JUVARE

Technical Proposal

for WV Homeland Security and Emergency Management

Solicitation No. CRFP 0606 HSE 1900000001

Submitted to the West Virginia Department of Administration

Submitted by: ESi Acquisition, Inc. (a Juvare Company)

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ORIGINAL PROPOSAL

JUVARE

We've focused on creating situational awareness which incorporates your needs related to task and decision tracking, event record keeping, checklists, file exchange and sharing, and dashboard functionality. Within our proposal, you will learn how we can accomplish this for you — just as we have for all our partners. We are confident that our knowledge, technology and customer service model makes us the right partner for West Virginia DHS and EM. Please contact Cliff Micham, Director of Business Development, at 252-378-1594 or via email at cliff.micham@juvare.com should you need any further information.

Respectfully submitted,

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Executive Summary

ESI Acquisition, Inc. (hereafter referred to as "Juvare") is pleased to offer the following proposal for the software solution, implementation and professional services, training and ongoing support for the **State of West Virginia** (hereafter referred to as "West Virginia"). Juvare has read the requirements outlined in the WV Homeland Security and Emergency Management RFP document, and we have provided responses as appropriate and related to the solution-set proposed.

In the past, as a community, we would view incidents as isolated occurrences. If there was a fire, then the fire department would handle it. Incidents are becoming more complex, and we must become more sophisticated. For example, a suspected shooter pulls a fire alarm to cause chaos, confusion, and disoriented crowds. In this scenario, a fire department response in isolation will fail.

As another example, could a robbery be related to a site evacuation order? There are many scenarios that we must plan, prepare, and respond to. Today's incidents require a unique solution – an adaptable, comprehensive, supportive solution. A solution that is precise, vigilant, and connected. It is simply not enough to have a solution to execute business-as-usual objectives; West Virginia needs a solution that will empower the State to bounce forward.

In an industry with high regulation and tight budgets, correctly allocating capital for risk management and disaster response will ensure perpetual readiness that saves corporate reputations and attains faster recovery time objectives. WebEOC improves the quality of decision-making processes for response management through understanding operational risk and assessment tracking that links to response team management and response frameworks.

Juvare understands the challenges faced by states, agencies and business organizations are wide ranging and include:

- Susceptibility to natural disasters, man-made threats and business conditions, including weather risks, securing commodity supply and infrastructure, terrorism, customer demands and expectations, capacity arrangements and market volatility;

- The need for a fully incorporated view of team capabilities and potential issues/hazards during day-to-day operations, as well as during emergencies, including the need for other groups that could assist with emergency responses be privy to this information/view;

- A requirement for a communication plan that specifies how and when critical information is disseminated to employees, patrons/residents or other stakeholders;

- A lack of a distinctly-identified hierarchy during crises and multiple, disconnected internal departments required to work together during disaster and threat response operations; and

- Having a common approach to the multitude of corporate areas of responsibilities.

WebEOC provides many technological advantages through facilitating situational awareness around all aspects of transmission and distribution incident response; and incorporating WebEOC will assist with internal controls of risk management. West Virginia may feel confident in knowing, as pressure for accountability increases, WebEOC is proven in the market and is trusted by regulatory authorities, peers and partners of the State.

Utilizing Juvare's WebEOC, the West Virginia team will:

- Create a common-operating picture for involved stakeholders and teams, allowing these groups to prepare for, operate during and recover from all events and crises

- Communicate and update critical information during events, alerting the West Virginia team, as well as other stakeholders, of new or changing situations that could require attention

- Provide the platform on which the organization can build checklists and procedures, ensuring that day-to-day-operations and unplanned events are responded appropriately to according to the State's own policy guidelines

- Allow the West Virginia team to disseminate information to other team members and stakeholders, as well as communicate with the residents and public when necessary

As discussed through the course of this response, the true value of WebEOC to the West Virginia team is the ability to tie everything together into a meaningful and actionable common operating picture.

The base foundation of this strategy is the core emergency operations center (EOC) processes that virtually every organization employs, easily augmented and customized for specific processes, readily achieved and implemented with our platform. At the end of the day, Juvare's solution ties this information together in two key ways – with real-time dashboards, and with process-specific integration.

Let's Secure A **More Resilient** Future

Company Background and Experience

About Juvare

Juvare is a Latin word for **help**. We this name to reflect our commitment to managing better outcomes in these challenging times. We help organizations establish relationships with us and their neighbors. The most successful way to achieve disaster resiliency is by being prepared. Building a relationship within our communities and our governments will support a national effort to be ready for the worst disasters — at the individual, family, community, state, local, and Federal levels.

We understand that in an uncertain world, it's become increasingly challenging for our clients to operate their organizations. Regardless of size or scope, change comes at us faster and with less predictably than ever before. Planned events, major disasters and everything in between has forced our clients to plan for both the expected and unexpected and react swiftly and appropriately in order to emerge safely and even stronger. Juvare is accountable to our customers. We do what we say, and we do it with consistency. Our solution is repeatable and reliable, based on many years and thousands of installations across the world.

Emergency preparedness and response includes the preparation, response, and recovery, including planning, logistical support, maintenance and diagnostics, training, and management, as well as supporting the actual activities at a disaster site and post-recovery after the incident. Our products are considered solutions, not just emergency management applications. Our focus on government and the private sector allows us to present our solution to thousands of departments and agencies.

As we have demonstrated, time and again, we will provide West Virginia with the right technology and implementation team to accomplish the goals set out. We will configure and grow the platform to develop a complete system, as detailed by your requirements. We acknowledge the importance for joint collaboration, and we will engage West Virginia not as a client - rather, as colleagues - united by common purpose.

Demonstrated Experience and Project Understanding

Our proposal should leave no doubt that Juvare is the clear industry leader with unrivaled, relevant experience. Our client list is the "Who's Who" of industry leaders and the global safety net. We have demonstrated our technical capability since the inception of the original crisis information management system (CIMS) concept, our product roots are maintained in the energy generation industry, where we were first to launch a commercial offering, and our technologies have not stopped advancing since.

> *"... Achieving this vision of a prepared and resilient Nation is a shared responsibility..."*
>
> **- Brock Long
> Administrator, FEMA**

Disasters and emergencies in large cities are, unfortunately, a regular occurrence. These large Emergency Operations Centers are able to better manage incidents and planned events by utilizing Juvare's WebEOC to create a central coordination and decision-making point that is based on accurate, complete, and comprehensive information.

That being said, Information Management can be the crux of most EOC problems. Without WebEOC, these large city EOCs would suffer from a lack of or too much information, as well as a systematic inability to glean the most pertinent information from the overabundant dross of data that can overwhelm EOC staff during an event.

Large population areas, like WebEOC clients in Los Angeles, Chicago, Houston, Phoenix, San Antonio, San Diego, Dallas, Denver and San Francisco, deal with complex multi-agency response situations that can only be addressed by companies with solutions that have experience in dealing with those crisis situations. We have a superior aptitude for implementing and supporting our WebEOC solution during not only hallmark catastrophes that have occurred over the past 20 years, but in most cases emergencies where massive numbers of citizens over large geographic areas are affected by these events. Experience, with the right technology platform, are paramount in managing and responding to large city problems that are unique and needing a platform to respond accordingly. Understanding those needs allows WebEOC to address the four key goals for your agency: planning and preparedness for emergencies, educating the public about preparedness, coordinating response and recovery, and collecting and disseminating emergency information.

Juvare employs a pragmatic, sensible and balanced approach to client maintenance, as well—regularly dealing with sensitive resiliency information, we know that we must make security, reliability, trust and performance paramount in our technology and database management approach. We keenly understand the purpose our products serve; they are called upon not only in times of crisis, but in the day-to-day, business-as-usual incidents and situations that impact your organization, as well.

Proven Technology and Approach

As we have for many of our clients, Juvare presents an approach for West Virginia whereby we stand firmly behind our commitment to you as a high-visibility client account with extensive enterprise and executive leadership sponsorship. If awarded your business, we will bring a superior level of commitment to the State. We are committed to delivering a seamless solution

and will work closely with the existing stakeholders and technology to migrate necessary information, settings and data. Should the solution require integrations or development work to meet the needs of West Virginia, Juvare is happy to work collaboratively with the team to find the best path forward.

Given our experience in preparedness and compliance operations we will work diligently to identify and mitigate risks and to deliver a quality solution to the West Virginia agencies and organizations. Our approach will ensure stakeholders receive a dependable and comprehensive solution for their operations, inclusive of the necessary organizational tools, global structure, hierarchy, capabilities and integrations necessary for success.

WebEOC is a technology platform for implementing processes, which allows you to connect those processes to one another and to the people within your organization. In essence, WebEOC gives life to your policies and procedures and puts them in the hands of your employees as they pursue your organization's mission. Our board sets for creating exercises and drills allow your agency planners to create real-life scenarios to better prepare for emergencies. Preparing and planning for large-scale events are important elements of incident management. To help you ensure optimal preparation for whatever lies ahead, Juvare offers add-ons built for handling all of your chief planning elements. With these add-ons, you can schedule recurring events, keep a reservoir of users' contact information, fill personnel gaps in incident coverage and much more.

Track Record of Excellence

Juvare is one of exceptionally few vendors who have proven their technologies outside of a small client base or small geographic area - our clients span both. We have individual generating station/sites as clients and organizations with thousands of separate global facilities. Juvare is likely the only vendor with this unique combination of extremely specific, proven and longstanding domain experience, which can also project on the same scale and breadth as required by West Virginia. We currently support large-scale technology deployments in dozens of similar client sites, and we are eager to demonstrate this experience to West Virginia and look forward to your review of our offering.

Juvare supports the International Association of Emergency Management, National Emergency Management Association, National Hurricane Conference, and International EMS Chiefs, among other organizations. Some notable awards achieved for our WebEOC solution are:

- The 2017 Florida Emergency Preparedness Association (FEPA) Corporate Award
- Certificate of Networthiness (CoN) from US Army NETCOM Award
- Authority to Operate (ATO) from Department of Homeland Security Award
- U.S. Department of Justice CIMS Evaluation Special Report Award
- InfoTech Research "Champion" Rating Award

- California Emergency Services Association– Southern Chapter's Silver Award for the
- SBCOA WebEOC – "Creating a Culture of Connectivity"
- 2013 Best of California: *Best IT Collaboration Among Organizations*
- Rockefeller **100 Resilient Cities** singular platform partner for Incident Management Solutions

Our Experience

Juvare has been the leader in emergency preparedness and response for more than twenty (20) years. As an innovator in the field, the company has supported over 500,000 emergency response incidents worldwide and enables clients to better manage day-to-day disruptions, planned events and unexpected emergencies. We offer a completely integrated Incident Management solution for agencies without shortcuts, demonstrating our dedication, industry expertise and comprehensive result-driven methodology. To demonstrate our ability to deliver, within a few months we successfully implemented the United States Department of Transportation (USDOT) and Federal Emergency Management Agency (FEMA) baseline operations, allowing these agencies to stand-ready quickly while we developed their specific platform.

Juvare's solutions are the industry-leading, commercial-off-the-shelf (COTS) products that will best meet your need for a system to aggregate information for response and recovery efforts in real time. It is field tested and trusted by users across the world, including:

- Fifty-three (53) departments and agencies within the Executive and Legislative Branches of the U.S. Federal Government, including the Departments of Agriculture, Commerce, Defense, Energy, Homeland Security, Health and Human Services, Interior, Transportation and Veterans Affairs

- Forty-three (43) state level deployments, some of which include the Florida Department of Transportation, the Michigan Emergency Management Agency, and the Georgia Department of Transportation

- 3,600 US Hospitals, and over 30,000 healthcare facilities, including 23 of the 25 largest non-profit health systems, 9 of 10 largest for-profit health systems, and 14 of top 25 largest single hospitals in the US.

- More than 700 WebEOC licensed customers, representing thousands of users, most of whom are government agencies at the local, state, and federal level

In Closing

We understand that getting the right technology design and functionality for the volunteers, internal staff, and external stakeholders are your paramount concerns. We provide technology and services as other companies will be able to lay similar claim to; however, because of our subject matter experts and their backgrounds, only we can provide technology and services within an approach that matches your mind-set.

The Juvare solution culture is a self-sustaining network of like-minded individuals (clients) throughout the U.S. and in over 30 countries, joined through our solutions, services, forums and user groups. We continuously assess new strategies, methodologies and technologies that would benefit West Virginia's crisis management and business continuity needs. We maintain the culture of constant innovation and continuous improvement that has resulted in a loyal client base, new discoveries and recognition within the profession.

As shared in this proposal response document, we can perform the tasks and deliver solutions in the manner required, while abiding by all necessary specifications and requirements, further augmented by our commitment to ensure excellent results during the deployment and implementation period, and ongoing through the determined length of contract.

Juvare would like to thank West Virginia for this opportunity. As indicated in our response, we believe that Juvare represents to West Virginia a partner that is unparalleled in terms of expertise and commitment we will bring as solution vendor. We are resolved and confident that we can deliver this project to West Virginia. We seek to become your single source provider and will work hard to receive and maintain your loyalty. We are certain that you will recognize Juvare as your best partner.

Solution Summary

History of WebEOC

In September 1989, the U.S. Department of Energy's Director of Emergency Operations created the Task Force on Compatibility of Emergency Operations Center (EOC) Communications and Information Processing Systems. The objective of that study was to develop, by consensus of responsible departmental officials and technical experts, requirements for compatible video, automated data processing (ADP), and communications systems to permit effective and efficient communications and exchange of information among EOCs throughout the Department. The Final Report of the Department of Energy Task Force on Compatibility of Emergency Operations Center Communications and Information Processing Systems was published in the May of 1991.

WebEOC is the natural evolution of technology as a direct result of these 1991 reports. This solution was developed in 1996 by ESi, a spin out from Westinghouse Savannah River Company, the Management and Operating (M&O) contractor for the Department of Energy's Savannah River Site (SRS), a nuclear materials processing center near Aiken, South Carolina. WebEOC was the first web-enabled information management system, providing a way for users to receive updates, submit reports, and stay abreast of an emergency response from anywhere in the world. WebEOC first received industry-wide exposure in the July 1999 edition of the International Association of Emergency Managers (IAEM) Bulletin. WebEOC quickly became the standard information management system throughout the DOE complex.

Between February 4 and May 3, 2002, the U.S. Department of Justice, National Institute of Justice, Office of Science and Technology conducted an evaluation of commercially available Crisis Information Management Software (CIMS) products. They analyzed 26 products. Of the 26, only 15 were deemed to meet test conditions, and just 10 subjected their software to DOJ's independent evaluation. ESi's WebEOC Professional was one of the 10. In October 2002, results of that evaluation were published by NIJ in a Special Report titled Crisis Information Management Software (CIMS) Feature Comparison Report. Since then, WebEOC has become the dominant CIMS product globally, and it only continues to grow.

WebEOC has and continues to be used to manage a variety of day-to-day and business-as-usual operations, special events, and man-made and natural disasters. Examples include:

- **2001**: World Trade Center, 9/11
- **2001**: Flight 587, American Airlines
- **2004**: Selendang AYU, Alaska and USCG
- **2005**: Hurricanes Katrina and Rita, Texas
- **2005**: London Terrorist Bombing
- **2006**: CITGO—Major Oil Spill
- **2006**: Texas Wildfires
- **2007**: Hawaii and Alaska, Earthquake
- **2007**: California Wildfires
- **2007**: Hurricanes Dean and Felix, Central America
- **2008**: Democratic National Convention, Denver
- **2008**: Hurricanes Gustav, Hanna and Ike
- **2009**: H1N1 Pandemic
- **2009**: U.S. Presidential Inauguration, Washington D.C.

- **2010**: Deep Water Horizon Oil Spill, Gulf of Mexico
- **2010**: Haitian Embassy, following 7.1 magnitude earthquake
- **2011**: Alabama Tornadoes
- **2012**: Hurricane Sandy, Southeast
- **2013**: Boston Marathon Bombings
- **2016**: Super Bowl 50, Levi's Stadium, California
- **2016**: Hurricane Matthew, Southeast
- **2016**: Presidential Election
- **2017**: Hurricanes Harvey & Irma, Midwest, U.S.
- **2018**: Las Vegas Shooting
- **2018**: Marjory Stoneman Douglas High School Shooting, Florida
- **2018**: Hurricane Florence, Southeast
- Thousands of day-to-day events managed by WebEOC across the world each year

WebEOC Today

WebEOC was one of the first web-enabled, commercial-off-the-shelf Crisis Management Systems (CIMS) developed for emergency and incident management. Today, this web-based product continues to make it possible to monitor and manage an emergency response from anywhere in the world. Applicable during the planning, mitigation, response and recovery phases of an emergency, WebEOC can easily be configured based on local requirements.

Used by organizations during both emergencies and day-to-day activities, WebEOC continues to prove its proficiency in the industry and will continue to remain a forerunner in emergency management when it comes to innovation, usability and functionality.

WebEOC Summary

Accessed via the intranet or Internet, WebEOC ushered in the virtual emergency operations center era. WebEOC is the first web-enabled, collaborative technology specifically designed for emergency management, and it is the industry-leading Crisis Management Software (CIMS) product in both in the U.S. and internationally. It is designed to deliver real-time situational awareness information to meet the needs of both healthcare organizations and the private sector, as well as emergency management agencies (EMAs) at the federal, state and local levels. Through interactive modules, WebEOC streamlines the activities that must take place to manage public safety and business continuity during spontaneous, emergent and large-scale events. Although WebEOC provides specialized tools for managing crisis information and emergency response, it can also be used to manage any day-to-day agency events and operations.

