, their Private Sector Liaison office, and local emergency management and law enforcement officials.

Increasing Decision Maker Confidence in Data-Driven Decision Making

The ORL (Operational Readiness Level) Standard was developed to address a need to increase decision maker confidence in data sets used in the decision processes during disasters. Created in partnership with NASA, the private sector, and the Earth Science Information Partnership Federation (ESIP), this important standard is being shaped by operational professionals, along with GIS technologists, to improve decision maker confidence in data, using a standardized ranking system for data sets and data providers.
Learn more..: https://youtu.be/YqmnpuUOsMY

Emerging Initiatives

Every year, new challenges and problems arise during storms and disasters. Such a dynamic environment requires constant education of new stakeholders, cooperation, planning, exercising and innovative problem-solving to address new issues with new solutions.

In 2018, several new initiatives emerged to begin addressing cross-sector issues:

Multi-Regional Public/Private Summit

The AHC is organizing an annual multi-regional summit meeting to support the need for ongoing education and training of executives and operations managers in government and industry, for enhancing disaster response and economic resilience. The summit will bring together multiple states, federal agencies, and private sector operations professionals, to discuss key issues impacting disaster response and power restoration; provide training and access to resources for new private sector and government officials; create a shared regional perspective on key topics; and coordinate actions to produce solutions together that can increase disaster response and economic recovery across multiple states on the East Coast.

Improving Disaster Data Availability on Fuel, Lodging & Commercial Roads

The SISE Strategic Advisory Council recommended that the AHC leverage its working groups and partnerships to explore ways of capturing more reliable data for commercial/retail fuel, lodging, and commercial road availability during and post-disasters. The SISE working group has begun defining the use cases which will focus the discussions on the specific data sets and organizations to be engaged. The outcome of this effort will be a spreadsheet and dashboard containing the best available data sources and data sets for these three topics, a list of the partner organizations, and ongoing planning meetings with government and industry on these three critical resources.

Enhancing Private Sector Data Sharing with Federal Agencies

As part of the DHS NIPP Security & Resilience Challenge Program, the AHC's SISE working group will be working with representatives from the DHS NICC (National Infrastructure Coordination Center) to develop plans to integrate the SISE and the NICC; create cross-sector committees to develop use cases and solutions; produce federated agreements to share specific data sets; conduct quarterly workshops to discuss solutions and show progress, and organize an annual meeting to brief executives on the results.

2018 IN REVIEW

Leadership Training & Education

In 2018, the AHC Board approved a new initiative aimed at developing programs to improve the lives of leaders, leverage the experience of the AHC's many operational professionals in disaster management, and develop operational partnerships to promote professional development in this public/private space.

The SISE Appstore

The SISE Appstore (Sensitive Information Sharing Environment) was developed in partnership with federal, state, and private sector operations professionals over the past several years. This SISE Appstore will provide a fast and effective way for vetted SISE users to get access to better organized, more reliable, and trusted information and tools faster. This app store will house the tools and 3rd party solutions that will broaden the SISE user's mental aperture for situational awareness and allow users to make more informed decisions during any type of incident or disaster… faster.

As new solutions are identified, the SISE working group will quickly align, test, and validate them. Once approved, the new solutions will be placed within the SISE Appstore for general use.

Learn more: https://youtu.be/XqC96hWrdkc

State Business Emergency Operations Center Integration with Private Sector

In 2018, Pennsylvania Emergency Management and the AHC 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), the new working group called ENDEAVOR, leveraged best practices from North Carolina and the FRWG to create a new public/private governance framework and work on operational issues with the state in transportation policy, information sharing, and business-to-business partnerships for disaster response.

Learn more: https://www.ahcusa.org/endeavor-work-group1.html.

PROJECTS

Several key projects were conducted during 2018 focused on; sensitive operational information sharing, forming operational partnerships with states, creating problem-solving frameworks, development of automated exercises/drills, conducting digital stakeholder outreach, SISE program sustainment with the private sector, and data-driven decision making.

DHS NIPP Security & Resilience Challenge Program

In 2018, the AHC was awarded a contract with the US Department of Homeland Security's National Risk Management Center, on the AHC's Phase 3 of their NIPP Security and Resilience Challenge Program. This project focused on the establishment of working groups and committees for the purpose of enhancing data sources and information related to commercial and retail fuel availability data, lodging availability data, and commercial road availability data for disaster response and decision support. Four (4) workshops throughout 2019 are being planned with an annual meeting to be scheduled in the fall. This project builds on the AHC's 2016 and 2017 DHS NIPP Challenge projects which developed several outputs:

1. *Development of the Sensitive Information Sharing Environment (SISE) to support operational information sharing.*
2. *Sustainment of the SISE Working Group, to conduct integrated planning with states and industry.*
3. *Development of federated agreements, processes and templates to support use case development to create new solutions, opportunities for research, and leverage existing technologies.*
4. *Development of a regional common operating picture dashboard, for power restoration and disaster-related supply chain fleet movement coordination, with states nationwide.*
5. *Development of advanced technology for nationwide digital outreach and education for the SISE and other public awareness and research initiatives.*
6. *Creation of self-guided exercises to enhance the adoption of the SISE, its processes and tools with states and industry.*
7. *Development of a new ORL (Operational Readiness Level) standard to vette datasets and data providers to increase decision maker confidence in data.*
8. *Further development of the SISE Appstore where hundreds of vetted datasets, apps, dashboards, websites and solutions will be accessed from a single trusted place.*

What is the SISE?: https://youtu.be/BI8HD5TbsKI

Pennsylvania Private Sector Integration Project

A new state private sector integration model was created with Pennsylvania Emergency Management (PEMA), the AHC's private sector Multi-State Fleet Response Working Group (FRWG), and several counties in Pennsylvania. This project helped establish a new private sector working group model called ENDEAVOR.

Designed to address statewide emergency management issues and sustain through government elections and turnover, this private sector operated working group immediately began work on updating several long-standing transportation-related issues and polices to address statewide transportation issues:

1. *Updating emergency related transportation policy in Pennsylvania for defining what organization types can legally be on the roads during disasters.*
2. *Creating a new federated agreement and policy related to minimum weight standards for "empty trailer" movements during disasters.*
3. *Creating a 2nd federated agreement for the private sector to use the PennDOT 511 Traffic Information website, as the most reliable source of transportation information. This sounds too simple, but half of the private sector stakeholders were not aware of this valuable tool.*

Additionally, the **ENDEAVOR** workgroup tested a new process to support the need for faster storm pre-staging of resources in or around the projected impact areas. This joint effort focused on the pre-staging of private sector utility resources and response fleets at large commercial parking lots (e.g. Walmart Superstores,) to support expedited power and supply chain restoration.

Getting off to a fast start, the **ENDEAVOR** working group has integrated state and county emergency operation centers, as well as state police and transportation professionals, into an ongoing planning framework. This effort already produced several operational solutions and partnerships along with multiple use cases to be addressed in the future.

CATEX Self-Guided Exercise

As part of the DHS NIPP Security & Resilience Challenge Program, the AHC redesigned its annual CATEX exercise created in 2013, to help expedite regional power and supply chain restoration following disasters, by reducing delays in transportation and disaster-related coordination with governments across multiple states.

This project included the design and production of a virtual, self-guided exercise format. This process provides a way to help SISE users understand how to use some of the SISE's information tools and solutions within real-world scenarios.

CATEX uses a "tiered" user approach to address the experience and needs of various levels of users:

1. *Beginner users*
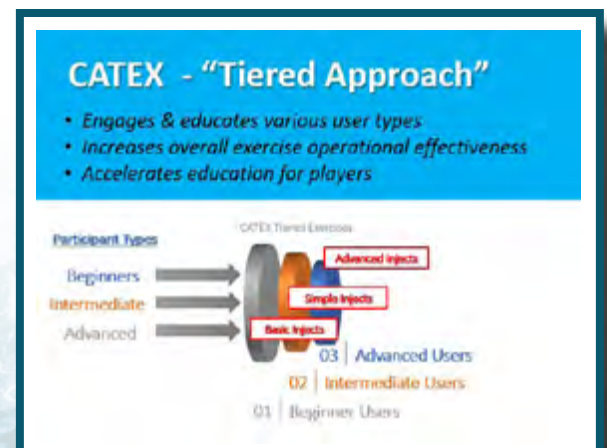2. *Intermediate users*
3. *Advanced users*

The framework for CATEX was built upon the philosophy of keeping things simple and connecting people to solutions that address real-world issues quickly. It combines both education and training into the exercise to help acclimate users with the scenarios and the context with which the tools were to be used.

