

Hurricane Harvey After Action Report

Austin Homeland Security and Emergency Management

Travis County Office of Emergency Management

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Table of Contents

EXECUTIVE SUMMARY	3
Overview	3
AFTER ACTION REPORT DEVELOPMENT	5
SUMMARY ANALYSIS	7
RESPONSE ANALYSIS	14
FOCUS AREA 1: AREA COMMAND/EMERGENCY OPERATIONS CENTER (EOC) OPERATIONS: PLANNING, LOGISTICS,	
Purchasing, Demobilization, and Finance	14
FOCUS AREA 2: CAPITAL AREA SHELTER HUB PLAN (CASHP)	22
Focus Area 3: Mega Shelter Plan and Operations	29
FOCUS AREA 4: PET SHELTER SERVICES	37
FOCUS AREA 5: LARGE ANIMAL/LIVESTOCK SHELTER SERVICES	41
FOCUS AREA 6: HUMAN SERVICES OPERATIONS AND CASE MANAGEMENT	46
FOCUS AREA 7: MEDICAL OPERATIONS	52
Focus Area 8: Language Access	57
Focus Area 9: Public Information	65
FOCUS AREA 10: COST RECOVERY	70
FOCUS AREA 11: DONATIONS MANAGEMENT	75
FOCUS AREA 12: MUTUAL AID ASSISTANCE PROVIDED TO IMPACTED COMMUNITIES	81
FOCUS AREA 13: REGIONAL EMERGENCY RESPONSE COORDINATION	85
APPENDICES	88
Survey Summary Analysis	88
Action Prioritization Ranking	128
ACRONYMS AND ABBREVIATIONS	143
CORRECTIVE ACTION PLAN	147

Executive Summary

Overview

On Aug. 22, 2017, City of Austin Office of Homeland Security and Emergency Management (HSEM) and Travis County Office of Emergency Management (TC OEM) began monitoring Hurricane Harvey as it approached the Texas Gulf Coast, marking the beginning of over four weeks of emergency response operations across the Capital Area Council of Governments (CAPCOG) region.¹

On Aug. 24, 2017, the City of Austin (the City) and Travis County (the County) prepared to activate the Austin-Travis County Emergency Operations Center (EOC). For the next 29 days, the EOC served as Area Command, operating 24 hours a day, with a peak occupancy of 80 staff from across the City departments and regional partners at the height of response. From the EOC, the City, County, and their regional partners coordinated sheltering operations and prepared for potentially catastrophic weather events across the CAPCOG region. Nearly all City and County departments contributed to logistics, public information, shelter staffing, mega shelter incident command, in addition to the entire range of operational activities.

Days before Harvey initially made landfall, as it transitioned to a Category 4 storm, HSEM stood up the Joint Information Center (JIC) at the EOC and sent alert messages to all City Public Information Officers (PIOs) and departments. This action was supported by evaluations of the posed threat as well as the desired EOC outcome. When the EOC was activated, the City, County, and their regional partners also activated the Capital Area Joint Information System (JIS) plan to coordinate public information.

While the EOC was activating, the City and the County's Capital Area Shelter Hub Plan (CASHP) Core Team received a State of Texas Assistance Request (STAR request) from the State to activate the CASHP, which leverages the facilities of Austin Independent School District (AISD) and more than a dozen other school districts in the CAPCOG region as a series of shelters. In response to the State's request, the City and the County, in coordination with their regional partners, including AISD, American Red Cross (ARC), Central Texas Voluntary Organizations Active in Disaster (VOAD), Williamson County, Hays County, and other responding organizations and public safety agencies rapidly stood up shelter operations to support coastal evacuations.

The CASHP Core Team activated a shelter on August 25, 2017, at the Delco Center, an AISD facility. Two other AISD facilities also operated as shelters under the CASHP: Toney Burger Activity Center and LBJ High School. Additionally, within the Core Team jurisdictions, five additional shelters were on standby, staffed, and ready to receive guests.

¹ The CAPCOG region consists of Bastrop, Blanco, Burnet, Caldwell, Fayette, Hays, Lee, Llano, Travis, and Williamson Counties.

Shortly after CASHP operations began, Harvey abruptly turned back to the coast, impacting the Houston metro area. The State indicated to the CASHP Core Team that it would be busing survivors of Hurricane Harvey from the greater Houston area to shelters in the CAPCOG region. In response, the City activated its Mega Shelter Plan to accommodate an expected total of 7,000 new guests and those consolidated from CASHP shelters. The City encountered immediate problems when the Austin Convention Center, the facility for which the Mega Shelter Plan was originally intended, declared that it would only be available as a shelter for less than two weeks. As the Mega Shelter Plan offered no contingency facilities, the City was forced to perform a rapid ad hoc search for a suitable location, at which time the City determined that it could accommodate 2,000 guests, and subsequently informed the State. On August 28, 2017, the City of Austin Office of Real Estate Services (ORES) was given three days to secure a shelter facility. The MetCenter, a privately-owned office and warehouse complex in southeast Austin, was selected, and hosted the Mega Shelter, as well as the Multi-Agency Resource Center (MARC) from September 1, 2017, through September 22, 2017. At the height of operations, the City hosted about 850 guests in the Mega Shelter.

City of Austin Animal Services, AISD, and the Austin Humane Society (AHS) worked together to stand up pet shelters inside the shelter facilities, provide medical care for pets, and accommodate any small animals left behind during demobilization. Colocated pet shelters were activated at two CASHP shelters (the Delco Center and LBJ High School) and at the Mega Shelter, each of which hosted roughly 15 small animals.

On August 25, 2017, the City and County, in coordination with the Regional Animal Issues Committee (RAIC), Texas A&M AgriLife Extension Service of Travis County (TC AgriLife), Texas Animal Health Commission (TAHC), and regional law enforcement agencies, began planning to stand up a Large Animal/Livestock Shelter at the Travis County Expo Center concurrently with the CASHP shelters and the Mega Shelter. During the activation, the Expo Center hosted both livestock and small animals, including: four horses (accompanied by four herd dogs), one donkey, 52 goats, 11 rabbits, one snake, and 161 stray dogs that had been evacuated from shelters along the Texas coast.

Several City and County departments and regional non-governmental organizations (NGOs), including Austin Public Health (APH), Travis County Health & Human Services (TC HHS), and Central Texas VOAD, responded to provide shelter guests with critical services inside the shelters. Case managers from these organizations interfaced with shelter guests to assess needs such as transportation, mental and psychological health concerns, medical problems, occupational needs, education access for children, access and functional needs, and processes for returning to their home communities. Meanwhile, many of these same groups, as well as Austin-Travis County Emergency Medical Services (ATC EMS), ARC, the Capital Area Public Health and Medical Preparedness Coalition (the Coalition), and the Seton Family of Hospitals (Seton), teamed up to coordinate Medical Operations inside the shelters and across the CAPCOG regional response.

Language access teams mobilized to shelters on August 29, 2017. City language access staff had prepared for activation, including contracted translation services and a team of roughly 40 City employees who had

already been trained and vetted as volunteer interpreters. Although the CASHP shelters did not support interpretive technologies, the Mega Shelter supported video remote interpretation (VRI) stations and over-the-phone interpretation (OPI) and provided bilingual signage. The Harvey response required only Spanish translation services, but the City and County were prepared to accommodate interpretation needs in more than 200 languages.

In response to the severity of the events unfolding along the Gulf Coast and in support of regional response efforts, citizens across the CAPCOG region responded in force to volunteer their time, money, services, and material goods in support of the City and County's sheltering operations during the Hurricane Harvey response. Donations were largely managed by Central Texas VOAD, which maintained a staff presence in the EOC.

While the CAPCOG regional response was centered around sheltering operations, several City and County departments also successfully deployed personnel and equipment to assist Hurricane Harvey response operations in impacted communities along the Texas coast. These efforts included first responders and emergency apparatus as well as personnel and equipment to assess and repair critical infrastructure.

Throughout the Hurricane Harvey response, the State did not activate the Disaster District Committee (DDC) for Disaster District 12, which contains the City of Austin, Travis County, and several neighboring counties and jurisdictions. As a result, the City served as the default lead for regional shelter response. Regional coordination to maintain situational awareness and address resource requests from regional partners was supported by the CAPCOG organization.

After Action Report Development

Methodology

City of Austin HSEM and Travis County OEM, in partnership with Hagerty Consulting², coordinated to form a Project Management Team. The Project Management Team identified 13 unique Focus Areas of response within the CAPCOG regional response to Hurricane Harvey. The Project Management Team worked with City, County, and regional partners, including other departments and responding organizations to identify a Planning Team, with representatives from across each of the 13 Focus Areas, to provide guidance for the after action process and for the After Action Report (AAR) itself.

The Planning Team worked to identify primary documents that guided the CAPCOG regional response, as well as key stakeholders and actors in the CAPCOG regional response within each of the Focus Areas. The Project Management Team then invited these stakeholders and actors to participate in a series of Focus Area Meetings to discuss critical elements of the response, including key themes, strengths, and areas of improvement. At the end of each Focus Area Meeting, participants were provided a menu of three to five

² Hagerty Consulting is a third-party emergency management consulting firm contracted to facilitate the after action process and develop the full After Action Report and Corrective Action Plan.

key action items identified during the meeting and asked to select the one action item which should receive priority over the others. The results of this voting process are captured in the <u>Action Prioritization</u> <u>Ranking</u> appendix to this report.

Following each Focus Area Meeting, all stakeholders and actors were provided two additional opportunities to capture their narratives, observations, and recommendations in writing. First, all stakeholders and actors were provided an input form to further capture information related to their Focus Area(s), including descriptive narratives and background details concerning specific strengths or areas of improvement. The input forms also solicited recommended actions and identified obstacles that might impeded the implementation of those recommended actions. Second, all stakeholders and actors were invited to participate in an online survey which solicited targeted information about the role each respondent played in the regional response to Harvey and asked respondents to rate and comment on critical components of the response, such as planning documents, training, and communication processes. The results of the online survey are captured in the <u>Survey Summary Analysis</u> appendix to this report. Completed input forms and the results of the online survey were visible only to Hagerty Consulting to maintain the integrity of the responses.

An initial draft of this AAR was prepared based on information gathered from a review of collected planning documents, Focus Area Meetings, input forms, and online survey responses. The initial draft was presented to the Planning Team and other critical stakeholders for comment at an After Action Conference (AAC). AAC participants were also invited to provide written feedback on the draft through a Comment Tracking Sheet. These comments were subsequently incorporated into a final draft.

An initial draft of the *Corrective Action Plan* (CAP) was developed in parallel with this Report to assign responsibilities for implementing the identified recommendations. Following the AAC, the draft CAP was presented to the Planning Team at a CAP Meeting, during which participants agreed upon City, County, or regional partner departments, agencies, or responding organizations that would maintain primary or supporting responsibility for the implementation of each corrective action. The CAP can be found at the conclusion of this report.

Finally, both the AAR and CAP were finalized, approved by HSEM and TC OEM, and formally accepted by the City and the County.

AAR Focus Areas

The Project Management Team identified 13 unique Focus Areas of response within the CAPCOG regional response to Hurricane Harvey. Each Focus Area comprises a different aspect of the response, each with a unique narrative and a distinct set of stakeholders, actors, plans, processes, and outcomes. While overlap exists across some Focus Areas, these divisions provide a mechanism to break the overall response into accessible elements and establish a framework for a set of focused and achievable actions. This AAR recommends the City, the County, and/or their regional partners implement said objectives in order to

capture strengths and remedy areas of improvement observed during the CAPCOG regional response to Harvey. The Focus Areas are:

- Area Command/Emergency Operations Center (EOC) Operations: Planning, Logistics, Purchasing,
 Demobilization, and Finance
- Capital Area Shelter Hub Plan (CASHP)
- Mega Shelter Plan and Operations
- Pet Shelter Services
- Large Animal/Livestock Shelter Services
- Human Services Operations and Case Management
- Medical Operations
- Language Access
- Public Information
- Cost Recovery
- Donations Management
- Mutual Aid Assistance Provided to Impacted Communities
- Regional Emergency Response Coordination

Summary Analysis

Strengths

Through feedback captured during 13 Focus Area Meetings, as well as through confidential stakeholder Input Forms and responses to the Online Survey, the Planning Team identified strengths evident across the CAPCOG regional response to Hurricane Harvey. These strengths were sorted by Focus Area and analysed to identify actions and processes that CAPCOG regional partners should continue or incorporate into future response plans. The strengths organized by Focus Area are:

Area Command/Emergency Operations Center (EOC) Operations: Planning, Logistics, Purchasing, Demobilization, and Finance

- Institutionalizing Knowledge
- Operational Communications at Area Command
- Leveraging Existing Relationships

Capital Area Shelter Hub Plan (CASHP)

- Plan Execution
- Notification
- Training

Mega Shelter Plan and Operations

- Leveraging Existing Relationships
- Partnerships with Non-Traditional Departments
- Interagency Coordination
- Improvised Coordination
- Technology Integration
- Shelter Comfort

Pet Shelter Services

- Interagency Coordination
- Colocated Shelters

Large Animal/Livestock Shelter Services

- Interagency Coordination
- Registration of Animals
- Volunteer Coordination

Human Services Operations and Case Management

- Leveraging Existing Relationships
- Adapting Operations

Medical Operations

- Shelter Staffing
- Operational Period Debriefing

Language Access

- Language Access Personnel Coordination
- Leadership
- Technology Integration
- Written Translation Needs

Public Information

- Interagency Coordination
- Media Relations

Cost Recovery

- Staffing Support Contracts
- Cost Tracking Tools
- Documentation

Donations Management

- Community Response
- Existing Plan
- Interagency Coordination
- Inventory Management

Mutual Aid Assistance Provided to Impacted Communities

- Successful Response
- Documentation

Regional Emergency Response Coordination

Regular Communication

Areas for Improvement

Through feedback captured during 13 Focus Area Meetings, as well as through confidential stakeholder Input Forms and responses to the Online Survey, the Planning Team identified areas for improvement evident across the CAPCOG regional response to Hurricane Harvey. These areas for improvement were sorted by Focus Area and analysed to identify actions and processes that CAPCOG regional partners should incorporate into future response plans as remedy for the following areas of improvements, organized by Focus Area:

Area Command/Emergency Operations Center (EOC) Operations: Planning, Logistics, Purchasing, Demobilization, and Finance

- Mobilization
- Information from the State
- EOC Staffing
- Operational Communications at Area Command
- Resource Planning
- Utilizing WebEOC

Capital Area Shelter Hub Plan (CASHP)

- Plan Flexibility
- Shelter Binders
- Shelter Staffing
- Accuracy of Information
- Communication at Shelters
- Training
- Partnership with Regional School Districts
- Feeding at Shelters

Demobilization

Mega Shelter Plan and Operations

- Site Selection
- Plan Flexibility
- Shelter Staffing
- Staffing Roles
- Incident Command Post
- Security
- Demobilization

Pet Shelter Services

- Shelter Activation
- Training
- Coordination between Agencies/Command
- Adequate Facilities
- Expectations
- Stray Animals
- Exotic Animals
- Demobilization

Large Animal/Livestock Shelter Services

- Facility Selection
- Site Access
- Resource Projection
- Training
- Volunteer Coordination
- Public Information
- Demobilization
- Reimbursement

Human Services Operations and Case Management

- Capabilities
- Qualifications of Responding Organizations
- Roles and Responsibilities
- Tracking & Information Systems
- Transportation
- Signage
- Shelter Transition
- Interfacing with Homeless

Medical Operations

- State-Level Coordination
- Roles and Responsibilities
- Tracking & Information Systems
- Transportation
- Qualifications of Responding Organizations
- Demobilization

Language Access

- Mobilization
- Interagency Coordination
- Visibility
- Written Translation Needs
- Equal Access to Language Services
- Roles and Responsibilities
- Qualifications of Interpreters

Public Information

- Mobilization
- Interagency Coordination
- The JIC
- Media Relations
- Coordination with Public Officials
- Technology Integration

Cost Recovery

- Mobilization
- Emergency Purchase Responsibilities
- Cost Tracking
- Mutual Aid Reimbursement Provisions

Donations Management

- Interagency Coordination
- Volunteer Management
- Public Messaging
- Inventory Management
- Interjurisdictional Coordination

Mutual Aid Assistance Provided to Impacted Communities

Protocols and Procedures

- State-Level Coordination
- Interjurisdictional Coordination

Regional Emergency Response Coordination

- Response Organization
- Regular Communication
- Resource Management

Core Capabilities

Presidential Policy Directive 8 (PPD-8): Describes the Nation's approach to preparing for the threats and hazards that pose the greatest risk to the United States. The Directive sets forth the National Preparedness Goal of: "A secure and resilient nation with the capabilities required across the whole community to prevent, protect against, mitigate, respond to, and recover from the threats and hazards that pose the greatest risk." To achieve this goal, 32 Core Capabilities³ have been established with associated capability targets to aid the whole community in achieving this goal. These Core Capabilities provide for collective goals across emergency management planning and exercises, and as such, have been incorporated into this report to assist both the City and County in aligning their future planning, training, and exercise initiatives. The Core Capabilities included in this report and their associated definitions are included below.

Core Capability	Definition
Economic Recovery	Return economic and business activities (including food and agriculture) to a healthy state and develop new business and employment opportunities that result in an economically viable community.
Environmental Response/Health and Safety	Conduct appropriate measures to ensure the protection of the health and safety of the public and workers, as well as the environment, from all-hazards in support of responder operations and the affected communities.
Logistics and Supply Chain Management	Deliver essential commodities, equipment, and services in support of impacted communities and survivors, to include emergency power and fuel support, as well as the coordination of access to community staples. Synchronize logistics capabilities and enable the restoration of impacted supply chains.
Mass Care Services	Provide life-sustaining and human services to the affected population, to include hydration, feeding, sheltering, temporary housing, evacuee support, reunification, and distribution of emergency supplies.
On-Scene Security, Protection, and Law Enforcement	Ensure a safe and secure environment through law enforcement and related security and protection operations for people and communities located within affected areas and also for response personnel engaged in lifesaving and life-sustaining operations.

³ A full list of Core Capabilities can be found at: https://www.fema.gov/core-capabilities.

Core Capability	Definition
Operational Communications	Ensure the capacity for timely communications in support of security, situational awareness, and operations by any and all means available, among and between affected communities in the impact area and all response forces.
Operational Coordination	Establish and maintain a unified and coordinated operational structure and process that appropriately integrates all critical stakeholders and supports the execution of core capabilities.
Planning	Conduct a systematic process engaging the whole community as appropriate in the development of executable strategic, operational, and/or tactical-level approaches to meet defined objectives.
Public Health, Healthcare, and Emergency Medical Services	Provide lifesaving medical treatment via Emergency Medical Services and related operations and avoid additional disease and injury by providing targeted public health, medical, and behavioral health support, and products to all affected populations.
Public Information and Warning	Deliver coordinated, prompt, reliable, and actionable information to the whole community through the use of clear, consistent, accessible, and culturally and linguistically appropriate methods to effectively relay information regarding any threat or hazard, as well as the actions being taken, and the assistance being made available, as appropriate.
Situational Assessment	Provide all decision makers with decision-relevant information regarding the nature and extent of the hazard, any cascading effects, and the status of the response.

Response Analysis

Focus Area 1: Area Command/Emergency Operations Center (EOC) Operations: Planning, Logistics, Purchasing, Demobilization, and Finance

Focus Area Introduction

Summary

On August 24, 2017, the City of Austin, in partnership with Travis County and regional partners, activated the Austin-Travis County EOC as Hurricane Harvey approached the Texas coast. For the next 29 days, the EOC served as Area Command, operating 24 hours a day, with a peak occupancy of 80 staff from across the City departments and regional partners. From the EOC, the City, County, and their regional partners coordinated sheltering operations and prepared for potentially catastrophic weather events across the CAPCOG region. Often leaning on the strength of partnerships forged during the Hurricane Katrina response in 2005, many City and County departments contributed personnel and resources to Logistics, Public Information, Shelter Staffing, and MetCenter Incident Command, in addition to the entire range of Operational activities.

However, because many of these City, County, and regional partner personnel also maintained responsibilities in their day-to-day roles, Area Command sometimes struggled with staffing shortfalls. At other times, operational coordination was hampered by a lack of familiarity (or practice) with the Incident Command System (ICS) among some City and County personnel staffing the EOC. As employees in the EOC worked through these difficulties, performance lagged, and exhaustion quickly set in, compounded by ambiguous or non-existent compensation policies for EOC personnel borrowed from other City or County departments. Operational coordination in the EOC was also complicated by inadequate mechanisms for information sharing, including infrequent coordination meetings and inconsistent use of WebEOC.

Finally, inadequate channels of communication between the State and Area Command made it difficult to maintain statewide situational awareness at the EOC. As Area Command relied on the State to provide numbers of guests inbound to the CAPCOG area, decision-making was challenging when this information was frequently incomplete, slow, and inaccurate. Because the State did not activate the DDC for Disaster District 12, which contains the City of Austin, Travis County, and several neighboring counties and jurisdictions, Area Command dispatched a liaison to the State Operations Center (SOC) throughout the response to establish and maintain communication with the Texas Department of Emergency Management.

Related Core Capabilities

- Operational Communications
- Operational Coordination
- Planning
- Situational Assessment

Strengths

Institutionalizing Knowledge (Planning):

- Some response partner agencies brought inexperienced personnel into the EOC to shadow their more experienced counterparts as on-the-job-training.
 - Recommendation 1.1: The City and County should consider including shadowing as a standard practice for responding agencies and departments.

Operational Communications at Area Command (Planning, Operational Communications):

- Some EOC personnel improvised ways to streamline standard EOC tasks. For example, some
 digital copies of ICS forms were programmed to autoload duplicated information into all pages
 that require the same information.
 - Recommendation 1.2: The City and County should evaluate the utility of autoloading information into digital copies of ICS forms; if determined to be useful, then the City and County should also establish this as a routine practice at the EOC.

Leveraging Existing Relationships (Operational Communications):

- Existing personal relationships between responding organizations, sometimes dating back to the Hurricane Katrina response, often helped facilitate ad hoc coordination efforts between the City, County, and partner organizations.
 - Recommendation 1.3: The City, County, and their regional partners should, in the future, look to leverage the working relationships developed with partner agencies during the Harvey response. These relationships should be sustained through regular, year-round, and collaborative trainings and exercises and include nontraditional response personnel so that working relationships already exist across responding organizations when the next disaster occurs.