WebEOC connects agency data sources into a common operating picture that is configurable and easy to use. With Internet access, an agency's command center is available 24/7, across the globe without compromise to the privacy and security of client information. The solution's status boards are a display that provides the ability to generate, post, transmit and share information in real-time amongst its users (while following the permission levels set to the client's operating procedures and plans). When an agency is better connected with its partners, other WebEOC users in your service area and the Juvare network of like-minded agencies/clients in the same sector, the agency/client will decrease operational disruption of events and will be able to recover/resume normal activities more quickly in the face of a crisis event.

Because WebEOC is designed to be configured to the agency's processes and requirements, it is not a cookie-cutter solution. Juvare's implementations team will work with your team to combine the best

practices that we have learned through our years of experience with your agency's operating model, creating the WebEOC operations model designed to meet the needs of your team.

Juvare's WebEOC system comes with a standard suite of status boards that enable any agency to begin using the system almost immediately. Status boards are the electronic equivalent of large, chronological or topical whiteboards or paper-based boards typically found in EOCs around the world. Within Juvare's WebEOC, a status board is a display that provides the ability to generate, post, transmit, and share information real-time among users. Administrators can designate users authorized to access information contained in these boards and can share information with other WebEOC users in the state, region or across the country.

West Virginia can use any status board "as is," or build an unlimited number of status boards and forms tailored to local requirements. Users can construct their own status boards using WebEOC Board Wizard or any external HTML editor, or Juvare can provide these services on a contract basis. Status boards formatted to meet individual user or organization needs can be developed when the system is initially deployed, as new requirements evolve, or as needed during an emergency.

Depending on configuration and access, personnel at home, out in the field, or in their office could monitor/manage incidents/events from any location. Uninvolved personnel could monitor events in real time as events unfold, if access is allowed. Juvare's WebEOC can be configured to mirror West procedures and plans.

Mobile options are essential tools for responders working in the field who must rely on mobile devices to gather, enter and transmit critical patient data. Juvare's solution offers applications for handheld devices and iOS and Android™ smartphones. No matter the application, WebEOC Mobile delivers a focused subset of features that allows responders to quickly and easily collect data by performing common, essential functions. The mobile application allows real-time and offline secure, encrypted capture of data ensuring uninterrupted workflow regardless of wireless connectivity. The ability to rapidly enter information, including HIPAA compliant pictures anytime, anywhere removes barriers inherent to other products.

Utilizing WebEOC can also provide West Virginia access to the Juvare Exchange, an innovative, first-of-its-kind collaborative incident management network that is transforming the way emergency managers, businesses and healthcare providers exchange data, share resources and communicate. The Juvare Exchange breaks down geographical and jurisdictional boundaries, eliminating communication barriers among emergency managers, businesses, healthcare providers, federal agencies, first responders and others. The Juvare Exchange promotes precise decision-making every day through unprecedented public-private-healthcare sector connectivity. This collaborative network elevates confidence leading to better preparedness, more proactive coordinated response and accelerated access to mutual aid so vital to saving lives.

Why WebEOC?

WebEOC is the most widely-used emergency management solution on the market today. The reason customers most often cite for selecting or switching to WebEOC from another crisis management software system is its ease-of-use and configurability. In addition, the WebEOC community, comprised of passionate, like-minded professionals is a strong peer-to-peer supportive network that can be relied on during day-to-day operations, as well as during times of emergency. Equally important is that WebEOC, as the name implies, is web-enabled, and can therefore be used and accessed by personnel responsible for dealing with all aspects of emergencies – in particular preparedness, response and recovery – from any place, at any time, as long as they have access to the Internet. It allows government, volunteer, and private organizations to respond, in a coordinated way, to a whole spectrum of emergency needs. Its use cuts across all segments of a response effort including:

- Communications
- Transportation
- Public Works
- Firefighting
- Emergency Management
- Higher Education
- Mass Care, Emergency Assistance, Housing, and Human Services
- Logistics & Resource Support
- Public Health and Medical Services

- Search and Rescue
- Hazardous Materials
- Agriculture and Natural Resources
- Energy (Nuclear, Electric, Hydroelectric, etc.)
- Public Safety and Security
- Long-Term Recovery
- External Affairs
- Military

"I'm really pleased to be a WebEOC customer... with the whole-hearted endorsement it's been getting from our local response community and community officials, they'd rather get rid of me than give up their WebEOC!"

DAVID KING, COORDINATOR | CAMPBELL COUNTY EMA, WY

WebEOC Estimated Operational Impact

WebEOC Functionality	Benefits	Estimate of Impact
Information Sharing through a CIMS	All departments, call centers, locations and designated personnel can obtain real time incident related information	**Accurate and timely decision-making and response to day-to-day and irregular operations**
Maintenance of individual and organizational position log	Tracking of all information related to the position/ organization and incident	**Organized recording and tracking of information through documentation of activities for use in reporting, analyzing response decision, and responding to audit inquiries**
Significant Events Boards	Information from individual and organizational logs can be pushed to higher level Significant Event Boards for a boarder audience to view.	**Increased situational awareness for more comprehensive event understanding**
Tracking of missions/ tasks, logistics situations, and statuses of Critical Infrastructure, Facilities, and Processes	All designated personnel are aware of the status of any situation, entity, resource, or capability that needs tracked. Everyone knows what everyone else is doing and how it impacts them.	**A coordinated response can be achieved and only those required resources and capability can be deployed bring the incident under operational control or back to status quo**
After-Action Comments Board	Timely tracking of all user recommendations or comments during an incident	**Provides a concentrated source of feedback to generate an improvement plan to refine operational processes and can provide insight to address audit inquiries**

	New Status Boards, Forms/Reports, Checklists	Create your own based on new requirements at any time	**A more efficient and effective, personalized WebEOC based on change requirements**
Documentation and Imagery		Obtain the ability to store, transmit and receive incident documents, images and reference by all agencies	**All agencies can obtain incident related documentation and imagery as needed from a sole source**
	Audit Trail	Create a permanent comprehensive record of the event or incident	**Obtain the ability to quickly access and obtain specific incident related data at any time during or after the incident**
Team Management		A comprehensive team management module for team administration, activation, deployment and tracking	**Obtain the ability to track all team members' deployment, training and location.**
	Open API	An open API provides the platform on which numerous third-party applications can feed data	**The ability for true interoperability through the ease of enabling 3rd party integrations**

Features and Capabilities

WebEOC is the most widely-used emergency management solution on the market today. The ease-of-use with which the system is operated, as well as the option to locally configure the software, has made it the platform of choice for our clients. In addition, the WebEOC community, comprised of passionate, like-minded professionals, is a strong peer-to-peer supportive network.

Equally important is that WebEOC, as the name implies, is web-enabled, and can therefore be used and accessed by personnel responsible for dealing with all aspects of emergencies – in particular preparedness, response and recovery – from any place, at any time, as long as they have access to the Internet. It allows government, volunteer, and private organizations to respond, in a coordinated way, to a whole spectrum of emergency needs.

Juvare's WebEOC will help West Virginia curate a common source of the organizational data and information responders need in real time by providing position-specific activity and events tracking, offering a real-time common operating picture throughout the entire life cycle of an incident. This allows users to gain crystal-clear situation awareness and efficient communication with internal and external constituents.

Several WebEOC terms, processes, features and benefits (with real-world examples) are listed below.

Creating the Event

Within the context of Juvare's WebEOC system, a **board** is an electronic display that allows you to transmit and share information in real-time among other users. WebEOC boards are the equivalent of large, chronological, or topical paper-based boards that, for years, dominated every EOC and command center around the world. Juvare's WebEOC comes with a standard suite of status boards that enable any agency to begin using WebEOC almost immediately. Status boards are the electronic equivalent of large, chronological or topical paper-based boards typically found in EOCs around the world. Status boards provide the ability to generate, post, transmit, and share information real-time among users. Administrators can designate users authorized to access information contained in these boards.

A WebEOC customer can use any status board "as is," or build an unlimited number of status boards and forms tailored to local requirements. Users can construct their own status boards using Juvare's WebEOC Board Wizard or any external HTML editor, or Juvare can provide these services on a contract basis. Status boards formatted to meet individual user or organization needs can be developed when the system is initially deployed, as new requirements evolve, or as needed during an emergency.

Configurable forms allow you to adapt WebEOC to meet the needs of your team and the events they manage. From managing business-as-usual events to planning special event logistics to working together and collaborating in times of emergency, configurable forms enable you to collect and document the right information at the right time in your workflow.

Maintaining and Updating the Event

WebEOC's configurability is unmatched. Unique status boards can be created and adapted by our users. Fields such as priority, status, progress, comments, and details can be added as necessary. Administrators can create status boards locally, modify status boards (including the default board set), or delete boards that are no longer needed. Once a board is developed, specialized options and functions can be assigned or modified using the Advanced Board Editor. With Juvare's WebEOC, each Administrator can create their own status boards and forms. These boards can be used locally or shared regionally. Mission Tasking and Significant events can be configured for specific customer requirements.

Significant Events

The Significant Events board is a component of the event reporting process. This board allows you to see important communications, information, and actions during an incident. Important events can be tagged to appear on the significant events board when you enter activities in the Activity Log. The Significant Events board provides real-time chronology of records of the actions taken during an event, from beginning to end. Entries in this board include reporting authority, event type, date and time of the entry, location, priority level, and a narrative summarizing event information.
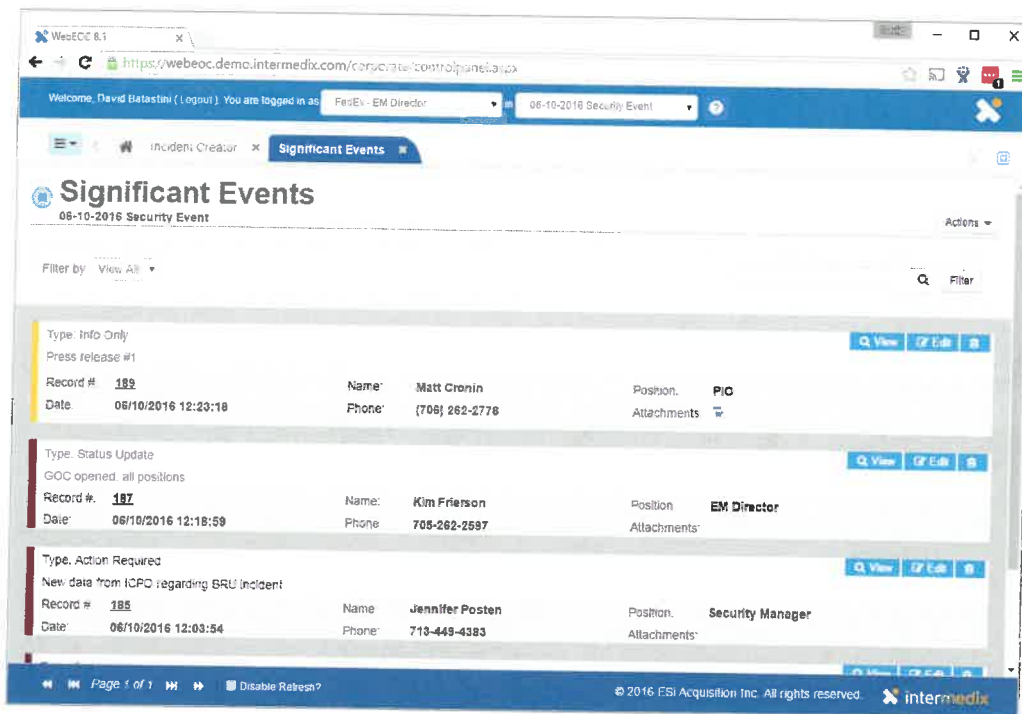
Managing Incidents

WebEOC can manage multiple ongoing incidents simultaneously, yet separately. This is critical for organizations that function in an oversight role, involving multiple operating facilities that track multiple incidents.

Relating multiple missions is a core feature in WebEOC and can be accomplished a number of different ways. Typically, there is a main mission or request. If multiple requests are required, additional requests can be added to the main mission and assigned separately to the appropriate position or emergency support functions. Receiving agencies have the ability to accept or reject missions and add comments as appropriate. Each element of the mission can be tracked separately with a unique status (e.g., Assigned, Mobilized, On Scene, etc.), date/time due, etc. To do this, each new incident (or event) is set up, or an existing incident modified, through Incidents in the Admin Manager and is maintained as an active incident until it is archived. Upon emergency declaration or the start of an incident, users create the new incident in the system and assign to applicable Groups. During log in, the Incident drop-down list will be filtered based on the group permissions of the responder. Responders can begin posting information once the incident is selected and the responder successfully logs in to the system.

With WebEOC, agencies and users can track individual incidents, or roll-up multiple incidents for viewing in a common master view. Users with access privileges to the Incidents admin manager have the capability to run a comprehensive incident report to include all boards, or any combination of boards, as determined by the user. All data fields for each board selected will be included in the report.

The flexibility provided in the customization of data fields as well as its ability to manipulate the process flow of data allows for the handling of large, complex missions involving numerous agencies with ease.

Dashboards

The WebEOC Dashboard is a visualization tool that enables end-users to arrange a combination of boards into a unified dashboard. Using the dashboard is a fast and simple way to organize critical information in a meaningful format and make it available to users in one place. Users are given an option to create their own dashboard and customize it to fit their workflow or use Administrator developed dashboards.

Juvare's WebEOC provides a default dashboard that displays many of the standard status boards that would be used during a response. Common information, such as resource requests, tasks, shelter information, weather, etc. can all be viewed on a single screen. Additionally, any number of dashboard views can be configured to display any other data that is available in the system. This configuration is performed by the administrator through the board editing tools provided with the solution. It is very common for administrators to create custom dashboard views. These views can include content from a combination of different WebEOC boards. They also can include other content such as RSS or weather feeds, or data integrations from other Juvare Products or external sources.

From the control panel, users can access dashboards created by administrators and create a custom dashboard for the position they are assigned to. Through the Dashboard, organizations are able to have real-time awareness of core capabilities and preparedness in multiple categories, including custom categories that can be added on-the-fly. Indicators follow a clearly identifiable color scheme with more detailed information on mouse-over. The dashboard allows real-time tracking of resources, personnel and other field data with details available on mouse-over. Previous data entries are maintained, allowing for historical analysis.

Our WebEOC system utilizes dashboards to summarize information in real time for the EOC and Situation Reports (SITREPs) to report on those summaries to an established communication chain. For any SITREP, separate input forms can be created allowing different entities to simultaneously enter data. The form can then be reviewed by a central authority and once approved, published for display or dissemination to predetermined addressees.

Resource Request/Task Assignments

Provides the ability to submit, assign, and track resource and task requests during an incident. The resource request and task assignment inputs are modeled after the *ICS 213-RR*. When you submit a new resource request or assign a new task, you can select the position to whom the request should be routed.
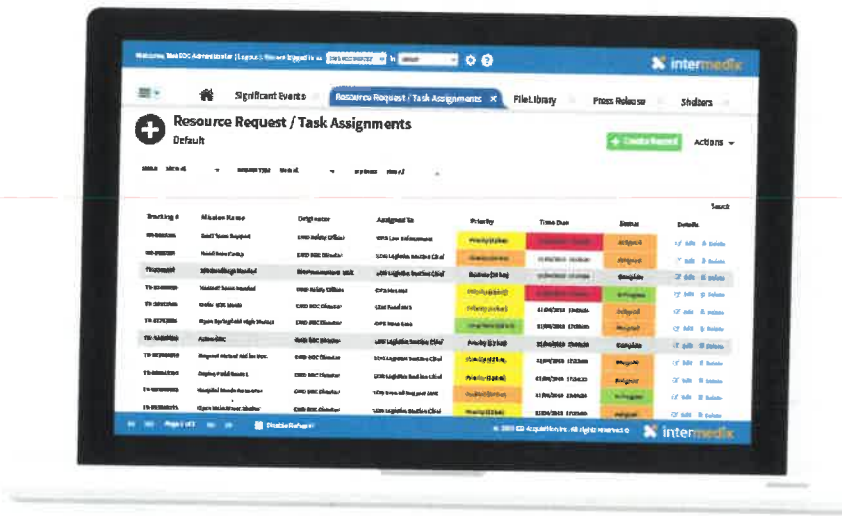
Users can submit resource requests from the field on any mobile device and route to the appropriate department. Staff can then dispatch resources safely and efficiently, all while maintaining a common operating picture. Juvare's WebEOC doesn't require you to change your processes. In fact, it conforms to your processes already in place, but makes these processes more effective, streamlined and more efficient.

Checklists

The checklist module enables the input of individual checklists. During setup, checklist steps can be identified as a 'main' numbered step or 'sub-step,' and can be easily ordered/reordered using arrow buttons. Steps and sub-steps can be shown as complete, open [in- progress], previously accomplished, or not applicable; or users can just mark a checklist step complete if they do not desire the added functionality.

Press Release

Every emergency response involves the media, and almost every emergency response organization has a Public Information Officer (PIO) responsible for the development and release of accurate and complete information regarding the incident. The PIO usually establishes an area for the media that is away from the command post, separate from the EOC, and a safe distance from the incident scene. This area is used to provide news releases, responses to questions or requests, tour information, etc. Juvare's WebEOC Press Release board allows you to establish links to press release files stored internally in WebEOC's database or files stored externally. It can be used to display press releases in their entirety.