CATEX supports a mobile participant requirement, which allows more users to participate after hours and on weekends; bypass many of the corporate and government firewall restrictions and access issues experienced in CATEX 2017; and allows for use with mobile devices from any location that has an Internet connection.

CATEX is integrated into the SISE Appstore and is part of the new user onboarding process for the SISE. CATEX immerses new users into real-world scenarios using short videos. Through a set of video injects, CATEX tests the user's knowledge and ability to use several tools and applications that promote situational awareness, provide access to government documents, utilization of a simple regional common operating picture, and access to several other unique applications that are used during major disasters.

Phase 1 of CATEX is aimed at "beginners," while phase 2 and three will offer more advanced scenarios and access to more data and applications.

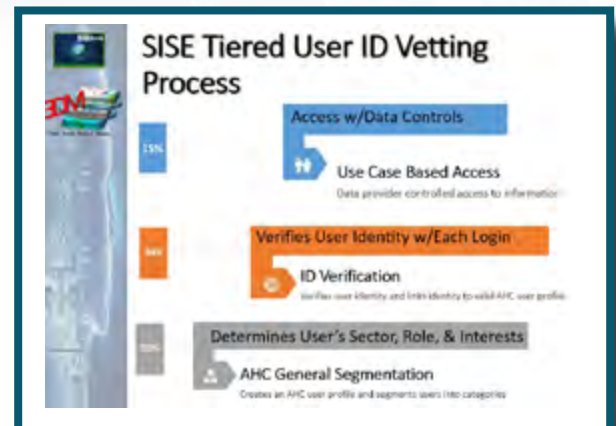Learn more… https://youtu.be/qV9LZpl5WFo

PROJECTS

SISE Sensitive Information Sharing

This project focused on the development of processes, technologies and tools to produce a scalable model that would vette and validate user identities for access into the SISE (Sensitive Information Sharing Environment) during the 2017 hurricane season.

The AHC needed a method to quickly segment individuals by sector, sub-sector, role, responsibility, the topic of interest(s), etc… This segmentation process needed to be user-driven; allowing the users to create their own profile, and be available 24x7. From this vetted user profile pool, the private sector can then select people to join the SISE working groups and committees based on the use cases being addressed. The identity management process needed to be simple and not require the issuance of a new user credential for accessing the SISE.

SISE Tiered User ID Vetting Process

The **Tier 1** identity vetting process was designed to address the SISE's issue with numerous government and private sector organizations, seeking to add email addresses of their people to the SISE and the AHC's operational alerts, which are issued to over 45,000 stakeholders across the country during every major storm involving utility fleet movements.

The **Tier 1** identity vetting process leveraged the user information that was easily available (e.g. email, cell, address, small credit card transaction) along with a signed agreement. Registration takes only 3 minutes. Going forward, every person interested in the AHC, the SISE, or any of the work groups will be required to register with the AHC using the **Tier 1** process.

The **Tier 2** and **Tier 3** security levels will involve high degrees of user identity verification including 2-Factor Authentication, higher level agreements and credentials, based on the use case and the data owner requirements.

Register with the SISE: https://www.siseusa.org

PROGRAMS

The AHC supports various programs by leveraging the efforts of its innovative and energetic stakeholders across the United States. All of these programs support the mission areas of the AHC and work towards a common goal of more resilient businesses and communities in the United States.

2019 AHC BASIC Membership Program

In 2019, the AHC will launch a new BASIC membership program featuring a low-cost annual subscription, which provides individuals access to many unique benefits, access to higher level subscription service offerings in the future, and teaches them how to plug into an innovative, nationwide trusted community of "problem-solving" professionals.

The BASIC subscription is designed to show new members how 80+ organizations have collectively taken their disaster planning, response and recovery efforts to another level with:

- *more reliable trusted data;*
- *streamlined processes;*
- *better coordination with regional states;*
- *and faster, data-driven decision making;*

New members learn how the private sector works with government to,

- *Get access to more reliable, not well-known federal & state data sets.*
- *Broaden their situational awareness apertures during events.*
- *Operate a growing community of people who share information .*
- *Leverage their time and investments to help each other during the "black-sky" days.*
- *Conduct year-round planning and exercises.*
- *Create new partnerships and solutions during "blue-sky" days.*
- *Lower their collective risks and exposure to mistakes.*
- *Help prevent costly delays.*
- *Enhance their decision making with better data and unique tools and solutions.*
- *Restore communities faster.*
- *Save lives.*

Resources raised from this membership program go to support the sustainment of existing working groups, committees and initiatives, as well as expand into new topics and develop new use cases that create new solutions for our members.

Learn more:https://www.siseusa.org/ahc-basic-membership

PROGRAMS

Sensitive Information Sharing Environment

The AHC, in partnership with industry, states and the US Department of Homeland Security, has developed the SISE (Sensitive Information Sharing Environment) to support the need of the private sector to share information with the government on a case by case basis.

The SISE integrates legal, policy, process and technology requirements into a single platform that forms the trust framework for information sharing.

The SISE is managed by the private sector and shared with the government for collaboration and decision-making needs.

The SISE allows for publicly available data and sensitive private data to be layered together into a single view that gets all stakeholders "visually" on the same page at the same time…without anyone taking possession of the data.

The SISE provides a framework for multiple organizations with multiple systems and varying data formats to share data in a simple, low cost and safe way without the need to replace existing systems, policies, processes and people.
The SISE has become the place where trusted vetted people can access more reliable; vetted 3rd party information, tools, websites and datasets from both industry and government, to support their situational awareness and decision-making needs.

The SISE is the primary place where new technologies, apps, new datasets and solutions will be aggregated for testing, enhancement, and ultimately operationalizing in the private sector.

Created in 2015, the SISE continues to sustain and mature and has been operational in multiple exercises and major incidents on the East Coast of the U.S.

SISE Appstore

The SISE working group developed an app store interface that will serve as the central delivery point for all SISE approved solutions developed by AHC working groups and reliable third-party partners.

The SISE Appstore provides a simple image driven framework, which allows people to access information quickly and make decisions faster.

The SISE Appstore currently provides access to a variety of vetted information and capabilities including:

- *Government websites for FEMA, Civil Air Patrol, DHS, DOT, DOE, USGS, FMCSA, USGC, CBP, State EOCs, State DOTs.*
- *Transportation Resources, Dashboards and Apps*
- *Weather Datasets from NOAA*
- *Resources for disasters*
- *Specialty Apps*
- *Operational Guides*
- *Premium Apps*
- *And more…*

The SISE Appstore will be available via an annual subscription service in 2019.

Learn more: https://youtu.be/XqC96hWrdkc
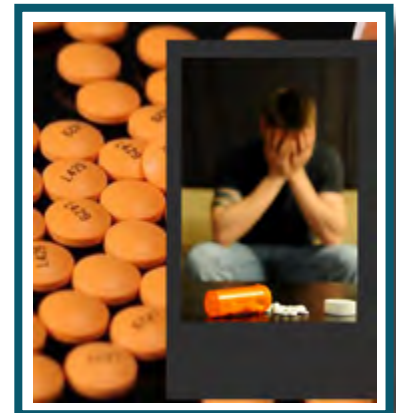
Digital Outreach & Education Program

Traditionally, the AHC and its working group members attend and speak at many conferences and meetings.

In 2018, however, the AHC's SISE Working Group worked with partners to develop a new digital outreach strategy and approach. This strategy is built on the philosophy that potential stakeholders need to be engaged in a way that is relevant to them and their interests, quickly gets their attention, communicates unique value propositions and benefits to them for connecting with the AHC, and lets them walk through a self-guided process of education and involvement that they are most comfortable with on any of their devices at home or work.

The strategy is coupled with technology and AI (Artificial Intelligence) that automates much of the outreach and routes stakeholders quickly to information and education based on their specific interests.

The strategy is far more time and cost effective for everyone, reaches more people with fewer email blasts that clutter their inboxes, connects with their interests and needs, and can show them how to join a community of people that provides them access to more reliable information, new tools and technologies, and eventually help them solve their issues and concerns.