Areas for Improvement

Mobilization (Operational Communications):

 All EOC activations are initiated by pager, but some personnel in non-public safety positions do not have pagers. Instead, agency or department coordinators had to notify these people by phone one-at-a-time, which required a large amount of time. As a result, some non-traditional agencies did not deploy staff at the EOC in a timely manner.

 Recommendation 1.4: The City and County should continue to work towards implementing a new wireless messaging system to offer notifications to all City and County personnel through SMS text, email, or traditional pagers.

Information from the State (Operational Coordination, Situational Assessment):

- Communication from the State regarding the numbers of inbound guests to be sheltered in the CAPCOG region was limited, slow, and in the event that information was provided, inaccurate. As a result, the City and the County resorted to sending a liaison to the SOC.
 - Recommendation 1.5: The City and County should develop a procedure to document communication with the DDC chair pre-event to communicate situation assessment, local intentions, and DDC intentions related to the potential/on-going hazard.
 - Recommendation 1.6: Regional partners should collaborate pre-event to establish a regional response structure to coordinate with the DDC when it activates and to operate within during instances in which the DDC does not activate. In the latter instances, this structure should provide for a regional liaison at the SOC. Such a structure would better enable regional entities to maintain statewide and local situational awareness, as well as facilitate response to mutual aid requests.

EOC Staffing (Operational Coordination):

- The EOC had insufficient trained staffing to meet initial and ongoing operational needs. The City and County reached out regionally for support in the EOC from Incident Management Teams (IMTs), but by that time these teams were already deployed elsewhere. As a result, EOC personnel quickly became depleted and exhausted, which caused communication breakdowns between Incident Command at the shelters and Area Command, as well as at the EOC itself. Some meetings between EOC personnel were ad hoc, hurried, and improvised because there was no guarantee that critical personnel would be on-site again when needed. In turn, this made it difficult for the Planning Section to include these meetings among the objectives for the next operational period. In addition, some roles, such as GIS analyst dedicated to the response and with experience in emergency management, were not able to be filled. Every role plays a critical role in response operations and when possible, needs to be filled to provide the City and County with the best stance to response to the disaster.
 - Recommendation 1.7: The City and County, in coordination with their CAPCOG regional partners, should develop, train, and sustain a sufficient base of City, County, and regional partner employees pre-disaster in preparation for deployment to specific positions within the ICS structure used for these operations and to ensure understanding of roles and responsibilities, chain-of-command, and other elements of ICS organizational structure, including resource request protocols and permissions. City Human Resources Department (HRD), County Human Resources Management Department (HRMD), HSEM, TC OEM, and other specific City and County departments should coordinate to allocate time for

- identified employees to receive regular, year-round training to be conducted by HSEM and TC OEM (in-person and online), as well as to develop (or revise, as appropriate) policies to address timekeeping and compensation for these employees during an activation. Similar coordination should take place among regional counterparts.
- Recommendation 1.8: Just-in-time training should be developed and provided for all incoming shelter staff that have previously not been trained on the shelter plan(s), or as a refresher course, providing an opportunity for additional trained staff, with the ultimate goal of alleviating the burden on the select few that have been trained on the plans. This training should be developed to be accessible on-
- o line, or in person, as needed/possible.
- o Recommendation 1.9: The City and County should establish standby contracts for staffing surge support in the EOC and identify other routes for personnel support. Avenues exist for expedient deployment of trained EOC personnel in a variety of response areas, as well as temporary support from staffing companies and potential support from retired personnel who are familiar with response operations. Specific consideration should be given to adding a HSEM/TC OEM-dedicated GIS analyst either on a permanent or surge contracted basis. Establishing these contracts pre-event will enable the City and County to activate them when needed and maintain a fully staffed EOC when needed. Furthering these contracts to include other needed emergency management consulting services would further aid the City and County in ensuring the ability to access all necessary subject matter expertise, when needed.
- Recommendation 1.10: As the City and County revisit and revise response protocols, the
 City and County should institute a procedure to seek support from regional IMTs early on
 in events to reduce the potential of the teams already being deployed.
- Recommendation 1.11: Regional partners should collaborate pre-event to establish a regional response structure to coordinate with the DDC when it activates and to operate within during instances in which the DDC does not activate. In the latter instances, this structure should provide for a regional liaison at the SOC. Such a structure would better enable regional entities to maintain statewide and local situational awareness, as well as facilitate response to mutual aid requests and identify available regional resources, such as IMTs. Regional partners should establish an accompanying protocol whereby any resource fulfilling a regional request is returned in its original condition, or with additional compensation in the event that the resource is partly or wholly expended or damaged.
- Recommendation 1.12: Regional partners should collaborate to determine the requirements for an electronic tool to track supplies and resources within the region, in which a board could be created to list resource needs and available regional resources, mark them when obligated or expended, and identify opportunities to pool resources. Partners should then evaluate if WebEOC meets the identified requirements. If determined as a suitable mechanism, this should be supported by additional WebEOC trainings for potential users on a regular basis in order to avoid complications arising from limited user proficiency. This tool may be supplemented by regional coordination calls as

well. If WebEOC is not identified as fulfilling the need, alternate technologies should be explored.

- Outside of public safety agencies, there was sometimes a lack of understanding of, or adherence to, the ICS among personnel staffing both the EOC and shelters. This deficit resulted in some City and County non-public-safety personnel filling positions without a clear understanding of their role. This was particularly problematic in roles requiring some specialized knowledge, such as protocols for requesting or procuring supplies and standing City and/or County contracts. Further, some personnel used ICS forms in manners other than as intended due to a lack of familiarity.
- A City of Austin policy is in place for non-public safety agencies to identify potential responding personnel and train them to a standard level, which is defined as IS-100, IS-200, and IS-700, with additional trainings as necessary by position. However, it is uncertain whether identified City employees are currently expected to meet this requirement, nor is it certain the regularity with which this training is repeated. Travis County did not have any such policy at the time of the Hurricane Harvey response, but the County expects to implement this policy in the near future.
 - Recommendation 1.13: The City and County, in coordination with their CAPCOG regional partners, should ensure regular pre-incident ICS training, including, at minimum, IS-100, IS-200, and IS-700, for all personnel who may potentially respond during a disaster in order to institutionalize understanding of and adherence to ICS across the CAPCOG region. City and County departments should also leverage existing EOC orientation classes offered by HSEM and TC OEM, and ICS protocols should be incorporated into other trainings wherever possible. Refresher trainings should be implemented on a regular basis as well in support of this goal.
 - Recommendation 1.14: Departments outside of public safety roles within the City, County, and their CAPCOG regional partners, should coordinate to pre-identify staff members to fill specific positions in the EOC; these personnel should be provided with regular, year-round, position-specific trainings in addition to the baseline trainings identified above. Further, the City, the County, and their regional partners should collaborate to develop simple job aids to provide guidance to EOC personnel during a response who do not normally work in the EOC. For example, some job aids should list the essential responsibilities of certain ICS positions. Other job aids, such as large, laminated, wall-mounted copies of ICS Form 203 with certain information pre-filled, can ensure consistent and accurate record-keeping.
- While overtime compensation is available to public safety personnel, there is no written policy in place with the City and County to compensate exempt personnel from departments or agencies outside of traditional public safety organizations for overtime. Because many exempt employees maintain regular operational responsibilities in addition to emergency responsibilities, mental fatigue and loss of motivation after extended periods of working in the EOC are common and were experienced during Harvey.
 - Recommendation 1.15: City HRD and County HRMD and specific City and County departments should coordinate to develop (or revise, as appropriate) policies to address overtime timekeeping and compensation for exempt non-public safety personnel (and

- exempt non-sworn public safety personnel) staffing the EOC for extended periods during disaster response. This effort should include an evaluation of whether any new policies are better implemented uniformly in a top-down manner, or on a department-by-department basis. Similar coordination should take place among regional counterparts.
- Recommendation 1.16: Just-in-time training should be developed and provided for all incoming shelter staff that have previously not been trained on the shelter plan(s), or as a refresher course, providing an opportunity for additional trained staff, with the ultimate goal of alleviating the burden on the select few that have been trained on the plans. This training should be developed to be accessible online, or in person, as needed/possible.
- o **Recommendation 1.17:** In order to alleviate some of the burden of emergency responsibilities on top of regular operational responsibilities for these employees, the City, the County, and their regional counterparts should also work to improve the collective understanding of the role these employees play when a disaster does occur.

Operational Communications at Area Command (Planning, Operational Communications):

- Some ICS sections and units at the EOC, such as Operations and Medical Operations, were generating such a high volume of work that status updates could not be adequately captured through one briefing per 12-hour operational period.
 - Recommendation 1.18: Area Command should adhere to the principles of the Planning Cycle ("Planning P"). Specifically, the EOC Planning Section battle rhythm should include a second mandatory and inclusive mid-operational period briefing per operational period to better facilitate status updates across every section and to allow for formalized input regarding objectives for the next operational period.
- Some EOC personnel struggled to find the blank paper copies of ICS forms and other standard EOC documents.
 - Recommendation 1.19: The City and County should establish an accessible online document library to include ICS forms, EOC job aids, and any other necessary documents.
 The City and County should explore using the Austin/Travis County Combined Transportation, Emergency & Communications Center (CTECC) network drive or online applications like WebEOC as a platform for this library.

Resource Planning (Planning):

- Uncertainty existed as to the extent of the City and County's resource capabilities and total resource needs for the purposes of standing up shelters; consequently, the City and County struggled to understand their resource gaps.
 - Recommendation 1.20: The City and County, in coordination with their CAPCOG regional
 partners, should collaborate to revise pertinent response plans (e.g. shelter plans) to
 include a baseline list of resource needs for sheltering operations, as well as provisions
 for scaling up or down. This effort should be in parallel to establishing (and periodically
 updating) an existing inventory of City, County and other CAPCOG members resources,

- which, upon activation of necessary plans, can be compared to the baseline list to identify resource gaps.
- Recommendation 1.21: The City and County, in collaboration with their CAPCOG regional partners, should assess the suitability of WebEOC as a tool for tracking shelter-specific supplies and resources, in which a board could be created to list available City and County resources and mark them when obligated or expended. If determined to be a suitable mechanism, this should be supported by additional WebEOC trainings for potential users on a regular basis in order to avoid complications arising from limited user proficiency. If determined unsuitable, CAPCOG should identify an alternative method for resource tracking.
- Personnel in the Logistics Section encountered difficulties with purchasing necessary resources due to a lack of access to ProCards.
 - o Recommendation 1.22: The City should continue to identify personnel who may need purchasing capabilities or who may be deployed during a disaster (including all HSEM staff), provide these individuals with ProCard training as well as annual refresher trainings, and issue ProCards to these individuals pre-disaster. The City should update this list annually prior to hurricane season. City departments should then coordinate with the Purchasing Office to assign "dormant" status to all personnel who may need purchasing capabilities or who may be deployed during a disaster until they are deployed or mobilized. The City should explore efficient mechanisms for City departments to notify the Purchasing Office of deployed or mobilized personnel.
- Logistics personnel from both the City and County sometimes needed "runners" to facilitate pickup and delivery of certain resources. City HRD was sometimes asked to fulfill requests for these runners or coordinate a response from the Veteran Emergency Response Team (VERT); however, these are not resources that are typically maintained or coordinated by City HRD. Further, this role was not always filled, sometimes due to a lack of personnel qualified to drive City or County vehicles.
 - o **Recommendation 1.23:** Agreement should be discussed between City and County allowing reciprocity of drivers for City/County vehicles by the opposite jurisdiction.
 - o Recommendation 1.24: All City and County departments outside of public safety roles should coordinate to pre-identify staff members to be "runners" during an emergency response. These personnel should be qualified (or trained) to drive City and County vehicles; and resource-specific needs, such as special licenses required, should be pre-identified and included at the time of the request. HSEM and TC OEM should coordinate with all City and County departments (and partner organizations, such as VERT) to maintain a list of these personnel, to include special licenses or certifications and contact information. The possibility of non-City/County personnel operating City/County vehicles should also be explored. In the event that staff and vehicles are not readily available, the City and County should work to establish standby contracts with moving companies to facilitate the movement of supplies and equipment, when needed.

 Recommendation 1.25: The County should investigate mechanisms to purchase emergency supplies and pay response costs, including possibly establishing a county fund designated for emergency response.

Utilizing WebEOC (Operational Communications, Situational Assessment):

- Some City and County personnel assigned to the EOC lacked sufficient training in WebEOC. This hampered the work of the Logistics Section, the Planning Section, Public Information, and other critical situational awareness and communications related tasks. Additionally, some responding personnel lacked WebEOC accounts and some shelter personnel, such as those at the Expo Center did not have access to WebEOC.
 - Recommendation 1.26: The City and County should coordinate pre-disaster to provide WebEOC accounts to all personnel who may potentially respond during a disaster; this should be supported by additional WebEOC trainings for potential users on a regular basis in order to avoid complications arising from limited user proficiency. The City and County should also identify WebEOC self-registration eligible positions in the EOC. Document the procedure to allow EOC personnel to self-register for a WebEOC position and publish/exercise just-in-time use instructions for EOC personnel.
 - Recommendation 1.27: The City and County should assign an employee with sufficient WebEOC experience as a WebEOC administrator to the EOC during responses to help facilitate WebEOC access, just-in-time training, and troubleshoot problems.

Focus Area 2: Capital Area Shelter Hub Plan (CASHP)

Focus Area Introduction

Summary

On August 24, 2017, the State of Texas asked the CASHP Core Team to activate the CASHP, which is designed to facilitate people who self-evacuate from impacted communities in private vehicles. The CASHP leverages the facilities of AISD and more than a dozen other school districts in the CAPCOG region as a series of shelters, some or all of which may be activated upon request from the State. In response to the State's request, the CASHP Core Team activated a shelter on August 25, 2017, at the Delco Center, an AISD facility. Two other AISD facilities also operated as shelters under the CASHP: Toney Burger Activity Center and LBJ High School. Additionally, within the Core Team jurisdictions, five additional shelters were on standby, staffed, and ready to receive guests. The CASHP successfully accommodated displaced residents who self-evacuated from impacted communities, and facilitated some shelter functions in unexpected conditions, such as moving colocated pet shelters indoors to avoid weather complications. However, in some cases, the CASHP provided too little direction to personnel setting up the shelter; and it was inflexible to accommodate rapidly changing conditions. These problems could have been mitigated in part by stricter adherence to written plans and previous training. Further, operational coordination at the shelters was made difficult by, among other things, inconsistent or irregular meetings, a lack of sufficient training on the CASHP and/or the ICS, and inaccurate information.

Related Core Capabilities

- Logistics and Supply Chain Management
- Mass Care Services
- Operational Communications
- Planning

Strengths

Plan Execution (Planning):

 The CASHP is designed for sheltering people displaced by hurricane events who self-evacuate in personal vehicles; as such it capably handled those guests who transported themselves to the Austin area.

Notification (Operational Communications):

City HRD used the EZ Text app, a cloud-based application used for scheduling, in order to notify
 City shelter managers of scheduling arrangements, which worked well.

Training (Planning):

- Recent CASHP trainings hosted by the CASHP Core Team effectively prepared attending personnel for CASHP operations at the EOC.
 - Recommendation 2.1: The City and County, in coordination with the CAPCOG region, should sustain this capability by ensuring that all personnel who may potentially respond under regional sheltering plans during a disaster are provided similar training, along with periodic refresher trainings.
- HSEM moved some City shelter managers from unused shelters to active shelters so that they
 could shadow active managers and gain real-world experience in an active shelter environment.
 This builds a resilient cadre of experienced shelter staff and helps retain institutional knowledge.
 - Recommendation 2.2: The City and County should consider including shadowing as a standard practice for responding agencies and departments.

Areas for Improvement

Plan Flexibility (Planning):

- The CASHP was designed for sheltering people displaced by major hurricane events who self-evacuate in personal vehicles. However, elements of both the CASHP itself and the CASHP shelter binders were inadequate to provide a comprehensive understanding of the potential for service offerings. As a result, the City, the County, and their regional partners were sometimes unable to fully meet the needs of individuals transported by bus, who, by nature of the mode of travel, arrived with few personal belongings and little ability to transport themselves. Further, buses delivered guests in large groups, which the CASHP model is not prepared to handle.
 - Recommendation 2.3: The City and County, in coordination with the CAPCOG region, should coordinate with all relevant stakeholders to develop a single shelter plan that is flexible to more nimbly expand and contract, and to meet the service and operational needs as identified on an incident-by-incident basis.
 - Recommendation 2.4: Revised sheltering plan should provide for a scalable shelter model, including the option to stand up a reception center. A reception center is recommended to manage the incoming flow of shelter guests, more accurately assess their different needs, accommodate arrivals by bus, leverage regional partners to alleviate pressure on responding City and County entities, and ensure guests are directed to the best shelter destination given their individual circumstances. Any revisions to shelter plans to include a reception center must also include a staffing plan for the reception center. Shelter plan trainings, including training on reception center operations, should be held on a regular basis.
- The CASHP does not include any information regarding re-entry of shelter guests to impacted communities.

Recommendation 2.5: The City, County, and their regional partners should coordinate
with all relevant stakeholders (at minimum, TC HHS) pre-disaster to devise a re-entry
strategy to facilitate the safe and timely return of guests in the CAPCOG region to their
home communities.

Shelter Binders (Planning):

- Shelter Binders did not provide adequate direction for setting up individual shelters due to ambiguous language or omitted subject matter. For example, there was confusion surrounding the intent of the word "expedient," in reference to dormitory layout.
 - Recommendation 2.6: The City and County's relevant stakeholders, including Travis
 County Fire Marshal's Office (TC FMO), Austin Fire Department (AFD), AISD, other school
 districts, and all other relevant stakeholders in the CAPCOG region, should coordinate to
 identify and revise interpretive or substantive gaps in emergency sheltering tools,
 including detailed plans of specific facilities.
- Not all pertinent parties had access to the facility binders or knowledge that they existed.
 - Recommendation 2.7: A digital version of the shelter tools should be made available to key shelter staff and should be available to those not able to access WebEOC.

Shelter Staffing (Planning):

- Among the cadre of City personnel trained as shelter managers, some did not activate with appropriate urgency, or simply did not respond.
 - Recommendation 2.8: The HSEM and TC OEM should coordinate with partner school districts to provide school administrators at schools pre-identified as shelter locations with sufficient, regular pre-incident trainings in shelter management, including emphasizing the urgency of a situation in which a shelter must be stood up.
 - Recommendation 2.9: The City and County, in coordination with the CAPCOG region, should develop a protocol, including clear directives to all departments, that officially reassigns staff pre-identified as shelter managers to shelter operations indefinitely once a certain trigger point in shelter operations has been reached.
- Shelter facilities experienced staffing shortfalls resulting in overworked staff and in some instances, inadequate job performance as staff attempted to balance more than one role at the shelter. While sheltering operations were critically supported by City and County personnel, had the CAPCOG region been impacted more directly by the storm, the availability of these staff would have been greatly stressed, resulting in even further staffing shortfalls. Another challenge existed with ensuring adequate staffing was available at each shelter due to a lack of uniform operational periods.
 - Recommendation 2.10: HSEM and TC OEM should identify pre-event estimates of shelter staff needs, capabilities, and gaps at various levels of shelter plan activation, and notify City HRD and County HRMD of those estimates. City HRD and County HRMD should then coordinate with other City and County departments and agencies to identify specific personnel to bridge those gaps. In conjunction with this, shelter operations should utilize

- uniform operational periods to aid in scheduling processes. Similar coordination should take place among regional counterparts.
- o Recommendation 2.11: The City and County, in coordination with their CAPCOG regional partners, should develop, train, and sustain a sufficient base of City, County, and regional partner employees pre-disaster in preparation for deployment to specific positions within shelter operations, from set-up to demobilization. City HRD, County HRMD, and specific City and County departments should coordinate to allocate time for identified employees to receive regular, year-round training, to be conducted by HSEM and TC OEM (in-person and online), as well as to develop (or revise, as appropriate) policies to address timekeeping and compensation for these employees during an activation. Similar coordination should take place among regional counterparts.
- Recommendation 2.12: Just-in-time training should be developed and provided for all incoming shelter staff that have previously not been trained on the shelter plan(s), or as a refresher course, providing an opportunity for additional trained staff, with the ultimate goal of alleviating the burden on the select few that have been trained on the plans. This training should be developed to be accessible online, or in person, as needed/possible.
- o **Recommendation 2.13:** In order to alleviate some of the burden of emergency responsibilities on top of regular operational responsibilities for these employees, the City, the County, and their regional counterparts should also work to improve the collective understanding of the role these employees play when a disaster does occur.

Accuracy of Information (Operational Communications):

- Shelter managers experienced some difficulty in obtaining accurate headcounts at CASHP shelters. In at least one instance, this resulted from miscommunication with Austin Police Department (APD) on-site personnel: APD were instructed to provide a rough headcount on arriving vehicles in order to assess the cut-off point for a specific shelter, but shelter managers construed this as a true headcount.
 - o **Recommendation 2.14:** Shelter plans should specify the preferred practice for obtaining regular census information (e.g. headcounts). Regular shelter plan trainings should include awareness of the operations of other shelter partners and the intent of those operations. This should be communicated to all identified shelter managers (including facility staff, City/County/regional counterpart personnel, and ARC leads).

Communication at Shelters (Planning, Operational Communications):

Within individual facilities, there was a lack of regular communication across all shelter personnel, notably at the beginning of operational periods, regarding basic operational coordination issues, such as daily schedules, daily priorities, personnel roles, and available personnel and resources. As a result, it was difficult for shelter staff or AISD school personnel to obtain needed information or coordinate with counterparts because they either could not identify the correct personnel to provide this information or did not have access to the necessary information to facilitate crossagency coordination. Chain-of-command was also ambiguous and not communicated

systematically to shelter staff, so some needs were not communicated upwards to Incident Command.