Effective Critical Information Sharing Among Organizations

Juvare's WebEOC and our product suite provide specialized tools for managing crisis information, people tracking and emergency response. It can be used to manage any-and-all events, agencies, organizations, etc. One of the greatest features of WebEOC is support for WebEOC Fusion, which brings a new dimension to the concept of collaboration. Emergency managers can reach out in times of need, not only to neighboring agencies, but to WebEOC users in other parts of the state or country, with Fusion acting as the central communications hub to route messages. An agency tied into a WebEOC Fusion server can easily share essential information with all WebEOC systems through status boards created from any of the connected WebEOC systems. This creates a common operating picture for all users, such as state EMAs and other federal agencies, regardless of locale.

WebEOC can be configured to allow West Virginia to securely and reliably share information through WebEOC Fusion. A Fusion server encrypts and routes data from firewall-protected servers to other subscribed WebEOC installations. WebEOC instances that are all connected to a single Fusion server will be able to see the subscription boards and regional incidents published by the other WebEOCs that are also connected to that WebEOC Fusion server. It is also possible for any individual WebEOC deployment to be connected to multiple WebEOC Fusion servers, but subscription boards and regional incidents only exist on the WebEOC Fusion server that they were published on.

Reports

Administrators have access to system reports and the ability to create specialty reports using the admin reporting tool. For example, the Activity Log allows you to document actions taken by personnel in your position during each shift. This board has the name of the position you are logged in as at the top of the board. It allows agencies to track event names and details, statuses, contact information, position and name of those reporting, maps of the area, and more. A comprehensive event report can be generated consisting of individual or all status boards in an agency's WebEOC system. For enhanced reporting functionality that may be required for external analysis programs and specially formatted documents, customers have the

option of integrating tools such as Crystal Reports, Microsoft Excel and Microsoft Access to provide additional functionality.

Staff Tracking: Summary
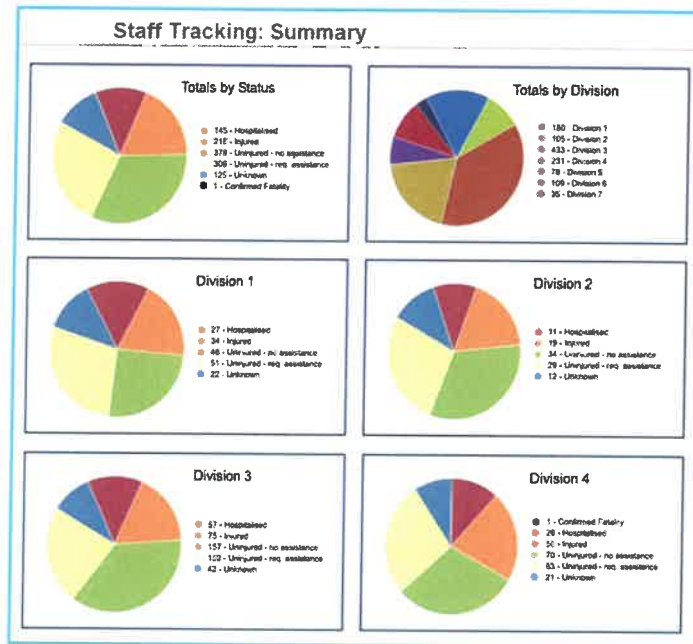
Situation Reports (SITREPs)

Juvare's WebEOC offers real-time situational awareness and a common operating picture while providing strategic management decision capabilities for decision makers and other stakeholders during an emergency or an event. SITREPs (SITuation REPorts) are typically published at least once every 24 hours during an emergency. WebEOC provides a standard format that may be used based on the two common methodologies — Incident Command System (ICS) or Emergency Support Functions (ESF). Functional areas within the emergency response organization update their portion of the SITREP which then populates a master SITREP. The master SITREP can be viewed online and approved before release. The Situation Report board allows agencies to track published SITREPs and view the published reports.

Wash-up/After Action Reporting

Users document comments and recommendations after an event and track action items to resolution. Create reports in advance or on-the-go. Gain comprehensive insight into every event with accurate reporting and more productive analysis.

Interagency Communication

Juvare's WebEOC system includes a messaging component, allowing users to communicate with each other via an internal messaging link unique to WebEOC. Users can send messages to any email server or email addressable device such as cell phones or pagers. It also allows users to send/forward messages to email accounts external to WebEOC.

The WebEOC system also offers a real-time chat, providing users with an informal method of communication.

Position Log

Provides users who have their own computers with a method of documenting actions taken during a shift. The user selects their particular agency or organization, and then only their incidents/events are presented during login.

Contacts

Provides the ability to maintain and display detailed contact information that is searchable and can be designated as private

JUVARE

Alerts & Notifications

Provides the ability to rapidly distribute and update information relevant to the healthcare community:

- Broadcast weather, missing endangered persons, and major road closure alerts
- Inform users of disruptions within the healthcare delivery system, including closures and evacuations
- Update first responders and hospitals on resource limitations, mass casualty incidents, and disasters
- Establish data sharing agreements to send alerts across regional boundaries
- Subscribe to update prompts and status change alerts
- Send updates in real-time, either targeted to specific user communities or widely distributed
- Send updates on-the-go with the smartphone app
- Provide multiple information-delivery options, including text, email, push notifications, and web alerts

Notifications Through Social Media

Juvare's WebEOC features a specialized feature, allowing users to send Tweets® directly from a WebEOC status board. Coordinating agencies, the media, or even the public can subscribe and view the Tweets® to receive real-time updates during an emergency. Since it integrates with any status board, there is no need to change your process to establish this information feed.

File Library

Enables users to upload and share documents and files with other users through Juvare's WebEOC system.
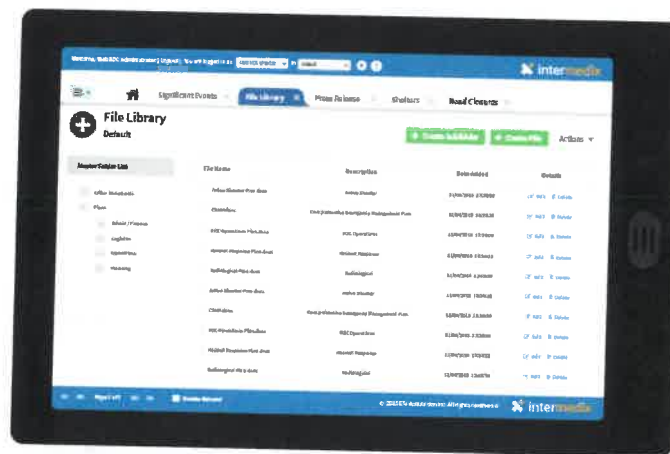
Data Linking

Through data linking, information entered in one status board can be simultaneously sent (pushed) to one or more 'target' status boards. This eliminates the need to enter the same data multiple times while ensuring information integrity across multiple boards.

ESF

Unlike ICS or FEMA forms where specific formats are prescribed, ESFs contain no such structure. Various customers have developed ESF status boards based on their interpretation and implementation of each emergency support function. These forms can be made available upon request.

WebEOC Technology Facilitators

Our platform interface is commercial-off-the-shelf (COTS), with tremendous configurability. Our board and dashboard capability are highly configurable and, adding to the end-user experience, we can provide direct interface to other systems using our REST and SOAP-based APIs. We have developed a sophisticated permission and process management capability, and our implementation process and workflow standardization approach has proven to be successful model in hundreds of agencies.

API

Communication between WebEOC and other products can be interfaced to the system through data import or through a simple link to the external system. A more complex integration can be achieved through the WebEOC API. WebEOC provides a web-service based API that enables the development of adapters to third party systems to create, update, and retrieve information in status boards. The API uses the same authentication and authorization rules as the application itself, so all business rules are obeyed.

Given an open API, optional interfaces between third party products and Juvare's WebEOC system can be developed. WebEOC-based solutions are constructed using Microsoft tools, which enables them to be used with any web services-based API. This integration could allow board & system data to be sent directly to an external application. The reverse is also possible, allowing an external application such as CAD software to send data directly to Juvare's WebEOC system.

Permissions

Juvare's WebEOC is an incident-based information management system, capable of managing multiple incidents simultaneously yet separately. This is critical for organizations that function in an oversight or regulatory role managing and/or tracking multiple incidents, or whose structure involves multiple operating sites or levels of government. When logging into WebEOC, the user will choose an incident. Data in some boards, for example, the Activity Log and Incident Action Plan, is dependent on the incident the user is viewing. Each user account in the WebEOC system must be assigned to a position; each position must be assigned to a group; and each group must be assigned to an incident. Without a position, a user cannot log into Juvare's WebEOC. Without a group, a user does not have permission to any incidents, and without being assigned to an incident, a user does not have permission to any boards, plugins, etc. Each user has a unique user name and system password. Users can be assigned multiple positions where necessary. User accounts, positions, and groups are established based on specific organizational structures whereby they are given different levels of rights depending upon the position selected during the login process. Positions are assigned to users in advance of a disaster event based upon their role(s).

For example, John Doe (a user) is assigned to the Operations Section Chief position. Multiple users can be assigned to a position, and multiple positions can be assigned to a group. These features of WebEOC make it easy to secure some events from some system users and allow users to switch easily between incidents. In addition to the ability to switch between incidents, WebEOC has the capability to create combined views of multiple incidents using the "Master View" feature.

Process Validation & Standardized Workflows

Juvare personnel will work with the designated West Virginia WebEOC Administrator to ensure boards and processes implemented are consistent with agency requirements. This includes ensuring final access privileges are assigned to Status Boards, plug-ins, links and menus and, if appropriate, process permissions are assigned to Organization Groups. Once complete, Juvare remotely installs the final board set on the West Virginia WebEOC server or, if the server is accessible from the internet, the process and boards can be configured directly on the server. This also provides Juvare personnel an opportunity to review the processes.with the customer's administrator.

WebEOC offers pre-established and tested workflows that match the needs of government clients and streamline both daily and emergency operations.

Outdated Method   Admin   Setup Reusable Boards   Share Across Organization
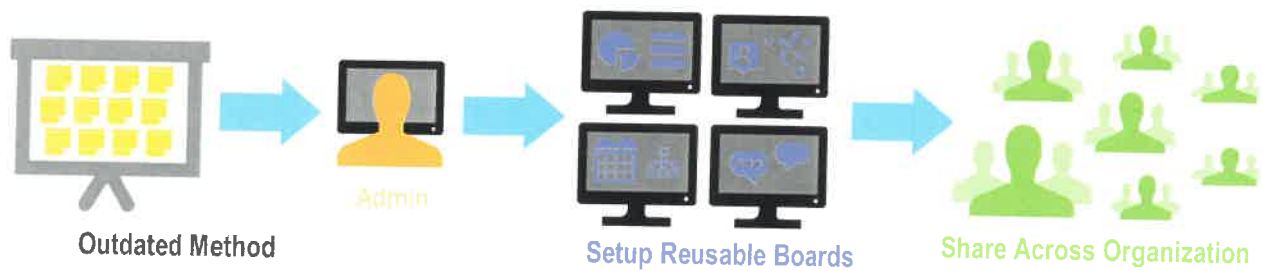
Scalability

As a market-leading provider of emergency operations center software, Juvare solutions are engineered to provide peak performance at a moment's notice. Juvare offers WebEOC as a tiered solution, ensuring that the right product mix is identified and provided for West Virginia.

WebEOC can be hosted using either the Application Service Provider (ASP) or on-premise host models.

The WebEOC Enterprise solution supports:

- 5 system administrators
- 10 sub-administrators
- 750 users

WebEOC Enterprise takes emergency management to the next level by offering enhanced WebEOC capabilities. This highly customizable system can be scaled to agencies of varied size and is the perfect solution for complex systems with a large number of users, and multiple sub-agencies or jurisdictions. In addition to the board building capabilities for system administrators, WebEOC Enterprise offers the following features:

- Sub-administrator Account Types
- Dashboard
- WebEOC Fusion
- Board Data Manager
- Surge Capacity Plan

While the final, actual license count is not known for West Virginia at this time, we can easily point to other federal agencies, state agencies and large counties/cities and can easily handle several hundred concurrent users during activations.

We have clients that manage thousands of users and a multitude of incidents daily. Juvare's products are scalable in that additional load balanced web servers can be added to the configuration as the need is identified. When load balancing is employed, the load balancer must be configured to allow a client connection to retain its affinity for a single server.

We have all experienced the surge of players that need a seat in the EOC or field access when a major event occurs, and the EOC system can quickly go from 30 day-to-day users to 500 users in minutes. The WebEOC system administrator can control users and positions that the surge creates – in real time. Using Position Access Codes (PAC) can be used to help in these situations.

Juvare's WebEOC is Commercial Off the Shelf Software (COTS) and is ready to use. As a browser-based solution, all end users with verified access can access the system via a current browser. Our development team uses agile development methodology, and any special configuration is

done on a per client basis and is tested during a validation phase to ensure all stated functionality exists as promised. This testing/validation is conducted during a table-top exercise with end users to ensure the system performs as expected in a real-life scenario.

Surge Capacity Plan

WebEOC Enterprise includes a Surge Capacity Plan that enables you to increase the number of users allowed by your license to address emergency needs during a critical period of EOC activation. During an emergency, if you need to engage a higher number of users than expected, rest assured that you can provide them with access to WebEOC without any issues or additional costs.

Normal Operation   Emergency Operation

Implementation

Juvare's Professional Services organization will assume lead responsibility for leading, conducting and assisting West Virginia with the implementation of the proposed Juvare WebEOC based solutions. Our Project Management team will provide scheduling, project plan development and management, coordination of and Juvare teams, requirements management, invoicing support, issues and action items tracking, and project communication. Following notification of Project Award, the Juvare Project Manager schedules and conducts a Project Kick-Off Meeting to include the [Client Name] Project Team and the Juvare Project Team.

Project Team

The Juvare employees who will be implementing, and training West Virginia personnel will be Certified WebEOC Administrators. A Certified WebEOC Administrator (CWA) possesses the knowledge necessary to administer a WebEOC system, participate in the implementation process, support and encourage integrated design, and has successfully passed a written and practical exam administered by Juvare. Other key personnel include your project managers and solution implementation managers, each of which will be assigned to West Virginia to oversee solution implementation, training and support.

> **Project Management:** Primary planning and subject matter experts for the project. Point-of-contact (POC) for all project activities and will be the Juvare team lead for the project. The Project Manager will provide Technical Control, Scope Control, and project communication. These resources will also be integral to the requirements and design deliverables. All PMs hold the Certified WebEOC Administrator (CWA) certification.

> **Technical Implementation Analyst (TIA):** The TIA is responsible for developing technical solutions, providing on-site services, training, and process evaluations related to our proprietary Emergency Management application. The TIA focuses on implementing Juvare solutions and building processes supporting the client's specific requirements. Perform on-site and off-site technical services including, but not limited to installations, training, system configurations, process review, and documentation. All TIAs hold the Certified WebEOC Administrator (CWA) certification.

> Juvare technical personnel will conduct a thorough review of the West Virginia systems. Recommendations will be made for improvements to processes utilizing best practices from Juvare's extensive customer based and unparalleled experience.

Dedicated Services Options

As part of the implementation and ongoing support process, West Virginia will have the option to purchase dedicated service hours. By purchasing dedicated service hours as a part of the project, West Virginia will have the option to use the hours as needed, either for requests outside of the initial scope of work, or for board-building and customization once the project is completed.

Our dedicated team of analysts/engineers will drive optimal long-term solution performance and ensure seamless operations. Clients that hire/assign internal WebEOC staff have the advantage of pairing a nuanced understanding of the organization's unique operating processes with the technical skills necessary to optimize the extensive configurability of WebEOC. However, many clients assign just a single, and sometime only a partial, staff position to this vital role. This "single point failure" model can be challenging to scale and, during staff absences or turnover, create a risk for your incident management operations. Juvare, with our **Dedicated Services** program, is positioned to mitigate that risk and offer additional upside benefits to help ensure our Client's continued success. Additional details on these options can be found in the *Ongoing Support* section in this document.

Holistic Implementation Approach

We are committed to delivering a seamless solution, and we will work closely with your existing stakeholders and technology to migrate necessary information, processes, settings and data into the proposed solution.

Our approach ensures stakeholders receive a dependable and comprehensive solution for their operations, inclusive of the necessary organizational tools, structure, hierarchy, capabilities and integrations necessary for success.

To ensure the project is implemented within budget and schedule, the Juvare project team utilizes the commonly accepted industry standards for project management as defined and codified in the Project Management Institute's PMBOK (Project Management Book of Knowledge), ensuring adherence to an established successful framework. This overarching set of guidelines provides a clear consistent path for the Juvare project team to initiate, plan, execute, monitor and control, and close projects successfully and efficiently. This methodology similarly follows the PMBOK framework of incorporating knowledge areas, including integration management, scope management, time management, cost management, quality management, human resource management, communications management, risk management, and procurement management as needed to successfully implement projects of various levels and complexity. The Juvare project team's utilization of these proven methods will ensure that project deliverables are met, objectives accomplished, and schedules adhered to.

The primary Juvare internal project monitoring and controlling tool will be Microsoft Project, which is designed to assist project managers in developing plans, assigning resources to tasks, tracking progress, managing budgets and analyzing workloads. Depending on the preferred needs of West Virginia, the information from these project files can be provided either as static/snapshot versions of the MS Project file, or as PDF images of the various views and reports inherent to MS Project. Or, if feasible, the Juvare team will be willing to contribute resource, task, and progress information to whatever project tracking system utilized by the team.