Additionally, this technology will support multiple use cases for industry and government including:

- *Public outreach and messaging to customers and citizens on key topics, while providing valuable metrics to decision makers on the effectiveness of their advertising or outreach investments.*
- *Research and information mining*
- *Validation of needs, requirements, and specifications on new ideas, concepts or projects*
- *Transition of research to the private sector faster*
- *Quickly determining possible markets*
- *Enhancing marketing and messaging strategies and products*
- *Validating interests*
- *Capturing feedback for improvements*

In one case study using this approach, 11,800 opioid stakeholders were reached across six states in just 5 days as part of a government outreach/awareness campaign to connect citizens to local county opioid "get help" websites….with a single click.

Learn more: https://youtu.be/7pVDqhm1tzk

Disaster Management

Regional disasters continue to require government and industry to plan, exercise, and respond together in a coordinated fashion to avoid the expensive delays, mistakes, and the confusion that typically occurs during regional disasters or incidents.

The AHC's Disaster Management programs support integrated planning between states and industry, sensitive information sharing, technology development, policy and process development, partnership development, and innovative solution development. All of these capabilities are developed within the AHC working groups and committees that bring together public and private sector professionals to work on joint issues or use cases together.

Disaster Response

During disasters, the AHC activates a number of partnerships and solutions that primarily address private sector issues in transportation, logistics, sensitive information sharing, situational awareness, and decision support. Combined, these programs, partnerships and solutions have drastically reduced delays, broadened member situational awareness, engaged state, local and federal governments as solution partners, and expedited disaster decision-making for states and industry.

Operations Center Help Desk

2018 saw 10 activations of the AHC Operations Center Help Desk to support operational coordination needed during winter storms, hurricanes, floods, wildfires, and industrial accidents across the U.S.

The AHC Operation Center Helpdesk was officially created in 2017 to help support the movement of electric, transportation, and communications sectors, which responded to Hurricanes Harvey, Irma, and Maria.

The AHC Operations Center, when activated, is staffed from 7 AM to 7 PM and provides email and phone support to AHC members and partners, to assist them in their disaster response coordination and communication efforts with states. By creating a virtual network that links state Emergency Operations Centers with the FEMA, DHS, DOT, and DOE Response Centers, the AHC Operation Center provides a unique set of tools to support the private sector on a wide variety of issues. The Operation Center has been an effective resource for the private sector to resolve transportation issues with multiple states; get access to reliable, timely and actionable information from the government; and to inform their situation awareness and decision-making processes during the disaster. This reduces overall costs, increases efficiency, and saves lives.

Over the past 15 months, the operation center has effectively produced results:

- *Located hard to find resources quickly during regional disasters;*
- *Connected industry and government professionals to share information on housing, access and re-entry, fuel, lodging, flooding, roads status, open stores and gas stations, and more;*
- *Supported the largest private sector resource movement in the electric sector to-date, for hurricane MARIA relief efforts in Puerto Rico and the US Virgin Islands;*
- *Located housing data to support utilities and responders during Harvey;*
- *Facilitated solution sessions where government and industry created ad-hoc processes to support business re-entry in Texas during Harvey;*
- *Expedited regional waivers and declarations from states and federal agencies;*
- *Coordinated with US Department of Transportation to eliminate delays at weigh stations for inbound fleets to Texas and Florida during the 2017 hurricane season;*
- *Worked with states to eliminate delays at toll stations;*
- *Created business to business solutions that promoted cross-sector partnerships that expedited power and supply chain restoration since 2013*

PROGRAMS

Cyber Security

Cybersecurity is a major focus for the AHC partners and members. As the AHC working groups develop information products and solutions that share sensitive information, the private sector needs to know who is accessing their information and for what purpose it will be used. Knowing that each user's identity has been validated is crucial to maintaining the SISE trust framework.

With the proliferation of websites, social media networks, and multiple personas used by individuals online, identity verification and validation is critical when dealing with information that is sensitive competitively, operationally, etc.

Identity Vetting, Validation and Management

Working in partnership with government and industry, AHC and its partners developed a simple, no-cost approach towards validating user identities by aggregating multiple pieces of information.

This process works for the AHC's requirements as outlined by the Sensitive Information Sharing Environment Work Group. The process is effective, has the ability to scale quickly for state and local government during a disaster, and does not require the purchase of a higher-grade credential.

All potential users of the SISE environment go through the same online identity verification process.

This approach allows users to opt into a process that will validate their email, cell phone, name, address, and signed SISE agreement, along with a small personal financial credit card charge. In the near future, the SISE framework will incorporate a two-factor authentication process which will validate user information each time they log in with a code sent to their Smartphone via a text message.

For more sensitive or secure types of applications in the future, the AHC will move to higher credentials, like PIV, PIV-I or others.

Data-Driven Decision Making

With the ongoing development of the Sensitive Information Sharing Environment (SISE), the private sector has developed a "data-driven decision making" initiative that organizes trusted information into "decision apps" or "decision dashboards" to support decisions within 30 seconds.

The SISE framework also provides a legal structure where companies and states can discuss and plan together in a safe, media free, trusted environment that is protected from FOIA (Freedom of Information Act) requests from non-operational entities.

As a result, the SISE has evolved into a multi-tiered framework that separates people and information by use case, and expedites the creation of new innovative solutions by leveraging not well-known data sets from government and industry.

Applied Research & Transition

The transition of research is a major challenge facing federal agency and private sector research groups. Millions of dollars are spent on research that many times struggle to get into the private sector's operational environment for a myriad of reasons.

Since 2013, the AHC has been helping the federal government expose some of their R&D solutions and technologies to the private sector. By leveraging the AHC's nationwide network of thousands of private sector organizations, the AHC and its working groups have developed a unique capability of exposing research to the private sector, gathering feedback, or creating a "ready and waiting" market for the research once it's completed.

Under the DHS NIPP Security & Resilience Challenge Program, the AHC was funded to research and develop new processes, tools, templates, technologies and solutions, to enhance regional situational awareness and decision-making during disasters.

Over 50+ unique solutions have been developed under this program with more on the way.

This unique capability is brought about through the SISE trust framework the AHC operates for the private sector companies. Applying federal funded private sector driven research to solve operational problems and address information sharing issues, represents a new major opportunity for the AHC stakeholders.

Going forward, the AHC will continue to expand its partnerships with research organizations and explore new opportunities to improve:

- *Sensitive Information Sharing*
- *Cyber Security*
- *Disaster Management*
- *Disaster Economics*
- *Public Outreach*
- *Education*
- *Artificial Intelligence*
- *Predictive Analytics*

Solution Development

All AHC created solutions are developed from its working groups and committees comprised of government and industry stakeholders. Through the creation of specific use case profiles, the stakeholders identify specific solutions and technologies that can be brought to bear to address the problems identified in a use case template.

Solutions come in various forms including data sets, webpages, web applications, operational guides, directories of people, mobile apps, tools, and the list goes on.

Many of these solutions are created/discovered, tested and/or refined during real-world events. As an example, in 2018 during Hurricanes Florence and Michael alone, the following new solutions were identified and/or implemented:

- *The AHC's FRWG worked with the state of North Carolina's Business Emergency Operation Center and Walmart, to create a process that would allow incoming electric utility fleets to use Walmart parking lots as pre-staging locations. The process was created within a few hours, approved and implemented. This solution streamlined utility vehicle movements which expedited power restoration efforts. After the storm, Duke Energy's CEO commented on how effective this partnership was to help Duke coordinate power restoration efforts within the region during Florence.*
- *During Florence, working with US DOT /Federal Motor Carrier Safety Administration, the AHC leveraged a new transportation routing service (created during Harvey in 2017), that provided accurate directions from Point A to Point B during the historic flooding in North Carolina during Florence. This saved utilities and transportation companies 4-6 hours in lost drive time per vehicle in some cases.*
- *Working with a team of research partners, the AHC quickly addressed a special resource need in the electric sector to locate nationwide suppliers of high water/track driven vehicles for utility crews to set electric poles in muddy flood waters during Florence. A nationwide map of providers of this resource was quickly generated and provided to the electric sector…within a few hours.*
- *Working with NOAA and the ESIP Federation, the AHC became aware of several new datasets:*