- Recommendation 2.15: As described in the current CASHP Plan, the shelter management battle rhythm should include mandatory and inclusive meetings at the beginning of each operational period without exception to, at minimum, identify available resources and define roles for personnel across all responding agencies or groups. Regular shelter plan trainings should place emphasis on the importance of these meetings.
- Recommendation 2.16: Relationships should be built and grown pre-incident through regular trainings among responding agencies so that personnel across agencies are already familiar with each other when an event occurs. Buy-in from agencies at the executive level should be secured to assign and commit agency personnel to specific longterm roles within the ICS structure.
- Recommendation 2.17: The City and County, in coordination with their CAPCOG regional
 partners, should ensure regular pre-incident ICS training for all personnel who may
 potentially respond during a disaster, including serving in shelter response roles.
- Recommendation 2.18: The City and County, in coordination with their CAPCOG regional
 partners, should develop protocols to ensure that prior to deployment, all shelter workers
 are provided a shelter orientation, including the locations of different personnel and
 services within the facility, as well as an explanation of the roles of all shelter personnel.
- Recommendation 2.19: Just-in-time training should be developed and provided for all incoming shelter staff that have previously not been trained on the shelter plan(s), or as a refresher course, to identify and understand roles and responsibilities. This training should be developed to be accessible online, or in person, as needed/possible.
- Recommendation 2.20: A cross-shift debrief checklist should be developed and included in any updated shelter manager field guides, trained on, and implemented during shelter operations. This will minimize gaps in information occurring at the change of a shift for essential shelter staff.
- o Recommendation 2.21: The City and County, in coordination with their CAPCOG regional partners, should explore, and regularly train on, platforms for electronic sign-in for all shelter personnel (in parallel with paper sign-in sheets as a back-up) and for providing critical documentation to the EOC on a daily basis and upon demobilization. The platform(s) should facilitate accurate personnel records-keeping to facilitate reimbursement but should also facilitate greater real-time situational awareness at the EOC regarding all aspects of shelter operations. Just-in-time training should be developed and provided for all incoming shelter staff that have previously not been trained on this platform(s), or as a refresher course. This training should be developed to be accessible online, or in person, as needed/possible.

Training (Planning):

 Some shelter personnel, such as ARC shelter managers coming from outside of the local ARC region, were unfamiliar with the CASHP shelter model, which differs from traditional ARC shelter operations. Many shelter personnel, including ARC shelter managers, AISD school administrators, and mental and medical health personnel responding from outside the region, received only abbreviated versions of just-in-time training on the CASHP; in some cases, these sessions were as short as ten minutes.

- Recommendation 2.22: The City and County should coordinate with their CAPCOG regional partners to better identify essential personnel during a shelter activation and provide this group with more robust pre-incident training on local sheltering models on a regular basis. Regular drills should be incorporated into this training schedule.
- Recommendation 2.23: Pre-planning should occur by relevant shelter stakeholders to develop intentional and more robust just-in-time shelter manager training specific to the operations of the City, the County, and their regional counterparts.

Partnership with Regional School Districts (Planning, Operational Communications):

- When the CASHP was activated, all CASHP school partners were mobilized. Based on estimates of guests inbound to the CAPCOG region provided by the State, Area Command put some of these schools on stand-by to stand up shelters, but ultimately never activated them. As a result, school districts committed personnel and resources to mobilize which could have been used elsewhere. AISD overcommitted resources including meals and lacked enough personnel to staff the EOC at all times. A long-term consequence of this may be that school districts within the CAPCOG region are less willing to mobilize quickly in the future.
 - Recommendation 2.24: The City, County, and school districts within the CAPCOG region should coordinate to develop better practices to hold in stand-by for potential shelter activation, operating with the information that is available.
- Many independent school districts within the region are included in the CASHP; however, only AISD was utilized during the Harvey response, which placed an undue burden on AISD facilities and staff.
 - Recommendation2.25: School districts within the CAPCOG region should re-engage mutual aid discussions whereby facility staff are pre-identified and trained to mobilize to activated shelters outside of their own district.
 - Recommendation 2.26: CAPCOG should engage in a regional coordination call to discuss shelter mobilizations, and prioritize activations through a collective decision-making process. This call may be stand-alone for shelter and mass care operations, or may be considered in a larger regional coordination call.

Feeding at Shelters (Planning, Mass Care Services):

Some schools serving as shelters were not well-suited for feeding shelter guests. For example, for security reasons, shelter guests could not be brought into areas of the school occupied by students; so, food often had to be brought in to the dormitory area from the cafeteria, which is an unsanitary practice. Further, both AISD and ARC prepared excess amounts of food, which had to be thrown away, as a result of inaccurate information from the State. This stressed AISD's

capacity to feed their own students, as food supplies across the district were already limited due to some existing vendors in impacted communities temporarily ceasing operations.

- Recommendation 2.27: All sheltering stakeholders should coordinate to identify and revise operational gaps in shelter planning, including establishing a scalable feeding plan.
 In doing so, all pertinent stakeholders should be involved, including school districts, government emergency managers, Central Texas VOAD, and Environmental Health (or equivalent) partners.
- Recommendation 2.28: The City and County, in coordination with their CAPCOG regional counterparts, should explore expanding sheltering capabilities, such as feeding shelter guests, by developing MOUs with regional governmental partners, higher education partners, and with existing partners like Central Texas VOAD, and/or by developing standing contracts to support surges in demand at shelters.

Demobilization (Planning, Logistics and Supply Chain Management):

- No demobilization plans existed for AISD facilities used as shelters, nor was detailed demobilization information provided to AISD personnel supporting the shelter. After demobilization, many unaccounted-for resources remained at CASHP shelters.
 - Recommendation 2.29: Pertinent partners should develop demobilization procedures and regular trainings for pertinent response plans (e.g. shelter plans), including supplemental documentation and the implementation of a resource tracking system, such as WebEOC, for shelter-specific supplies and resources in order to identify any that remain and return them to their owners.

Focus Area 3: Mega Shelter Plan and Operations

Focus Area Introduction

Summary

Shortly after CASHP operations began, the State indicated to the CASHP Core Team that it would be busing survivors of Hurricane Harvey from the greater Houston area to shelters in the CAPCOG region. In response, the City activated its Mega Shelter Plan to accommodate an expected total of 7,000 new guests and those consolidated from CASHP shelters. The City encountered immediate problems when the Austin Convention Center, the facility for which the Mega Shelter Plan was originally intended, declared that it would only be available as a shelter for less than two weeks. As the Mega Shelter Plan offered no contingency facilities, the City was forced to perform a rapid, ad hoc search for a suitable location, at which time the City determined that it could accommodate 2,000 guests, and subsequently informed the State. On August 28, 2017, City ORES was given three days to secure a shelter facility. The MetCenter, a privately-owned office and warehouse complex in southeast Austin, was selected, and hosted the Mega Shelter, as well as the MARC from September 1, 2017, through September 22, 2017.

Several City and County departments worked together closely and creatively to stand up the Mega Shelter on short notice at an unfamiliar facility. These groups collaborated to facilitate operational coordination on-site, including improvising an Incident Command Post (ICP) as well as some communication channels between the ICP and Area Command. With the hard work of the City and County and the generosity of their partner organizations, the Mega Shelter provided a comfortable environment for its roughly 850 guests.

However, the abbreviated and ad hoc nature of the site selection process resulted in operational gaps inherent to the MetCenter facility that impeded or prevented some critical facility functions, including security and credentialing, pet sheltering, incident command, guest privacy, and demobilization. For the most part, key stakeholders were included in the selection process, although Animal Services were not consulted as to the suitability of the facility. However, the missing element in the selection process was a comprehensive checklist to ensure that all relevant operations could be successfully achieved at the facility or that modification could be made during set-up to make the facility more useful for operations. Consequently, some core services, such as the pet shelter, were pushed outside the facility due to its limited capacity, requiring tents and other unanticipated supplies.

As shelter operations progressed, communication breakdowns between Incident Command and Area Command and among shelter personnel increased due to fatigue. Additional City and County employees activated to relieve exhausted shelter personnel sometimes lacked sufficient training in the ICS and/or familiarity with roles and responsibilities at the Mega Shelter.

Notably, shelter management in the Mega Shelter environment differs from CASHP management. This structural incongruence caused additional operational confusion during the transition from one shelter

system to the other. Further, the Mega Shelter Plan itself, originally drafted as a response tool for point-to-point evacuations from Galveston, proved too inflexible (as did the CASHP) to host displaced survivors of other types of disasters, accommodate contingency facilities, and incorporate regional partners. It became increasingly apparent throughout shelter operations, first at the CASHP shelters, and subsequently at the Mega Shelter, that one shelter plan for the CAPCOG region, with various annexes describing a cohesive management process, would represent a significant improvement in flexibility over two disparate sheltering plans.

Related Core Capabilities

- Logistics and Supply Chain Management
- Mass Care Services
- On-Scene Security, Protection, and Law Enforcement
- Operational Communications
- Operational Coordination
- Planning
- Situational Assessment

Strengths

Leveraging Existing Relationships (Operational Communications):

- Existing personal relationships helped facilitate the acquisition of the shelter lease as well as other unanticipated resource needs.
 - Recommendation 3.1: The City, County, and their regional partners should, in the future, look to leverage the working relationships developed with partner agencies during the Harvey response. These relationships should be sustained through regular, year-round, and collaborative trainings such that working relationships already exist across responding organizations when the next disaster occurs.

Partnerships with Non-Traditional Departments (Operational Communications, Situational Assessment):

City ORES played a critical role in selecting a site on extremely short notice, as well as negotiating its lease with the City. As a result of this process, City ORES now maintains an ongoing understanding of what facilities in the region capable of supporting the Mega Shelter are currently available. This list will be further refined by any checklists of necessary considerations for shelter site selection in the future (see "Site Selection" below).

Interagency Coordination (Operational Coordination, Situational Assessment):

By day three of mega shelter operations, representatives from across each agency or department active in the Mega Shelter were invited to regular meetings at the beginning of each operational period. This activity served to be critical to maintaining situational awareness and smooth coordination across agencies or departments: while some representatives would not play an active role in the meeting, they served as a conduit of critical information to other personnel in their agency or group.

Improvised Coordination (Operational Communications, Situational Assessment):

 Mega Shelter Incident Command assigned a liaison to serve as a physical presence at both the ICP and the EOC. This liaison therefore was familiar with conditions at both sites and improved the flow of communication between the two.

Technology Integration (Planning, Operational Communications):

- Radio communications at the Mega Shelter were augmented by wireless internet, which was online within 24 hours by way of the Greater Austin Telecommunications Network (GATN).
 - Recommendation 3.2: The City and County should formally incorporate the GATN into sheltering plans to assist with the provision of wireless internet.

Shelter Comfort (Planning, Operational Coordination, Mass Care Services):

Shelter residents were provided access to many amenities, including transportation provided by taxis, ride-sharing companies, and Capital Metro, daily entertainment for both children and adults (e.g. from Del Valle Independent School District and Boys & Girls Clubs of the Austin Area), and donations from local vendors, such as the H-E-B ice cream truck.

Areas for Improvement

Site Selection (Planning, Situational Awareness):

- The Mega Shelter Plan was written explicitly for Austin Convention Center facilities. However, the Plan did not specify a backup site in the event that the Convention Center would be unavailable as a shelter, as was the case during the Harvey response, nor did the Plan specify procedures and requirements for selecting a back-up site. Although City personnel successfully leveraged pre-existing personal relationships to secure a site, this approach is not a sustainable plan due to the possibility of a suitable location not being able to be identified in the moment and the resources expending attempting to find and retrofit an alternate facility without previous planning. The move to a facility for which the Mega Shelter Plan was not written resulted in gaps. For example, the City expected to operate the dormitory at full capacity; consequently, other core services had to be moved outside the facility. Tents became necessary to accommodate these services, as did other unanticipated supplies, such as porta-cans, portable showers, and a mobile command post, in order to bridge other capabilities gaps.
 - Recommendation 3.3: The City and County, in coordination with their CAPCOG regional
 partners, should explore the opportunities to pre-identify, obtain, and equip a facility that
 can be dedicated for primary use as a large population shelter, when needed, and as a
 storage facility when not needed as a shelter. Other uses would be secondary, so that a

- shelter facility was always available when needed. As this may not be possible within a given timeframe, this should be done in parallel with the two following recommendations.
- Recommendation 3.4: The City and County, in coordination with their CAPCOG regional partners, should revise sheltering plans to include a list of considerations for selection of sites in a just-in-time manner. Additionally, the City, the County, and their regional partners should engage in additional pre-identification of more than one potential facility; capabilities, gaps, and needed resources should additionally be identified in advance to bridge known gaps. For Mega Shelters, the facility should be able to accommodate, at minimum, estimated demands from Galveston.
- Recommendation 3.5: City ORES and regional partner counterparts should be included in all future shelter planning initiatives, having specific roles in identifying an ongoing understanding of available facilities in the region in pre-planning, and in just-in-time site selection scenarios.
- Although some key departments and agencies, like City ORES, were included in the site selection process, other key stakeholders were not, such as the APD, AFD, and Animal Services. As a result, the shelter facility presented several challenges that might have been minimized with feedback from a comprehensive group of stakeholders. For example, the MetCenter had more egress paths than APD could monitor; and a colocated pet shelter had to be improvised outside the facility.
 - Recommendation 3.6: The City and County, in coordination with their CAPCOG regional
 partners, should identify all essential stakeholders to involve in selection of an alternative
 site.
 - Recommendation 3.7: Although no site will be a perfect match, a checklist should be developed by relevant stakeholders that provides feedback on necessary considerations for shelter site selection. This tool can be used in pre-identification, as well as in just-intime situations.
- Within the facility, there are special service areas that require isolation as a best practice; but there were no spaces which provided true isolation within the facility.
 - Recommendation 3.8: The City and County, in coordination with their CAPCOG regional
 partners, should revise shelter plans to include provisions for isolated spaces and the
 resources needed to create and operate those spaces.
- While the City, the County, and their regional partners were locating an alternate facility to host the Mega Shelter, the Federal Emergency Management Agency (FEMA) was engaged in a similar process in the CAPCOG region. Ultimately, FEMA secured a more suitable facility to host the joint field office (JFO) just hours before the City, the County, and their regional partners contacted the same facility.
 - Recommendation 3.9: HSEM, TC OEM, and their regional partners should coordinate with state and federal counterparts to coordinate facility needs in advance and maintain situational awareness during the shelter activation process.

Plan Flexibility (Planning):

- The Mega Shelter Plan was designed to facilitate point-to-point evacuation from Galveston, so greater flexibility is needed to accommodate sheltering in response to other types of disasters. For example, the Mega Shelter Plan did not include any information regarding re-entry of guests to impacted communities. The shelter management structure of the CASHP and Mega Shelter Plan are different, and therefore posed challenges in transition of operations. Further, the Mega Shelter Plan was not well-equipped to provide services to people rescued from the storm (as opposed to evacuated before impact); this population of shelter guests arrived with no personal belongings at all.
 - Recommendation 3.10: The City and County, in coordination with the CAPCOG region, should develop a single shelter plan that is flexible to more nimbly expand and contract, and to meet the service and operational needs as identified on an incident-by-incident basis. For example, the City and County, along with their regional partners, could develop one shelter plan for the CAPCOG region with various annexes describing a cohesive management process, with the flexibility to stand up reception centers, to receive individuals coming from within the region (versus outside), via personal vehicle and bus, and to shelter smaller groups of individuals (in school facilities, for example) versus large groups of individuals (in a mega shelter environment).
 - o **Recommendation 3.11:** The City and County should coordinate with all relevant stakeholders (at minimum, TC HHS) pre-disaster to devise a re-entry strategy to facilitate the safe and timely return of guests in the CAPCOG region to their home communities.
- While the intent of the Mega Shelter Plan is to invite regional participation, City resources were almost exclusively leveraged as a consequence of the shelter's central location in the region. No action was taken to leverage regional partners who were generally prepared to assist via the initial standby request from the Texas Division of Emergency Management (TDEM).
 - Recommendation 3.12: The City and County should collaborate with regional partners to revise shelter plans to better integrate regional resources into response, regardless of exact shelter location. Incorporation of regional partners, however, should consider the individual capabilities of each jurisdiction or agency. For example, any partner jurisdiction assigned to operate a shelter should be capable of providing, or leveraging from other regional partners, the full complement of human and medical services that shelter guests may require. Further, regional partners, some of whom traditionally expect to support overflow capacity, should be clearly informed of expanded expectations for their role in regional response.

Shelter Staffing (Planning):

As staffing became depleted further into shelter operations, implementation of the ICS/shelter management structure sometimes broke down, causing communication breakdowns between Area Command and Mega Shelter Incident Command. Consequently, resource requests sometimes did not pass through official channels, resulting in duplicate logistical efforts.

- o Recommendation 3.13: The City and County, in coordination with their CAPCOG regional partners, should develop, train, and sustain a sufficient base of City, County, and regional partner employees pre-disaster in preparation for deployment to specific positions within the response and to ensure understanding of roles and responsibilities, chain-of-command, and other elements of ICS and/or shelter management structure, including resource request protocols and permissions. City HRD, County HRMD, and specific City and County departments should coordinate to allocate time for identified employees to receive regular, year-round training, to be conducted by HSEM and TC OEM (in-person and online), as well as to develop (or revise, as appropriate) policies to address timekeeping and compensation for these employees during an activation. Similar coordination should take place among regional counterparts.
- Recommendation 3.14: Just-in-time training should be developed and provided for all incoming shelter staff that have previously not been trained on the shelter plan(s), or as a refresher course, providing an opportunity for additional trained staff, with the ultimate goal of alleviating the burden on the select few that have been trained on the plans. This training should be developed to be accessible online, or in person, as needed/possible.
- o **Recommendation 3.15:** In order to alleviate some of the burden of emergency responsibilities on top of regular operational responsibilities for these employees, the City, the County, and their regional counterparts should also work to improve the collective understanding of the role these employees play when a disaster does occur.
- o Recommendation 3.16: The City and County, in coordination with their CAPCOG regional partners, should explore and regularly train on platforms for electronic sign-in for all shelter personnel (in parallel with paper sign-in sheets as a back-up) and for providing critical documentation to the EOC on a daily basis and upon demobilization. The platform(s) should facilitate accurate personnel records-keeping to facilitate reimbursement but should also facilitate greater real-time situational awareness at the EOC regarding all aspects of shelter operations. Just-in-time training should be developed and provided for all incoming shelter staff that have previously not been trained on this platform(s), or as a refresher course. This training should be developed to be accessible online, or in person, as needed/possible.

Staffing Roles (Planning, Operational Coordination):

- Many shelter personnel were unfamiliar with roles and responsibilities established in the Mega Shelter Plan because many shelter workers were coming from outside the region.
 - Recommendation 3.17: Utilizing an ICS structure to organize personnel at shelters is highly unorthodox; this practice should be re-examined to determine if there is a more cohesive operational structure in shelters. This may include, for instances of multiple facilities activated simultaneously, a special Mass Care mission group for remote coordination of many incident command functions, and the expansion of the organizational structure for shelters to include functions of incident command needed on site.

- o **Recommendation 3.18:** Just-in-time training should be developed and provided for all incoming shelter staff that have previously not been trained on the shelter plan(s), or as a refresher course, providing an opportunity for additional trained staff, with the ultimate goal of alleviating the burden on the select few that have been trained on the plans. This training should be developed to be accessible online, or in person, as needed/possible.
- Recommendation 3.19: The City and County, in coordination with their CAPCOG regional
 partners, should develop protocols to ensure that prior to deployment, all shelter workers
 are provided a shelter orientation, including the locations of different personnel and
 services within the facility, as well as an explanation of the roles of all shelter personnel.

Incident Command Post (Operational Communications, Situational Assessment):

- Command Vehicle-1 (CV-1) was generally inadequate to serve as the ICP due to its confined space and outdated technology. Entities competed for meeting space inside CV-1 with other responding entities, but also with some shelter personnel that used the vehicle as a makeshift break room. In order for these entities to communicate with the EOC, an individual's cell phone set to speaker mode was generally deployed. Further, the deployment of CV-1 as the ICP was not prescribed by the Mega Shelter Plan.
 - Recommendation 3.20: The City should assess the viability of CV-1 as an ICP. If the City
 determines that CV-1 will continue to be used in such capacity, then necessary upgrades
 to its technical components should be addressed; and disciplined use of its interior space
 will be required to assure adequate meeting space for everyone.

Security (Planning, Logistics and Supply Chain Management, On-Scene Security, Protection, and Law Enforcement):

- Inadequate credentialing protocols and locations resulted in the presence of unauthorized persons within the shelters, including scam artists, non-credentialed advocates and medical providers, and self-deployed volunteers. Consequently, authorized personnel, and case managers in particular encountered difficulties in coordinating and collecting needed information from other agencies or groups due to the confusion of identifying authorized parties. This also resulted in duplicate interactions with shelter guests.
 - Recommendation 3.21: The City and County, in coordination with their CAPCOG regional partners, should revise shelter plans pre-disaster to improve credentialing protocols and processes and further identify applicable partner organizations to engage in the development and establishment of credentialing protocols. As a part of the protocols, pre-vetted partners should establish points of contact assignment at facilities on an incident-by-incident basis.
- The MetCenter had more egress doors than APD personnel could monitor.
 - Recommendation 3.22: As the City and County, in coordination with their CAPCOG regional partners, revise shelter plans to be flexible to different locations, provisions for the inclusion of APD and other critical stakeholders in the evaluation of potential alternative shelter sites should be integrated into the revisions.

- Coordination between Travis County Sheriff's Office (TC SO) and APD to determine security
 assignments at the Mega Shelter was sometimes ineffective. Resources became depleted as some
 requests for support were received with just a few hours of notice.
 - Recommendation 3.23: The City and County, in coordination with their CAPCOG regional
 partners, should revise shelter plans to include provisions for security assignments as
 priority element, train on the plans and policies, and implement them accordingly during
 future events.

Demobilization (Planning, Logistics and Supply Chain Management):

- The MARC was colocated with the Mega Shelter; best practices discourage this because it provides little incentive for some guests to leave the shelter. This was particularly problematic with respect to the local homeless population that had integrated into the shelter. This homeless population continued to demand a number of services at the MARC that otherwise could have been demobilized.
 - Recommendation 3.24: The City and County, in coordination with their CAPCOG regional
 partners, should develop a specific MARC plan, with a corresponding registration process.
 As a best practice, the plan should indicate that the MARC should be located in a separate
 location from shelters.
- Demobilization of the Mega Shelter resulted in unaccounted-for resources. City ORES became the default party to finalize clean-out of the facility.
 - Recommendation 3.25: Pertinent partners should develop demobilization procedures and regular trainings for pertinent response plans (e.g. shelter plans), including supplemental documentation and the implementation of a resource tracking system, such as WebEOC, for shelter-specific supplies and resources in order to identify any that remain and return them to their owners.