Juvare will employ proven methods for management, communications and continuing support, all implemented per Project Management Institute standards, to ensure project deliverables are met, objectives accomplished, and schedule adhered-to.

Project Phases
Phase 1 – Preparation

Project Kickoff

Following notification of Project Award, the Juvare Project Manager schedules and conducts a Project Kick-Off Meeting. Juvare's Project Management team will provide scheduling, project plan development and management, coordination of West Virginia and Juvare teams, requirements management, invoicing support, issues and action items tracking, and project communication.

System Reviews

Juvare technical personnel will conduct a thorough review of the existing West Virginia systems. Juvare will facilitate Discovery sessions to determine how West Virginia wishes to enhance our solutions for day-to-day operations, special events and man-made or natural disasters. Recommendations will be made for improvements to processes utilizing best practices from Juvare's extensive customer based and unparalleled experience.

Phase 2 - Configuration and Training

Perhaps the greatest benefit in selecting **WebEOC** is the culture and commitment that Juvare brings to every engagement. With both CIMS technology and emergency management experience, Juvare delivers a solution unrivaled in the industry. The diversity of our customer base is also a significant factor and we believe unmatched by other CIMS vendors or solution providers attempting to provide similar services. Many personnel, especially in the Federal vertical, are veterans. Our technical staff is vast and the original programmers of WebEOC are still with us today in leadership roles.

We believe that our experience with over 800 implementations gives us a distinct advantage in sharing best practices, connecting our clients with other systems and being efficient with our timeline. All implementations are different; however, ours are guided by a Project Management Professional with key milestones that we will collectively determine. Some implementations can be conducted in 30-45 days; others will take longer depending on the solution and training programs selected.

Juvare will provide onsite software installation of our WebEOC solution in the State's environment. We would rely on the local IT resources to ensure environmental factors are addressed. (e.g., servers loaded with operating system / database software and related service packs, servers on the network, permission issues, properly configured firewalls, etc.).

Configuration

Clients rarely implement the default, out-of-the box checklists, status boards or processes that come standard with our products. Instead, they take advantage of the configurability our solutions offer and implement their own unique requirements. This involves building new

checklists/status boards, modifying existing checklists/status boards and/or importing and modifying where necessary information from other users. In so doing, clients are able to implement processes that meet their unique incident/situation reporting requests, business continuity needs, other mission critical requirements. Juvare has extensive experience and visibility into the latest best practices that can be shared with and brought to West Virginia.

Training

Implementing effective training and exercise programs to practice communications interoperability is essential for ensuring that the technology works, and responders can effectively communicate during emergencies and events.

Juvare offers four primary methods of end-user training. At a high-level:

- In-person sessions (usually most appropriate for in-depth administrator trainings)
- Interactive webinar training sessions (often for more basic or end user audiences)
- Pre-recorded online learning curriculums
- Online learning modules

Juvare will work with West Virginia to define one or more methods that are most appropriate for the users/groups being trained on the system. Our training program is intended to support a "train the trainer" methodology. Following implementation, our clients routinely support their own user training initiatives, including "just-in-time" training as needed.

Juvare will provide instructor-led training for up to 15 participants per class. The client must provide location and required equipment for instruction. The end user training course will encompass two separate classes per day lasting three hours each. A separate two-day administration and board building class will be provided. This training will be prior to the design phase of the project to set a baseline for all participants of the discovery process. The hands-on end user training class will be a four-hour session. All our instructors are training professionals with extensive backgrounds in Incident and Emergency Management.

Using this methodology, West Virginia could then implement a "train-the-trainer" training and utilize some key strategies to ensure that all agencies follow the same processes and procedures.

General Orientation on Equipment and Applications—Agencies should provide initial orientation to their users about their particular applications. Multi-agency/multijurisdictional operations are often an afterthought to this training, if provided at all.

Single Agency Tabletop Exercises for Key Field and Support Staff— Structured tabletop exercises promote planning and identify response gaps. However, single agency activities do not promote interoperability across disciplines and jurisdictions.

Additionally, management and supervisory training is critical to promoting routine use of interoperability mechanisms.

Multi-Agency Tabletop Exercises for Key Field and Support Staff— As agencies and disciplines begin working together to develop exercises and provide field training, workable interoperability solutions emerge. Tabletops should address data and/or voice communications interoperability and focus on effective information flow.

Multi-Agency Full Functional Exercises Involving All Staff—Once multi-agency/multi-discipline plans are developed and practiced at the management and supervisory level, it is critical that all staff who would be involved in actual implementation receive training and participate in exercises.

Regular Comprehensive Regionwide Training and Exercises—Optimal interoperability involves equipment familiarization and an introduction to regional/state interoperability at time of hire (or in an academy setting). Success will be assured by regular, comprehensive, and realistic exercises that address potential problems in the region and involve the participation of all personnel. Despite the best planning and technology preparations, there is always the risk of the unexpected—those critical and unprecedented incidents that require an expert at the helm who can immediately adapt to the situation. Within the incident command system, these specialists are called Communications Unit Leaders. The role of the Communications Unit Leader is a critical function that requires adequate training and cannot be delegated to an individual simply because that person "knows about communications systems." Rather, the proper training of these individuals is of significant importance to a region's ability to respond to unexpected events, and it should prepare them to manage the communications component of larger interoperability incidents by applying the available technical solutions to the specific operational environment of the event.

WebEOC Administrator and Board Builder training is provided to the person or persons responsible for administering the system. Administrator training will provide instructions on how to setup and manage WebEOC. Administrators need not be IT professionals. The administrator training is not meant for end users; they will be trained after the WebEOC solution has been configured to meet the requirements of West Virginia. Once a baseline process is developed and installed, targeted user training can be conducted. This training, tailored to the State's unique implementation of WebEOC, is administered to selected users representing key EOC positions.

Upon completion of training, the same individuals participate in a mini tabletop exercise. The purpose of the exercise is two-fold. First, it tests user knowledge gained

during initial training. Second, and more importantly, it validates the WebEOC implementation as directed by the customer and highlights areas needing improvement.

Upon completion of onsite training and the exercise, Juvare will work with the West Virginia team to address any issues identified and, where time permits, implements any needed changes. Other customized training will also be conducted based on the needs of West Virginia.

Phase 3 – Support and Continual Improvement

Once initial system reviews, configurations and training is completed, Juvare personnel will continue to provide ongoing regional management, coordination and technical support including:

- Providing ongoing guidance on the use of Juvare's solutions

- Providing technical and administrative support

- Testing and coordinating patches and upgrades

- Providing recommendations of new and emerging technologies

- Ensuring interoperability between systems in the region, if applicable

- Designing and deploying new checklists, processes and board updates as needed to meet the needs of partner jurisdictions

Ongoing Support

Client Success Manager

Throughout the implementation phase, and as the lead point-of-contact once the initial project is complete, your Juvare Client Success Manager (CSM) will interact directly with the West Virginia team on a regular basis. Our Client Success Management structure encompasses multiple individuals who have industry expertise to support a specific industry. The CSM is an expert in incident management in the healthcare sector and manages similar clients, allowing the CSM to fully understand the business continuity and crisis management needs for the State and your peers. This individual serves as the concierge to all facets of the Juvare team, including support, contracting, finance, engineering, and will facilitate regular meetings and product enhancement.

Dedicated Services & Professional Services Team

Whereas the Juvare support team is available 24/7 via phone to address all emergency issues, the Juvare Services group provides additional technical services to clients and their technology installations, both onsite or remotely.

Our dedicated team of analysts/engineers will drive optimal long-term solution performance and ensure seamless operations. Clients that hire/assign internal staff have the advantage of pairing a nuanced understanding of the organization's unique operating processes with the technical skills necessary to optimize the extensive configurability of WebEOC and other Juvare systems. However, many clients assign just a single, and sometime only a partial, staff position to this vital role. This "single point failure" model can be challenging to scale and, during staff absences or turnover, create a risk for your incident management operations. Juvare, with our *Dedicated Services* program, is positioned to mitigate that risk and offer additional upside benefits to help ensure our Client's continued success.

Advantages of *Dedicated Services* for West Virginia include:

- **High Productivity:** Our clients interact with the same Juvare technical team for the duration of the Dedicated Services engagement. Similar to your existing internal staff, your dedicated Juvare team will gain an increasingly nuanced understanding of your configured system and your operational process – becoming an extension of your staff and supercharging productivity.

- **Low Administrative Burden:** Your dedicated team's time is free to be used in whatever way you deem appropriate – just like your staff.

- **Flexibility:** The Client has complete freedom to prioritize the dedicated Juvare team's work from month to month. In addition, should you require specialized technical support that goes beyond the dedicated team's skill set, you will have the option of diverting up to 25% of the monthly services to specialized technical resources. This flexibility is a significant advantage vs.

the internal staffing approach, as it is unlikely that most Clients will have the specialized technical resources that Juvare offers.

- **Access to Best Practices:** As another benefit only Juvare can offer, your dedicated Juvare team is part of a larger team of Professional Services and Engineering staff that have acquired best practices knowledge from hundreds of clients, thousands of hospital/healthcare users, and hundreds of thousands of supported events. As the team works to improve the Juvare instantiation, they will have the ability to consult with dozens of technical peers to mine best practice. You can expect that your team will provide a steady stream of recommendations that they can execute that reflect these best practices.

- **Improved Backlog Planning:** As your Juvare team becomes more familiar with your operating processes and system goals, they will increasingly be able to offer up suggestions to optimize the evolution of your systems. Whether it's a new or improved board, additional documentation or supplementary ad hoc training, your dedicated team will work with your stakeholders to ensure there is a healthy backlog of jointly prioritized improvements queued up.

Support Beyond Technology Implementations

West Virginia has unique requirements due to changing conditions, dynamic emergency preparedness requirements and explicit incident response protocols. If your organization doesn't have the capacity or technical expertise internally to drive your initiatives, Juvare Professional Services can support your project by acting as an extension of your team.

Project Management

Our team will provide end-to-end project management support to facilitate business or process improvements throughout your operations. Our knowledgeable and certified team skillfully employs proven techniques that reduce the costs, time and risk involved with tackling your toughest projects.

Technical Development

Our software development team will plan, design, test and implement world-class solutions to meet your unique demands.

Consulting

On-site and distance consulting services can better support your organization by providing the tools and expertise you need to progress at any level. Our solution consultants can support your operations with compliant strategies that complement our service and technology offerings.

Education and Training

Support your staff and mission with best-in-class training via live on-site sessions or remotely through our comprehensive learning management system (LMS). Our programs are certified by

the International Association for Continuing Education and Training (IACET) and provide continuing education units.

Juvare 24x7 Support

Juvare takes pride in offering excellent support to our customers 24 hours a day, 7 days a week. The Juvare Support Team is responsible for all activity related to assisting clients with our suite of products. This team maintains a vast knowledgebase of the products (EMResource, eICS, WebEOC, EMTrack, CORES, FleetEyes), specific domain experience across healthcare, the private sector, emergency management, and an in-depth understanding of specific hardware, networking HTML, JavaScript and SQL.

Response to Specifications

4.2.1 Project Goals and Objectives

4.2.1.1 The Successful Vendor should provide a solution that is easy to use for all projected users, to include representatives of federal agencies, state agencies, local jurisdictions, non-governmental organizations and other organizations with minimal or "just in time" training packages to be provided.

Juvare's WebEOC complies with this requirement. All WebEOC functionality is developed with the end user in mind to ensure users can be trained and effective in their response role in a very short period of time and without technical expertise. The WebEOC product is the result of real engagement by hundreds of thousands of users over the last 20 years. Our product team is committed to the principle of continuous improvement and is constantly evaluating user feedback regarding the graphical user interface and overall usability of the product.

4.2.1.2 The successful vendor's solution may also provide for customization of displays or reports, based on the needs of the users.

Juvare's WebEOC complies with this requirement. WebEOC provides administrators the ability to create, customize and assign an unlimited number of status boards for tracking of different types of information and workflows. This is a powerful fundamental of our solution. We provide training on this capability specifically so that you are able to modify and evolve your system without us should you desire to do so.
System users have flexibility to customize their view by opening boards as tabs and easily dragging and dropping tabs to order and re-order as necessary. Tabs opened are also remembered when logging off and back on and are unique to each position for circumstances where users fill multiple roles and monitoring different boards.
When using the WebEOC dashboard tool, users can further customize their view with a user defined dashboard for an even greater flexibility and common operating picture.

4.2.1.3 The successful vendor should provide a solution that provides for safe and secure sharing of emergency information, resource management, and related information in an environment to be evaluated by the panel.

Juvare's WebEOC complies with this requirement. WebEOC provides safe and secure sharing of emergency information, resource management and related information. The Juvare Security and Compliance Program is dedicated to regulatory compliance and protection of our customers' confidential and protected information. Regulatory compliance encompasses HIPAA privacy and security rules, HITECH, the Omnibus Rule, PCI (Payment Card Industry) Data Security Standards and State Information Security and Privacy controls. Juvare currently spends approximately 3 million dollars per year on the Security and Compliance Program.

Our security program is built on a strong base of policies and procedures that all Juvare employees must learn, understand, and implement in their daily work. Our comprehensive library documented policies and procedures are available to every Juvare team member via the corporate intranet. These policies include (but are not limited to):

- Standards of Business Ethics and Conduct
- Safeguarding Confidential Information
- Compliance Training & Certification
- HIPAA Affiliated Covered Entity
- HIPAA Business Associates Agreements
- PHI Breach Determination, Notification and Disclosure

All Team Members hired by Juvare are required to receive compliance training within the first thirty (30) days of their employment and to pass a certification test. New hire compliance training covers the Juvare Standards of Business Ethics and Conduct, the team members' basic compliance responsibilities, confidentiality of company information, and privacy and security. All existing Team Members are required to receive annual updates and refresher Compliance training, and to certify that they have received such annual training, upon its completion. Compliance training may be taught in live classroom sessions, or be given via remote video and/or teleconference, or may be accessed via available computer-based training. Application developers are also required to take a class on secure coding practices when they join the company.

The Juvare Security and Compliance program has been in place since 2002 and is constantly improved. In addition to the necessary policies, procedures and employee training, new measures are routinely implemented to meet or exceed current regulatory requirements.

4.2.1.4 The successful vendor should provide initial training for the following categories of uses. This training should be accompanied by easy to use and follow system documentation for each category of user.

4.2.1.4.1 System Administrators to include user access management - 0 up to ten (10) users.

4.2.1.4.2 State Agency representatives – up to fifty (50) users.

4.2.1.4.3 Local jurisdiction representatives – up to two hundred (200) users.

4.2.1.4.4 Non-governmental organization representatives – up to one hundred (100) users.

4.2.1.4.5 Federal Agency Representative – up to twenty-five (25) users.

Juvare complies with each of the requirements of 4.2.1.4. Juvare will provide training to the requested groups for the State.

4.2.1.5 The successful vendor should also provide refresher training for current users. The method of delivery will be evaluated.

Juvare complies with this requirement. We will provide refresher training to users as needed and as defined by the project scope.

4.2.1.6 The Successful Vendor should provide 24 hours availability for system technical support. The method of delivery and availability will be evaluated.

Juvare complies with this requirement. We provide 24x7 support availability via both telephone and email.

4.2.1.7 The EMIS shall be fully interoperable with the Federal Emergency Management Agency (FEMA) systems at Regional and National levels.

Juvare's WebEOC fully complies with this requirement. FEMA is a long standing WebEOC client who actively uses the solution on a daily basis. WebEOC provides an information hub that allows the users to connect multiple WebEOC systems into a secure network to facilitate collaboration and information sharing. This solution can be successfully used by emergency management agencies to empower managers at national, state, and regional levels to communicate critical incident information in real time and streamline response efforts in their communities. The agency's WebEOC, or the publisher, sends these boards to the WebEOC server.

The server forwards this information to other WebEOC systems in the network, or subscribers, so that emergency managers can see available boards and subscribe to them. This ability to seamlessly exchange data gives WebEOC systems in the network an ability to link incidents together. The advantage of linking incidents is that information is disseminated among jurisdictions in real time. When one of the EOCs in the network updates incident details, the updates become instantly available to the other connected WebEOC systems.

4.2.1.8 The EMIS shall be fully interoperable with EMIS solutions in all FEMA Region III states and other neighboring states.

Juvare's WebEOC fully complies with this requirement. WebEOC's open API in RESTful and SOAP formats permit integration with external systems.

4.2.1.9 The EMIS may be fully interoperable with Emergency Management Assistance Compact (EMAC) Operations System (EOS) for all functions.

Juvare's WebEOC fully complies with this requirement.

4.2.1.10 The vendor shall make training available at the State for all levels of EMIS users (User, Administrator, Technical, and Maintenance) during deployment. The vendor shall identify the following:

4.2.1.10.1 Course names.

WebEOC Bootcamp, consisting of WebEOC End User Training, WebEOC Administration and Basic Board Building. In addition to providing "basic" training Juvare offers two additional board building courses: Intermediate Board Building & Advanced Board Building. Custom training courses may be offered upon request.

4.2.1.10.2 Delivery methods.

Training as part of implementation is delivered onsite, face-to-face. Optional, additional trainings once implementation has been completed can be onsite or remote.

4.2.1.10.3 Length of each course.

WebEOC Bootcamp is 2.5 days in length. Other course lengths vary depending on needs but are typically 1-2 days.