  - *New aerial photo data that was used for damage assessments;*
  - *New flood gauge data that could predict road closures;*
  - *And, new dynamic coastal storm surge data that could prevent infrastructure damage and saved lives during coastal storms.*
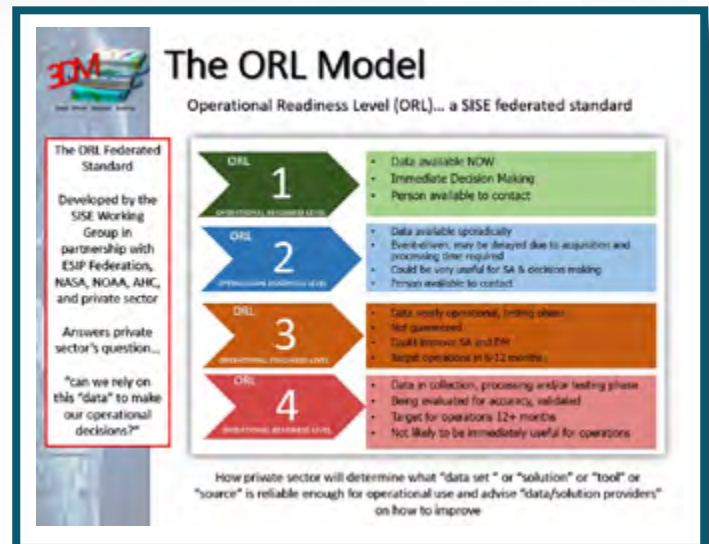
Standards Development

Developing standards is fundamental to sharing trusted information. Developing information sharing standards is part of the SISE working group's processes within the AHC.

Most notably, in 2018, a standard was needed to help government and industry decision-makers, better determine the most accurate data sets and providers of data across many data categories including weather, transportation, fuel availability, lodging availability and roads status data.

At the time, there was no reliability standard for these data sets or data providers. A new committee was formed under the SISE and began working on a new data reliability standard referred to as the Operational Readiness Level (ORL) standard, which was developed in partnership with the AHC, NASA, the ESIP Federation, and the multiple companies and states.

This ORL standard was tested in a live operational environment by Duke Energy during Hurricane Florence and proved to be extremely helpful for GIS professionals to quickly determine the most reliable data sets and sources, to produce their decision products for executives during the storm.

PROGRAMS

Public/Private Integrated Planning

Joint Integrated Planning Framework

Resolving regional issues that require states and companies to work together is the main focus of the AHC's planning efforts. Leveraging the AHC's Regional Integrated Planning Framework, the AHC convenes and facilitates public/private working groups to come together and discuss real-world issues in a honest and open fashion, without concern for media or other non-operational concerns.

Since 2010, this framework produced 50+ solutions to common operational issues faced by government and industry, successfully promoted joint public/private exercises that were once held separately, and successfully developed a new sense of trust between industry and government that has not been seen before.

In 2018 alone, planning topic discussions included some of the following use cases and topics:

- *Response*

    - *Enhancing retail and commercial fuel availability data*
    - *Enhancing lodging availability data and forging potential agreements between the public and private sector to increase the efficiency in the use of this competitive resource*
    - *Predictive flooding/road closure data*
    - *Sharing of Drone/UAS data between industry and government*
    - *Use of state weigh station sites as private sector fueling locations during disasters*
    - *Commercial transportation route availability*
    - *State/private sector drone mutual assistance agreement*
    - *US/Canadian Border Crossing process*

- *Planning*

    - *Developing a state operational private sector liaison working group*
    - *Operationalizing the ORL (Operational Readiness Level) standard*
    - *Creating Regional pre-staging and mustering points*
    - *Expediting US DOT/FMCSA regional declarations*
    - *Leverage US DOT/FMCSA routing hotline capability*

- *Research*

    - *Enhancing predictive storm surge models with new data sets*
    - *Enhancing damage assessment through NOAA aerial datasets*

- *Security*

    - *Enhancing active shooter data for situational awareness*

- *Analytics*

    - *Develop a cross-sector "predictive inter-dependency impact analysis" capability to improve decision making in the private sector*

- *Training*

    - *Regional Mutual Assistance training and education for state emergency managers and regulators*
    - *Leveraging ESRI software for creation of executive decision-making dashboards*
    - *Operational Public-Private Partnership training*
    - *Survivable Disaster Communications training*

PROGRAMS

Joint Exercises & Drills

How do you conduct effective exercises when you have beginners, intermediate users, and advanced users all participating in the same exercise? How can you design the exercise to not overwhelm the beginners or frustrate the advanced users? The AHC and its private sector members participate in multiple industries and government exercises throughout the year. These are the primary events where government and industry come together to test and address common issues, develop contacts, and increase coordination. Several of these are listed below:

- *FEMA National Level Event (NLE) exercise*
- *US Department of Energy Clear-Path exercise*
- *Edison Electric Institute's National Level Event (NRE) exercise*
- *Multiple state tabletop exercises*
- *And more…*

Working Groups and Committees

The majority of the work within the AHC's Integrated Planning Framework is conducted within its working groups and committees. Several of these are listed below:

SISE Strategic Advisory Committee (SAC)

This committee was established in 2018 to advise the SISE working group called the SISE Strategic Advisory Committee (SAC). Members of this committee included representatives from FEMA, Department of Homeland Security, Department of Energy, Department of Transportation, several state EOC representatives (PA,NC), and several sector representatives from food, communications, electric, transportation, and healthcare. The SAC committee meets periodically to discuss and agree upon the future direction of the SISE, its capabilities, and partnerships going forward.

Sustainment Committee

This committee was established to create a long-term plan and budget for the sustainment of the SISE (Sensitive Information Sharing Environment), and its supporting staff, technology, and related needs, to operate a regional and/or national trust framework model of working groups and committees.

Operational Readiness Level (ORL)/Data Set Vetting Process Committee

This committee was formed to create the processes, templates, and tools to support the Operational Readiness Level (ORL) standard, and its process to evaluate data sets and data providers in order to increase decision maker confidence in their data-driven decision making.

Data Provider / Partner Committee

This committee was established to create a process to vet and validate data providers into the SISE, and to create a legal agreement that data providers sign when they partner with the SISE.

PROGRAMS

GIS/ORL Committee

This new committee was established in 2018 to operationalize the ORL (Operational Readiness Level) standard in the private sector for the purpose of increasing decision maker confidence in data during disasters. This committee will develop use cases and pilot projects to operationalize the ORL standard in the electric sector, and then expand to other sectors and government partners. Representatives on this committee include state, federal, and private sector GIS professionals.

State Private Sector Liaisons Committee

This committee was established in 2018 to enhance communications and coordination with states and the private sector during disasters. Building upon past successes in Maryland, North Carolina, Virginia, New Jersey, Florida and Pennsylvania, this committee will be comprised of state Private Sector Liaisons who will develop solutions with the private sector, conduct training and joint drills together with the private sector, and share information to enhance coordination during disasters.

Use Case Development Committees

These committees are being established to help enhance disaster decision making via more reliable and better-organized datasets and data sources using the ORL standard. These committees and its sub-committees will use the AHC's "Use Case to Solutions" planning process and templates to create a common understanding and agreement on where to find the most reliable datasets and providers of data in the following areas:

- *__Enhancing Fuel Availability Data__* *to improve access to diesel and gas supplies at commercial and retail fueling stations during disasters*
- *__Enhancing Lodging Availability Data & Developing Federated Agreements__* *to improve coordination between federal government, industry and hotel owners & operators, on the usage and allocations of hotels and housing units.*
- *__Commercial Transportation Route Availability__* *to provide access to near-real-time data and information to determine road available to support commercial fleet/vehicle movements during disasters, floods, storms, etc…*
- *__Regional Pre-Staging / Mustering Points__* *to create a regional, multi-state network of commercially provided locations that can support pre-positioning of commercial resources (electric and telecommunications utilities and contractors, fuel providers, supply chain organizations) pre- and post-disasters.*

PROGRAMS

Training & Education

In 2018, the Board of the AHC approved a new initiative in executive and strategic issues training.