Focus Area 4: Pet Shelter Services

Focus Area Introduction

Summary

As part of the City and County's sheltering operations, colocated pet shelters were activated at two of the CASHP shelters (the Delco Center and LBJ High School) as well as at the Mega Shelter, each of which hosted roughly 15 small animals concurrently. Both the CASHP and Mega Shelter Plan called for pet shelters to be located on the exterior of shelter facilities; however, these provisions immediately proved inadequate in the face of potentially catastrophic weather impacting the CAPCOG region. Despite a lack of guidance from these Plans, City of Austin Animal Services, AISD, AHS worked together to stand up pet shelters inside the shelter facilities, provide medical care for pets, and accommodate any small animals left behind during demobilization.

Pet sheltering operations were often characterized by a lack of coordination with Area Command, inadequate staffing, and poor coordination between Animal Services and pet owners. Strays, exotic pets, and facilitating the return of pets to their home communities posed additional challenges, none of which were addressed in either the CASHP or the Mega Shelter Plan.

Related Core Capabilities

- Mass Care Services
- Operational Communications
- Operational Coordination
- Planning
- Situational Assessment

Strengths

Interagency Coordination (Planning, Mass Care Services):

- The City, County, and AHS collaborated effectively to provide medical care for pets. Further, collaboration between these groups and TC AgriLife was instrumental in standing up an interim shelter for remaining stray animals after demobilization.
 - Recommendation 4.1: The relationship built between AHS, the City, the County, and their regional partners should be formally codified and incorporated into sheltering plans to streamline animal registration and health protocols in future sheltering operations.

Colocated Shelters (Planning, Mass Care Services):

 AISD personnel understood the importance of colocating pet shelters and worked diligently to accommodate this need, despite the CASHP's lack of guidance in this area.

Areas for Improvement

Shelter Activation (Operational Communications):

- An initial planning meeting was held to prepare for standing up the Large Animal/Livestock Shelter
 as soon as possible after notification of shelter activation from the State; no such meeting
 occurred specifically with regard to standing up pet shelters.
 - Recommendation 4.2: An initial planning meeting including all stakeholders relevant to pet sheltering should be held upon the activation of shelter plans.
- Animal Services sometimes received untimely or inaccurate information from Area Command regarding shelter activation. This, along with uncertainty regarding the expected scale of the shelters resulting from inaccurate data from the State, made it difficult for Animal Services to understand what resources would be needed, and when and where those resources should be delivered. This inefficiency stressed Animal Services' capacity to stand-up shelters in a timely fashion.
 - Recommendation 4.3: The City should leverage other agencies with available capacities to support the delivery of Animal Services supplies to stand-up shelters.
 - Recommendation 4.4: The City, the County, and their regional partners should work through the RAIC to develop an animal resource inventory in order to better leverage regional capacity for animal sheltering operations.

Training (Planning):

- Animal Services' capacity to support pet shelter operations was sometimes stressed by inadequate staffing. Further, some City personnel who were trained to assist human shelter guests were instead assigned to pet shelter operations despite being unprepared for such a role.
 - Recommendation 4.5: The City and County, in coordination with their CAPCOG regional partners, including TC AgriLife and RAIC, should develop, train, and sustain a sufficient base of City, County, and regional partner employees pre-disaster in preparation for deployment to specific positions within pet shelter operations, from set-up to demobilization. City HRD, County HRMD, and specific City and County departments should coordinate to allocate time for identified employees to receive regular, year-round training, to be conducted by HSEM, TC OEM, and/or regional partners (in-person and online), as well as to develop (or revise, as appropriate) policies to address timekeeping and compensation for these employees during an activation. Similar coordination should take place among regional counterparts.
 - Recommendation 4.6: Just-in-time training should be developed and provided for all incoming pet shelter staff that have not previously been trained on pet shelter plan(s), or as a refresher course, providing an opportunity for additional trained staff, with the ultimate goal of alleviating the burden on the select few that have been trained on the plans. This training should be developed to be accessible online, or in person, as needed/possible.

Coordination between Agencies/Command (Operational Communications, Operational Coordination, Situational Assessment):

- Despite a representative from Animal Services attending coordination meetings at the beginning of each operational period at shelter sites, coordination between Animal Services, shelter managers, and/or AISD personnel (at CASHP shelters) was inefficient and/or ineffective. Incident Command and/or shelter managers sometimes did not recognize Animal Services as an available resource. As a result, some critical problems and/or solutions, such as accommodations for certain exotic pets, were never communicated to Animal Services. Further complications occurred when Animal Services eventually surrendered their seat at the EOC in favor of transferring limited personnel resources to shelter sites, as Animal Services determined that this would be necessary in order to communicate with Incident Command.
 - Recommendation 4.7: The shelter management battle rhythm should include mandatory
 and inclusive meetings at the beginning of each operational period, without exception, in
 order to, at minimum, identify available resources and define roles for personnel across
 all responding agencies or groups. Regular shelter plan trainings should place emphasis
 on the importance of these meetings.
 - Recommendation 4.8: Regular shelter plan trainings should include the protocols for communicating with the EOC, including the specific support functions for pet sheltering that may be accessed through doing so.
- There was ambiguity as to how the TAHC should be engaged by Area Command.
 - Recommendation 4.9: Contact with TAHC should be directed through the RAIC. Rather than aggregating needs, TAHC should be supplied with two lists: one for needs/actions related to large animal/livestock sheltering, and one for needs/actions related to pet sheltering.

Adequate Facilities (Planning, Mass Care Services):

- The sheltering space designated for the Pet Shelter within the MetCenter was inadequate due to a lack of temperature control and security measures; as a result, one pet escaped.
 - Recommendation 4.10: The City and County, in coordination with their CAPCOG regional
 partners, should revise shelter plans to include provisions for engaging a pet shelter lead
 (e.g. Animal Services or RAIC) to detail considerations for site selection that would be
 suitable for a pet shelter.
- The CASHP was designed such that Pet Shelters are located outdoors, adjacent to shelter facilities. However, this was inadequate given the lack of a controlled environment. As a result, AISD personnel had to go shelter-to-shelter to verify which internal areas could be used for pet shelter, because the Shelter Binders only indicated exterior areas for this use.
 - Recommendation 4.11: The City and County, in coordination with their CAPCOG regional
 partners, should revise shelter plans and relevant tools (e.g. shelter binders) pre-disaster
 to make them flexible to different types of disasters, including contingency locations for
 colocated Pet Shelters.

Expectations (Operational Communications):

- Responsibilities for pet care in colocated shelters were communicated to owners upon arrival, but accountability for fulfilling these responsibilities diminished over the duration of shelter activation; this placed an undue burden on Animal Services.
 - Recommendation 4.12: The City and County, in coordination with their CAPCOG regional partners, should ensure that shelter plans provide guidance and tools (e.g. rules and signed agreements) for ensuring accountability among pet owners throughout the length of their stay at a shelter operated by the City, the County, or their regional partners for the care of their respective pet(s) in the animal shelter(s).

Stray Animals (Planning):

- The CASHP and the Mega Shelter Plan did not provide guidance for sheltering stray animals; the AHS-led interim shelter for strays after shelter demobilization, while successful, was an ad hoc effort.
 - Recommendation 4.13: The City and County, in coordination with their CAPCOG regional
 partners, should revise sheltering plans to include guidance for sheltering strays during
 operations as well as a demobilization plan for sheltering strays.

Exotic Animals (Planning):

- The CASHP and the Mega Shelter Plan did not provide guidance for sheltering exotic pets; solutions for this problem were ad hoc.
 - Recommendation 4.14: The City and County, in coordination with their CAPCOG regional partners, should revise shelter plans to consider colocation of exotics with owners (and/or other temporary arrangements) in order to provide the best situation for both animal and owner on a case-by-case basis. The City and County, or their regional counterparts, may choose to utilize existing school district resources that may be available for sheltering exotic pets.

Demobilization (Planning):

- The State ceased efforts to return guests to their home communities while sheltering operations in the CAPCOG region were still active. As a result, re-entry of most sheltered animals and their associated owners was left to be coordinated by the City and County, which was facilitated on an ad hoc basis by direct contact with EOCs in impacted communities, when possible.
 - Recommendation 4.15: The City and the County, in coordination with their CAPCOG regional partners, should revise policies and guidance for re-entry of guests in the CAPCOG region (along with any pets) to their home communities in in in the State ceases its own re-entry efforts.

Focus Area 5: Large Animal/Livestock Shelter Services

Focus Area Introduction

Summary

The City and County stood up a Large Animal/Livestock Shelter at the Travis County Expo Center concurrently with the CASHP shelters and the Mega Shelter. To initiate this process, HSEM and TC OEM jointly invited critical stakeholders in the region, including TC AgriLife, TAHC, and law enforcement agencies, to attend a planning meeting on August 25, 2017, less than 24 hours after the CASHP Core Team received the State's request to activate the CASHP. This meeting proved critically important to support the activation process, as did the pre-prepared animal registration kits. During the activation, the Expo Center hosted both livestock and small animals, including: four horses (accompanied by four herd dogs), one donkey, 52 goats, 11 rabbits, one snake, and 161 stray dogs that had been evacuated from shelters along the Texas coast.

Although TC AgriLife initially experienced difficultly activating volunteers, the Large Animal/Livestock Shelter was largely staffed by a volunteer force comprised of local 4-H students and Agriculture teachers. This group was critical to sustaining shelter operations, but communication across the volunteer network was usually done ad hoc via email chains, which sometimes posed scheduling complications. TC AgriLife staff served as shelter managers; however, as this arrangement is not documented in shelter plans, most TC AgriLife staff had received no prior training in shelter management.

While the Expo Center was sufficient for operations during Harvey, it is the *only* county-owned facility in Travis County capable of supporting a large animal shelter; existing shelter plans do not make provisions for additional sheltering if the Expo Center's capacity is exceeded. This is complicated by the State's limited capacity to obtain the number of inbound livestock. Owner access, demobilization, and reimbursement present additional challenges for the City and County, as shelter plans do not currently make any such provisions.

Related Core Capabilities

- Economic Recovery
- On-Scene Security, Protection, and Law Enforcement
- Operational Communications
- Planning

Strengths

Interagency Coordination (Operational Communications):

An initial planning meeting was held to prepare for standing up the Large Animal/Livestock Shelter
as soon as possible after the CASHP Core Team received the request from the State to activate

the CASHP. This was facilitated by TC OEM reaching out to critical stakeholders. Although this process was mostly ad hoc, this was successful and should be integrated into future responses.

- Recommendation 5.1: The City, the County, and their regional partners should revise large animal sheltering plans to include an initial planning meeting with all stakeholders, including the RAIC, to leverage regional resources and coordinate shelter operations for large animals and livestock.
- Both Williamson County and Bastrop County stood up large animal shelters and were prepared to accept animals upon request from the RAIC. Although these resources were not leveraged during the Harvey response, during future responses the City and the County should reach out to their regional partners through the RAIC to coordinate the use of other regional resources and facilities.
 - Recommendation 5.2: The City, the County, and their regional partners should revise large animal shelter plans to include an initial planning meeting with all stakeholders, including the RAIC, to leverage regional resources and coordinate sheltering operations for large animals and livestock.

Registration of Animals (Planning):

- TC AgriLife was provided with registration forms per the CASHP; TC AgriLife modified these forms during shelter operations to improve their usefulness.
 - Recommendation 5.3: The City, County, and their regional partners should coordinate
 with TC AgriLife to review and formalize the modified large animal registration forms,
 including the ability to copy in triplicate, into shelter plans.

Volunteer Coordination (Planning):

 After initial difficulties with volunteer mobilization, TC AgriLife successfully coordinated and sustained a volunteer force to support Large Animal/Livestock Shelter operations by recruiting 4-H students and Agriculture teachers from local school districts.

Areas for Improvement

Facility Selection (Planning):

- The Travis County Expo Center is the only option for a Large Animal/Livestock Shelter within Travis County; current shelter plans do not provide guidance for alternative locations if the Expo Center is unavailable, or if demand exceeds Expo Center capabilities. Similarly, current shelter plans lack guidance for large animal shelter operations concurrent with another event hosted by the shelter facility.
 - Recommendation 5.4: The City and the County, in coordination with their CAPCOG regional partners, including the RAIC, should revise large animal shelter plans to reflect a regional approach to large animal shelter operation and resource management.
 - Recommendation 5.5: The City, the County, and their CAPCOG regional partners should revise large animal shelter plans to include a list of possible alternative facilities for

- sheltering large animals and livestock, including site-specific capabilities and special considerations for each facility.
- Recommendation 5.6: The City, the County, and their CAPCOG regional partners should revise large animal shelter plans to include an initial planning meeting with all stakeholders, including the RAIC, to leverage regional resources and coordinate sheltering operations for large animals and livestock.
- Recommendation 5.7: The City, the County, and their CAPCOG regional partners should revise large animal shelter plans to include guidance for shelter operations concurrent with another event hosted at the same facility.
- The Large Animal/Livestock Shelter at the Expo Center expanded operations to shelter both owned animals and stray dogs under the same roof.
 - Recommendation 5.8: The City, the County, and their CAPCOG regional partners should revise large animal shelter plans to include guidance for sheltering stray pets and small animals at the Large Animal/Livestock Shelter.

Site Access (Planning; On-Scene Security, Protection, and Law Enforcement):

- Initially, one family that brought animals to the Large Animal/Livestock Shelter arranged with a TC SO Officer permission to shelter on-site as well. However, no policy existed to provide guidance (or permission) for colocation of owners and large animals. Further, without this guidance, it is unclear how owners can meet the expectation that they feed and provide care for their own animal at a shelter if owners are not afforded 24-hour access to their animals.
 - Recommendation 5.9: The City, the County, and their CAPCOG regional partners should revise large animal shelter plans to provide guidance for colocating large animal owners with their large animals. Colocating shelter on-site for livestock owners would improve access for owners to handle their animals and would simplify the logistics of providing site security.

Resource Projection (Planning):

- TAHC does not have adequate staffing capacity to identify all inbound evacuating animals; nor is there an expectation that TAHC should do so. This made resource projection for the Large Animal/Livestock Shelter difficult for the City and County.
 - Recommendation 5.10: The City and the County, in coordination with their CAPCOG regional partners, including the RAIC, should revise large animal shelter plans to reflect a regional approach to large animal shelter operation and resource management. Plans should leverage the RAIC to contact TAHC directly and to provide situational awareness of regional resource needs and capabilities to the City, the County, and their regional partners. In parallel, the RAIC should coordinate with TAHC to ensure common understanding of communication protocols (e.g. appropriate phone numbers) between the two groups.

Training (Planning):

- Although TC AgriLife personnel served as de facto shelter managers for the Large Animal/Livestock Shelter, they were not previously trained as such.
 - Recommendation 5.11: The City and County, in coordination with their CAPCOG regional partners, including TC AgriLife and RAIC, should develop, train, and sustain a sufficient base of City, County, and regional partner employees pre-disaster in preparation for deployment to specific positions within large animal shelter operations, from set-up to demobilization. City HRD, County HRMD, and specific City and County departments should coordinate to allocate time for identified employees to receive regular, year-round training, to be conducted by HSEM, TC OEM, and/or regional partners (in-person and online), as well as to develop (or revise, as appropriate) policies to address timekeeping and compensation for these employees during an activation. Similar coordination should take place among regional counterparts.
 - Recommendation 5.12: Just-in-time training should be developed and provided for all incoming large animal shelter staff that have not previously been trained on the large animal shelter plan(s), or as a refresher course, providing an opportunity for additional trained staff, with the ultimate goal of alleviating the burden on the select few that have been trained on the plans. This training should be developed to be accessible online, or in person, as needed/possible.

Volunteer Coordination (Planning):

- TC AgriLife personnel were initially unsure of the scope of the livestock sheltering operation due
 to incomplete information from the State. This initially made organizing and mobilizing volunteers
 difficult because TC AgriLife could not provide clear expectations to volunteers.
 - Recommendation 5.13: The City and County, in coordination with their CAPCOG regional
 partners, should revise sheltering plans to include a checklist of expectations for Large
 Animal/Livestock Shelter volunteers, including but not limited to an outline of staffing
 shifts, security policies, and FAQs, to better facilitate volunteer mobilization.
 - Recommendation 5.14: The City, the County, and their CAPCOG regional partners, such as TC AgriLife and RAIC, and with other pertinent response organizations, should establish a volunteer management plan, to include recruitment, credentialing, and coordination protocols for both pre-vetted volunteers (including City, County, and regional partner employees as well as volunteers with recognized volunteer agencies, such as Central Texas VOAD or 4-H CAPITAL) and spontaneous volunteers.
- Communication across responding agencies and volunteer groups was largely ad hoc, using email chains developed during activation to keep applicable parties informed of scheduling and other logistical issues.
 - Recommendation 5.15: The City and County, in coordination with their CAPCOG regional
 partners, should revise sheltering plans to include provisions for communication with
 Large Animal/Livestock Shelter volunteers throughout the response.

Public Information (Operational Communications):

- Information channels for individuals whose animals were at the shelter was ambiguous.
 - Recommendation 5.16: The City and the County, along with their CAPCOG regional counterparts, should coordinate to provide 3-1-1 representatives and other relevant public information entities with regular training regarding appropriate routing for livestock-related calls during a response, including a list of appropriate phone numbers.

Demobilization (Planning):

- Although it did not present problems during Hurricane Harvey, other shelter operation challenges revealed that future operations could include circumstances in which certain shelter guests or other evacuees who own livestock at the Large Animal/Livestock Shelter may not be able to return home yet even though the Large Animal/Livestock Shelter demobilizes.
 - Recommendation 5.17: The City and County, in coordination with their CAPCOG regional partners and the RAIC, should revise shelter plans to include provisions for an interim Large Animal/Livestock Shelter (or other accommodations) for evacuated livestock owners who are still unable to return home after the Large Animal/Livestock Shelter demobilizes.
- Shelter plans did not include provisions for fecal management as a part of demobilization.
 - Recommendation 5.18: The City and County, in coordination with their CAPCOG regional
 partners, should revise shelter plans to include provisions for fecal management as a part
 of demobilization.

Reimbursement (Economic Recovery):

- Expenses related to the Large Animal/Livestock Shelter are not eligible for reimbursement under FEMA Public Assistance Category B, Emergency Protective Measures, because livestock are considered business costs and are normally ensured; whereas expenses related to Pet Shelters are eligible. This makes identifying volunteers (e.g. trained veterinarians for large animals/livestock) challenging. Current City and County policies do not address this gap.
 - Recommendation 5.19: The City and County, in coordination with their CAPCOG regional
 partners, should work together to explore other disaster assistance-related funding that
 might be available specific to large animal/livestock sheltering.

Focus Area 6: Human Services Operations and Case Management

Focus Area Introduction

Several City and County departments and regional NGOs responded to provide shelter guests with critical services inside the shelters. Case managers from these organizations interfaced with shelter guests to assess needs such as transportation, mental and psychological health concerns, medical problems, occupational needs, education access for children, access and functional needs, and processes for returning to their home communities.

Although these organizations were instrumental to helping shelter guests adjust to their stay in the shelters, the response was sometimes marked by low to non-existent coordination across responding agencies with inconsistent data management. In some cases, organizations with similar goals worked in parallel without any knowledge of each other's efforts. In other cases, unauthorized organizations worked inside the shelter, leading to confusion among shelter guests and case managers as to the roles and responsibilities of particular organizations. Still other times, FEMA moved some shelter guests to semi-permanent accommodations without any coordination with City and County agencies and partner organizations (e.g., Central Texas Voluntary Organizations Active in Disaster) to provide follow-up services. As a result of this disorganization, certain human service needs were met only after case managers persevered to overcome significant organizational obstacles. Nonetheless, the provision of human services to shelter guests improved over time, as case managers adapted to navigate complex organizational structures.

Related Core Capabilities

- Mass Care Services
- Operational Communications
- Planning
- Public Health, Healthcare, and Emergency Medical Services
- Situational Assessment

Strengths

Leveraging Existing Relationships (Operational Communications):

- Existing personal relationships between APH, TC HHS, and Central Texas VOAD dating back to the Hurricane Katrina response often helped facilitate ad hoc coordination efforts between the City, County, and partner organizations.
 - Recommendation 6.1: The City, County, and their regional partners should, in the future, look to leverage the working relationships developed with partner agencies during the Harvey response. These relationships should be sustained through regular, year-round,

and collaborative trainings such that working relationships already exist across responding organizations when the next disaster occurs.

Adapting Operations (Operational Coordination):

- Case management at the Mega Shelter was more efficient and successful because of the consistency of case management personnel. After some initial challenges transitioning from CASHP shelters to the Mega Shelter, the consolidation of all response efforts to a single site simplified data tracking for both shelter guests and case managers.
- Flexibility in the identification and provision of services to guests was provided by numerous partners, including APH and TC HHS. Roles not traditionally outlined, such as the location of guests within hotels to provide identified needed services, and provision of transportation to guests back to their home communities, are examples where partners came together to find real-time solutions to issues that arose specific to the Harvey operation.

Areas for Improvement

Capabilities (Planning, Public Health, Healthcare, and Emergency Medical Services):

- Some EOC personnel were not fully aware of the extent of resources available for case work through Central Texas VOAD.
 - Recommendation 6.2: Central Texas VOAD organizations should collaborate to develop, confirm, and provide a resource list to the EOC. The capabilities and resources should be known among responding agencies pre-disaster through incorporation into planning, as well as regular trainings and exercises.
 - Recommendation 6.3: The Medical Operations Center (MOC) should expand within the EOC to be inclusive of both Emergency Support Function (ESF) #6 (Mass Care) and ESF #8 (Public Health and Medical Services) needs, for example through a Mass Care mission group.
- There was no separate private space allocated for case managers to discuss sensitive matters with shelter guests or in which shelter guests with certain environmental sensitivities or behavioral conditions could retreat.
 - Recommendation 6.4: The City and County, in coordination with their CAPCOG regional
 partners, should revise the shelter and MARC plans pre-disaster to include the provision
 of a dedicated private space (or spaces) to accommodate shelter guests with certain
 environmental sensitivities or behavioral conditions.

Qualifications of Responding Organizations (Planning):

In some cases, unauthorized human services personnel or organizations self-deployed to shelters.
In addition, there was confusion on-site about which organizations were authorized or not authorized to access shelter guests.