4.2.1.10.4 Schedule for standard yearly training courses.
For 2019, Juvare has standard yearly trainings scheduled for the following dates:

WebEOC Bootcamp	April 23 – 25
Intermediate Board Building	May 14 – 16
Advanced Board Building	June 11 - 13
WebEOC Bootcamp	June 18 – 20
WebEOC Bootcamp	August 13 – 15
Intermediate Board Building	September 17 – 19
WebEOC Bootcamp	October 15 – 17
Advanced Board Building	October 22 - 24
WebEOC Bootcamp	December 10 – 12

4.2.1.10.5 Type of course material that will be provided to the State (ie, course handouts, electronic power point presentations, etc.).

Juvare would be happy to provide thorough course syllabi of the information provided in each training course upon request by the State.

4.2.1.10.6 Methods for ongoing, continuing, and on-demand training.

WebEOC End-User and WebEOC Administrator classes can be taught face-to-face or via two-way webinar. Basic Board Building must be taught face-to-face. Further, Juvare provides online videos and resources for on-demand, continuing training for our clients. Board Tutor allows on-demand training of the state's own implementation at the user's individual discretion. Training progress can be tracked by application admin users.

4.2.1.11 The EMIS shall enable users to assign members of the contact lists to associated message groups to facilitate rapid dissemination of messages to specific sets of recipients.

Juvare's WebEOC fully complies with this requirement. WebEOC allows users to create groups within contact lists to facilitate the rapid dissemination of messages to specific groups of individuals. The proposed solution allows for the dissemination of messages across multiply modalities such as voice, sms, fax, email.

4.2.1.12 The EMIS shall enable users to access situation reports and visual situation displays (Common Operating Picture [COP]).

Juvare's WebEOC fully complies with this requirement. Most implementations of WebEOC are configured to support a roll-up process of information to create a common operating picture (COP). These processes can be established using permission-based assignments, data filtering, and record routing. For example, a record could be created at the lowest level by a user representing a local participant. This record, when saved, could then be passed to a user or group of users trusted with review capabilities. Upon review, the record could be escalated to higher and higher levels (and reviewers can intervene at every escalation), until the record reaches its highest level, which tends to correlate directly with visibility. If the reviewers determine escalation should stop at the municipal level, that record now becomes part of the municipal COP; if it stops at the county level, it becomes part of the county COP; etc.

Using filtering, records can be passed between levels that would not necessarily be considered part of the escalation process. For example, if Town A wanted to share a record with Town B, something like a checkbox could be clicked to enable this type of lateral sharing. Separate permissions could be instituted, where perhaps Town B could be given read-only access or edit access to only a handful of data fields.

At each level a COP is formulated, that data can be aggregated into a report using assigned views and filter tools. The report can contain maps, graphs, charts, lists, summary queries, anything to support and elevate situational awareness.

Given WebEOC's high configurability, any process flow can be created to your requirements.

4.2.1.13 The EMIS shall enable users to access Road Closure Notifications and reports from the West Virginia Division of Highways and other agencies and display them in the EMIS solution and the Common Operating Picture (COP).

Juvare's WebEOC fully complies with this requirement. WebEOC offers pre-established and tested workflows that match the needs of government clients and streamline both daily and emergency operations. Examples of these standard workflows include: Event Reporting, Resource Requesting, Situation Reporting, Shelter Tracking, and Road Closures. Pulling in data from partnering agencies is simple in WebEOC. Transportation maps, such as road closures, traffic speeds, or highway incidents, can be layered alongside incident data using WebEOC's Maps Add-On. Other external feeds can be seamlessly ingested into WebEOC using the API.

4.2.1.14 The EMIS shall enable logistics support users to plan and monitor the routing and movement of supplies from a supply facility to the destination.

Juvare's WebEOC fully complies with this requirement. Logistics support users will be able to plan and monitor the routing and movement of supplies from a facility to the destination. WebEOC utilizes GPS tracking and/or barcode scanning to assist in monitoring such movements of supplies.

4.2.1.15 The EMIS shall enable logistics support users to monitor and manage stocking levels of supplies held in supply depot facilities.

Juvare's WebEOC fully complies with this requirement. Logistics users will be able to monitor and manage stocking levels of supplies held in supply depot facilities. The logistics support staff will be able to monitor supplies according to various fields such as quantity, supply descriptions, locations, and deployments. This information in WebEOC combined with the reporting feature will enable the staff to forecast consumption rates based on the information accessed.

4.2.1.16 The EMIS shall enable authorized users to provide administrative support for procurement of materials and services including the ability to:

> **4.2.1.16.1 Identify local sources for equipment rentals;**
> **4.2.1.16.2 Identify local sources for material supplies;**
> **4.2.1.16.3 Record orders and receipts for equipment and supplies; and,**
> **4.2.1.16.4 Provide capability for the upload/import of database of existing or acquired inventories.**

Juvare's WebEOC fully complies with this requirement. The solution will address each of these points via the use of a WebEOC Status Board. The status board will be configured for the city to identify local sources for equipment rentals, identify local sources for material supplies, record orders and receipts for equipment and supplies, and provide the capability to upload/import existing inventories.

4.2.1.17 The EMIS shall enable authorized users to provide cost analysis services including the ability to:

    4.2.1.17.1 identify material and personnel that require payment;

    4.2.1.17.2 enter and record all cost data;

    4.2.1.17.3 maintain accurate records of incident costs; and,

    4.2.1.17.4 support planning activates through preparation of estimates for resource usage.

Juvare's WebEOC fully complies with this requirement. The solution will address each of these points via the use of a WebEOC Status Board. The status board will be configured for the State to identify material and personnel that require payment, enter and record all cost data, maintain accurate records of incident costs, and support planning activates through preparation of estimates for resource usage.

4.2.1.18 The EMIS web application shall allow functional user groups to easily bulk import and export information including resource data.

Juvare's WebEOC fully complies with this requirement. With Resource and Request boards, an import feature allows you to download a template spreadsheet in .CSV format, providing you with column headings that comply with the Inventory component. After completing the spreadsheet, you import it into the Resource and Request board to update the inventory.

4.2.1.19 The EMIS shall allow users to plan, manage, track, observe status and costs incurred as well as plan future resource allocations.

Juvare's WebEOC fully complies with this requirement. Resource Request Module will provide the support staff with the ability to oversee resource allocations. Inventory items will track actual cost, cost rates, reimbursement amount, and reimbursement type. In addition, the inventory items can be deployed against a resource request thus allowing the staff to observe the status and plan for future resourcing needs based on inventory levels and deployment lengths. Further, the staff can generate reports.

4.2.1.20 The EMIS shall have the capability to interoperate with the State's financial administration system to report material transactions including orders and receipt of ordered material.

Juvare's WebEOC fully complies with this requirement. The solution does include an API service which can establish an interface with the financial administration system. Juvare will work closely with the State to scope the interoperability to the financial administration system using the API.

4.2.1.21 The EMIS shall generate reports as requested on the levels of material at the report time and the usage or consumption over a defined time interval to enable consumption to be assessed.

Juvare's WebEOC fully complies with this requirement. RRDM will generate these reports.

4.2.1.22 The EMIS shall be able to receive, upload, record and log incident intelligence and security reports from identified and verified external agencies.

Juvare's WebEOC fully complies with this requirement. The solution proposed includes the ability to attach, receive and log reports from external agencies. The client chooses who shall have access to the solution for viewing, uploading, etc.

4.2.1.23 The EMIS shall allow users, according to established role and authorization, to post and retrieve information to/from a shared information space.

Juvare's WebEOC fully complies with this requirement. Administrators of the solution have full control over users' permission/authorization to post and retrieve information. Permissions can be modified at any time.

4.2.1.24 The EMIS shall disseminate incident information automatically to authorized users / team members.

Juvare's WebEOC fully complies with this requirement. Once information is entered into the solution, the solution disseminates/shares the information real-time to the appropriate users within the designated space.

4.2.1.25 The EMIS shall enable authorized users/team members to track incident locations and information and develop trend data over time during an incident.

Juvare's WebEOC fully complies with this requirement. The solution supports the use of graphical data representation through line, bar, and pie charts that can be used for trend over time displays by authorized users/team.

4.2.1.26 The EMIS shall disseminate to authorized users/ team members real time status updates as the reports are received.

Juvare's WebEOC fully complies with this requirement. Once information is entered into the solution such as status updates on various reports, the solution disseminates/shares the information real-time to the appropriate users within the designated space.

4.2.1.27 The EMIS shall provide the means for visually presenting situational information in dashboard and Common Operating Picture (COP) views.

Juvare's WebEOC fully complies with this requirement. The solution includes a Dashboard module which allows administrators and end users to modify and create their own dashboard. A dashboard can include 2 to 6 views and multiple dashboards can be assigned accordingly to the permissions set.

4.2.1.28 The EMIS's geographic component shall have a geographic application capable of supporting the resource request management process during an incident or emergency. This geographic application shall contain dynamic maps for displaying information such as the status of the resource request and the delivery location. The dynamic maps must deploy in real time the resource request statuses on a map and in a table view. The application shall permit dynamic search by address, toponyms, coordinates, and resource type. The application shall work on PC, tablet, and mobile devices.

Juvare's WebEOC fully complies with this requirement. Utilizing WebEOC's Maps Add-On in conjunction with the Resource Request and Deployment Module, West Virginia will have access to dynamic maps for displaying information, such as the status on a map and in table view. The State will be able to search the application by address, toponyms, coordinates and resource type, and this functionality will work on PC, tablet and mobile devices.

4.2.1.29 EMIS shall provide for provide for data views that users can select, while removing old active information from sorted views.

Juvare's WebEOC fully complies with this requirement.

4.2.1.30 The EMIS shall provide the means to communicate easily with one or more remote users (by name or by function) using real time text messaging that is logged and recorded.

Juvare's WebEOC fully complies with this requirement. WebEOC can do SMS gateways that send text messages through the default email capabilities, and the

solution can also interface with third-party mass notification systems such as Onsolve, Twilio, Rave, etc.

4.2.1.31 The EMIS shall have the ability to send automated text messages, voice chat messages or video messages to mobile devices that are voice-only capable.

Juvare's WebEOC fully complies with this requirement.

4.2.1.32 The EMIS shall have the ability to select privacy options according to member preference.

Juvare's WebEOC fully complies with this requirement. Privacy options are viewed as permission settings on user accounts.

4.2.1.33 The EMIS should provide access to properly authorized users via mobile devices, such as smartphones.

Juvare's WebEOC fully complies with this requirement. WebEOC can be accessed via mobile devices, such as smart phones and tablets.

4.2.1.34 The EMIS shall provide detailed user activity reports.

Juvare's WebEOC fully complies with this requirement. User activity across the application can be tracked and consolidated in activity reports.

4.2.1.35 The EMIS shall provide ad hoc user-defined reporting.

Juvare's WebEOC fully complies with this requirement. Users can formulate custom queries using compounding filter, sort, and search capabilities to build focused reports.

4.2.2 Mandatory Project Requirements

4.2.2.1 Vendor shall develop and provide an enterprise level web-based emergency management information sharing software solution that can be used by federal, state and local governmental, and non-governmental emergency response partner organizations and agencies. The solution will be hosted on a Level I Data Center with a combination of local servers at the agency and have could-based hosting, as an option.

Juvare's WebEOC fully complies with this requirement. The WebEOC solution can either be installed at West Virginia's Level 1 Data Center or be hosted in our cloud-based environment. WebEOC can be deployed in an on-premise configuration whereby the servers and server software components are located locally at the

agency data center facilities. WebEOC is a web-based solution, so very little is needed by the agency to implement the EMIS solution.

In addition, Juvare offers full hosting for WebEOC through a certified data center that houses secure servers and other network components, making the system available to your agency online at any time and from anywhere.

4.2.2.2 Vendor shall provide such a solution that can be integrated and interoperable with the Federal Emergency Management Agency's web-based solution and those of all FEMA Region III states, the District of Columbia, and other contiguous states.

Juvare's WebEOC fully complies with this requirement. While it was originally developed to meet the needs of emergency management agencies (EMAs) at the federal, state, and local levels. Today our platform is not only used by government agencies such as the U.S. Departments of Agriculture, Defense, Energy, Homeland Security (CDP, FEMA, ICE, TSA, and USCG), Health and Human Services, CDC, EPA, and NASA, but also by corporations, public utilities, universities, and more. Utilizing WebEOC will allow West Virginia to communicate with these instances, sharing information to create a more complete common operating picture with not only these federal agencies, but also with state or regional-level instances like District of Columbia HSEMA, the National Capital Region (NCR), Virginia Department of Emergency Management (VDEM), Maryland Emergency Management Agency (MEMA), Pennsylvania Emergency Management Agency (PEMA), Kentucky Division of Emergency Management, and Ohio Emergency Management Agency.

WebEOC provides an information hub that lets you connect multiple WebEOC systems into a secure network to facilitate collaboration and information sharing. This solution can be successfully used by emergency management agencies to empower managers at national, state, and regional levels to communicate critical incident information in real time and streamline response efforts in their communities. The agency's WebEOC, or the publisher, sends these boards to the WebEOC server. The server forwards this information to other WebEOC systems in the network, or subscribers, so that emergency managers can see available boards and subscribe to them. This ability to seamlessly exchange data gives WebEOC systems in the network an ability to link incidents together. The advantage of linking incidents is that information is disseminated among jurisdictions in real time. When one of the EOCs in the network updates incident details, the updates become instantly available to the other connected WebEOC systems

4.2.2.3 This system shall supply reports on the following factors of emergency management: event and incident reporting; resource requesting and

management; response inventory management; infrastructure reporting, including road closures, hospitals, shelters, other critical infrastructure; damage assessment; and, a references section for documents, user directory, organization charts, etc.

Juvare's WebEOC fully complies with this requirement. WebEOC can provide real-time status information, updates and reports on event and incident reporting, resource requesting and management, response inventory management, infrastructure reporting (such as road closures, hospitals, shelters, other critical infrastructure), damage assessment and can be utilized as a reference section for documents, user directory, organization charts and more.

4.2.2.4 The system shall be designed and equipped to accept upload of GIS information for spatial display in the form of shape files, layer files, web map services (WMS) files, and .kml or.knz files, as well as allow for querying of multiple data sets that may be exported from the system in the aforementioned GIS formats as well as tabular or delimited form which will enable editing and spatial order for good presentation of maps or reports.

Juvare's WebEOC fully complies with this requirement. WebEOC GIS solutions allow the user to create a common operating picture with data from multiple WebEOC boards using GIS data layers and live feeds. Users are able to create a dynamic, geographically based picture without the need for specialized GIS or mapping expertise and can display data with custom icons that are relevant to their own organizations.

4.2.2.5 This system shall be capable of assigning user-based permissions to data. These permissions will be based on security levels determined by the agency. The system will be capable of determining access to data based on user permission level. The system shall allow users to share information to other users in Word, Excel, PDF, or equal formatting.

Juvare's WebEOC fully complies with this requirement. User accounts, positions, and groups are established based on specific organizational structures whereby they are given different levels of rights depending upon the position selected during the login process. Positions are assigned to users in advance of a disaster event based upon their role(s). This major differentiator means that you get to tell the software what your people see, not the other way around.

One of the great configurable advantages of WebEOC is the ability to share data on a position/group basis, such as operations or logistics. Because each user account in WebEOC is assigned a position, or multiple positions where necessary, it becomes very easy to assign displays and dashboards to these users based on their specific need.

Many WebEOC administrators also seek to convey information in graphical formats that maximize information transfer while minimizing the screen real estate used. WebEOC dashboard views, executive overviews, and display view-based summary reports support the display of numerical data in chart and graph forms. This is another way that your logistics and operations sections can have data tailored to their view and functional needs. We have included the dashboard module.

4.2.2.6 All data shall remain the property of the state and will not be available for dissemination by the vendor.

Juvare complies with this requirement.

4.2.3 Functional Requirements

4.2.3.1 The vendor shall provide all training opportunities and/or exercises against the State's Development platform of the EMIS solution.

Juvare complies with this requirement. Juvare will use the State's Development platform for all WebEOC training.

4.2.3.2 The vendor shall provide training for:
4.2.3.2.1 Users.
4.2.3.2.2 User Support Staff.
4.2.3.2.3 System Operators.
4.2.3.2.4 Trainers.
4.2.3.2.5 System Administrators.
4.2.3.2.6 Technical Staff, to include Information Technology, Programming, and GIS staff.

Juvare will use a combination of WebEOC Bootcamp modules to address the individual needs of each group.