Over the years, the AHC has hosted many meetings with leaders in government and industry. Repeatedly, leaders have expressed the need for more targeted training on a variety of topics including:

- *Creating operational public/private partnerships*
- *Survivable disaster communications*
- *Professional skills development*
- *Data-driven decision making*
- *Handling stress on the job*
- *Building resilient networks of peers*
- *Using social media more effectively for public outreach*
- *And more…*

Additionally, every year, new people are brought in to the AHC's communities, as a result of elections, retirements, turnover, etc. Having a simple, structured method to provide training to these officials is critical to overall coordination, communication and decision-making during future disasters.

Going forward, the AHC will work with our partners in academia and the private sector to develop unique training courses and materials that will help improve leadership, decision-making, and individual quality of life, which all leaders express the need for as they work in their respective, busy, pressure-filled environments.

MEETINGS

Convening meetings that bring people together to work on important public/private topics is a core function of the AHC and its working groups. Throughout 2018, the AHC hosted and/or attended 40+ meetings focused on a wide variety of topics including:

- *2017 hurricane season lessons learned*
- *Cybersecurity impact on critical infrastructure*
- *Healthcare supply chain resilience*
- *Data-driven decision making*
- *Leveraging federal government data*
- *Expediting research into the private sector*
- *Increasing food sector supply chain resilience*
- *Developing more effective state-level partnerships with private sectors*
- *Developing Drone/UAS data sharing opportunities with Government*
- *Improving coordination and communication with states in the electric sector*
- *Enhancing private sector partnerships within FEMA*
- *Exploring ways to enhance data analytics between government and industry*

These are just a few of the many workshops, webinars, and meetings the AHC and its partners are engaged in annually. Listed below are a few highlights from the 2018 meeting calendar.

- *The AHC's Multi-State Fleet Response Working Group conducted their annual meeting in April and focused on lessons learned from the 2017 hurricane season, which include:*
  - *How the private sector can better support and partner with state emergency operation centers.*
  - *How to improve and enhance sensitive information sharing during any type of natural hazard or cyber security event.*

- *In the spring, the AHC provided a briefing to the White House Office of Science and Technology Policy (OSTP), focused on the SISE (Sensitive Information Sharing Environment) and how it is being developed by the private sector in order to share certain information with the government. From this meeting, a partnership was forged with the OSTP to explore ways to improve information sharing investments; to facilitate an introduction to US DOT Federal Motor Carrier Safety Administration's executive team to help on several initiatives; and an agreement to develop a process to support faster research transition into the private sector.*

- *In the spring of 2018, the AHC met with executives from US DOT Federal Motor Carrier Safety Administration, to discuss a partnership aimed at expediting power and utility supply chain restorations during and after disasters. From this meeting, new capabilities were brought to bear to expedite power and utility restoration efforts during hurricanes Florence, Michael and several winter storms.*

- *The FEMA National Level Event (NLE) exercise was conducted in May and provided an opportunity for the AHC's private sector stakeholders to engage FEMA and states in drills to test process and new solutions. From this exercise, the AHC implemented several new disaster communication policies/solutions, and formed a State Private Sector Liaison Committee to further engage state emergency operations centers in year-round multi-regional planning and use case development.*

- *The US Department of Energy conducted its annual "ClearPath" exercise focused on energy restoration and resilience following a large regional disaster. From this exercise, the AHC formed several new partnerships with energy sector associations and began developing a "use case" to address the need for better fuel data availability for commercial and retail fuel applications.*

- *The US Department of Homeland Security conducted its annual meeting of the Critical Infrastructure Partnership Advisory Council (CIPAC), focused on the newly formed Cybersecurity and Infrastructure Security Agency (CISA), and its new National Risk Management Center (NRMC). The meeting provided keynotes and panel discussions focused on the NRMC's capabilities for analytics, developing more robust public-private partnerships, ways to help small businesses engage in cyber security effectively, and assisting states with information and programs that can help them support critical infrastructure within their states. From this meeting, the AHC began working on a process to develop cross-sector "use cases" to enhance disaster communications between states, DHS and multiple sectors.*

PRODUCTS & SERVICES

Since its creation in 2005, the AHC has developed a number of services that have been made available to government and industry.

Government
Government services provided to local, state, and federal agencies are as listed below.

Resource Staffing

Since 2010, the AHC has provided junior and senior level staffing services to government on an expedited basis, using its low overhead rate of 10%. As an example, the District of Columbia has contracted 20+ contractors under this program, and many of the people have become permanent employees. This program was designed by states to support their ever-changing need for short and long-term talent. This program leverages the AHC's nationwide network of people, both from government and industry to fulfill the needs.

This program has proven to be a very effective one.

In many cases, state/local governments were paying up to 54% overhead rates and getting inexperienced people. Under the AHC's program, the overhead rate is 10% and the customers get more senior experienced people. Results have shown many times that customers can hire two or more experienced people, for the same cost as a single inexperienced person. This service is not available in all states.

Creation of Private Sector BEOC Integration Programs

The AHC supports states in their efforts to establish sustainable private sector driven working groups that are connected to their state emergency operations center.

The AHC provides the legal framework to support the initial planning, outreach, working group charter, facilitates the formation of the governance structure, and support the marketing and sustainment efforts, while working closely with the states Private Sector Liaison within the Department of Emergency Management.

This service takes pressure off the state BEOC programs that many times struggle with keeping their private sector organizations active and engaged year-round.

Private Sector Meeting Facilitation

Many state and local governments struggle with engaging the private sector owners and operators of critical infrastructure within their jurisdictions over the long haul. The AHC provides this facilitation capability built on its 15-year experience with the private sector. Several services provide support to design and facilitate meetings with directed outcomes. The AHC has provided these facilitation services to multiple states on the East Coast and major urban areas in New York City, NY and Washington, D.C. Additionally, the AHC assists FEMA and the Department of Homeland Security in addressing specific sector issues through several of its working groups including the FRWG and the SISE working group.

Multi-State Program Management

Started in 2008 under the FEMA Regional Catastrophic Planning Program, the AHC serves as a fiduciary agent in multiple states or jurisdictions who pool their resources to work on regional projects together. Using its low overhead rate of 10% and its experienced team of staff and partners, the AHC has allowed multiple government agencies and jurisdictions to pool their funding and resources to address regional issues like, communications interoperability, FirstNet regional planning, private sector coordination for catastrophic events, software development, regional transportation planning, mass casualty planning, housing/feeding planning, operational coordination and communications during disasters, and joint operational policy development.

Expedited Procurements

For initiatives or grants that require a fast procurement process, the AHC provides an expedited procurement mechanism which was put in place in 2008. Under this process, the AHC works with a government agency or agencies to develop the procurement specifications, receive the proposals, rank the proposals, and allow the agency or agencies to make the final decision. Afterward, the AHC can contract and manage the suppliers for the entire length of the program if needed. As an example, during a regional planning grant process, the AHC managed over 80 contractors under contract on behalf of six states. This program has proven effective, allows for a speedy turnaround of decisions/ awards, and still allows the agencies to stay in the decision-making role. This program has been audited multiple times by DHS and agencies to ensure its compliance with federal and state grant procurement guidelines and policies. There has never been a single problem since 2008 when it began.

Private Sector

The AHC provides a number of services and products to meet the needs of the private sector operators of critical infrastructure.

Owners & Operators of Critical Infrastructure

For owners and operators of critical infrastructure like hospitals, energy and communications networks, food and water sector, finance, retail, transportation, etc., the AHC provides a unique set of services that focus on strengthening trusted relationships with states and increasing resilience for the nation's critical infrastructure. These services include:

Planning Services

- *Facilitation of working groups and committee to conduct planning w/states.*
- *Use case development to address/solve operational issues.*
- *Joint solutions development to create products to address operational problems.*
- *Promotes and facilitates public/private exercises in disaster response.*

Disaster Response Services

- *Activation of the AHC operational help desk to resolve certain issues with states.*
- *Regional alerts with cross-sector updates.*
- *Centralization of government declarations and waivers.*
- *Activation of dashboards to support situational awareness and decision making.*
- *Coordination with multiple states to support resource movements.*
- *Serves as liaison to the state and federal government to resolve operational issues.*

Sensitive Information Sharing Services

- *Operation of the SISE and its identity vetting processes.*
- *Management of the SISE Appstore that provides access to operational products.*
- *Facilitates the SISE Working Group and its committees.*
- *Provides access to more reliable, not well-known data sets from the federal government.*

Research & Development Services

- *Leverages federal research investments to solve private sector operational issues.*
- *Conducts requirements gathering to inform new federal research.*
- *Provides access to new technologies and solutions for private sector use.*

Through a year-round integrated planning framework that provides legal protection for all involved, the AHC facilitates discussions, initiatives and programs that:

- *Find new technologies or solutions that address member issues.*
- *Convene planning meetings and workgroups with the government to help the private sector understand and solve complex regional issues in disaster response and information sharing.*
- *Help the private sector respond to regional disasters by partnering with government to expedite processes.*
- *Get access to more reliable data to support their decision-making.*
- *Provide operations center helpdesk services to resolve issues with states during a disaster.*

All of these services have proven effective over the years, and have provided AHC stakeholders with truly unique and innovative approaches to solve their operational issues.