- Recommendation 6.5: The City and County, in coordination with their CAPCOG regional partners, should revise shelter plans pre-disaster to improve credentialing protocols and processes and further identify applicable partner organizations to engage in the development and establishment of credentialing protocols. As a part of the protocols, pre-vetted partners should establish points of contact assignment at facilities on an incident-by-incident basis.
- Recommendation 6.6: The City, the County, and their CAPCOG regional partners should engage the Coalition pre-disaster to revise any specific plans related to medical operations and/or human services, and to identify and implement training and vetting standards for responding organizations. The City, the County, and their regional partners should also work to ensure executive buy-in across all responding agencies and to push out these standards to the full cadre of potential medical responders in the CAPCOG region.
- Recommendation 6.7: The Coalition should be expanded to include Federally Qualified Healthcare Clinics and ARC.

Roles and Responsibilities (Planning, Operational Coordination):

- Roles and responsibilities and chain-of-command were unclear among case managers with the City, County, Central Texas VOAD, ARC, and other partner organizations. As a result, many organizations did not coordinate with APH, TC HHS, Incident Command, or Area Command. Further, little understanding existed across responding organizations as to the purpose and mission of other organizations inside the shelter. These conditions made it difficult for case managers to identify shelter guests who needed critical medical, human, crisis, or mental health support services. Other times, lack of coordination across organizations resulted in redundant interfacing between multiple case managers with the same shelter guest, resulting in confusion among both case workers and guests, and duplication of casework for guests.
 - Recommendation 6.8: The City, County, and all relevant CAPCOG regional partners should regularly train pre-disaster on the shelter and MARC Plans to identify and understand roles and responsibilities. The City and County should establish an accessible online document library via WebEOC to supplement this training, including org charts to indicate roles and responsibilities as well as chain-of-command, kits and job aids for specific shelter positions, EOC job aids, ICS forms, and any other necessary documents.
 - o Recommendation 6.9: The City and County, in coordination with their CAPCOG regional partners, should explore and regularly train on platforms for electronic sign-in for all shelter personnel (in parallel with paper sign-in sheets as a back-up) and for providing critical documentation to the EOC on a daily basis and upon demobilization. The platform(s) should facilitate accurate personnel records-keeping to facilitate reimbursement but should also facilitate greater real-time situational awareness at the EOC regarding all aspects of shelter operations, including a list of all organizations active in the shelter at any given point. Just-in-time training should be developed and provided for all incoming shelter staff that have previously not been trained on this platform(s), or

as a refresher course. This training should be developed to be accessible online, or in person, as needed/possible.

Tracking & Information Systems (Operational Communications, Situational Assessment, Public Health, Healthcare, and Emergency Medical Services):

- An improved registration process is needed to facilitate the identification of specific shelter guests to help case managers address needs, including unique or special needs. The State's Emergency Tracking Network (ETN) failed in most regards. Some confusion also existed regarding whether ETN or the ARC registration system was the "official" registration system. The lack of a coherent registration system also created difficulties, in some cases, in planning for shelter guests to reenter their home communities.
 - Recommendation 6.10: The City and County, in coordination with CAPCOG, should partner with ARC, APH, TC HHS, and other organizations providing case management to develop a consistent registration methodology that can be used by the City, County, and appropriate partners as necessary to register shelter guests, easily identify unique needs upon arrival at the shelter, maintain data, support casework, and plan for re-entry to impacted communities. This system should not be dependent on the functionality of ETN. This system should be incorporated into regular trainings for shelter managers, case managers, and other shelter personnel.
 - Recommendation 6.11: The City and County, in collaboration with their CAPCOG regional
 partners, may also work with the State to explore the possibility of procuring another
 technology to perform the identified needs ETN is slated to fill.
- Little coordination existed between responding agencies representing differing levels of government, which resulted in assistance provided to guests that was sometimes incomplete or inadequate. For example, FEMA moved some shelter guests to hotels without coordinating with or notifying Area Command or Incident Command. Consequently, it was difficult, and sometimes impossible, for case managers to provide these guests with critical follow-up services, such as transportation needs and medical or mental health care.
 - Recommendation 6.12: Ensure an intake process is established and utilized obtaining accurate Head of Household contact information for follow up.
 - Recommendation 6.13: During incidents, establish point(s) of contact for each agency providing services in shelters and MARC, including state and federal agencies. Include all partners in shift change briefings, providing desired process for transition out of the shelter and anticipated sustained services.
 - Recommendation 6.14: As a part of the plan, and plan implementation, provide printed copies of key agency contact numbers during the initial intake to shelter residents. With this, provide a verbal and written explanation of the types of services being offered in the shelter and MARC, and the distinction between federal services offered, and local case management services.
- APH case managers sometimes encountered difficulty obtaining accurate or specific information, such as headcounts or the names of certain shelter guests, from partner organizations. In addition

to inadequate registration systems and lack of coordination between federal and local organizations, this was also the result of a fundamental lack of understanding regarding the roles and responsibilities within the shelter. Case managers found it challenging to be a calming factor for shelter guests when they were unable to receive accurate or timely information themselves.

- Recommendation 6.15: A singular electronic registration process should be developed, planned around, and trained upon by HSEM, TC OEM, and regional partners whereby all pertinent parties would be granted (or denied) permission by guests to have access to information to provide case management and case work.
- Recommendation 6.16: The City and County, in coordination with their CAPCOG regional
 partners, should develop protocols to ensure that prior to deployment, all shelter workers
 are provided a shelter orientation, including the locations of different personnel and
 services within the facility, as well as an explanation of the roles of all shelter personnel.
- Recommendation 6.17: Include all partners in shift change briefings, providing clarification of roles and responsibilities within the facility.

Transportation (Planning):

- The State ceased efforts to return evacuees to their home communities while sheltering operations in the CAPCOG region were still active; this placed the burden of securing transportation on the City and County. Case managers spent an undue amount of time on securing transportation for re-entry.
 - Recommendation 6.18: The City and County, in coordination with their CAPCOG regional
 partners, should revise policies and guidance for re-entry of guests in the CAPCOG region
 (along with any pets) to their home communities, in the event that the State ceases its
 own re-entry efforts.

Signage (Planning, Public Health, Healthcare, and Emergency Medical Services):

- There was a lack of signage to direct shelter guests towards the provision of certain services. This presented a missed opportunity to passively guide the actions of shelter guests.
 - Recommendation 6.19: The City and County, in coordination with their CAPCOG regional partners, should revise shelter plans to include provisions for standard signage and/or takeaway sheets within the shelter. Some signage should clarify between minor problems and major problems, with guidance about steps shelter guests should take based on the category of problems. Other signs and/or takeaway sheets should prompt "to-do" lists for certain shelter guests, such as considerations prior to relocating from a City or County facility to a hotel.

Shelter Transition (Planning):

- The transition from CASHP shelters to the Mega Shelter also amplified the degree of difficulty for some case managers trying to track shelter guests.
 - Recommendation 6.20: The City and County, in coordination with the CAPCOG region, should develop a single shelter plan that is flexible to more nimbly expand and contract,

and to meet the service and operational needs as identified on an incident-by-incident basis. For example, the City and County, along with their regional partners, could develop one shelter plan for the CAPCOG region with various annexes describing a cohesive management process, with the flexibility to transition from school-based facilities, to a mega shelter model.

Interfacing with the Homeless Population (Mass Care Services):

- Some of the local homeless population integrated into the local emergency shelters. This
 homeless population continued to enhance the demand for shelter services that otherwise could
 have been demobilized. This stressed shelter staffing capacities.
 - Recommendation 6.21: Case managers from the City, the County, and their regional
 partners should attempt to distinguish between local homeless persons and guests to the
 region, in order to direct the homeless population towards those services that would
 better serve their needs, rather than those services designed for traditional shelter
 guests.

Focus Area 7: Medical Operations

Focus Area Introduction

Summary

Medical Operations were largely successful during the Hurricane Harvey response. Medical volunteers, many of whom responded from outside the CAPCOG region, were always present in adequate numbers inside the shelters to assess the medical and functional needs of guests, track these needs over the duration of shelter operations, and respond to new medical conditions. And despite a complex organizational chart of responding groups and agencies, regular meetings facilitated coordination efforts to the extent that only twenty-six shelter guests were transferred to hospitals across 30 days of shelter activation.

However, in general, the medical response was characterized by a lack of coordination at multiple levels. At the State and regional levels, communication from medical facilities evacuating patients in impacted areas rarely followed proper channels through Regional Advisory Councils (RACs); as a result, the Capital Area Trauma Regional Advisory Council (CATRAC) was unable to accurately assess the current capacity of the CAPCOG region to receive evacuated patients. Fortunately, Houston-area hospitals mostly opted to shelter-in-place during the storm; had they evacuated patients, capacity might have been critically stressed without any means of assessing the burden.

Within the shelters themselves, various groups of responders and medical response organizations operated independently of one another without a single leadership structure to coordinate priorities and tasks, resulting in inefficient and duplicative medical case management. Mechanisms for tracking medical data collected on shelter guests were similarly disjointed. Absent cohesive organization, some unauthorized medical groups and personnel self-responded to the shelters and were allowed inside.

Transportation of shelter guests with medical and functional needs posed significant challenges as well: The State's role in providing transportation for hospitalized evacuees to or from shelters was ambiguous, and City and County shelter demobilization plans did not make provisions for specialized medical transportation.

Related Core Capabilities

- Mass Care Services
- Operational Communications
- Operational Coordination
- Planning
- Public Health, Healthcare, and Emergency Medical Services
- Situational Assessment

Strengths

Shelter Staffing (Mass Care Services, Public Health, Healthcare, and Emergency Medical Services):

- Volunteers to staff shelters were abundant. Among these volunteers, Medical and Functional Needs (MAFN) teams were instrumental in identifying medical needs among shelter guests during the shelter registration process. As a result of these efforts, only twenty-six shelter guests were transferred to hospitals across 30 days of shelter activation.
- ARC used an eight-question triage process to assess medical and functional needs of incoming shelter guests; this helped streamline and prioritize ATC EMS response among arriving populations.
- Comfort care, provided by ARC, was a constant presence, providing a consistent resource to guests while APH and TC HHS staff came in shifts. This service provided guests with effective continuity of care.

Operational Period Debriefing (Planning, Operational Coordination):

- Meetings held at the end of every operational period among medical operations personnel provided opportunities for reflection and improvement and improved partnerships on-site. This ad hoc process helped ensure smooth hand-offs from one operational period to the next among ARC, CommUnityCare, and Integral Care personnel.
 - Recommendation 7.1: The City, County, and their regional partners should evaluate the
 utility and effectiveness of regular operational period debriefings among medical
 operations personnel; and if determined to be useful, then the City, County, and their
 regional partners should revise all pertinent plans to incorporate this practice.

Areas for Improvement

State-Level Coordination (Planning, Operational Coordination, Situational Assessment):

- There was a lack of consistent communication from the State concerning the number and types of patients being evacuated to the CAPCOG region. Further, hospitals in impacted communities communicated the number and types of patients being evacuated directly to CAPCOG region facilities under the same parent group, and communications were not routed to the CATRAC and Medical Operations making situational awareness limited. Further, communication between CATRAC and other RACs was slow to develop; there is no state-level plan to identify triggers for coordination between RACs. This resulted in CATRAC being unable to guide hospitals in the CAPCOG region about how to appropriately ramp up their operations. Had Houston-area hospitals evacuated their patients rather than sheltering-in-place during the storm, Medical Operations would have been unable to assess available capacity in the CAPCOG region.
 - Recommendation 7.2: The City and County, in coordination with their CAPCOG regional
 partners, should engage with stakeholders both locally and statewide to develop

agreements to quickly facilitate assistance when a disaster occurs. Because many medical personnel responded from outside the CAPCOG region, existing agreements with other jurisdictions or regional organizations would ensure that responding personnel in future responses already meet all credentialing and training requirements.

- Recommendation 7.3: RACs should coordinate with one another directly in future operations. This activity should be made visible to local MOCs.
- There is no functional statewide platform for tracking evacuated patients and medical resources.
 The State's ETN failed in most regards.
 - Recommendation 7.4: The City, the County, and their regional partners should jointly recommend to TDEM that this is an essential state-level function that must be funded and solved.

Roles and Responsibilities (Planning, Operational Coordination):

- Communication on the shelter floor between medical personnel, case managers, shelter managers, and Incident Command was sometimes ad hoc and fractured. Many shelter personnel were unfamiliar with roles and concepts within the ICS, the role of each organization responding inside the shelters, and chain-of-command. There was no single medical authority or leader to set priorities and coordinate among different groups; this resulted in responding organizations ordering resources independently of each other, sometimes in duplicate. An ad hoc meeting was eventually held to establish an overall organization to Medical Operations, which produced an informative yet complex org chart.
 - Recommendation 7.5: Just-in-time training should be developed and provided for all incoming shelter staff that have previously not been trained on the shelter plan(s), or as a refresher course, to identify and understand roles and responsibilities. This training should be developed to be accessible online, or in person, as needed/possible.
 - Recommendation 7.6: Area Command should adhere to the principles of the "Planning P". Specifically, EOC Planning Section battle rhythm should include mandatory and inclusive meetings at the beginning of each operational period without exception to, at minimum, identify available resources, define roles for personnel across all responding organizations, and define operational priorities for the operational period. Regular shelter plan trainings should place emphasis on the importance of these meetings.
 - Recommendation 7.7: The City and County, in coordination with their CAPCOG regional partners, should evaluate the org chart developed during the response and revise it as necessary pre-disaster. Subsequently, the City and County should collaborate with their regional partners to revise sheltering plans to include this organizational structure and identify which agencies, departments, and/or organizations will lead, and which will play supporting roles in Medical Operations.

Tracking & Information Systems (Operational Communications, Situational Assessment):

 Methods for collecting, aggregating, and maintaining medical data on shelter guests were not uniformly defined and consequently varied across responding organizations. This data was sometimes lost in the transition between operational periods, or never pushed upwards due to an ambiguous chain-of-command.

Recommendation 7.8: The City and County, in coordination with their CAPCOG regional partners, should engage ARC, APH, TC HHS, and other organizations providing case management to develop a consistent registration methodology that can be used by the City and the County, as well as other pertinent partners, to register shelter guests, easily identify unique needs upon arrival at the shelter, and maintain data. This system should not be dependent on the functionality of ETN. This system should be incorporated into regular training for shelter managers, case managers, and other shelter personnel.

Transportation (Planning):

- The City and County encountered difficulty arranging for the transportation of shelter guests to and from medical appointments and from individuals brought to local hospitals by the State to shelters; this was partly due to a lack of State notification and assistance.
 - Recommendation 7.9: Pre-event planning should include the planning for transportation
 of shelter guests for such appointments, in the event state assistance is not an available
 resource again in the future.

Qualifications of Responding Organizations (Planning, Public Health, Healthcare, and Emergency Medical Services):

- There was difficulty vetting organizations that responded, or wanted to respond, to sheltering operations. In some cases, unauthorized medical personnel self-deployed to shelters and were allowed access to shelter guests.
 - Recommendation 7.10: The City and County, in coordination with their CAPCOG regional partners, should revise shelter plans pre-disaster to improve credentialing protocols and processes and further identify applicable partner organizations to engage in the development and establishment of credentialing protocols. As a part of the protocols, pre-vetted partners should establish points of contact assignment at facilities on an incident-by-incident basis.
 - Recommendation 7.11: Just-in-time training should be developed to include a module specific to medical operations for all incoming shelter staff that have previously not been trained on medical operations plans, or as a refresher course. This training should be developed to be accessible online, or in person, as needed/possible.
 - Recommendation 7.12: The City, the County, and their CAPCOG regional partners should engage the Coalition pre-disaster to revise any specific plans related to medical operations and/or human services, and to identify and implement training and vetting standards for responding organizations. The City, the County, and their regional partners should also work to ensure executive buy-in across all responding agencies and to push out these standards to the full cadre of potential medical responders in the CAPCOG region.

- Recommendation 7.13: The Coalition should be expanded to include Federally Qualified Healthcare Clinics and ARC.
- In some cases, medical personnel responding from outside the CAPCOG region were vetted and qualified but lacked familiarity with the shelter structure and plans.
 - Recommendation 7.14: The City, the County, and their CAPCOG regional partners should engage the Coalition pre-disaster to implement just-in-time training to familiarize qualified medical personnel with shelter plans and structures. This training should be developed to be accessible online, or in person, as needed/possible.

Demobilization (Planning):

- As the conclusion of operations at the Mega Shelter approached, the on-site medical clinic required a disproportionate number of staff to maintain service to a small number of shelter guests. Further, the continued provision of services discouraged some guests, many of whom were among the local homeless population, from leaving the shelter.
 - Recommendation 7.15: Shelter plans should be revised to identify a trigger point at which
 the on-site medical clinic should be discontinued, with services transferred to traditional
 points of distribution within the City, the County, or other regional partners.
- There was significant confusion regarding the appropriate process for returning evacuated patients who had been transported and admitted to hospitals in the CAPCOG region back to their home communities. These individuals were not recognized as having been evacuated from a hospital, but nonetheless, needed special transportation back to their home communities and to have medical care continued upon arrival.
 - Recommendation 7.16: The City, the County, and their CAPCOG regional partners should include relevant state agencies in future planning processes to establish the protocol, establish clear roles and responsibilities, and minimize gaps experienced during Harvey operations.

Focus Area 8: Language Access

Focus Area Introduction

Summary

A general Language Access Plan for HSEM existed prior to the CAPCOG region's response to Hurricane Harvey; however, this Plan was not specific to shelter management. As a result, interpreters were mobilized only after public comments noting deficient interpretation services in CASHP shelters were made by an Austin city councilmember and other prominent citizens. Consequently, interpreters mobilized to shelters on August 29, 2017, five days after activation of the CASHP. However, City language access staff had prepared for activation, including contracted translation services and a team of roughly 40 City employees who had already been trained and vetted as volunteer interpreters. Although the CASHP shelters did not support interpretive technologies, the Mega Shelter successfully supported VRI stations and OPI and provided bilingual signage.

Although the Harvey response required only Spanish translation services, the City and County were prepared to accommodate interpretation needs in many more languages. Interpreter services were available in over 200 languages via OPI and in 36 languages, including American Sign Language (ASL), via VRI. Additionally, City Asian language staff (including interpreters for Korean, Chinese, and Vietnamese) and County ASL interpreters were on standby during shelter operations. Arabic interpretation was available via a trained contracted interpreter. Each standby interpreter was provided with a two-hour orientation and training at the Mega Shelter.

Language access teams effectively shared information internally during improvised meetings at the end of each operational period; however, the teams experienced difficulty coordinating externally with Incident Command, shelter managers, and other shelter personnel. As a result, the roles of many volunteer interpreters were not well defined; many had no choice but to act as de facto case managers, despite lacking qualifications, due to the lack of coordination with case workers and other shelter personnel.

Further, shelter plans did not provide for language access guidance once guests were inside shelters. For example, no pre-scripted, bilingual messages were broadcast to arriving guests during the registration process to provide instructions for accessing language assistance. Some, but not all, paper documents were printed in multiple languages. And language access services were sometimes located away from critical service providers.

Related Core Capabilities

- Logistics and Supply Chain Management
- Mass Care Services
- Operational Coordination
- Planning

Strengths

Language Access Personnel Coordination (Planning, Operational Coordination):

- Pre-disaster, the City vetted and provided training, including best practices for interpreting, for roughly 40 employees who were reassigned to serve as interpreters during an emergency.
 - Recommendation 8.1: The City should continue the process of vetting and providing training, including best practices for interpreting, to select employees to expand its base of vetted and trained City employee interpreters.
- City Asian language staff (including interpreters in Korean, Chinese, and Vietnamese) and County ASL interpreters were on standby during shelter operations. Arabic interpretation was available via a trained contracted interpreter. Each standby interpreter was provided with a two-hour orientation and training at the Mega Shelter.
- The City successfully leveraged pre-existing contacts within Seton to recruit ten fully-vetted professional medical interpreter volunteers to staff the medical area at shelters.
 - Recommendation 8.2: The City and County, along with their regional partners, should revise language access and/or shelter plans to avoid ad-hoc efforts during future responses by formalizing the relationship between Seton and the City and County. Similar coordination should take place among regional counterparts.
- No census of incoming languages represented across the guest population was available for planning purposes. As a result, the City planned for the language diversity found in Houston-area populations; but the only language access needs in the shelters were those of Spanish-speaking guests. Despite standing up VRI and OPI services, language access needs were therefore successfully addressed entirely by City staff and Seton volunteer interpreters.
- In response to widespread misinformation about the need for language access volunteers and some instances of unauthorized volunteers deploying to shelters, City language staff developed a Google Form through which untrained language access volunteers could be recruited and vetted. While respondents to this survey were never deployed, they could have been leveraged (with additional training) had the number of shelter guests reached a higher threshold.
 - Recommendation 8.3: The City and County, in coordination with their CAPCOG regional
 partners, should develop a series of pre-scripted messages to correct misinformation and
 to communicate to the public that essential services for shelter guests, including language
 access, are in place.
 - Recommendation 8.4: The City and County, in coordination with their CAPCOG regional
 partners, should consider identifying other volunteer opportunities or organizations to
 which the community's energy could be directed to achieve positive outcomes.
- At the Mega Shelter, interpreters gathered data on the preferred language of all shelter guests. Language access coordinators built an ad hoc note-taking template to be shared across shifts to capture language preferences as well as information related to incidents or services provided to shelter guests with language access needs.

- Recommendation 8.5: The ad hoc note-taking template developed by interpreters at the Mega Shelter should be assessed by the City, the County, and their regional partners; and, if judged successful and secure, this practice should be codified into language access and/or shelter plans and regular trainings.
- Language access coordinators developed sign-in sheets for each language access team shift, as well as a schedule that posted between one and five interpreters per peak hour shifts.

Leadership (Operational Coordination):

 The language access coordinator was familiar with emergency operations due to a background in hospital operations.