4.2.3.3 The EMIS shall enable users to manage and coordinate the efforts and resources of the response and management organizations engaged in a specific incident, planned event, training event, or exercise, regardless of scope.
Juvare's WebEOC fully complies with this requirement. WebEOC can be used to coordinate response activities related to planned events and unplanned incidents. Training and full-scale and tabletop exercises can be conducted using WebEOC's Simulator tool, which allows former incidents or fabricated scenarios to be "played" through a template of automated or manually-triggered injects.
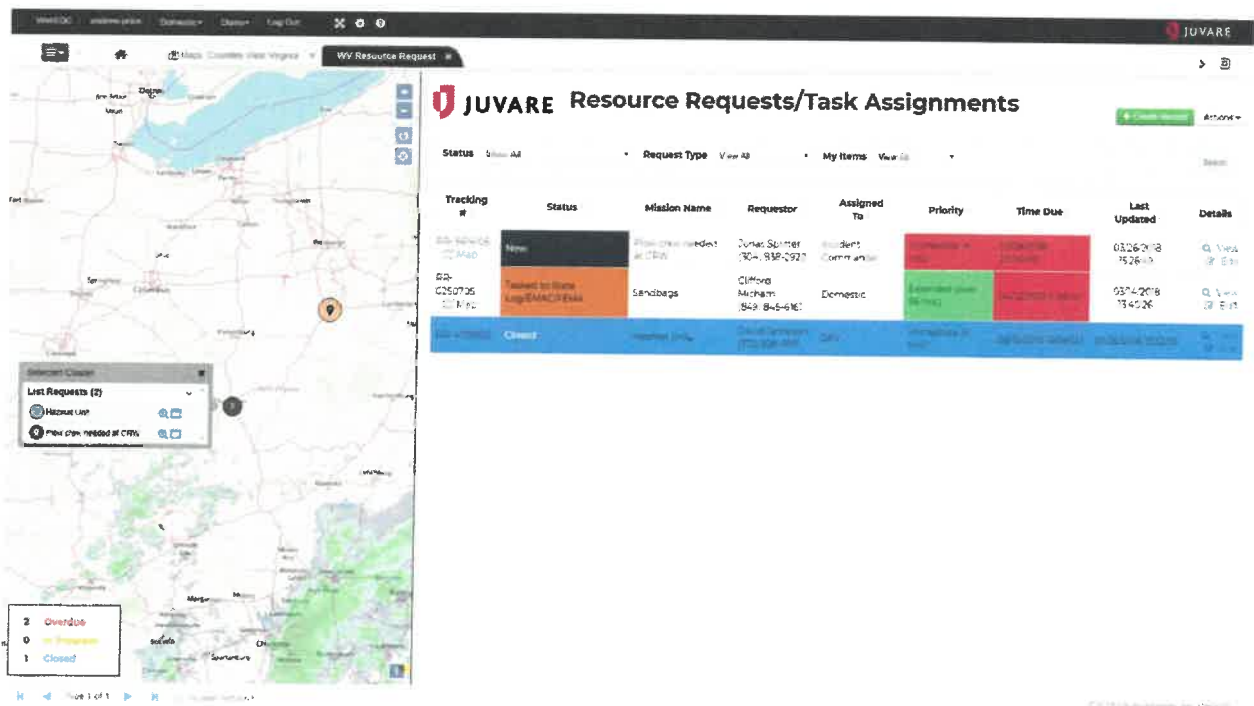
4.2.3.4 The EMIS shall enable users to manage daily activities and to monitor and track all aspects of an incident or event.

Juvare's WebEOC fully complies with this requirement. WebEOC was designed from the beginning for agencies to manage parallel emergency events. It is very common, for example, to have a "Daily Operations" event and a "Winter Storm" event running parallel. A county and city can be running their own events separately while the State manages a regional event that everyone is connected to and collaborating through.

4.2.3.5 The EMIS shall enable users to direct or task resources and or receive and monitor reports received in response to directives.

Juvare's WebEOC fully complies with this requirement. Our Resource Request and Task Assignment board enables the handling of critical assets, from inventory cataloging to resource requests and deployments, in a fast and efficient way. This feature rich board supports interoperability across agencies by allowing you to define inventory based on recognized NIMS resource definitions and then manage and track those resources in real time.

An example of a Resource Request and Task Assignment Board that Juvare built as a prototype for WV DHSEM is below:

4.2.3.6 The EMIS shall enable users to create contact lists for emergency management staff and external contacts.

Juvare's WebEOC fully complies with this requirement. Users can create contact lists for emergency management staff and external contacts.

Other advantages to our Contacts Management are:

- View a list of users logged into WebEOC
- Easily import or export contact data
- By allowing users to maintain their own contact profile, this lessens the burden on the WebEOC administrator
- Quickly add additional custom fields to capture more data
- Integrates with the Messages Manager add-on to allow you to email your contacts, both WebEOC and non-WebEOC users, directly from WebEOC

4.2.3.7 The EMIS shall enable users to access Duty Logs and Call Logs.

Juvare's WebEOC fully complies with this requirement. The solution sets permission levels per position and a user with proper permissions can access duty logs and call logs in the solution within one or a few clicks of the mouse.

4.2.3.8 The EMIS shall enable users to access Procedures, Check Lists and Organization Charts, as defined by the agency.

Juvare's WebEOC fully complies with this requirement. WebEOC includes all ICS and FEMA forms as standard. We also conduct updates to these forms as they are change by their respective agency and include them with product updates as needed. They are also configurable beyond the basic form. All ICS forms roll up into a custom, incident-specific IAP, which advanced users can set up by picking which ICS forms to include.

The in-progress or completed IAP roll-up can be printed to paper or PDF. Sharing the IAP is easy when the friendly formatted PDF can be emailed or set through other electronic means. WebEOC boards can also be updated to leverage the application's configuration with an email server. Once configured, data can be sent via email from WebEOC boards to user-defined or pre-defined recipients.

4.2.3.9 The EMIS shall enable approved individuals to designate groups of individuals, by name or by functional position.

Juvare's WebEOC fully complies with this requirement. WebEOC administrators have complete control over the naming nomenclature of positions. Users will log in to the solution using their unique name for establishing accountability.

4.2.3.10 The EMIS shall enable the logistics support users to plan and manage the acquisition and distribution of personnel, equipment, and material required to sustain an incident operation.

Juvare's WebEOC fully complies with this requirement. WebEOC Resource Request and Deployment Module (RRDM) enables you to handle critical assets from inventory cataloging to resource requests and deployments in a fast and efficient way. This add-on supports interoperability across agencies by allowing you to define inventory based on recognized NIMS resource definitions and then manage and track those resources in real time. For custom processes, WebEOC can be used to produce a board to match current operational workflows as well.

4.2.3.11 The EMIS shall enable logistics support users to plan the pre-position and manage supplies in facilities in advance of an incidence occurrence.

Juvare's WebEOC fully complies with this requirement. The RRDM module allows logistics support users to plan the pre-position and manage resources and supplies in facilities during day-to-day operations in advance of an incident occurrence. WebEOC also allows the support staff to locate and determine the proper preposition of supplies.

4.2.3.12 The EMIS shall enable logistics support users to task transportation resources to transport and deliver supplies.

Juvare's WebEOC fully complies with this requirement. Logistics support users will be able to task personnel to transport and deliver supplies. The solution will utilize the WebEOC Maps Add on module to enhance and accomplish this requirement. The Deployments component provides the user with a detailed view of all of the resources that have been deployed. You can view, edit, and print deployment information.

The Inventory component provides the user with a detailed view of inventory. They can view, update, add, delete, and map the location of inventory and also deploy inventory resources from within this component. An import feature can download a template spreadsheet in a .CSV format, providing the users with column headings that comply with the Inventory component. After completing the spreadsheet, you import it into the Resource Request module to update the inventory.

In addition, the Mapping application will route and track the delivery.

4.2.3.13 The EMIS shall enable the logistics support users to monitor and forecast the consumption of supplies.

Juvare's WebEOC fully complies with this requirement. Logistics support users will be able to monitor and forecast the consumption of supplies within WebEOC. The inventory within the Resource Request module provides the status, assignment, and location of the supplies as they are being requested and deployed.

4.2.3.14 The EMIS shall provide for the following:
    4.2.3.14.1 Financial administrative support for procurement of material and services,
    4.2.3.14.2 Monitoring and reporting of costs related to an incident.
    4.2.3.14.3 Providing cost analysis services.

Juvare's WebEOC fully complies with this requirement. WebEOC will provide financial administrative support for procurement of materials and services, as well as monitor and report the costs related to an incident. Cost analysis services and reports can also be found standard in WebEOC. The WebEOC application will address each of these points via the use of a WebEOC Status Board. The status board will be configured for the State to support procurement of material and services, monitor and report costs related to an incident, manage and report on injury claims, and provide cost analysis services.

4.2.3.15 The EMIS's administrative and management functions shall be available to designated Administrator groups.

Juvare's WebEOC fully complies with this requirement. The solution allows for multiple full administrator groups and sub-administrator accounts.

4.2.3.16 The EMIS web application shall allow functional user groups to easily bulk import and export information including resource data.

Juvare's WebEOC fully complies with this requirement. With Resource and Request boards, an import feature allows you to download a template spreadsheet in .CSV format, providing you with column headings that comply with the Inventory component. After completing the spreadsheet, you import it into the Resource and Request board to update the inventory.

4.2.3.17 The EMIS shall allow users to plan, manage, track, observe status and costs incurred as well as plan future resource allocations.

Juvare's WebEOC fully complies with this requirement. Resource Request Module will provide the support staff with the ability to oversee resource allocations. Inventory items will track actual cost, cost rates, reimbursement amount, and reimbursement type. In addition, the inventory items can be deployed against a resource request thus allowing the staff to observe the status and plan for future resourcing needs based on inventory levels and deployment lengths. Further, the staff can generate reports.

4.2.3.18 The EMIS shall provide the State EOC electronic and printable forms for logging and reporting the ordering, receipt and issuance of material.

Juvare's WebEOC fully complies with this requirement. The solution will support the use of the State forms. The user can print or save as PDF onto the local machine/device.

4.2.3.19 The EMIS shall receive, log and report to the authorized users / teams the status of human, equipment and logistics resources throughout an event.

Juvare's WebEOC fully complies with this requirement. Authorized users or positions with the proper permissions are able to have full awareness of the status associated with human, equipment and logistical resources. Edit, monitor, and reporting functions are assigned accordingly.

4.2.3.20 The EMIS shall enable the authorized users to develop deliberate contingency plans in advance of and/or during an event.

Juvare's WebEOC fully complies with this requirement. The solution will support the development of plans in advance or during a crisis. The Client may decide to incorporate the plan as a WebEOC Status Board or use the File Library plugin. WebEOC has the capability to add the plans into a board and then automatically recall and assign the plans when a matching incident is created.

4.2.3.21 The EMIS shall provide the electronic fillable and printable forms for the authorized users to prepare, share, present, electronically sign, and print their components of the contingency operations plan.

Juvare's WebEOC fully complies with this requirement. The solution will support electronic and printable (or save as PDF) forms to include situation reporting, incident action planning, and contingency operations plan. Access, editing, and approving these plans are set by permissions assigned by the State's plans and procedures.

4.2.3.22 The EMIS shall receive, record and log incident situation reports submitted by authorized users or local users, including external agencies or external EOCs.

Juvare's WebEOC fully complies with this requirement. Remote users can access the solution for receiving, uploading, and logging information. The solution supports multiple web-browsers and devices which remote users can use for solution access. In addition, the solution supports VPN connections. The client controls access to the solution by creating, editing, and deleting user accounts. User Accounts can be established for representatives of remote or local users, including external agencies or external EOCs. Once a user accesses the solution, the user, based on their assigned permissions, are able to receive, record, and log reports.

4.2.3.23 The EMIS shall enable authorized users/team members to prepare and disseminate situation assessment information and recommendations.

Juvare's WebEOC fully complies with this requirement. Once information is entered into the solution such as situation assessment information, the solution disseminates/shares the information real-time to the appropriate users within the designated space.

4.2.3.24 The EMIS shall provide ready access to plans, procedures, checklists and other documents.

Juvare's WebEOC fully complies with this requirement. Access to plans, procedures, checklists and other documents are permissioned by the solution administrator.

4.2.3.25 The EMIS shall be able to provide different views and scales on each of the large-scale situation displays.

Juvare's WebEOC fully complies with this requirement. The solution supports different views, such as large font or scrolling of information for displays.

4.2.3.26 The EMIS's situation display shall be able to display geographical views with geo-referenced features on map overlays.

Juvare's WebEOC fully complies with this requirement. The solution includes the WebEOC Maps Add-On module which allows end users viewing the map to click on a specific point and create a record within the solution from the map. WebEOC Maps Add-On allows for bi-directional entry into WebEOC status boards.

4.2.3.27 The EMIS's situation display shall be capable of displaying one or more selectable map overlays created by the EOC members.

Juvare's WebEOC fully complies with this requirement. WebEOC Maps Add-On is capable of displaying one or more selectable map overlays and allows each end user to select and adjust the base maps, select which WebEOC Status Board data to show on the map, create a bookmark with annotations on their map, and select any available GeoRSS feeds to view on the map. Base maps published by ESRI ArcGIS and rendered in WebEOC Maps Add-On will display the latest version of the base map upon refreshing.

WebEOC Maps Add-On can display one or more selectable map overlays created by EOC members to display static and incident data types. Features can be in point, line, and polygon formats, and it provides users with the tools to geocode these display formats. Features can also be set to custom icons, labels, and colors to indicate attributes, such as types and statuses. All data will update in the maps in real time to reflect the additions and updates of the users.

Base maps can also be configurable by the user. Vector, satellite, or aerial maps can be set as the base layer to better enrich the overall spatial and situational awareness of the users.

4.2.3.28 The EMIS's geographic component shall be capable of displaying a dynamic map identifying incidents, events, or emergencies; effects related to those events; and, the responding agencies involved, including agency contact information.

Juvare's WebEOC fully complies with this requirement. The WebEOC Maps Add-On will display a dynamic map identifying incidents, events, or emergencies, effects related to those events, and the responding agencies involved, including agency contact information.

4.2.3.29 The EMIS's geographic applications shall allow appropriate users to add new layers to the dynamic map. The dynamic maps shall be editable by users with appropriate permissions.

Juvare's WebEOC fully complies with this requirement. The WebEOC Maps Add-On will allow appropriate users to add new layers to the dynamic map.

4.2.3.30 The EMIS 's geographic application shall permit authorized users to use the geographic analysis functions such as proximity, find the nearest point, and create buffers, to estimate possible human, property, and infrastructure effects.

Juvare's WebEOC fully complies with this requirement. The WebEOC Maps Add-On will allow authorized users to use the geographic analysis functions such as proximity, find the nearest point, and create buffers, to estimate possible human, property, and infrastructure effects.

4.2.3.31 The EMIS's situation display shall be capable of displaying a situation report, operational information, status report, or map image received from users.

Juvare's WebEOC fully complies with this requirement. WebEOC's configurable dashboards will display situation report, operational information, status report, or map image received from users.

4.2.3.32 The EMIS's situation display shall include the ability to display selectable levels of detail to enable users and EOC/DOC members to see summaries such as a dashboard display to indicate elements that may require attention.

Juvare's WebEOC fully complies with this requirement. The solution includes the ability to display selectable levels of detail – from the 20,000 foot view to the 5 foot view. The solution supports this ability through different displays and filters that are applied to the information. These details can be used in the dashboard module.

4.2.3.33 The EMIS's situation display shall be capable of integrating and displaying live images and audio/video feeds from external sources such as traffic monitors, security cameras, surveillance cameras or data feeds.

Juvare's WebEOC fully complies with this requirement. The solution is capable of displaying live feeds. The solution requires the IP/URL address, as well as any required credentials, and can work on both internal and external sources.

4.2.3.34 The EMIS shall be capable of capturing and disseminating the image showing on the situation display to selected user(s).

Juvare's WebEOC fully complies with this requirement. The solution is capable to disseminate the image via the proper permissions assigned to local, remote, and external users. An internal archiving mechanism can essentially create a snapshot of the data, which can then be stored and retrieved by permitted users during and after the incident response.

4.2.3.35 The EMIS shall enable the authorized users/team to prepare and disseminate the Incident Action Plan.

Juvare's WebEOC fully complies with this requirement. The solution includes an Incident Action Plan (IAP) module. This module is based on the Incident Command System and allows for the tracking/status of each forms progress. Once the IAP works through the approval process, the IAP can then be 'published' and is therefore 'locked-down' from further edits. In addition, while outside the scope of

this response, it is possible to create a new IAP module based on the specific desired forms.

4.2.3.36 The EMIS shall enable electronic and customizable paper forms for creating, editing and storing EOC & ICS Reports.

Juvare's WebEOC fully complies with this requirement. The solution includes the ability to create, edit and store the electronic EOC and ICS reports. The solution administrator can create and edit an electronic form at any time, even during a response by using the solution's form building/editing wizard or via HTML viewing. In addition, the solution, off-the-shelf, comes with 34 ICS forms.

4.2.3.37 The EMIS shall enable authorized users / team members receive and implement report forms and templates identified by the State of West Virginia (conforming to West Virginia Emergency Operations Plan, State Emergency Operations Center (SEOC) Standing Operating Procedures (SOP) & ICS).

Juvare's WebEOC fully complies with this requirement. The solution allows for authorized users/team members to receive and implement the forms and templates from the State. Various forms or templates, regardless of the identifier, can be created within the solution.

4.2.3.38 The EMIS shall provide access to electronic West Virginia Emergency Operations Plan, SEOC SOP & ICS forms, documents and templates for approved user to edit, update and subsequently store within the application in the user interface.

Juvare's WebEOC fully complies with this requirement. The electronic BCERMS EOC and ICS forms, documents, and templates can be stored or replicated within the solution and made available to users.

4.2.3.39 The EMIS shall be capable of storing and managing official documentation to be retained as record.

Juvare's WebEOC fully complies with this requirement. The solution can store official documentation and retain as record.

4.2.3.40 The Vendor shall provide, within the application, the ability for the State to maintain and create or import new forms and that any forms created or amended by the State will be retained through any subsequent upgrade of the application.

Juvare's WebEOC fully complies with this requirement. The solution supports the State to create and/or import new forms. Changes to the forms are retained through subsequent upgrades.