PARTNERSHIPS

Partnerships are fundamental to the AHC's creation and sustainment of disaster management and information sharing programs.

Partnerships expand capabilities, improve the overall brain trust of the AHC, and provide the subject matter expertise and specialized knowledge base needed to address cross-sector issues.

In 2018, the AHC forged multiple new partnerships with both government and industry organizations to develop new capabilities for research, information sharing, transportation, healthcare, food, rail, and energy.

- *A new partnership in the transportation sector with the American Trucking Research Institute (ATRI) will eventually produce new capabilities within the transportation situational awareness arena, which can be used during regional or local disasters to determine near real-time commercial route availability during floods.*
- *Other partnerships with NOAA and NASA will lead to the development of new data and products, which will help with faster damage assessments using aerial photograph and enhanced storm surge prediction models, to support pre-planning and response efforts for disasters like hurricanes, earthquakes, floods and more.*
- *New partnerships in training will help the AHC develop new training programs to improve or enhance our members' skills and lives, as they continue to work in the stress-filled environments of disaster management, cyber security, etc.*
- *A partnership with the US Department of Transportation's Federal Motor Carrier Safety Administration will develop new capabilities to help route first responders and utilities more efficiently through and around flooded areas during certain types of storms or hurricanes.*
- *Lastly, a partnership with Walmart allowed the testing of a new process that supports the pre-staging of utilities and responders, utilizing pre-designated Walmart parking lots prior to hurricanes and storms.*

PARTNERSHIPS

Below is a listing of some of the AHC partnerships:

The Health Industry Distributors Association (HIDA)
http://www.hida.org/hida/about/distribution/about/intro.aspx?hkey=8997160e-2ced-48ba-8b54-373b28fd3b32

Mazars USA LLP
http://mazarsusa.com/about-us/

The American Logistics Aid Network (ALAN)
http://alanaid.org/about-us/about-alan/

The American Transportation Research Institute (ATRI)
http://atri-online.org/about-atri/

US Department of Homeland Security – Cyber Security Division
https://www.dhs.gov/science-and-technology/our-work

Bank of America Business Continuity
www.bankofamerica.com

Priority 5
https://priority5.com/about/

US Department of Energy
https://www.energy.gov/about-us

Federal Emergency Management Agency (FEMA)
https://www.fema.gov/about-agency

API (American Petroleum Institute)
http://www.api.org/

The National Rural Electric Cooperative Association (NRECA)
http://www.electric.coop/

Data Fusion Solutions
https://www.datafusionsolutions.com/

DHS Cyber & Infrastructure Security Agency (CISA)
https://www.dhs.gov/cisa/about-cisa

The National Institute for Hometown Security
https://www.thenihs.org/

The Federation of Earth Science Information Partners (ESIP)
http://www.esipfed.org/about

Edison Electric Institute
http://www.eei.org/

Hughes Network Systems
http://www.hughes.com/

APPA (American Public Power Association)
http://publicpower.org/

PECO / An Exelon Company
www.peco.com

National Fusion Center Directors Association
https://nfcausa.org/

Skyline Technology Solutions
http://www.skylinenet.net/

ARCOS LLC
http://www.arcos-inc.com/

StormCenter Communications, Inc
http://www.stormcenter.com/enabling.html

White House Office of Technology & Policy
https://www.whitehouse.gov/ostp/

US Department of Transportation
https://www.fmcsa.dot.gov/

Petroleum Marketing Association of America
https://www.pmaa.org/about/about-pmaa/

Food Marketing Institute
https://www.fmi.org/about-us/about-us

Federal Motor Carrier Safety Administration
https://www.fmcsa.dot.gov/

Witt O'Briens
https://www.wittobriens.com/

About the All Hazards Consortium

The All Hazards Consortium (AHC) is a 501c3 non-profit organization focused on disaster management, business continuity, homeland security and supply chain issues. The focus of the AHC is to improve public/private planning and operational information sharing in order to get business back to on track faster, following disruptions and/or disasters.

Since 2005, the AHC stakeholder base has grown to become a national and international group of government and private sector professionals that all share a common interest:

Recovering faster from business and community disruptions caused by an expanding world of threats.
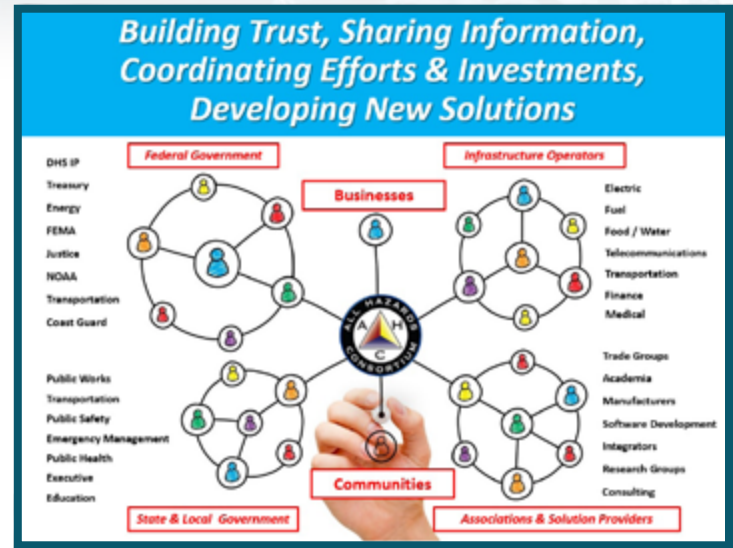
The unique value proposition provided by the AHC to its stakeholders is a trusted environment, where companies and states can come together and have a different kind of conversation, develop a different kind of relationship, and jointly work on problems together to produce real world, actionable solutions.

Through its working groups, the AHC focuses on addressing private sector issues on a sector by sector basis. By first developing "sector use cases," the working groups concentrate their collective efforts to developing operational solutions that can be used and tested in the next incident.

Stakeholders are divided into four (4) groups:

- ***Infrastructure Operators*** *- includes representatives from energy, transportation, telecommunications, food, water, health, finance, retails and other supply chain sectors.*
- ***Associations and Solution Providers*** *- include representatives from sector trade groups & associations, manufacturers, academia, software developers, integrators, consultants and research groups.*
- ***State and Local Government*** *- includes representatives from state and local government agencies in transportation, public works, public safety, homeland security, emergency management, health, education and the executive and legislative branches.*
- ***Federal Government*** *- includes representatives from federal government agencies in emergency management, weather, justice, transportation, treasury, homeland security, and energy.*

When activated, the AHC and its working groups provide information to a growing national and international group of over 45,000+ stakeholders.

About AHC

Leadership

The leadership of the All Hazards Consortium is comprised of operations professionals from government, the private sector and academia, who have a long history of leadership and solving operational issues in both the public and private sectors.

The governance structure consists of a Board of Directors, several regional working groups and committees, and the Executive Director. All are supported by the AHC Program Management Office (PMO) staff and hundreds of public and private sector volunteers.

Working Groups:

Fleet Response Working Group (FRWG)
- Chair – Mike Zappone, Eversource Energy
- Co-Chair – Tony Hurley, Witt-O'Briens
- About: A cross sector working group focused on expediting the movement of private sector resources and information to support disaster response

SISE Working Group
- Chair – Kent Kildow, Verizon
- Co-Chair – Gene Shearer, FEMA Logistics
- About: Development of a regional/national Trust Framework designed for the private sector to share operational information with government

East Coast Corridor Coalition Working Group
- About: A regional government guide group to conduct planning and exercises with private sector to address operational in disaster response, logistics, regional coordination and information sharing.