Technology Integration (Planning, Mass Care Services, Logistics and Supply Chain Management):

- The City had contracts in place that allowed for the purchase of interpretation services, such as VRI and OPI, as well as related resources, such as 30 interpreter-on-wheels stands compatible with VRI. The City also secured iPads on loan to support VRI. As a result, interpreter services were available at the Mega Shelter (but not CASHP shelters) in over 200 languages via OPI and in 36 languages via VRI. This was particularly critical for hearing-impaired guests, as VRI offers the only means of interpretation for ASL outside of human interpreters.
 - Recommendation 8.6: Standing contracts allowing for the purchase of interpretation services should be continued in the future to ensure interpretation technology needs can be quickly addressed.
- The City leveraged lessons-learned from failing to assess CASHP shelter facilities prior to their opening to assess the Mega Shelter's language access capabilities in advance. As a result, City Communications and Technology Management (CTM) was able to set up the Mega Shelter to accommodate language access technologies, including VRI and the provision of analog telephone lines to support OPI. When VRI stations struggled to function properly in the absence of strong cell signals, CTM provided Wi-Fi hubs to bridge this gap.
 - Recommendation 8.7: The City should ensure that VRI and OPI connectivity (and other language access requirements) are included on CTM's checklist for facility assessment.
 Similar coordination should take place among regional counterparts.
 - Recommendation 8.8: The City, the County, and their regional partners should formalize
 the provision of Wi-Fi hubs and (isolated) analog telephone lines as best practices to be
 included in language access and/or shelter plans and regular trainings.
- Language access teams successfully leveraged the *WhatsApp* app in an ad hoc manner to share status updates and progress notes regarding specific shelter guests.
 - Recommendation 8.9: Because the use of a communication tool for this function should be assessed by the City, the County, and their regional partners; and, if judged successful and secure, this practice should be codified into language access and/or shelter plans and regular trainings.

Austin | Travis County

Written Translation Needs (Planning, Mass Care Services, Logistics and Supply Chain Management):

- A contract was in place for translation services for Arabic, Burmese, Chinese, Korean, Spanish, and Vietnamese.
- Through the City Communications and Public Information Office (CPIO), teams of interpreters and contracted translators were able to quickly and successfully turn around ad hoc translation needs at shelters, particularly needs that changed daily for signage in Spanish.
 - Recommendation 8.10: Language access and/or shelter plans should be revised to reflect bilingual signage support as an additional responsibility for on-site interpreters and contracted translators (if applicable).
- The City leveraged lessons-learned from the lack of bilingual signage and documents at CASHP shelters to provide bilingual signage and upwards of twenty translated documents at the Mega Shelter. Further, HSEM has the capability to translate all of its messaging into Spanish.

Areas for Improvement

Mobilization (Planning):

- The need for language access services in shelters was not recognized until public comments from citizens triggered HSEM to contact the CPIO to mobilize interpreters. As a result, interpreters did not arrive in shelters until August 29.
 - Recommendation 8.11: The City and County, in coordination with their CAPCOG regional partners, should revise language access and/or shelter plans to identify key roles and responsibilities for language access services in all relevant incidents. The plans should include processes to access contracted language access services for interpretation and translation of, at minimum, Spanish and ASL, as well as trigger points for mobilization.

Interagency Coordination (Planning, Operational Coordination):

- Language access teams did not integrate into Incident Command at the shelters. This resulted in a lack of familiarity with the purpose and protocols of language access teams among ARC shelter managers and other shelter staff. This caused difficulties for language access teams trying to gather data and communicate information about the language needs of guests (or other needs assessed during interpretation) to appropriate responding agencies. As a result, Language access teams established an ad hoc end-of-day debriefing meeting at shelters to discuss issues and coordinate solutions. This was helpful to interpreters; but this meeting did not always extend to case managers or other shelter staff who may have needed access to information collected by language access teams.
 - Recommendation 8.12: The City and County, in coordination with their CAPCOG regional
 partners, should revise language access and/or shelter and MARC plans to include
 provisions for regular coordination meetings (or calls) among language access personnel

- to allow professional interpreters and/or language access coordinators to coordinate daily requirements for language volunteers.
- Recommendation 8.13: Just-in-time training should be developed and provided for all incoming shelter staff that have previously not been trained on the shelter plan(s), or as a refresher course, to identify and understand roles and responsibilities. This training should be developed to be accessible online, or in person, as needed/possible.
- Recommendation 8.14: The Travis County Language Access Workgroup, as it is further established, should be incorporated into these future operations and planning. The City and regional partners should establish a similar group(s). Groups should meet regularly to establish relevant plans and procedures to provide language access during incidents.
- As a result of departmental policies and non-exempt work status among some City employee language access volunteers, some volunteers were required to work for durations that exceeded shelter shifts; consequently, some shifts were covered by more volunteers than necessary.
 - Recommendation 8.15: City HRD and County HRMD should determine (or revise, as applicable) policies that incorporate City and County language access workers into emergency response policies for timekeeping and scheduling.

Visibility (Planning):

- At the Mega Shelter, the language access team was not colocated at the same registration tables as the ARC; rather, the team was located off to the side, away from the flow of guests. This caused difficulties for language access teams trying to assess the needs of guests and begin interpreting for them once they arrived at the shelter.
 - Recommendation 8.16: The City and County, in coordination with their CAPCOG regional partners, should engage ARC pre-disaster to revise registration plans to locate the language access team, as well as VRI and OPI services, at each critical service station to assist ARC and other personnel in communications with limited-English guests. Floating interpreters should be made available within the shelter if there is sufficient need, as assessed by a language census.
 - Recommendation 8.17: Pre-scripted messaging should be broadcast in multiple languages to guests arriving at shelters informing them of the availability of interpretation services with information on how to engage language access teams once inside the shelter.

Written Translation Needs (Planning, Mass Care Services, Logistics and Supply Chain Management):

- Signage at CASHP shelters was not bilingual; and confusion existed as to the role of facility owners
 in providing bilingual signage for the facility. In this event, signage was only needed in two
 languages, but future events may necessitate multiple languages.
 - Recommendation 8.18: The City and County, in coordination with their CAPCOG regional
 partners, should revise language access and/or shelter and MARC plans to include specific
 assignments for multilingual signage. The City secured the translation of a multitude of

- documents for use in shelters, but not every necessary document was captured, nor was everything that was translated property of the City.
- Recommendation 8.19: A clear directive from Area Command should be given to all responding agencies and City and County departments (and their regional counterparts) in advance of shelter activation to collect all documents that will require translation. Consideration should be given to pre-identification of necessary documents before an event occurs to facilitate more comprehensive operations.
- The City maintains a translating team among its staff, but did not activate this team. AISD maintains a similar cadre but it was also never mobilized. These teams could have provided support for the translation needs of both signage and documents.
 - Recommendation 8.20: The City and its regional partners should identify existing translating teams in the CAPCOG region and coordinate with pertinent partners to activate these teams during future responses to support ongoing translation needs, including daily signage needs as well as documents.
- Due to lack of coordination between the language access teams and City PIOs, bilingual messages were never uploaded to rolling electronic information boards deployed inside the Mega Shelter.
 - Recommendation 8.21: The City and County, in coordination with their CAPCOG regional
 partners, should revise language access and/or shelter plans to identify key roles and
 responsibilities for language access services in all relevant incidents. The plans should
 include processes for coordination between Public Information functions and language
 access teams.

Equal Access to Language Services (Planning):

- The majority of City-trained-and-vetted interpreters speak Spanish and Spanish was the only language needed in the shelters during this event. However, there were other evacuees in the CAPCOG region with other language needs. For example, there were no Vietnamese guests in City-run shelters; but large Vietnamese populations are known to have evacuated impacted areas. These evacuees likely sheltered at ethnically-affiliated churches, temples, or mosques, or with family and friends. As a result, it was difficult for case managers to identify these people in order to assess needs and provide services.
 - Recommendation 8.22: The City and County, in coordination with their CAPCOG regional
 partners, should develop written translation of service offerings in known (or presumed)
 common languages, distribute to partner agencies for dissemination as necessary, and
 make public on social media, and through other means of public information
 dissemination.
- PIOs encountered difficulty with providing information in multiple languages due to a lack of translation capabilities during some shifts.
 - Recommendation 8.23: City HRD, County HRMD, CPIO, HSEM, and TC OEM should coordinate to activate and deploy members of the City translation team or other qualified language access staff to the JIC during a disaster response. A trigger point for coordination

- between these groups and the City translation team should be identified. Similar coordination should take place among regional counterparts.
- Recommendation 8.24: The City, the County, and their regional partners should ensure that adequate pre-positioned contracts are in place to provide professional translators on-call for important, rush, or longer documents.

Roles and Responsibilities (Planning, Operational Communications):

- There was a tendency for interpreters to receive a flood of information from guests with language barriers once that barrier was removed. However, the amount of information received sometimes overwhelmed interpreters; and interpreters sometimes did not know to whom they should communicate this information. Further, much of this information was pertinent to case management, but most interpreters were not qualified to serve as case managers. Due to the overwhelming need for case management services, a relative lack of bilingual case management interpreters' desire to support guests, interpreters tended to take on needed case management tasks, sometimes at the request of case management personnel.
 - Recommendation 8.25: A clear policy is needed to define roles and responsibilities for interpreters in shelters and to channel their desire to support guests to a handoff of responsibility to proper personnel.
 - Recommendation 8.26: The City, County, and their CAPCOG regional partners should work to identify and regularly train more bilingual case managers.
 - Recommendation 8.27: Any interpretation training provided to City, County, or regional partner employees should include familiarization with shelter organization and management structures in order to improve interpreters' understanding of their role and where/who to go to for specific needs, rather than taking on additional roles themselves for which they may not be qualified.
 - Recommendation 8.28: The City and County, in coordination with their CAPCOG regional
 partners, should revise language access and/or shelter and MARC plans to include
 provisions for language access managers in the shelters who bear the responsibility for
 the dissemination of information collected from interpreters.

Qualifications of Interpreters (Planning):

- Confusion existed about the training necessary to provide interpreter services at shelters. Most City and County staff relegated interpretation and translation to the status of volunteer work, unaware that bilingual skills are not sufficient for accurate and lawful interpretation, especially of medical or other sensitive topics. This confusion made the planning and reporting process more difficult, as continuous clarification was needed on this point.
 - Recommendation 8.29: The City should continue its program to expand the base of vetted City employees trained in best practices for translation. The County and other regional partners should develop similar programs as well. Some first responders are bilingual-qualified and can accurately translate for medical needs; the City, the County,

Hurricane Harvey After Action Report

Austin | Travis County

and their regional partners should coordinate with regional public safety agencies predisaster to leverage these personnel as part of language access teams in shelters.

Focus Area 9: Public Information

Focus Area Introduction

As Hurricane Harvey transitioned to a Category 4 storm, HSEM stood up the JIC at the EOC and sent alert messages to all City PIOs and departments. This action was supported by evaluations of the threat posed by the hazard as well as the desired EOC outcome. AFD also began to issue messaging internally for potential deployment, and messaging externally for general public safety. When the EOC was activated on August 24, 2017, the City and its regional partners also activated the Capital Area Joint Information System plan to coordinate public information.

The Joint Information System Plan facilitated daily conference calls, which, along with informal follow-up calls, usually provided for smooth communication among PIOs that were unable to locate at the JIC. However, a key stakeholder in the response—the City of Austin Mayor's Office—was initially left out of the public information coordination process, which resulted in some inconsistent messaging initially. Information transfer during operational shift changes was also inconsistent at times. To help bridge this gap, PIOs at the Mega Shelter improvised a daily log book to record daily goals and tasks. At the JIC, which was moved around within the EOC on multiple occasions, coordination efforts were occasionally impaired by background noise or other activities due to the lack of a dedicated space.

Media relations were poorly coordinated during the initial stages of the response. For example, during CASHP operations, expectations were not clearly communicated regarding access to shelter facilities and information. While a press conference was held by state and local public officials at the Delco Center to address the CASHP response, it was assembled with minimal coordination. However, the City and County leveraged lessons-learned to improve their relationship with the media as sheltering operations progressed: prior to the opening of the Mega Shelter, media members were provided a tour of the facility along with clear expectations (and justification) of limited media access during operations.

Related Core Capabilities

- Operational Communications
- Planning
- Public Information and Warning

Strengths

Interagency Coordination (Planning, Operational Communications, Public Information and Warning):

 Coordination and information sharing across the existing regional PIO group occurred regularly during scheduled morning conference calls, in accordance with the Regional Joint Information Plan. This improved the collective understanding of rapidly changing conditions, particularly for

- jurisdictions who lacked personnel to deploy to the JIC. As a result of these meetings, City, County, and regional partner organizations were able to push out coordinated public messaging.
- Informal afternoon calls occurred on an ad hoc basis but were usually helpful to follow-up on agenda items from the regularly scheduled morning conference calls.
 - Recommendation 9.1: The City and County PIO wings should evaluate the effectiveness and necessity of the afternoon calls to consider codifying this practice into the Regional Joint Information Plan.
- During the response, members of the regional PIO group successfully leveraged existing knowledge of appropriate contacts within the City and other agencies facilitated by membership in the group.
 - o **Recommendation 9.2:** The City, the County, and their regional partners should continue to build relationships pre-disaster through regular training and exercising on existing plans, such as the *Regional Joint Information Plan*, to improve working relationships with this wider base of PIOs and institutional knowledge when a disaster occurs.
- At the Mega Shelter, PIOs created an ad hoc binder that contained daily accomplishments, goals, unresolved tasks, and contacts to facilitate information exchange between shifts.
 - Recommendation 9.3: The City, the County, and their CAPCOG regional partners should formally incorporate the creation of a PIO binder populated with daily accomplishments, goals, unresolved tasks, and contacts into shelter plans as a fail-safe against higher-tech communication processes, as well as incorporate the concept into regular PIO trainings.

Media Relations (Planning, Operational Communications):

- The City and County successfully leveraged lessons-learned during CASHP operations to improve media relations during Mega Shelter operations, including a facility walk-through for media prior to the arrival of guests and a well-planned press conference.
 - Recommendation 9.4: The City and County, in coordination with their CAPCOG regional
 partners, should revise pertinent response plans to incorporate successful media
 strategies employed at the Mega Shelter.
- Some messaging to the media properly set expectations for the media regarding available information. For example, City PIOs successfully communicated to media members that the Delco Center would be the only CASHP shelter available. For the most part, this prevented ad hoc and undesirable interactions with the media at other CASHP shelters.
 - Recommendation 9.5: The City, the County, and their regional partners should incorporate provisions for pre-event messaging to the media into pertinent response plans to establish expectations of what information can be made publicly available, as well as expectations of media access to facilities.
- Although there was no interpretation or translation of press conferences or press releases, some
 Spanish language interviews were facilitated by City PIOs and members of the language access team.

 Recommendation 9.6: The City, the County, and their regional partner PIOs should ensure that Spanish language press interview facilitation remains a standard capability during disaster responses.

Areas for Improvement

Mobilization (Planning):

- The County does not possess the same PIO staffing capacity as the city, and as a result, City personnel attempted to fill those gaps when needed. While this helped, City personnel are not as aware of the specific nuances of the County and this creates a gap in the effectiveness of this practice
 - Recommendation 9.7: The County should work to expand its capacity for supporting PIO functions through additional staffing.

Interagency Coordination (Planning, Operational Communications, Public Information and Warning):

- Some coordination outside the regional PIO group was limited; for example, the group was initially unaware of an outreach event sponsored by the Mayor's Office. HSEM responsively invited a representative from the Mayor's staff into the EOC after seeing public messaging from the Mayor's Office.
 - Recommendation 9.8: The Mayor's Office is a key public point of contact in emergency response, and as such the process for citywide communications should be evaluated and enhanced.
- Not all PIOs were updated at shift changes, nor did PIOs utilize WebEOC to maintain situational awareness, which made it challenging to understand the operations from the previous shift and smoothly continue information coordination efforts. Some PIOs did receive briefings which were noted as being extremely helpful in assuming responsibilities as seamlessly as possible.
 - Recommendation 9.9: The City and County, in collaboration with their CAPCOG regional
 partners, should incorporate best practices related to briefings at shift changes, including
 standardized PIO reporting procedures and tools (e.g. WebEOC) into regular PIO trainings.

The JIC (Planning, Operational Communications):

- The physical location of the JIC was challenged by background noise and limited space. The frequent moving made it challenging to maintain awareness of the present location of the JIC and to maintain placement near public information partners, such as 3-1-1. As a result of colocating the JIC within the EOC and not in a designated space, PIOs were often asked by other EOC personnel to perform work outside the scope of their role.
 - Recommendation 9.10: Agency PIOs who are unable to locate at the JIC should coordinate pre-disaster with the regional PIO group to ensure inclusion in regularly scheduled conference calls. Additionally, WebEOC should be explored as a potential

- avenue for information sharing; this should be supported by additional WebEOC trainings for potential users on a regular basis in order to avoid complications arising from limited user proficiency.
- Recommendation 9.11: HSEM and TC OEM should evaluate the allocation of space in and around the EOC to find dedicated space for the JIC, if possible. When able, planning for partners such as 3-1-1 to be located near the JIC in the EOC should be conducted.

Media Relations (Planning, Operational Communications):

- Due to conflicting policy guidance directed to PIOs, expectations of what information would be made available publicly during sheltering operations was not adequately communicated to media, particularly during CASHP activation. Similarly, there was poor coordination between PIOs and media regarding the level of access that could be provided at different types of shelter facilities. For example, media could not access shelters at school facilities, but could have limited access at the Delco Center shelter, which is an AISD facility, but not a school itself).
 - Recommendation 9.12: Pre-event messaging to the media and pre-established policies should be developed to establish expectations of what information can be made available to the media, as well as expectations of media access to different types of facilities. Different types of facilities will require different guidelines.
 - Recommendation 9.13: The City and County, in coordination with their CAPCOG regional partners, should revise pertinent response plans to incorporate successful media strategies employed at the Mega Shelter, including the provision of a pre-scheduled media walk-through at shelters prior to the arrival of guests. The walk-through should be designed to accommodate the media's information needs, as well as to establish an understanding of security requirements and limitations on media access to facilities during operation.
- Due to very limited preparation time, the press conference held by state and local public officials at the Delco Center was not adequate to meet media needs. For example, the selected location for the press conference offered poor sight-lines.
 - Recommendation 9.14: The City and County, in coordination with their CAPCOG regional partners, should revise shelter plans to include provisions for holding press conferences at each shelter, including preferred locations (or a list of considerations to identify a preferred location). Plans should also specify that coordination of press conferences should begin with PIOs as soon as possible.
- ASL translation was available at some, but not all, press conferences during the event.
 - Recommendation 9.15: The City Americans with Disabilities Act (ADA) Office is normally responsible for coordinating ASL needs across the community; the City should include the ADA Office in shelter plans pre-disaster to include provisions for ASL translation on-site.

Coordination with Public Officials (Planning, Operational Coordination):

 Visits to the shelters by state and local public officials, accompanied by heavy media presence, posed disruptions to the privacy and day-to-day activities of shelter guests. Recommendation 9.16: The City and County, in coordination with their CAPCOG regional partners, should revise shelter plans to guide logistics for visits from state and local public officials, or from any other individuals that may draw extra public attention, to provide for minimal disruptions to shelter guests and shelter operations.

Technology Integration (Planning):

- Not all City and County PIOs had access to graphics-editing software, such as the Adobe Suite of programs, on city-issued machines. This limited the ability of some PIOs to quickly generate graphics to help spread information during the response.
 - Recommendation 9.17: The City, the County, and their regional partners should engage
 all relevant PIOs to identify software necessary for timely response under emergency
 conditions. The City, the County, and their regional partners should then establish a
 workstation at the EOC with generic logins through which PIOs may access this software.

Focus Area 10: Cost Recovery

Focus Area Introduction

Summary

Most of the purchasing transactions executed by the City during the Hurricane Harvey response were made using HSEM ProCards, emergency credit cards, or via directing invoices to HSEM. As a result, HSEM bore responsibility for a large share of cost recovery functions. Although some City and County departments successfully leveraged existing internal cost tracking mechanisms, the task of tracking sheltering costs was complex. This added responsibility stressed the capacity of HSEM staff, most of whom still maintained other response-related responsibilities. To ease some of this burden, HSEM activated a standing contract with a recovery consultant to provide surge staffing to develop templates to record shelter costs post-disaster.

During the response, cost tracking was complicated with the varied nature of response, inconsistent implementation of necessary documentation collection, confusion surrounding cost reporting codes, and inconsistent reimbursement provisions across executed mutual aid agreements. At the shelters, a lack of clarity in the logistics process resulted, at times, in duplicative resource requests, which further complicated the tracking responsibilities of Logistics personnel in the EOC. In addition, many of these same personnel were unfamiliar with the ICS and/or lacked adequate training in resource request methods and tools, like WebEOC.

Related Core Capabilities

- Economic Recovery
- Logistics and Supply Chain Management
- Planning

Strengths

Staffing Support Contracts (Planning):

 Cost recovery assistance post-disaster was available through a standing contract with a consultant. This surge staffing allowed for the development of a shelter cost tool along with justin-time training for its users. This enabled more accurate recording of STAR request-related costs.

Cost Tracking Tools (Planning, Economic Recovery):

- Very early in the response, the City Controller's Office established overarching reporting codes to be used with this emergency.
- Some City and County departments had existing mechanisms in place to track costs and to more easily facilitate requests for assistance. For example, by using pre-populated spreadsheets, the TC

SO could provide instant cost estimates for all incoming requests. Austin Energy employees used standing Task Orders to eliminate lag time in documentation.

Documentation (Logistics and Supply Chain Management):

A SharePoint site was established as a common repository for cataloguing City of Austin sheltering and Public Assistance documentation. Although at the time of the response HSEM did not know what would be reimbursed, and therefore, did not know what to track for Public Assistance reimbursement, this repository was useful for cost recovery purposes.

Areas for Improvement

Mobilization (Planning):

- Cost recovery activities were inconsistently implemented by agency, and necessary activities to initiate City financial services, such as emergency procurement activities, went undone. For example, the City did not make a local disaster declaration, the avenue by which emergency purchasing is officially mobilized. In its stead, a departmental declaration was facilitated in an impromptu fashion by the Purchasing Office.
 - Recommendation 10.1: A Disaster Cost Recovery Plan should be developed by the city, clearly identifying all roles, responsibilities, triggers, and operations for cost recovery functions, beginning with pre-disaster activities, through conclusion of said activities (e.g. closeout activities). All pertinent departmental representatives should be trained on the plan and their specific responsibilities to ensure procedures are effectively implemented.