4.2.3.41 The EMIS shall provide for managing and reporting on injuries and deaths.

Juvare's WebEOC fully complies with this requirement. Information, such as injury and death statistics and details can be managed and stored within WebEOC.

4.2.3.42 The EMIS client software shall enable a user to sign on 'once' for access to all the applications.

Juvare's WebEOC fully complies with this requirement. WebEOC includes a Single Sign-On Module for this purpose. Single Sign On (SSO) allows you to quickly and securely access WebEOC by skipping the login process. Integrated with your Active Directory system, SSO remembers a user after their first login, negating the need for users to re-authenticate upon subsequent access.

4.2.3.43 The EMIS shall enable the system administrator to define roles, assign privileges to users, create, maintain and/or delete users.

Juvare's WebEOC fully complies with this requirement. The solution's Administrators configure user accounts and assign credentials to enable users to access the solution. Credentials include user names and passwords. The credentials include many security options as assigned by the administrator such as hard passwords, lock-out thresholds, and password history.

Administrators then assign users to positions and groups for obtaining the users' proper permissions/privileges. The solution supports the creation of position access codes (PACs) for self-registration by users, if desired.

Administrators can add, edit, or delete users and/or roles at any given time. Such changes are recorded in the solution's audit log.

4.2.3.44 The EMIS shall be able to define a structured top-level organization with fully functional sub-organizations that operate in a hierarchy of authority.

Juvare's WebEOC fully complies with this requirement. The solution is highly configurable from the forms/templates to the workflows and permissions. The solution is configured to the business logic (plans/procedures) of the client. Therefore, an authoritative hierarchy can easily be established.

4.2.4 Technical Requirements

4.2.4.1 The EMIS shall be compatible with multiple factor identification and its use for system access.

Juvare's WebEOC fully complies with this requirement. If the State has CAC or a PIV card (aka smart card) access, we can incorporate that into the SSO process. Also, the new Mobile app release will support biometrics with touch and face sign-in as well.

4.2.4.2 The EMIS shall be able to provide for single sign on and for PIV/PIV-I/CAC integration for system access based on Federal Information Processing Standard (FIPS 201) requirements.

Juvare's WebEOC fully complies with this requirement. The WebEOC Single Sign-On module will provide this functionality.

4.2.4.3 The EMIS shall log utilization transactions to record when a person has logged in and the device (workstation, etc.) where the person logged in.

Juvare's WebEOC fully complies with this requirement. The solution will log and record when a person has logged in and out of the solution. The person can note during the log in process at which device their using to log in and that information is recorded in the log, as well. WebEOC is able to use the IP address since the IP address will most likely be workstation dependent.

4.2.3.4 The EMIS shall record the failure of a login attempt. The solution shall have the flexibility to lock the user account after an Administrator-specified number of attempts. The solution shall have the capability of providing unattended password reset capability.

Juvare's WebEOC fully complies with this requirement. The solution records all failed login attempts be recording the user account, date, time. Solution administrators can set a lock-out threshold for failed login attempts by a user. The solution does allow for password reset capabilities and enforcement of strong passwords.

4.2.4.5 The EMIS shall have the ability to provide event logging for successful logins, IP addresses of every authenticated user, failed login attempts, IP addresses of every failed login attempt, user database changes, log failures and/or errors.

Juvare's WebEOC complies with this requirement in that the solution provides an audit log that captures successful logins (user/position/incident), failed logins (attempted credentials), date/time, and changes committed to the system. However, the system does not capture the IP Address of the user, unless a custom script is built within a board.

4.2.4.6 The EMIS shall include the means of recovering from a system failure using data previously backed-up.

Juvare's WebEOC fully complies with this requirement. Data previously backed-up can be used to recover from a system failure. In an on-premise implementation, Juvare can make recommendations for backups, redundancy, and failover procedures for complete disaster recovery.

4.2.4.7 The EMIS client software shall limit access to those users who have valid login permissions and credentials.

Juvare's WebEOC fully complies with this requirement. Solution access is granted only to unique named users with accounts and having a valid password that meets the security options selected by the solution administrator.

4.2.4.8 The EMIS log in procedure shall include a requirement for users to agree to the state's confidentiality agreement prior to gaining access on each log in.

Juvare's WebEOC fully complies with this requirement, and a splash page can be fully configured by the State.

4.2.4.9 The EMIS shall enforce strong alphanumeric passwords and periodic password changes.

Juvare's WebEOC fully complies with this requirement. The solution includes the following password security measures:

1) Enforce strong passwords
2) Password age (set by administrator)
3) Minimum password length
4) Enforce password history
5) Reset password on next login

4.2.4.10 The EMIS shall provide capability of a user to obtain password reset by administrator and by verification and via approved email and/or text.

Juvare's WebEOC fully complies with this requirement. The solution supports password reset the user will be prompted upon next login attempt. In WebEOC, a user can reset his or her password via their account-registered email, obviating admin intervention. We can also leverage SMS gateways to relay the email via text message.

4.2.4.11 The EMIS shall be scalable to automatically accept any number of users (local and remote users) to a maximum of 500 users logged in simultaneously with capability to add additional users with no delay.

Juvare's WebEOC fully complies with this requirement. The proposed Enterprise solution supports 750 uniquely named users for simultaneous use. In addition, the proposed solution includes the surge capacity plan which allows the State to go over the 750 named users in the event of a crisis without violating the End User License Agreement. The surge capacity plan ensures the State has the capability to add additional users with no delay during a crisis if more than 500 become necessary.

4.2.4.12 The EMIS shall adhere to industry standard scalable relational database architectures that are able to provide input or output to other Enterprise systems.

Juvare's WebEOC fully complies with this requirement.

4.2.4.13 The EMIS shall be a Windows based interface.

Juvare's WebEOC fully complies with this requirement. WebEOC is accessed via the internet and can utilize all major web browsers.

4.2.4.14 The EMIS shall have a "Development" platform with the same functionality and capabilities of the "Production" platform. This "development" platform will be used for change management, training, development, and scenario modeling.

Juvare's WebEOC fully complies with this requirement. The State can utilize a Non-Production Instance of their WebEOC instance to provide change management, training, development, and scenario modeling.

4.2.4.15 The EMIS shall have complete redundancy across all components and a sole Disaster Recovery solution, in the event of data corruption, hardware malfunction, or cyber-attacks.

Juvare's WebEOC fully complies with this requirement. The solution includes complete redundancy and multiple methods of Disaster Recovery.

4.2.4.16 The EMIS shall have multi-server fault-tolerant architecture with full redundancy and automatic recovery.

Juvare's WebEOC fully complies with this requirement. The solution provides a load balanced web server environment and database server failover capability to ensure redundancy.

4.2.4.17 The EMIS shall support multi-site architecture that provides for the following replication sites and supports an Active/Active platform for high- availability and load balancing.

> **4.2.4.17.1 Primary replication site at least 50 miles from our facility.**
> **4.2.4.17.2 Secondary replication site at least 100 miles from our facility.**
> **4.2.4.17.3 Tertiary replication site at least 200 miles from our facility.**

Juvare's WebEOC fully complies with this requirement. The solution provides geographically separate datacenters that support the stated requirements.

4.2.4.18 EMIS shall provide data backup to include error checking and correcting during backup to ensure backed-up data is valid.

Juvare's WebEOC fully complies with this requirement.

4.2.4.19 EMIS shall provide for records maintenance and retain information until permanently deleted.

Juvare's WebEOC fully complies with this requirement.

4.2.4.20 The EMIS shall provide flexible emergency management support functions for day-to-day operations and large-scale multi-agency response.

Juvare's WebEOC fully complies with this requirement. The solution will support day-to-day operations by a couple/few individuals and can scale up during an activation to support large-scale multi-agency response.

4.2.4.21 The EMIS emergency management support functions shall enable EOC users to share, analyze, and prioritize information across multiple jurisdictions in text, images, and geo-referenced map formats.

Juvare's WebEOC fully complies with this requirement. The solution provides EOC staff to share and collaborate across multiple jurisdictions in text, images, and geo-referenced map formats because the solution will be configured to the EOC plans and procedures which dictate such sharing and collaboration.

4.2.4.22 The EMIS shall operate as a web application in which Users interact with the EMIS through any web browser.

Juvare's WebEOC fully complies with this requirement. The solution is web-based. Users access the solution through a web browser. Multiple web browsers are supported - Microsoft® Internet Explorer® 8, 9, 10 or 11; Apple® Safari® 6.x or higher; most recent stable version of Mozilla® Firefox® and Google Chrome 11 or higher.

4.2.4.23 The EMIS shall meet industry-standard cross-platform, browser independent, and device awareness industry requirements.

Juvare's WebEOC fully complies with this requirement. The solution is highly accessible. The solution supports the following browsers: Microsoft® Internet Explorer® 8, 9, 10 or 11; Apple® Safari® 6.x or higher; most recent stable version of Mozilla® Firefox® and Google Chrome 11 or higher. In addition, WebEOC supports the following mobile operating systems:

- BlackBerry® OS v6 and later

- Apple® iPhone® (latest OS version)

- Apple® iPad® (latest OS version)

- Android™ devices (latest version)

4.2.4.24 The EMIS shall be built on a highly secure platform. Proponent shall describe their platform and security measures.

Juvare's WebEOC fully complies with this requirement. WebEOC helps organizations and agencies meet the requirements of Department of Defense Instruction DoDI 6055.17, including maintaining a comprehensive, all-hazards IEM Program on DoD installations worldwide; supporting civil authorities; following NIMS and ICS procedures; and coordinating preparedness, response, and recovery requirements and capabilities with state, local, and tribal governments; other military departments.

WebEOC is an EDXL solution in a 3-tiered arrangement using standard web browser on the front end to access a web server and a database SQL server on the backend. It can be deployed inside an intranet or internet DMZ. We would use our API to connect to third party systems of record where you wanted to pull or push data between the two systems. We would use WebEOC Fusion to connect you to other State and Federal partners who own WebEOC Enterprise.

Numerous third-party applications have used WebEOC application programming interface (API) to exchange data with WebEOC. The API simplifies the task of creating interfaces to WebEOC using industry standard language. There are nearly 35 APIs created already for specific usage.

The API is a web-service implemented on the Simple Object Access Protocol (SOAP) specification. A Web Services Description Language (WSDL) file exists for code generation utilities to automatically create helper proxy classes and the underlying SOAP bindings. Code generation utilities exist for many popular development environments or languages (e.g. Java, .NET, Python, Ruby).

4.2.4.25 The EMIS shall provide secure usage capabilities such as security reporting, user data access, and email/message.

Juvare's WebEOC fully complies with this requirement. The solution provides various reporting capabilities to include audit logs, user access, and email/message tracking.

4.2.4.26 The EMIS shall enforce secure networking protocols and ports for all activities.

Juvare's WebEOC fully complies with this requirement. The solution will operate via port 443 if the security certificate is in place. The security certificate is the client's responsibility. Otherwise the solution will use port 80.

4.2.4.27 The EMIS shall maintain an event log of all entries, which makes a time-stamped record of receipt and transmission of messages.

Juvare's WebEOC fully complies with this requirement. The solution documents for reporting and auditing the incidents' records and system administrative changes.

4.2.4.28 The EMIS shall provide the means to employ the event log to create an audit trail.

Juvare's WebEOC fully complies with this requirement. As stated, the solution documents for reporting and auditing the incidents' records and system administrative changes.

4.2.4.29 The audit function shall include the event log, the messages and the documents handled by the EMIS.

Juvare's WebEOC fully complies with this requirement. As stated, the solution documents for reporting and auditing the incidents' records and system administrative changes.

4.2.4.30 The EMIS shall maintain a security audit trail to log system usage.

Juvare's WebEOC fully complies with this requirement. As stated, the solution documents for reporting and auditing the incidents' records and system administrative changes.

4.2.4.31 The EMIS shall have an automated and scheduled back up of information.

Juvare's WebEOC fully complies with this requirement. The back-up of information is automated. Coordinating the frequency and timing of backups is the client's

responsibility and can be communicated through the state's personal Client Service Manager.

4.2.4.32 The EMIS shall support interaction with remote users using a workstation, laptop, or tablet type of devices.

Juvare's WebEOC fully complies with this requirement. The solution is web-based and supports multiple browsers and devices. Remote users access the system as a local user would access the system – via their approved unique user named account and valid password - by accessing the login page through a browser.

4.2.4.33 The EMIS shall provide real-time message delivery tracking and response consolidation.

Juvare's WebEOC fully complies with this requirement.

4.2.4.34 The EMIS shall be able to access and integrate with the State's GIS data (ESRI) as a primary source for GIS functionality.

Juvare's WebEOC fully complies with this requirement. The solution will use WebEOC Maps Add-On to integrate with the State's GIS data through the ArcGIS Extension.

4.2.4.35 The EMIS shall have an alternate GIS platform that can be used in the event that the primary GIS source is unavailable.

Juvare's WebEOC fully complies with this requirement. Maps Add-On would be the primary GIS platform in the event the previously identified ESRI source is unavailable.

4.2.4.36 Support and Maintenance of the EMIS for the period of the contract shall include all upgrades or enhancements, bug fixes, document changes, system support (including a technical hotline and support services to support the requirements of this CRFP).

Juvare's WebEOC fully complies with this requirement. Support and maintenance includes upgrades, bug fixes, document changes, and system support (through both phone and email). Support further includes access to our client hub for tips and tricks, client forums, and other client templates.

4.2.4.37 The vendor shall provide support for versions for the base software as well as enabling EMIS software up to five years after general availability of the next version.

Juvare's WebEOC fully complies with this requirement. Support for the solution is provided in annual terms of one year.

4.2.4.38 The vendor shall provide a proposed EMIS support model. The proposed support model should identify how the vendor will address the ongoing support functions.

Juvare's WebEOC fully complies with this requirement. Information and details regarding our ongoing support can be found in the "Ongoing Support" section of this proposal.

4.2.4.39 The vendor shall provide a proposed EMIS maintenance schedule and services schedule with costs and any additional service packages.

Juvare's WebEOC fully complies with this requirement. The solution maintenance is controlled by the client. For example, if a point upgrade is schedule at a particular day and time that is not convenient to the client, the upgrade can be postponed.

4.3.1. Qualification and Experience Information

4.3.1.1 Vendor shall provide one (1) relevant reference to demonstrate that it has proven experience in managing hosted/on-premise Solutions at a statewide level. All referenced Solutions shall be currently operational in a production environment. This information shall be provided prior to contract award.

State of Michigan Emergency Management and Homeland Security
7150 Harris Drive
Dimondale, Michigan 48821

Jaclyn Barcroft, CIMS Manager
517-284-3996
barcroftj@michigan.gov

Michigan Emergency Management and Homeland Security's need for a Critical Incident Management Solution that had the following goals and objectives:

- Interoperability with the 3 nuclear power plants as well as neighboring states of Illinois, Indiana, and Ohio, allowing easier sharing of information during emergencies or disasters. ***WebEOC provides its solution for all these agencies.***

- The solution should allow us the ability to create our own boards based on new requirements or import and modify boards from other customers to match EMHSD terminology and process flows. This would greatly limit the need to utilize services from the Contractor to perform these activities, allowing for a truly configurable solution.
- Android, iPhone, and Blackberry should all be supported. *WebEOC natively provides the ability to create, edit, and maintain the agency's own board sets.*
- Outside of already widely used Adobe Flash, vendor should not require any cumbersome plug-ins to run. This is critical, as many users operate from "locked down" computers and require IT support to install anything on their systems, including simple plugins. *WebEOC provides easy to use modules that do not require IT support.*
- Vendor should provide an understanding of common implementation issues as well as mitigation strategies to ensure successful implementation. *With 44 of the 50 state Emergency Management Agencies using WebEOC, we are expert in deploying and maintaining the solution.*
- Solution should have built in reporting capabilities allow user to create reports that contain graphs, charts, tables & text summaries through status board views and SQL Server Reporting Services. Solution should be designed with low bandwidth in mind. This is very important as post-disaster connectivity could be compromised, run slow, or be absent entirely (especially wireless based data). Having a system that can run reliably and effectively with low-bandwidth is crucial. Administrators can create special boards with minimal graphics if necessary. *WebEOC offers a comprehensive reporting solution that allow administrators the ability to create boards quickly and efficiently.*
- Solution should integrate with other CIMS systems in use by other States/Federal partners. *The WebEOC Fusion solution allows for easy interoperability and data connections with other users natively or with our open API.*
- Vendor should provide a good overview on the Administrators ability to perform key activities without requiring contractor assistance. *WebEOC trains the end users to support and maintain the solution without outside contractor assistance.*
- Spell check should be available for every form on any board. *Spell Check comes with the base WebEOC solution.*
- Geoprocessing tools should include: routing, measuring, address finder and select feature. The tool set must be demonstrated during oral presentations to be advanced, simple, and highly responsive.

> *WebEOC was able to demonstrate the Mapping and ESRI tools are both robust in features and highly responsive.*

- The need for the mobile application to come from a commercially available "app store" which would allow for the sharing of multiple state, and local reports. These could be automatically be imported at no additional charge and configured by the State. *WebEOC's IMX Connect can be downloaded from readily available App Stores at no cost.*
- The solution should have an open and secure architecture. The vendor should be very thorough on checking security prior to releases. *WebEOC is a true web-based solution with an open and secure architecture.*

4.3.1.2 Vendor shall provide references for unique projects that started and/or were completed in the past Three (3) years.