Endeavor Working Group
- Chair – Pat Shull, Harrisburg Property Services, LLC
- Co-Chair – Carmela Hinderaker, C&S Wholesale Grocers, Inc.
- About: Works with Pennsylvania Emergency Management Agency to address private sector's operational issues in disaster planning, response, and recovery to expedite business recovery and continuity in Pennsylvania.

About AHC

Committees:

**SISE ORL/Data Committee:**
- Chair – Kari Hicks, Duke Energy
- Co-Chair – Karen Moe, NASA / ESIP
- About: Develop and implement the Operational Readiness Level (ORL) standard to improve data-driven decision making.

**State Private Sector Liaison Committee**
- Chair – Persia Payne-Hurley, North Carolina
- Co-Chair – Beverly Byerts, Florida
- About: Develop and implement processes and use cases with the private sector FRWG stakeholders that enhance disaster response operational communication and coordination year-round.

**GIS/ORL Committee**
- Chair – Kari Hicks, Duke Energy
- Co-Chair – Chris McIntosh, Bent Ear Solution, former Virginia State OEM
- About: Develop and implement the Operational Readiness Level (ORL) standard within utilities to improve decision maker confidence in GIS data products, datasets and data sources.
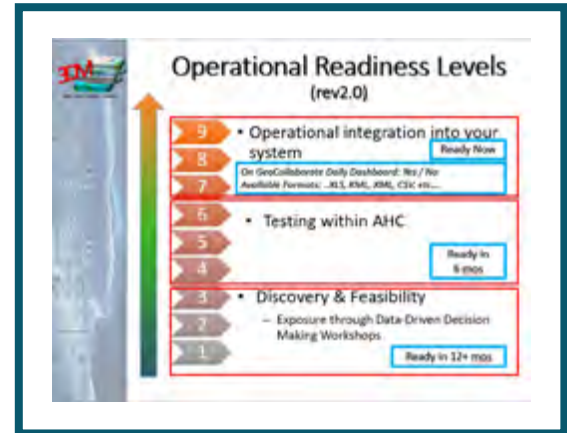
**SISE Sustainment Committee:**
- About: Develop and implement a long-term sustainment plan for the SISE.

**SISE Use Case Committee:**
- About: Develop and implement processes and templates to support the simple and scalable creation of sector use cases to support solution development for operational issues in the private sector.

**SISE Data Partner/Agreement Committee:**
- About: Develop processes and agreements to be used with vetting, approving and engaging SISE data partners.

Christine Morris
Retired, Deputy Secretary, West Virginia Department of Military Affairs and Public Safety (WVDAMPS)
LinkedIn: https://www.linkedin.com/in/christymorris

Chris Geldart
Director, District of Columbia Department of Public Works
LinkedIn: https://www.linkedin.com/in/chris-geldart-86b05323

Kelly McKinney
Director, Emergency Management & Enterprise Resilience, NYU Langone Health
LinkedIn: https://www.linkedin.com/in/kelly-mckinney-2a990726/

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 Director of 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
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Roland "Bud" Mertz
Director Westmoreland County Public Safety
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ACG Systems Inc.
ADC
ADP
AECOM
AEMA
Agency Solutions Executive Strategies LLC
AHTC LLC
Alabama Emergency Management Agency
Alabama Grocers Association
Alabama Power Company
Alectra Utilities
Alight Solutions
ALLCOM GS/IS
Allegheny Technologies Incorporated
Alliant Energy
Allied Universal
Allstate
Ameren
American Chemistry Council
American Electric Power
American Gas Association
American Logistics Aid Network
American Military University
American Public Power Association
Ameriprise Financial Inc.
Arapahoe County Sheriff's Office
Architect of the Capitol / Office of Security Programs
ARCOS LLC.
ArdentMC
Arkansas Department of Emergency Management
Arlington County Fire Department
Aroostook County Emergency Management
AshBritt, Inc.
Asplundh Tree Expert, LLC
AT&T
AT&T Network Disaster Recovery/FirstNet
Atlantic Consulting
Atlas Oil
Avalias
Avangrid
B & K Hotels - Riverview Inn
Baltimore Gas &Electric
Baltimore Metropolitan Council
Bank of America
Bartholomew County Emergency Management
Base Logistics, LLC
Bay Area UASI
BBX Capital.com
BCS, LLC
Bensalem Township EMA
Bent Ear Solutions, LLC.
Bestpass, Inc.
BirchGrove Consulting LLC
BloomIT
Blue Incubator
BNET Inc.
Boeing
Boise State University
BP
Braintree Solution Consulting
Brookfield Emergency Management Agency
Brookhaven National Lab
Bryghtpath LLC
Bytes Defense, LLC
C&S Wholesale Grocers
California Governor's Office of Emergency Services
California Resiliency Alliance
Caltrans - California Department of Transportation
CAP &. FEMA
Carnegie Mellon University, Software Engineering Institute
Center for Disease Control
CenterPoint Energy
Central Hudson G&E
CERRA
Chautauqua County Office of Emergency Services
Chester County PA Department of Emergency Management
CHOC Children's Hospital
CIESIN, Columbia University
City & County of Honolulu / Department of Emergency Management

City of Ferndale
City of Frisco Fire Department
CityMD
Civil Air patrol
Claflin Company
CMCG
Coastal Bend Regional Advisory Council
Cobra Energy LLC
Colonial Pipeline Company
Columbia University
Columbus State Community College
ComEd
Comm. of MA DPU EPD
Commonwealth Edison
Commonwealth of Pennsylvania
Commonwealth of Virginia
Communications Electronics, Inc.
Con Edison
Connecticut Department of Emergency Management and Homeland Security
COTS Technology, LLC
Cotton Global Disaster Solutions
County of Fairfax
CREATE! Emergency Management Services
Critical Situation Management, Inc.
CSA Group
CTEH
CVS Health
D&S Services
Daniel Consultants, Inc.
Dayton Power & Light/AES
DBI Services
Delaware City Refinery/ PBF Energy
Delaware Emergency Management Agency
Delaware Valley Intelligence Center - Phila Police
Des Moines County Emergency Management Agency
DF Critical Solutions, LLC
DHS Cyber & Infrastructure Security Agency
DHS Immigration and Customs Enforcement
DHS Transportation Security Agency
DHS/NPPD/National Infrastructure Coordinating Center
Disaster Intelligence, Inc.
District of Columbia Department General Services
District of Columbia Homeland Security & Emergency Management Agency
Dominion Energy
Dun & Bradstreet
DXC Technology
eCivis, Inc.
Edison Electric Institute
ElectriCities of NC
EM Strategies
Emera Maine
Enterprise Holdings
EPP
Ernst & Young
Eversource Energy
Exacter, Inc
Exelon Corporation
Facebook
Federal Bureau of Investigation
Federal Law Enforcement Training Centers
FEMA Emergency Management Institute
FEMA IPAWS
FEMA Logistics
FEMA National Business Emergency Operations Center
FEMA Region 6
FEMA Region I
FEMA Region II
FEMA Region II
FEMA Region III
FEMA Region IV
FEMA Region V
FEMA, Office of National Capital Region Coordination
Financial Services Information Sharing and Analysis Center
First Line Technology
FirstEnergy
Florida Department Emergency Management
Florida Department of Agriculture and Consumer