Emergency Purchase Responsibilities (Planning, Economic Recovery):

- HSEM bore the majority of expenses related to sheltering operations in the CAPCOG region, which caused budget and resource problems as the HSEM budget is not designed to absorb all costs. The County could research items for purchase but could not actually execute orders on behalf of the City. As City personnel also researched items for purchase, this sometimes resulted in duplicative efforts. Further, HSEM and Purchasing Office staff were critically involved in response and demobilization, which limited their ability to fully address cost recovery as expenses were being incurred.
 - Recommendation 10.2: The City should seek alternative mechanisms for the City to pay response costs, including possibly establishing a city fund for emergency situations.
 - Recommendation 10.3: HSEM should identify potential partners within the City, such as
 the Financial Services Department, to support cost recovery functions while HSEM is still
 mobilized to support sheltering operations.
 - Recommendation 10.4: The City and the County should establish an agreement (e.g. Memorandum of Understanding) between the two parties in order to more equitably distribute purchasing responsibilities during disaster response. In support of this goal, the

County should investigate mechanisms to purchase emergency supplies and pay response costs, including possibly establishing a county fund designated for emergency response.

- Current protocols require that ProCard users be registered in the ProCard system before training on the use of ProCards can be offered; this takes a few days. Because of this, some employees deployed during the Harvey response without access to ProCards; ad hoc means of procurement and cost tracking had to be implemented. While this worked in the moment, it does not provide the security that the ProCard system does.
 - o Recommendation 10.5: The City should continue to identify personnel who may need purchasing capabilities or who may be deployed during a disaster (including all HSEM staff), provide these individuals with ProCard training as well as annual refresher trainings, and issue ProCards to these individuals pre-disaster. The City should update this list annually prior to hurricane season. City departments should then coordinate with the Purchasing Office to assign "dormant" status to all personnel who may need purchasing capabilities or who may be deployed during a disaster until they are deployed or mobilized. The City should explore efficient mechanisms for City departments to notify the Purchasing Office of deployed or mobilized personnel.
 - Recommendation 10.6: ProCard training through the City Purchasing Office is currently in-place and can be completed online in less than an hour. The training PowerPoint slides should be made available digitally as a quick-reference guide during an event.

Cost Tracking (Economic Recovery):

- The cost recovery contract was not accessed until post disaster, though the Finance Branch within the EOC, as previously mentioned, was taxed supporting the efforts within the City. This limited HSEM's ability to more robustly implement a standardized cost tracking process during response. Further, the existing contract was limited in remaining funds to more fully mobilize support that would have assisted to alleviate the burden on HSEM staff post disaster.
 - Recommendation 10.7: The City, the County, and their regional partners should ensure that adequate pre-positioned contracts are in place to support cost recovery efforts during planning, response and recovery phases of disasters.
- Shelter personnel sign-in sheets in shelters were lost, which made it difficult to keep accurate accounting records for reimbursement. Emergency sheltering costs are reimbursable under FEMA's Public Assistance program, but documentation of those costs is a crucial element to obtain reimbursement. Losing timekeeping documentation for shelter workers in the future has the potential to prohibit the City and/or County from being able to be reimbursed for those costs.
 - Recommendation 10.8: The City and County, in coordination with their CAPCOG regional partners, should explore and regularly train on platforms for electronic sign-in for all shelter personnel (in parallel with paper sign-in sheets as a back-up) and for providing critical documentation to the EOC on a daily basis and upon demobilization. The platform(s) should facilitate accurate personnel records-keeping to facilitate reimbursement but should also facilitate greater real-time situational awareness at the EOC regarding all aspects of shelter operations. These procedures should be documented

in the Cost Recovery Plan. Just-in-time training should be developed and provided for all incoming shelter staff that have previously not been trained on this platform(s), or as a refresher course. This training should be developed to be accessible online, or in person, as needed/possible.

- Recommendation 10.9: FEMA claim forms should be pre-populated with electronic employee timekeeping data for City or County Departments to verify, instead of requiring duplicated manual input. Similar coordination should take place among counterparts across the CAPCOG region.
- Most City and County agencies experienced difficulty tracking personnel and equipment expenses. Sometimes this was due to equipment being used for multiple projects on the same day; sometimes this was due to a lack of best practices for employee timekeeping.
 - Recommendation 10.10: Within the Cost Recovery Plan, the City and County, in coordination with their CAPCOG regional partners, should implement standardized protocols for tracking equipment and personnel, including a standardized form or log to collect uniform data.
- Although the City Controller's Office established cost reporting codes for citywide use, the codes did not differentiate between costs related to mutual aid, shelter operations, and response within the community. For reimbursement purposes, having these efforts differentiated is very important.
 - Recommendation 10.11: The City Controller's Office should clarify the use of reporting codes for emergency costs and departmental task orders set up to track specific types of costs, such as costs related to mutual aid, shelter operations, and response within the community. The procedures should be documented in the Cost Recovery Plan.
- There was confusion regarding roles and responsibilities and chain-of-command at shelters. As a result, resource requests were made from multiple personnel at shelters instead of being routed through a single Logistics liaison at the shelters. Some of these requests were then channeled through the on-site Logistics Section at the shelters before being sent to the EOC Logistics Section, while others were sent directly to the EOC. Still other requests were erroneously routed to individual departmental purchasing staff. Consequently, many of these requests were made in duplicate. EOC Logistics was able to catch and cancel some duplicate requests; but this was ad hoc and circumstantial at best.
 - Recommendation 10.12: All pertinent response plans (e.g. shelter, Mutual Aid) should reference specific procedures for cost recovery. The City, County, and all relevant regional partners should regularly train pre-disaster on plans to understand roles and responsibilities, chain-of-command, and other elements of ICS and/or shelter management structure, including resource request protocols and permissions. This training should be developed to be accessible online, or in person, as needed/possible.
- HSEM could not maintain visibility on purchases made by other City departments using HSEM ProCards. As a result, it was impossible for HSEM to provide justification for some purchases, such as ordinary office supplies, which may have been necessary, but had no tracking mechanism to

record that justification. This lack of documentation could pose a significant problem in the event that HSEM is audited.

- Recommendation 10.13: The practice of sharing HSEM ProCards can be discontinued when all City personnel who may need purchasing capabilities or who may be deployed during a disaster have been issued an individual ProCard. Until discontinuation is possible, WebEOC resource boards should be revised to include a field for purchase justification. The procedures should be documented in all pertinent response plans, including the EOC and Cost Recovery plans.
- Some City and County personnel assigned to the EOC lacked sufficient training in WebEOC and other tracking mechanisms for shelter-specific resources and supplies. This hampered the work of the Logistics Section, as some personnel were unable to enter resource orders.
 - Recommendation 10.14: The City and County, in coordination with their CAPCOG regional partners, should ensure regular pre-incident ICS training for all personnel who may potentially respond during a disaster, including WebEOC training. Further, the City, the County, and their regional partners should collaborate to develop simple job aids to provide guidance to EOC personnel during a response who do not normally work in the EOC. For example, some job aids should list the essential responsibilities of certain ICS positions. Other job aids, such as large, laminated, wall-mounted copies of ICS Form 203 with certain information pre-filled, can ensure consistent and accurate record-keeping.
 - Recommendation 10.15: As a part of the Disaster Cost Recovery Plan, all relevant City departments should collaborate to draft a pre-activation memo to be sent to all City employees prior to an activation, to include general reminders about important response functions, such as timekeeping protocols, resource tracking, ProCard procedures, ICS and shelter management structures, and other organizational functions. Similar coordination should take place among counterparts across the CAPCOG region.

Mutual Aid Reimbursement Provisions (Economic Recovery):

- Reimbursement provisions, such as the number of billable days or hours allowed on an invoice, did not exist uniformly across mutual aid agreements. This caused gaps to exist in some of the datasets needed to facilitate cost recovery for the City or County.
 - Recommendation 10.16: The City, the County, and other CAPCOG regional partners should coordinate with their respective mutual aid partners to verify the adequacy of the reimbursement provisions of each mutual aid agreement to which the City, County, and/or partner jurisdiction are signatories. HSEM should develop an FAQ document to address reimbursement questions for those personnel responsible for executing agreements and for those deploying. Similar action should be coordinated among HSEM's regional counterparts. These procedures should be documented in the Cost Recovery Plan.

Focus Area 11: Donations Management

Focus Area Introduction

Summary

Citizens across the CAPCOG region responded in force to volunteer their time, money, services, and material goods in support of the City and County's sheltering operations during the Hurricane Harvey response. Donations were largely managed by Central Texas VOAD, which maintained a staff presence in the EOC. While coordination among organizations under the VOAD umbrella was nonetheless lacking at times, the Central Texas VOAD representative in the EOC served as a useful liaison between Area Command and individual members.

While the City and County's Donations Management Plan was successfully activated during the Hurricane Harvey response, the Plan did not differentiate roles among responding organizations, which contributed to informal, and sometimes ineffective, inter-agency coordination. Communication with other jurisdictions outside the CAPCOG region to coordinate donations distribution points was similarly ineffective. Further, the Plan did not provide a coordinated mechanism for recruiting, vetting, and deploying volunteers; rather, many agencies and/or departments acted on their own accord to mobilize volunteers. Other times, absent a clear channel for mobilization, individual volunteers self-deployed to shelters and were allowed inside.

This problem was compounded by deficiencies in public messaging. The City and County did not use prescripted messaging to guide donations and volunteers, nor were the clear expectations of the volunteer experience adequately established for those seeking ways to assist. In at least one instance, ambiguous and poorly coordinated messaging erroneously gave some citizens the impression that some City offices would only accept volunteers or donations from certain religious groups.

Inventory management across responding organizations also proved difficult, despite good internal practices among some organizations. Rather than maintaining the inventory in a centralized warehouse, donated goods were dispersed among several facilities, which complicated efforts to track and assess the status of certain donated items.

Related Core Capabilities

- Operational Communications
- Planning
- Public Information and Warning

Strengths

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Community Response (Operational Communications):

Citizens across the CAPCOG region were particularly generous in their donations of cash, goods, services, and in their willingness to volunteer. Donations of material goods were made to assist both the shelter population and survivors who remained in impacted areas of the state. In most cases, volunteers were plentiful to help sort donated goods. Donations of services were often innovative, such as live entertainment for shelter guests or handcrafted foods. These types of outside-the-box donations helped the City provide as comfortable a stay as possible to shelter guests.

Existing Plan (Planning):

- The City has a Donations Management Annex. HSEM developed an ad hoc Tactical Donations Management Plan during the response, which was successfully deployed as part of the Mega Shelter operations.
 - Recommendation 11.1: The City and County should evaluate the successful elements of the Tactical Donations Management Plan and formally revise the Donations Management Plan pre-disaster to include these elements; subsequently the City and County, in coordination with their CAPCOG regional counterparts, should engage all relevant departments and agencies pre-disaster in trainings on the revised Donations Management Plan on a regular basis.

Interagency Coordination (Planning, Operational Communications):

A Central Texas VOAD representative was present at the EOC throughout the event; this representative was in communication with all agencies under the VOAD umbrella. This role can be expanded from a single individual to a formal Unmet Needs Committee (see "Interagency Coordination" below).

Inventory Management (Planning, Operational Communications):

- Many City offices and partner organizations maintained relatively accurate inventories of donated goods, services, and cash. Coordination across these groups was lacking, but the intent and readiness to track donations was present in most of groups receiving donations.
 - Recommendation 11.2: The City can leverage accurate and established inventory practices across its departments and partner organizations to successfully coordinate donations inventory across multiple groups using a centralized mechanism (see "Interagency Coordination" below).

Areas for Improvement

Interagency Coordination (Planning, Operational Communications):

- The City's Donations Management Plan does not identify which agencies, departments, and/or organizations will lead, and which will play supporting roles in donations management. As a result, some City and/or County agencies and VOAD organizations had differing perceptions on the roles of VOAD organizations and personnel in volunteer management.
 - Recommendation 11.3: The City, the County, and their regional partners should revise the Donations Management Annex pre-disaster to identify which agencies, departments, and/or organizations will lead, and which will play supporting roles in donations management; subsequently the City and County, in coordination with their CAPCOG regional partners, should engage all relevant agencies, departments, and/or organizations pre-disaster in trainings on the revised Donations Management Plan on a regular basis.
- A formal Unmet Needs Committee to coordinate across Central Texas VOAD and other response partners does not exist in the EOC organizational structure. As a result, communication across agencies was informal. For example, Austin Disaster Relief Network (ADRN) developed daily goals based on daily phone calls with the EOC Operations Chief. ADRN learned of shelter closings through existing personal relationships between ADRN and ARC personnel. This was successful, but not sustainable as a future model for interagency coordination.
 - Recommendation 11.4: The City, the County, and their regional partners should revise the Donations Management Plan pre-disaster to incorporate an Unmet Needs Committee to coordinate across Central Texas VOAD and other response partners. The City and County should engage their regional partners to identify critical stakeholders to populate the Committee; the Committee should be incorporated into regular trainings on the Donations Management Plan.

Volunteer Management (Planning, Public Information and Warning):

- Volunteer recruitment, vetting, and mobilization was done mostly on an ad hoc basis, resulting in an uncoordinated effort across responding organizations. For example, the Mayor's Office created a basic volunteer registration portal on MayorAdler.com using Google Forms, but this was not coordinated through HSEM or other agencies in the EOC. HSEM press releases directed volunteers first to ARC. Later press releases redirected volunteers to the Central Texas VOAD website. Even later, HSEM messaging directed volunteers to the Dell Foundation and organizations in impacted communities.
 - Recommendation 11.5: The City and County, in coordination with their CAPCOG regional
 partners, should identify a preferred algorithm for directing potential volunteers
 (including interested City or County employees); HSEM, in coordination with its regional
 counterparts, should develop pre-scripted messaging to the general public during disaster
 response in order to support this algorithm.

- Recommendation 11.6: The City, the County, and their regional partners should, with other pertinent response organizations, establish a volunteer management plan, to include recruitment, credentialing, and coordination protocols for both pre-vetted volunteers (including City, County, and regional partner employees as well as volunteers with recognized volunteer agencies, such as Central Texas VOAD) and spontaneous volunteers.
- As a result of high levels of community interest in the CAPCOG region, some citizens self-deployed to shelters with the intent to serve as a volunteer. Management of spontaneous volunteers adds another layer of responsibility to the shelter staff already working to meet the needs of the shelter.
 - Recommendation 11.7: The City and County, in coordination with their CAPCOG regional
 partners, should identify alternate channels for volunteer service in the community when
 the number of volunteers exceeds the needs of local disaster response. Clear messaging
 should occur throughout the response about how to, and how not to, contribute to the
 response.

Public Messaging (Public Information and Warning):

- Some donors felt as though their donations were not being put to good use at shelters. Other times, offers to donate services at shelters were declined because of a lack of centralized coordination and understanding of shelter needs and current opportunities for service at shelters. Although public messaging from HSEM did communicate that donations were not being accepted at shelters, the City and County missed opportunities to use pre-scripted messaging to guide volunteerism and public enthusiasm for donating goods, services, and cash.
 - Recommendation 11.8: The City and County, in coordination with their CAPCOG regional partners, should develop a series of pre-scripted messages to guide public enthusiasm for individuals wishing to donate goods, services, and cash, including: messaging indicating a preference for cash donations and instructions to facilitate these donations; messaging identifying accepted drop-off locations for donations of goods; a list of "do's and don'ts" to direct donations to legitimate recipients and avoid scams; guidelines for earmarking donations for certain purposes or agencies; and messaging to establish expectations regarding the final destination of donated goods and cash (that is, support of local efforts versus support of efforts in impacted communities). The City, the County, and their regional partners should also develop pre-scripted messaging to guide large organizations/corporations wishing to donate services.
 - Recommendation 11.9: Shelter staff should be notified of donations locations. Handouts
 of addresses and key contacts for donations can be provided at entrances to those that
 arrive at shelters and/or the MARC.
- There was a gap in the expectations of the volunteer experience versus the reality of the volunteer experience for some volunteers. For example, some volunteers anticipated supporting different activities than those to which they were assigned. Some volunteers' expectations of time commitments did not reflect the duration of their actual assignment. This gap also manifests itself

in recruitment methods for volunteers that mobilize on a regular basis versus spontaneous volunteers who generally mobilize only in response to disasters. Some responding organizations crafted messaging to address this gap; others did not.

- Recommendation 11.10: City and County PIOs should collaborate with their counterparts
 across regional partner agencies pre-disaster to develop pre-scripted messaging aimed at
 a spontaneous volunteer audience to establish volunteer expectations in terms of time
 commitment, responsibilities, shelter environment, and other aspects of the volunteer
 experience.
- Recommendation 11.11: The City and County, in coordination with their CAPCOG regional partners, should consider identifying other volunteer opportunities or organizations to which the community's energy could be directed to achieve positive outcomes.

Inventory Management (Planning, Operational Communications):

- Donations of goods in the CAPCOG region grossly outmatched the needs of shelter guests and other evacuees in the region. However, there was not a coordinated mechanism for assessing quantities of particular goods donated across responding agencies; these agencies often used low-tech means of communication, such as sticky notes, to assess and obligate certain donations. This problem was also exacerbated by the lack of a centralized regional warehouse.
 - Recommendation 11.12: The City, the County, and their regional partners should assess the suitability of WebEOC as a tool for donations management, in which a board could be created to list donated goods and services and mark them when obligated. If determined as a suitable mechanism, this should be supported by additional WebEOC trainings for potential users on a regular basis in order to avoid complications arising from limited user proficiency.
- There was not one centralized regional warehouse to collect, store, and distribute donated goods (although a State warehouse did exist during Harvey operations, the City and its regional partners cannot assume its availability for regional response). As a result, agencies like ADRN operated multiple small warehouse facilities, which increased staffing demands and lowered efficiency.
 - Recommendation 11.13: Partners in the CAPCOG region taking a lead for collecting and distributing donations during a disaster should explore possibilities for expanding warehousing capabilities, including the possibility of obtaining and utilizing a centralized warehouse, and/or coordinating with the larger Central Texas VOAD network to determine what collaborative processes may occur.

Interjurisdictional Coordination (Planning, Operational Communications):

There was no coordinated effort among the City and County and their regional partners to identify, vet, and coordinate with donations distribution points outside the CAPCOG region; rather, this was left to individual organizations, which decreased efficiency, increased duplicative efforts, and increased the chances that some donations would be provided to illegitimate recipients.

Hurricane Harvey After Action Report

Austin | Travis County

Recommendation 11.14: Central Texas VOAD should coordinate with the State to identify
and vet potential distribution points in vulnerable areas of the state; a list of these
potential distribution points should be compiled and updated periodically.

Focus Area 12: Mutual Aid Assistance Provided to Impacted Communities

Focus Area Introduction

Summary

The City and County successfully deployed personnel and equipment to assist Hurricane Harvey response operations in impacted communities along the Texas coast. These efforts included first responders and emergency apparatus as well as personnel and equipment to assess and repair critical infrastructure. These deployments were successful, saving lives and helping other Texas communities begin to recover. However, deployment was sometimes poorly coordinated among City departments. Demobilization was poorly coordinated as well, and there were no provisions to allow deployed personnel sufficient time for rehabilitation before returning to their normal responsibilities.

State-level coordination was also problematic, as many requests for aid were channeled through existing relationships or other informal channels, rather than through STAR requests, which is the formal channel for issuing requests through the State. As a result, some City and County departments deployed without first coordinating through HSEM or TC OEM. Emergency managers then had little means of tracking City and County assets and were unable to accurately assess the City or County's current capacity to respond to other requests or to local emergencies.

Even existing mutual aid agreements between the City or County and their partners in impacted jurisdictions were slow to be activated. In most of these cases, the agreements had not been properly maintained over the years, and required renegotiation before activation, which slowed response times.

Related Core Capabilities

- Environmental Response/Health and Safety
- Logistics and Supply Chain Management
- Operational Coordination
- Planning
- Situational Assessment

Strengths

Successful Response (Environmental Response/Health and Safety):

- The City successfully deployed mutual aid assistance to impacted locations in the Gulf Coast area to aid in response and recovery operations, including:
 - o Five contract crews and eight tree-trimming contract crews from Austin Energy (AE);
 - Up to 20 Austin Resource Recovery personnel;
 - o 28 firefighters from AFD;

- Upwards of 65 police officers from APD;
- 43 ATC EMS personnel;
- 23 Austin Transportation Department personnel to Victoria to assist with repairs to traffic signs and signals, plus additional traffic signal equipment to Houston; and
- 20 Austin Water personnel to Rockport to aid in critical water and wastewater infrastructure repairs and rebuilds.
- The County successfully deployed mutual aid assistance, including 47 personnel and 14 apparatus, to impacted communities along the Texas Gulf Coast through the Texas Intrastate Fire Mutual Aid System (TIFMAS) program. This effort was coordinated by the TIFMAS Branch Coordinator for the region, who was responsible for providing awareness of deployments to the EOC.
 - Recommendation 12.1: The City and the County's abilities to organize and mobilize resources to communities when they need is a practice that should be further developed and continued in future events.

Documentation (Logistics and Supply Chain Management):

- A SharePoint site was established for cataloguing mutual aid documentation, which has been useful for cost recovery purposes.
 - Recommendation 12.2: The City and County financial wings should document the process of cataloguing mutual aid documentation through a SharePoint site and incorporate the practice into pertinent response plans (e.g. a Disaster Cost Recovery Plan) as appropriate.

Areas for Improvement

Protocols and Procedures (Planning, Operational Coordination, Situational Assessment):

- The City and County plans offered little guidance for deploying mutual aid, including procedures for deployment in response to time-sensitive or critical public safety requests and on how to demobilize personnel deployed to impacted communities. As a result, some deployed personnel did not have adequate time off to recover both physically and mentally upon return to the CAPCOG region. In some cases, it was not possible for employees to return to work on time; for example, time restrictions on Class B license holders stressed available staffing levels at the City and County departments whose employees regularly drive under such a license. Further, there is no consistent City or County policy regarding compensation for personnel deployed to mutual aid assistance.
 - Recommendation 12.3: The City and County, in coordination with their CAPCOG regional partners, should develop a Mutual Aid (and tangentially related activities) Plan, including procedures for deployment in response to time-sensitive or critical public safety requests and a demobilization plan for personnel deployed to mutual aid assistance, including a behavioral health debriefing process and a consistent policy for compensation.
- In cases outside of STAR requests, internal notification of deployment within the EOC was inconsistent. Some City departments deployed to impacted jurisdictions without notifying the

EOC. As a result, the EOC had no reliable way of assessing some of the City's present capacity to respond to requests for assistance, or the capacity to respond in the local area. While the CAPCOG region did not receive large direct impacts, in future events, such occurrences could lead the local area to be unable to meet the local need if resources are deployed elsewhere without a uniform means of visibility throughout responding agencies and departments.