State of Alabama Emergency Management Agency
Jeb Hargrove, Chief Information Officer
205-280-2290
Jeb.Hargrove@ema.alabama.gov

State of Wisconsin Emergency Management Agency
Lisa Gustafson, Mission Support Program Manager
608-888-5347
lisak.gustafson@wisconsin.gov

State of Pennsylvania Emergency Management Agency
Randy Padfield, Acting Director
717-651-2001
dpadfield@pa.gov

4.3.1.3 Vendor shall provide at least one (1) of the references above in 4.3.1.1 from United States public sector/government clients.

The references Juvare has provided comply with this requirement. Should the State need additional references, Juvare is happy to provide them.

4.3.2. Mandatory Qualification/Experience Requirements

4.3.2.1 Vendor shall provide a minimum of five (5) relevant references to demonstrate that it has proven experience in managing hosted/on-premise Solutions at a statewide level. All referenced Solutions shall be currently operational in a production environment. This information shall be provided prior to contract award.

Juvare has provided a total of four (4) unique reference sites in the previous section that comply with this requirement. Additional reference sites are listed below to meet this requirement. Should the state require additional information or references, Juvare is happy to provide them.

State of Georgia Emergency Management Agency
Timothy Head, SOC Planner
470-755-0017
timothy.head@gema.ga.gov

State of Massachusetts Emergency Management Agency
Andrew Bagdonas, Facilities and Technical Services Unit Manager
508-820-1409
andrew.bagdonas@state.ma.us

New York/New Jersey Port Authority
Sean Holland, Emergency Operations Center Administrator
551-225-5109
wholland@panynj.gov

State of Louisiana Office of Homeland Security
Austin Dixon, WebEOC Administrator
225-922-2190
austin.dixon@la.gov

Juvare Technologies: Proven and Trusted to Deliver

Juvare's WebEOC is the most well-known and battle-tested crisis management system available, providing organizations around the world with complete situational awareness for emergency management and daily operational support.

Emergency management personnel, public safety staff, business continuity managers and volunteers all access WebEOC from nearly any device to view a common operating picture with simplified information delivered in real-time.
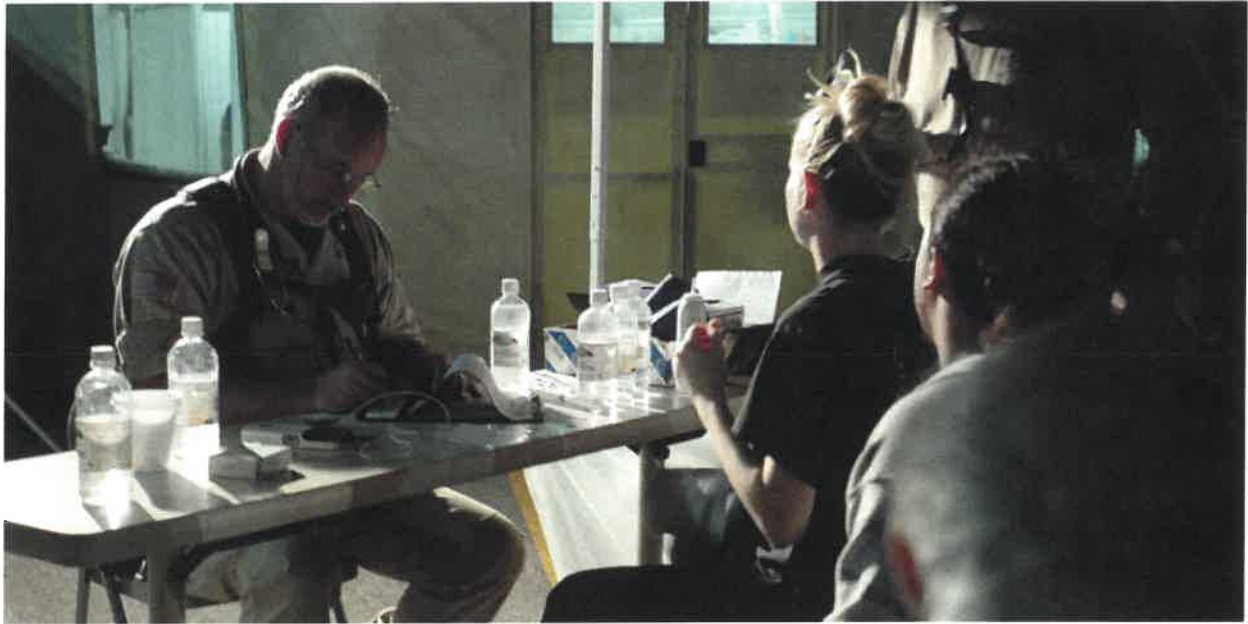
Benefits of Juvare's WebEOC System for West Virginia

- **Enhanced Tracking Workflows** - Strategic data capture promotes tracking efficiency and data standardization, while at the same time making workflow changes and reconfigurations instantly accessible to users. Our system operationalizes existing policies, streamlines data capture and enables workflows to evolve over time.

- **Balanced Approach to both Facility, and Enterprise Preparedness** – By developing and offering two technologies, each focused on the specific mission and functional objectives of different user groups and organizational workflows, Juvare is the only vendor capable of addressing both the "facility level" preparedness initiatives, and the overarching "enterprise" requirements warranted in an age of geographically distributed and yet otherwise highly integrated healthcare delivery.

- **Actionable Decision Making** - Whether documenting day-to-day operations or communicating during a crisis situation, Juvare's WebEOC facilitates actionable decision making and supports information sharing.

- **Supports Regulatory Requirements** - WebEOC intrinsically meets regulatory requirements set forth by the Centers for Medicare and Medicaid's CoP and Emergency Preparedness Rule, The Joint Commission's Emergency Management Standards and the Department of Health and Human Services' 2017-2022 Health Care Preparedness and Response Capabilities.

- **Built for Any User, Any Skill Level -** No other solution offers the same flexibility and configurability. Non-technical personnel routinely create unlimited forms, processes and workflows and customize them to meet any business need. Seamless integration is possible with nearly any third-party system. Users can be trained in minutes.

- **Collaboration Fosters Faster Response** - Bi-directional data sharing and common workflows enable agencies to connect, leading to faster response, recovery and more resilient communities.

- **Critical Event Expertise Sets Us Apart -** At Juvare, many staff come from industries we serve, and many have worked with clients during critical event responses. We invented the category of crisis information management software over 20 years ago and continue to innovate. Our large and expanding footprint in emergency and crisis management has provided us with a strong network of experts dedicated to the exchange of ideas and best practices. We effectively manage disruptions on any scale due to critical event expertise that clearly sets us apart.

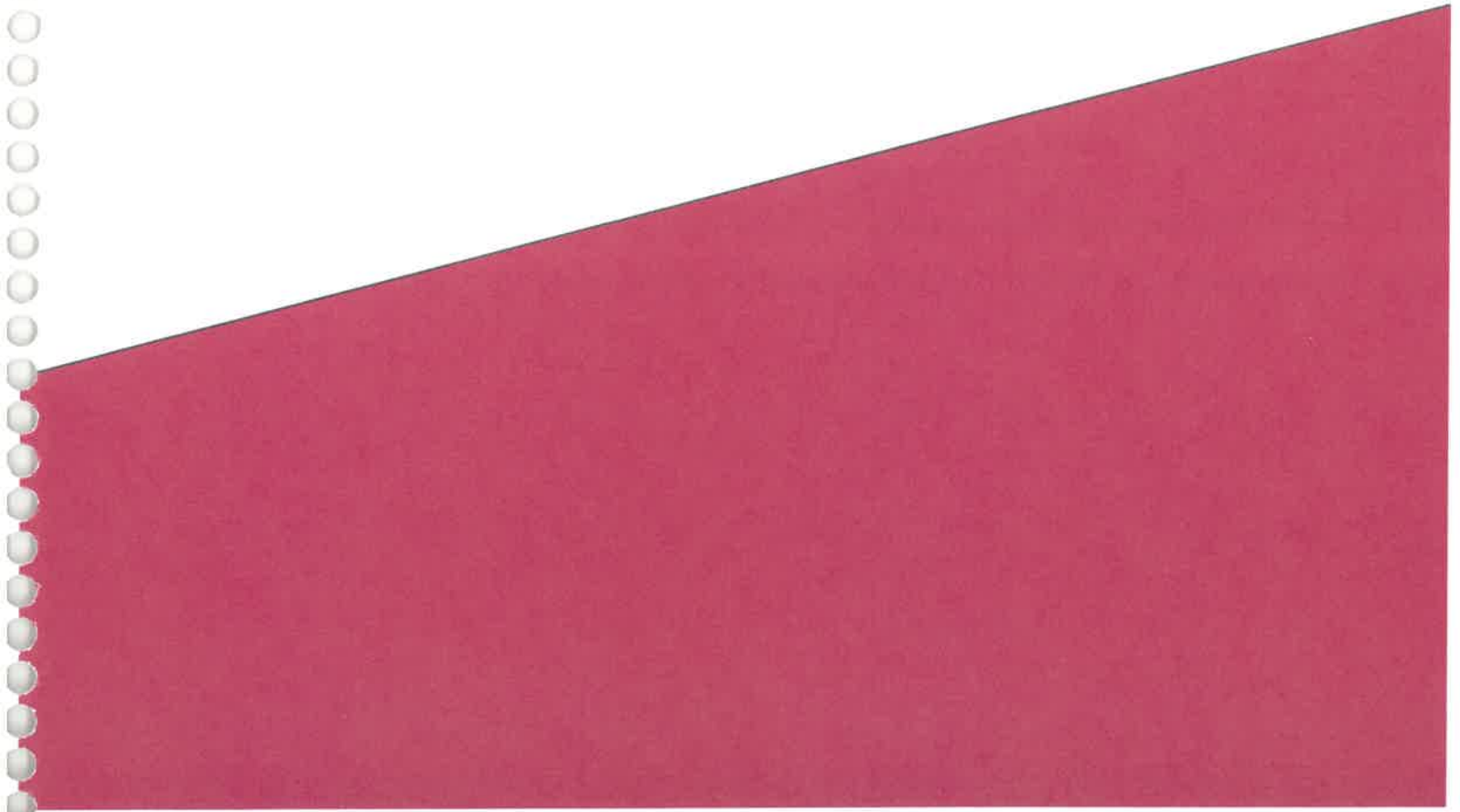"The Coast Guard had been using Excel for spill tracking. Once they saw the power of WebEOC, they jumped on board. BP wanted to create its own oil tracking system. We asked, 'Why?' We told them we're doing it right now with WebEOC."

- Melton J. Gaspard, Jr., Governor's Office of Homeland Security & Emergency Preparedness (GOHSEP), LA

JUVARE

SECURING A RESILIENT FUTURE

JUVARE

May 7, 2019

Department of Administration, Purchasing Division
2019 Washington Street East
Charleston, WV 25305-0130

Reference: WV Homeland Security and Emergency Management Solicitation No. CRFP0606 HSE
1900000001

Dear Ms. Gale,

Juvare has attached signed copies the bid title pages for Addendum 3 and Addendum 4, and we
have also included the signed copy of the Addendum Acknowledgement Page from Addendum
4. As per our conversation with a member of the West Virginia Purchasing Department on April
30, in lieu of reprinting and reshipping our entire proposal response, we have faxed the
completed documents to the fax number given to us. Please consider this an addition to Juvare's
bid response delivered to the purchasing department on April 24, 2019.

Please do not hesitate to reach out if you have any further questions or require additional
information.

Respectfully submitted,

Cliff Micham
Director, Business Development
o: 252 623 1783 m: 252 378 1594

e: cliff.micham@juvare.com

RECEIVED

2019 MAY -8 AM 10: 00

WV PURCHASING
DIVISION

Purchasing Divison 2019 Washington Street East Post Office Box 50130 Charleston, WV 25305-0130	State of West Virginia Request for Proposal 21 — Info Technology

Proc Folder: 462141
Doc Description: Addendum #3 Web Based Emergency Management Information Syste
Proc Type: Central Master Agreement

Date Issued	Solicitation Closes	Solicitation No	Version
2019-04-24	2019-05-03 13:30:00	CRFP 0606 HSE1900000001	4

BID RECEIVING LOCATION

BID CLERK

DEPARTMENT OF ADMINISTRATION

PURCHASING DIVISION

2019 WASHINGTON ST E

CHARLESTON   WV   25305

US

VENDOR

Vendor Name, Address and Telephone Number:	Point of Contact:
ESi Acquisitions, Inc. 235 Peachtree Street NE, Suite 2300 Atlanta, GA 30303	Cliff Micham Director, Business Development o: 252 623 1783 m: 252 378 1594 e: cliff.micham@juvare.com

FOR INFORMATION CONTACT THE BUYER

Stephanie L Gale

(304) 558-8801

stephanie.l.gale@wv.gov

DocuSigned by:

Signature X *Nek Meeks*   FEIN # 58-2498832   DATE 2 May 2019

All offers subject to all terms and conditions contained in this solicitation

Page : 1   FORM ID : WV-PRC-CRFP-001

ADDITIONAL INFORMATION:

Addendum #3 issued to:

1. Move bid opening date and time to Friday, May 3, 2019 @ 1:30pm. Subsequent Addendum to follow.

End of Addendum #3

INVOICE TO	SHIP TO
ACCOUNTING TECHNICIAN 304-558-5380 HOMELAND SECURITY & EMERGENCY MANAGEMENT BLDG 1 RM EB80 1900 KANAWHA BLVD E CHARLESTON WV 25305-0360 US	ACCOUNTING TECHNICIAN 304-558-5380 HOMELAND SECURITY & EMERGENCY MANAGEMENT BLDG 1 RM EB80 1900 KANAWHA BLVD E CHARLESTON WV 25305-0360 US

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Total Price
1	EMIS- network				

Comm Code	Manufacturer	Specification	Model #
43232900			

Extended Description :

web based statewide EMIS enterprise solution to be utilized by all levels of government and private sector response partners as the States central Emergency Response platform

Purchasing Divison 2019 Washington Street East Post Office Box 50130 Charleston, WV 25305-0130	**State of West Virginia** **Request for Proposal** **21 — Info Technology**	

Proc Folder: 462141

Doc Description: Addendum #4 Web Based Emergency Management Information Syste

Proc Type: Central Master Agreement

Date Issued	Solicitation Closes	Solicitation No	Version
2019-05-02	2019-05-08 13:30:00	CRFP 0606 HSE1900000001	5

BID RECEIVING LOCATION

BID CLERK

DEPARTMENT OF ADMINISTRATION

PURCHASING DIVISION

2019 WASHINGTON ST E

CHARLESTON   WV   25305

US

VENDOR

Vendor Name, Address and Telephone Number:

ESi Acquisitions, Inc.
235 Peachtree Street NE, Suite 2300
Atlanta, GA 30303

Point of Contact:
Cliff Micham
Director, Business Development
o: 252 623 1783 m: 252 378 1594
e: cliff.micham@juvare.com

FOR INFORMATION CONTACT THE BUYER

Stephanie L Gale
(304) 558-8801
stephanie.l.gale@wv.gov

Signature X   *DocuSigned by:*   Nick Meeks   FEIN #   58-2498832   DATE   2 May 2019

All offers subject to all terms and conditions contained in this solicitation

FORM ID : WV-PRC-CRFP-001

ADDITIONAL INFORMATION:

Addendum #4 issued to:

1. Move bid opening date and time to Wednesday, May 8, 2019 @ 1:30pm.
2. Provide responses to vendor questions.

End of Addendum #4.

INVOICE TO	SHIP TO
ACCOUNTING TECHNICIAN 304-558-5380	ACCOUNTING TECHNICIAN 304-558-5380
HOMELAND SECURITY & EMERGENCY MANAGEMENT	HOMELAND SECURITY & EMERGENCY MANAGEMENT
BLDG 1 RM EB80	BLDG 1 RM EB80
1900 KANAWHA BLVD E	1900 KANAWHA BLVD E
CHARLESTON WV25305-0360	CHARLESTON WV 25305-0360
US	US

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Total Price
1	EMIS- network				

Comm Code	Manufacturer	Specification	Model #
43232900			

Extended Description :

web based statewide EMIS enterprise solution to be utilized by all levels of government and private sector response partners as the States central
Emergency Response platform

ADDENDUM ACKNOWLEDGEMENT FORM
SOLICITATION NO.: _____

Instructions: Please acknowledge receipt of all addenda issued with this solicitation by completing this addendum acknowledgment form. Check the box next to each addendum received and sign below. Failure to acknowledge addenda may result in bid disqualification.

Acknowledgment: I hereby acknowledge receipt of the following addenda and have made the necessary revisions to my proposal, plans and/or specification, etc.

Addendum Numbers Received:
(Check the box next to each addendum received)

[X] Addendum No. 1   [   ] Addendum No. 6

[X] Addendum No. 2   [   ] Addendum No. 7

[X] Addendum No. 3   [   ] Addendum No. 8

[X] Addendum No. 4   [   ] Addendum No. 9

[   ] Addendum No. 5   [   ] Addendum No. 10

I understand that failure to confirm the receipt of addenda may be cause for rejection of this bid. I further understand that any verbal representation made or assumed to be made during any oral discussion held between Vendor's representatives and any state personnel is not binding. Only the information issued in writing and added to the specifications by an official addendum is binding.

ESi Acquisitions, Inc.
_____
Company

DocuSigned by:
Nick Meeks
D4DD6026E50C4C6...   **Authorized Signature**

2 May 2019
_____
Date

NOTE: This addendum acknowledgement should be submitted with the bid to expedite document processing.
Revised 6/8/2012