Services Office of Energy
Florida Department of Revenue
Florida Department of Transportation
Florida Division of Emergency Management
Florida Institute of Research & Education
Florida Municipal Electric Association
Florida Power and Light Company
Florida Public Service Commission
Food Industry Alliance of NYS
Food Marketing Institute
Fortalice Solutions
Frederick County, MD Division of Emergency Management
G4S Secure Solutions (USA) Inc
GARDA Risk Management LLC
Gate 15
GeoDecisions
Geopliant LLC
Georgia Attorney General
Georgia Department of Emergency Management
Georgia Department of Labor
Gigunda Group, Inc.
Global Impact
Goodman and Shipp
Governor's Office of Homeland Security & Emergency Preparedness
GP Strategies
Greenville Health Systems- Laurens County Memorial Hospital
Greenwich Terminals LLC
Harris County Office of Homeland Security & Emergency Management
Harvard University
Hawaii Emergency Management Agency
Hawaiian Electric Company
Health and Human Services
Health Industry Distributors Association
Henkels & McCoy Inc
Henrico County Emergency Management
High Alert Institute
Highland County
Holland Power Services
Holman Enterprises
Homeland Security Information Corporation
IAI North America
IBM
ICF International
Idaho National Laboratory
IEM
Illinois Electric Cooperative
Illinois Emergency Management Agency
Impact 21
Independent
Independent Consultant
Indianapolis Power & Light
Ingham County HSEM
Insight Solutions
Intel Corporation
Intermodal Holding
International Analysis and Assessment
International Association of Emergency Managers
IP&R Solutions, LLC
ITC Holdings Corp.
Jackson County Office of Emergency Services
Jaxon Mattison Consulting
Jefferson Co HSERT
Jersey City/Newark UASI
Jet Blue FLL
JFHQ-DODIN
JLL (Jones Lang LaSalle)
JLShaner Consulting LLC
John Jay College of Criminal Justice /Christian Regenhard Center
Johns Hopkins University Applied Physics Lab
JSI Telecom
Kansas Department of Agriculture
Kant Consulting Group
KCP&L and Westar, Energy Companies
Kentucky Division of Emergency Management
Kinetics
Kriegspiel Tactical Support Unit
Liberty Utilities

LocationAge
Lockheed Martin Owego
Logan Fire Apparatus
Louisiana Business EOC
Louisiana Department of Transportation and Development
Louisiana Retailers Association
Lower Allen Twp Public Safety
Maine DPS
Maine Emergency Management Agency
Marathon Petroleum Company LP
Marion County Health Department
Marriott International Inc
MARS Practitioners Network
Maryland Coordination and Analysis Center
Maryland Department of Health
Maryland Department of State Police
Maryland Dept of Transportation - State Highway Administration
Maryland Emergency Management Agency (MEMA)
Maryland Fire and Rescue Institute
Maryland Retailers Association
Maryland State Police
Maryland State Police Spec Operations
Maryland Transportation Authority
Maryland Transportation Police
Massachusetts Dept of Transportation
Massachusetts Emergency Management Agency
Massive Connections, LLC
Mayo Clinic
MAZARS
MD Department of Public Safety & Correctional Services
Metropolitan Washington Council of Governments
MFR Consultants Inc.
Miami Tribe
Miami-Dade County OEM
Michigan Emergency Management Agency
Military Auxiliary Radio System
Minnesota Department of Commerce
Mission Secure, Inc.
Mississippi Emergency Management Agency
Missouri State Emergency Management Agency
Mitchell D. Erickson Associates
MITRE
Montgomery County Fire & Rescue
Montgomery County Police
Morrice Transportation
MT BoME
Mutualink
MWCOG
Nai Saturn, Safeway Eastern Division
NASA, Earth Science Disasters Program
National Association of State Energy Officials
National Council of Public Safety UAS
National Disaster Medical System
National Economic Security Alliance
National Emergency Management Association
National Energy Technology Laboratory / DOE
National Funeral Directors Association
National Governor Association
National Grid
National Guard Bureau
National Oceanic and Atmospheric Administration
NCN
Neak Media LLC
NERC
NERC E-ISAC
Nevada Division of Emergency Management
New Hampshire Homeland Security and Emergency Management
New Jersey Board of Public Utilities
New Jersey State Police
New Jersey State Police - Special Operations Section
New York City Office Emergency Management
New York State Emergency Management
New York State Office of Emergency Management
Nexight Group
Nicholas Group - Security & Consulting
NJ Board of Public Works
NJ Department of Transportation
NJ EMS Task Force
NJ Food Council

NJ Motor Truck Association
NJ Office Homeland Security & Preparedness
NJ Office of Homeland Security and Preparedness
North Carolina Department of Public Safety
North Carolina Emergency Management
North Central Region - Colorado
Northwestern Medicine
Novant Health
NOWHERETOHIDE.ORG
NY Metro InfraGard
NYU Langone Health
NYU Langone Medical
Ohio Department of Transportation
Ohio Emergency Management Agency
Oklahoma Department of Emergency Management
Oklahoma Gas & Electric
Oklahoma Office of Homeland Security
On Target Utility Services
Oncor Electric Delivery LLC
Optima by R1
Oregon Department of Corrections
Pachulski Industries Inc
Pacific Gas & Electric
Pacific Northwest Economic Region
Pacific NW Economic Region
PacifiCorp
Palm Beach County Sheriff's Office
Passaic County Sheriff's Department
Pattern Computer
Peabody Conservatory of Music, Johns Hopkins University
PECO Energy
Pedanos
Pennsylvania Emergency Management Agency
Pennsylvania Public Utility Commission
Pennsylvania Turnpike
PEPCO
Petroleum Marketers Association of America
Philadelphia Office of Emergency Management
Pittsburgh Office Emergency Management Homeland Security
Plus Lab Architects
PMCS
PM-ISE
PPL Electric Utilities
Priority5
Professional & Executive Services
PSEG Long Island
RB Consulting
RD Consulting LLC
ReadyZoneHQ
Redland Strategies
Reformed Presbyterian Home
Resilient Outcomes
Resudox Solutions
Retail Grocers Assoc. - Kansas Food Dealers
RF1
Rhode Island Emergency Management Agency
Rifkin & Associates
Riverview Inn
Rowan County Emergency Services
Rutgers University - The Center on Policing
SABER and SpotOnResponse
SAIC
Security & Resilience Consultingllc.com
Security and Analytics, LLC
Security Consulting Alliance LLC
Security Resources LLC
SecurityInfoWatch.com
Senior Emergency Management Consultant
Sharper Shape
Sheehan Phinney Bass & Green PA
SHI International
SimsUshare
Skyline Technology Solutions
SLM
SMECO
South Carolina Department Emergency Management
Southeast Region HQ. CAP / USAF Aux.
SpectraRep
SSAI/NASA
State House News www.StateHouse.News
STATE OF HAWAII DBEDT

Steelton Borough EMA
StormCenter Communications
Strategic Threat Assessment & Defense, Inc.
SunTrust
SurvivalRing Unlimited
T. Rowe Price
Talen Energy
Tallahassee International Airport
Technology Advancement Group, Inc.
Tecsec
Telco Management Group
Tennessee Emergency Management Agency
Tennessee Technological University
Tetra Tech
Texas Department of Public Safety
Texas Department of State Health Services
Texas Lt. Governor's Office
Texas Office of Homeland Security
The MAI Group
Tillamook PUD
Toronto Hydro
Town of Culpeper VA
Tri-State Generation and Transmission Association, Inc.
U.S. Bank
U.S. Department of Veterans Affairs
Uber Freight
UMD CATT Lab
United Illuminating (AVANGRID)
United States Attorney for the District of Maryland
United States Coast Guard Auxiliary
University of Alabama in Huntsville
University of Delaware
University of Nebraska Lincoln
Unmanned Experts, Inc
Unmanned Systems and Solutions
US Agency for International Development
US Airforce Auxiliary- Civil Air Patrol- AZWG
US Coast Guard
US Department of Agriculture Forest Service/CIO
US Department of Health & Human Services
US Department of Energy
US Department of Homeland Security
US Department of Homeland Security
US Department of Human Services
US Department of Transportation
US Fire Administration
US Marshals Service
US Postal Service
Utah Division of Emergency Management
UtiliCon Solutions/Asplundh Tree Expert
Venue Management Consultants Group, LLC
Verizon
Vermont Emergency Management
Virginia 1st
Virginia Dept of Emergency Management
Virginia Retail Merchants Association
Virginia Tech University
Wakefern Food Corporation
Warren County Fire and Rescue
Washington State Fusion Center
WCR
WEC Energy Group
WE-Energies
Wegmans Food Markets
Wells Fargo Bank. N.A.
West Chester Borough Police
West Virginia Department Military Affairs and Public Safety
West Virginia Department Transportation
West Virginia Division Homeland Security and Emergency Management
West Virginia Intelligence Fusion Center-IP Programs
West Virginia Military Authority
Western Energy Institute
Western Energy Institute
Westmoreland County Department of Public Safety
Westmoreland County PA Department of Emergency Management
Whitney, Bradley & Brown, Inc
Wicomico County Department of Emergency Services
Witt-O'Brien's LLC
World Disaster Management
WRTAC