- Further, in some cases where City departments deployed to impacted jurisdictions without notifying the EOC, no formal agreement had been established between the City and the impacted jurisdiction. In at least one of these cases, the impacted jurisdiction received aid but is currently unable to reimburse the City.
 - Recommendation 12.4: The City and County, in coordination with their CAPCOG regional partners, should evaluate existing emergency plans pre-disaster to validate that mobilization procedures are appropriate. For example, any City or County agency that receives a request for mutual assistance should first contact their own emergency management department within Area Command to maintain visibility and to ensure that the correct channels have been followed to appropriately provide assistance. The City, the County, and their regional partners should engage all relevant departments and agencies pre-disaster in trainings on mobilization procedures per plan on a regular basis.

State-Level Coordination (Planning, Operational Coordination, Situational Assessment):

- Jurisdictions in the CAPCOG region received only one STAR request, which is the formal channel for issuing requests through the State. However, the City did not receive the request in writing until after the incident. A second STAR request was rumored to have been channeled to the City, but in reality, it was only an online survey. Another request was received by the City via a STAR request template, but without any state-assigned STAR request number. Most other requests were instead channeled directly to various responding City departments (such as APD), as requesting entities leveraged pre-existing informal relationships to bypass official State coordination channels. Further, assurance of reimbursement was often facilitated by these same pre-existing relationships. Since no procedure existed for other City departments to notify the EOC of upon receipt of an informal request, each department responded differently. Consequently, it was difficult for EOC personnel to uniformly track requests that had arrived and solicited a response through different informal channels.
 - Recommendation 12.5: The City, the County, and their regional partners should advocate
 at the State level to require STAR requests (and related surveys, if any) to be channeled
 to the appropriate EOC, to ensure the EOC maintains proper visibility on these requests.
 - Recommendation 12.6: The City and the County should enable identified appropriate users to view STAR requests to maintain a coordinated response. Similar coordination should take place among regional counterparts.
 - Recommendation 12.7: The City and County should leverage WebEOC to capture requests that arrive through disparate channels; this should be supported by additional WebEOC trainings for all potential users across the region on a regular basis to avoid complications arising from limited user proficiency.

- o Recommendation 12.8: The City and County, in partnership with their CAPCOG regional partners, should revise existing plans to outline best practices for the provision of mutual aid, including a standard protocol for the City and County to respond to STAR requests (i.e., requests from other jurisdictions where no current mutual aid agreement exists) and to track and monitor their approval, fulfillment, and reimbursement status. For example, Area Command, upon receiving a request for resources at the EOC, should initiate contact with the requesting jurisdiction's emergency management office or agency, if the requesting jurisdiction has not already made contact, to expedite the responding jurisdiction's process of resource identification and resource management. This coordination should be between Emergency Management Coordinators (EMCs).
- Recommendation 12.9: The City and County should develop a protocol for the City and County to submit STAR requests.
- Recommendation 12.10: Regional partners should collaborate pre-event to establish a regional response structure to operate within to coordinate with the DDC when it activates and during instances in which the DDC does not activate. Such a structure would better enable regional entities to facilitate a regional response to mutual aid requests and identify available scarce regional resources, such as IMTs. Regional partners should establish an accompanying protocol whereby any resource fulfilling a regional request is returned in its original condition, or with additional compensation if the resource is partly or wholly expended or damaged.

Interjurisdictional Coordination (Planning, Operational Coordination):

- The City of Houston did not activate its existing mutual aid agreement with the City of Austin because it was outdated. Although existing personal relationships between City of Austin and City of Houston personnel ultimately facilitated a response, this model is unreliable and risks a slower response due to the necessity of negotiating a new agreement.
 - Recommendation 12.11: The City, the County, and other CAPCOG regional entities should engage their mutual aid partners to perform annual reviews of existing agreements prior to hurricane season, and sign or re-sign these agreements as necessary.
- The response times of some responding jurisdictions was slow when mutual aid agreements required the verification of logistical concerns such as the liability of responders or the readiness of equipment. This process had to be replicated each time the City and/or County agreed to assist another impacted jurisdiction.
 - Recommendation 12.12: The City and County, in coordination with their CAPCOG regional partners, should develop mission ready packages to establish ready-to-go cost estimates and/or templates pre-disaster which can quickly be signed and mobilized upon receipt of a request for mutual aid assistance. The City, the County, and other CAPCOG regional entities should engage their mutual aid partners to include mission ready packages with ready-to-go cost estimates, team structures, and logistical requirements as addenda to existing mutual aid agreements.

Focus Area 13: Regional Emergency Response Coordination

Focus Area Introduction

Summary

During the Hurricane Harvey response, the State did not activate the DDC for Disaster District 12, which contains the City of Austin, Travis County, and several neighboring counties and jurisdictions. As a result, the City served as the default lead for regional shelter response. Although a *Capital Area Regional Response Plan* existed, most regional coordination efforts led by HSEM occurred on an ad hoc basis. Some improvised efforts, like regular regional conference calls facilitated by CAPCOG, were very effective in maintaining situational awareness and addressing resource requests from regional partners.

However, with the City as the lead entity, the roles of other jurisdictions across the region were ambiguous, which contributed to the City and its partners shouldering most of the burden for regional sheltering operations. Further, absent coordination through the DDC, regional needs were sometimes pushed upward to the State, rather than being filled by capable entities within the same region. Consequently, some of these needs were not addressed as quickly or as efficiently as they could have been via regional coordination. This problem was compounded by inconsistent use of available tools, such as WebEOC, for identifying and/or pooling available regional resources. For example, the City and County reached out regionally for support in the EOC from IMTs, but by the time of the request, these teams were already deployed elsewhere.

Related Core Capabilities

- Operational Communications
- Operational Coordination
- Planning

Strengths

Regular Communication (Operational Coordination):

 CAPCOG hosted regular regional conference calls with partner organizations and surrounding counties. This worked well to maintain awareness of regional capabilities, as well as to address requests for assistance from regional partners experiencing direct impacts from the storm. Some improvements should also be considered (see "Regular Communication" below).

Areas for Improvement

Response Organization (Planning):

- The *Capital Area Regional Response Plan* existed to facilitate regional response efforts. However, not all regional entities were familiar with this Plan.
 - Recommendation 13.1: The City, County, and their regional partners should revisit and update the plan and collaborate pre-disaster to regularly train on this plan.
- Because the State did not activate the DDC, the City and County served as the de facto lead for the regional response. However, the role of partner counties is ambiguous when the City is the lead.
 - Recommendation 13.2: The City and County should develop a procedure to document communication with the DDC chair pre-event to communicate situation assessment, local intentions, and DDC intentions related to the potential/on-going hazard.
 - Recommendation 13.3: Regional partners should collaborate pre-event to establish a regional response structure to coordinate with the DDC when it activates and to operate within during instances in which the DDC does not activate. In the latter instances, this structure should provide for a regional liaison at the SOC. Such a structure would better enable regional entities to maintain statewide and local situational awareness, as well as facilitate response to mutual aid requests and identify available regional resources.

Regular Communication (Operational Coordination, Operational Communications):

- Although the regular regional conference calls between the City, County, partner organizations, and surrounding counties were generally successful, these calls were ad hoc and informal. Further, the calls were not initiated until at least two days into the response, when the need was evident.
 - Recommendation 13.4: Where possible, jurisdictions should regularly monitor WebEOC, the avenue that can also support similar coordination efforts. However, smaller and/or overwhelmed jurisdictions may not have sufficient staffing to maintain a real-time WebEOC presence. Therefore, the City, County, and their regional partners should collaborate pre-disaster to revise the Capital Area Regional Response Plan to include regularly scheduled regional conference calls, as well as trigger points for their initiation, as a failsafe method for regional coordination.

Resource Management (Operational Coordination, Operational Communications):

There was no formal mechanism for identifying unused regional resources, including IMTs, that could be leveraged among responding regional partner organizations, nor was there a mechanism for pooling regional resources. Without regional coordination from the State DDC, it was difficult for the City and County to assess present regional response capabilities. Consequently, some requests for resources that originated within the region could have been filled by regional

partners rather than being pushed upwards to the State. It was difficult to uniformly track resource requests that arrived through multiple formal and informal channels.

- Recommendation 13.5: The City and County should develop a procedure to document communication with the DDC chair pre-event to communicate situation assessment, local intentions, and DDC intentions related to the potential/on-going hazard.
- Recommendation 13.6: Regional partners should collaborate pre-event to establish a regional response structure to coordinate with the DDC when it activates and to operate within during instances in which the DDC does not activate. In the latter instances, this structure should provide for a regional liaison at the SOC. Such a structure would better enable regional entities to maintain statewide and local situational awareness, as well as facilitate response to mutual aid requests and identify available regional resources, such as IMTs. Regional partners should establish an accompanying protocol whereby any resource fulfilling a regional request is returned in its original condition, or with additional compensation if the resource is partly or wholly expended or damaged.
- Recommendation 13.7: Regional partners should collaborate to determine the requirements for an electronic tool to track supplies and resources within the region, in which a board could be created to list resource needs and available regional resources, mark them when obligated or expended, and identify opportunities to pool resources. Partners should then evaluate if WebEOC meets the identified requirements. If determined as a suitable mechanism, this should be supported by additional WebEOC trainings for potential users on a regular basis in order to avoid complications arising from limited user proficiency. This tool may be supplemented by regional coordination calls as well. If WebEOC is not identified as fulfilling the need, alternate technologies should be explored.
- Recommendation 13.8: The City, County, and their regional partners should revise the Capital Area Regional Response Plan to include standing up a small EOC Support Team, in the model of Texas Emergency Management Assistance Teams (TEMAT), as an organized way to self-assess the needs of the region and identify available resources within the region to address these needs without having to work through the State for assistance.
- Recommendation 13.9: The City, the County, and all relevant regional partners should regularly train pre-disaster on plans to understand roles and responsibilities, including resource request protocols and permissions. This training should be developed to be accessible online, or in person, as needed/possible.

Appendices

Survey Summary Analysis

Response Stakeholder Survey

As part of the after-action process, the Planning Team invited all identified key stakeholders and actors in the CAPCOG regional response to Harvey to participate in an online survey, which solicited targeted information about the role each respondent played in and asked respondents to rate and comment on critical components of the response, such as planning documents, training, and communication processes. Not every respondent was asked to answer every question; instead, certain questions were included or excluded based on the answers provided to certain other questions earlier in the survey. Therefore, although a total of 110 complete responses were received, the number of responses is not uniform across each individual question. The results of the online survey are captured in this appendix and are organized by the order in which the questions appeared in the survey.

Roles and Responsibilities

Respondents were first asked to clarify their understanding of their role in the response. Of the 101 responses to this question, 55 respondents (54.4 percent) indicated that their roles and responsibilities were clearly defined and communicated to them prior to serving in their respective roles. 32 respondents (31.7 percent) indicated that their roles and responsibilities had been partially defined and communicated to them. 14 respondents (13.9 percent), however, indicated that their roles and responsibilities had been neither defined nor communicated to them at all. These responses are summarized in Figure 1.

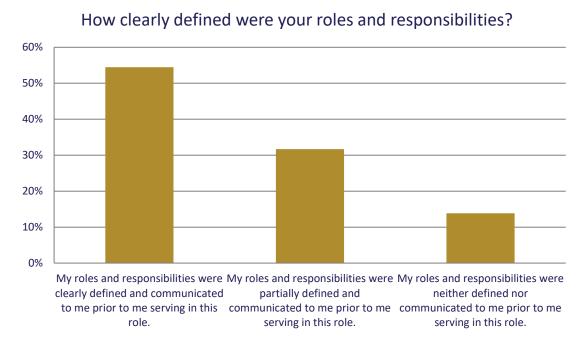
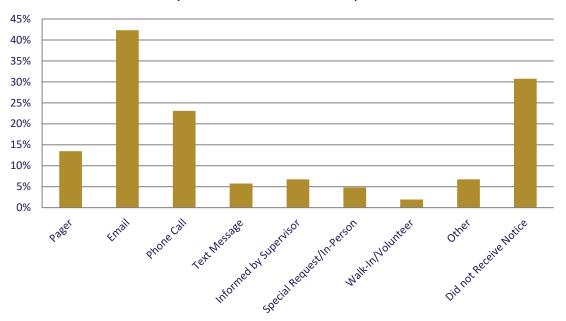


Figure 1: Response Stakeholder Survey

Respondents were then asked how they initially received notice to report for duty at the EOC or in their respective area of shelter operations (with some receiving more than one means of notification). Of the 104 respondents, 44 received notification via email (or 42.3 percent of all respondents), 24 received notification by phone (23.0 percent), and 14 received notification via the pager (13.5 percent), which, as noted in Area Command/Emergency Operations Center (EOC) Operations section of the Response Analysis, is the traditional method for EOC activations. However, 32 respondents never received any notification at all (30.8 percent). These responses are summarized in Figure 2.

Figure 2: Response Stakeholder Survey

If you worked in the EOC or in shelter operations, how did you receive notice to report?

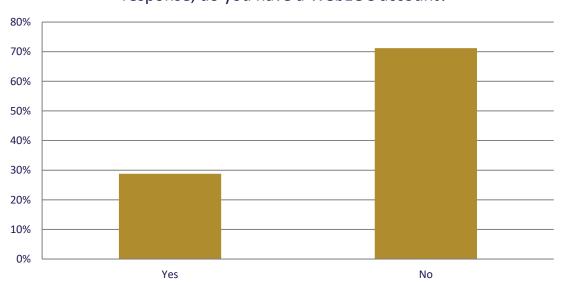


WebEOC

Respondents were questioned about the role WebEOC played in the response. 53 respondents (48.6 percent of all respondents) indicated that they did use WebEOC in some capacity, while 56 indicated that they did not (51.4 percent). Of those respondents who did not use WebEOC, 42 did not have a WebEOC account (71.2 percent), while 17 did (28.8 percent) have a WebEOC account but did not use it (note that three additional responses were recorded for this question in addition to the 56 respondents who originally indicated that they did not use WebEOC). These responses are summarized in Figure 3.

Even though you did not use WebEOC during the Harvey response, do you have a WebEOC account?

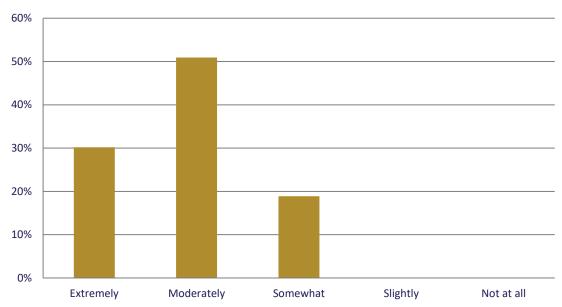
Figure 3: Response Stakeholder Survey



Of the 53 respondents who did use WebEOC, 16 indicated that they were able to navigate and use WebEOC "extremely" well (30.2 percent), 27 indicated that they were able to navigate and use WebEOC "moderately" well (50.9 percent), and 10 indicated that they were able to navigate and use WebEOC somewhat (18.9 percent). No respondents who used WebEOC during the response indicated that they were only "slightly" able to use WebEOC, nor did any answer "not at all". These responses are summarized in Figure 4.

How well were you able to navigate and use WebEOC?

Figure 4: Response Stakeholder Survey



The 53 respondents that affirmed that they used WebEOC during the response were subsequently questioned concerning what worked well with software, as well as what did not work well. 44 respondents provided feedback on what worked well. While responses varied, most fit into one of four themes:

- Improved situational awareness (13 responses);
- User-friendly data entry and retrieval processes (11 responses);
- A common centralized system (six responses); and
- Timeliness (four responses).

Selected individual responses are shown below. Where possible, responses are represented as entered by the respondent:

- Improved situational awareness:
 - Keeping track of what multiple areas were working on.
 - o Up to date info and Situational Awareness.
 - When people put updates.
 - o Dashboard.
 - information sharing.
 - Generally, it is a good way to see who is doing or requesting things.
 - Task tracking.
 - o Information was available.
 - Staying connected with on-going activities.
 - The platform exists for the sharing of information.

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- Ability to provide written information on AW actions and to read about the larger response.
- o Shelter census information and what shelters were opened.
- Shelter status board and general situational awareness.
- User-friendly data entry and retrieval processes:
 - Documentation of needs.
 - Search mechanism was easy to use.
 - Incident logging, shelter ops.
 - Ability to track information from multiple sources.
 - Use as a unit log.
 - Easy to access site.
 - Easy to enter info.
 - The tracking numbers were very useful.
 - It worked well for documenting items.
 - A very versatile and useful tool for tracking needs.
 - Tracking requests that were entered.
- A common centralized system:
 - Single collection point for information.
 - Communication among all agencies involved.
 - Common framework.
 - A central location to add requests.
 - o Information warehouse.
 - Having it centralized and accessible remotely.
 - Timeliness:
 - The speed is much improved over previous major incidents.
 - Receiving information from the shelters at times and being able to report the number of behavioral health crisis support workers there were at any given time in the shelters.
 - Updates on sheltering.
 - Timely situational awareness.

41 respondents provided feedback on what elements of WebEOC did not work well. While responses varied, most fit into one of four themes:

- Inconsistent use (9 responses);
 - Difficult, awkward, or time consuming (6 responses);
 - Provision of limited or inaccurate information (6 responses);
 - Lack of knowledge or training on the software (6 responses); and
 - Difficulty accessing or logging in to the software (5 responses).

Selected individual responses are shown below. Where possible, responses are represented as entered by the respondent:

Inconsistent use:

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- People didn't always put updates.
- o It seemed like WebEOC was not used as heavily.
- o I, as well as others, did not use it consistently enough to rely on it as a primary source of information.
- Many partners did not read what was entered in WebEOC.
- Not always up-to-date or being used.
- The platform was not used as intended universally.
- Was not referenced by all parties at EOC during operations.
- Tracking requests that were not entered or updated.
- Not everyone posts.
- Difficult, awkward, or time consuming:
 - Logistics were added here as a secondary repository as it was not organized well enough to serve as primary. This wasted time and meant that if things got too busy they were not entered in WebEOC.
 - o Cumbersome and time consuming.
 - Web EOC has a clunky interface.
 - Antiquated system.
 - o It didn't offer enough useful tools.
 - o It was difficult to track items or follow up on concerns.
- Provision of limited or inaccurate information:
 - Not enough regional status to show impacts around area. Information stove piped and unimportant information weighted same as other details. Does not give full picture.
 - Not having accurate information regarding the number of individuals in the shelters, and not receiving adequate information from the shelter managers.
 - Requestors from the field could not log in and complete their requests, EOC Logistics staff
 had to manually enter the requests in. There wasn't a workflow established so requests
 were fulfilled without knowing if the requestor had the authority to place the request. No
 transparency in the field to know what requests had been placed, duplication sometimes
 occurred. Required fields in the systems were not present.
 - Routing of work/needs to other agencies, ability to see what previous responder had done.
 - The fields did not provide enough options to enter information.
 - I don't feel the shelter census numbers were accurate.
- Difficulty accessing or logging in to the software:
 - Not clear on where exactly to input the info.
 - o Learning on own how to submit info for dashboard
 - Posting to the appropriate board.
 - Departments not familiar with this system would log things in incorrect places and made it hard to retrieve information.
 - Navigating the system; knowing what content to put in which section of the system; knowing what was considered critical to document.

Not sure what content to provide.

Finally, respondents who used WebEOC were asked to provide ideas for improvements to WebEOC that would better enable respondents to accomplish their respective response mission. 28 respondents answered this question, and selected individual responses are shown below. Where possible, responses are represented as entered by the respondent:

- I saw the need for improvement in WebEOC for Logistics but that was not my primary mission. I
 would like to see how WebEOC can be better utilized for Plans and Finance.
- Aggregate all important data points into the system. We push information to the state, why not get SOC and NWS updates through this system.
- Make it easier to practice using before an emergency occurs. Training modules/refresher training online, at our own pace/time available would be helpful. Also, give access to everyone via an easier log on and password process.
- Posting of significant that affect multiple agencies.
- Better connection.
- Patient Tracking Boards/Process; Blood Board; Fusing all WebEOC Servers.
- Return to the ability to enter information in activity log and chose if it goes to significant events or to another entity.
- The ability to MAKE an IAP using the forms.
- Probably, but I only use it a couple of times a year if that, so I wouldn't be a good resource to suggest enhancements.
- Mapping feature would be good to give a visual reference.
- Specific mandatory fields that indicate information that is necessary for the request to be processed. Transparency in the field. Workflow approvals. Ability for field logistics to place requests through WebEOC. Better search capabilities. User name, date, and time stamps for creation, edits, and deletion of requests.
- Improve the user interface; make attachments easier.
- utilize all components of system/update system interface.
- Add more summary data from different boards on landing page.
- Tracking system, scheduling, order history.
- It would be useful if it were more search-friendly and if everyone used it consistently across the board.
- Clear delineation for social service responses separate from medical.
- Require all human services & VOAD orgs to enter their activities in WebEOC, as not all did this
- Automatic feeds into the hospital status board, based upon real time feeds from the hospital bed logistic program.
- A message board for our position or some other way to see what had been done and what was still open.
- Add more drop-down fields and more space to enter information.
- Need to quick guides (hard copy next to computers) available in the EOC for reference.

Hurricane Harvey After Action Report

Austin | Travis County

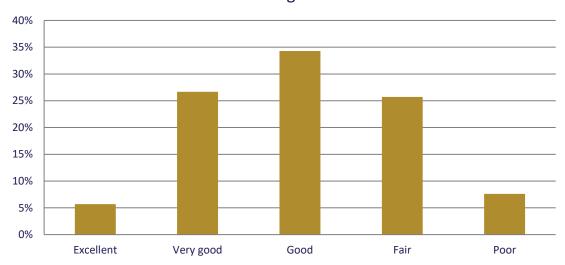
- being able to see and track what others are doing, perhaps an OTJ training to briefly show us how to do that.
- More connectivity between systems via fusion servers.
- If paper was no longer used and entities that needed to make a request could enter it the same, then is queued for logistics to process.
- Too much time has passed to provide a valid response.
- Clearer definition of what position people should sign into and an easier process to add positions to peoples' accounts.

Information Sharing and Regional Coordination

Respondents were asked to rate the effectiveness of information-sharing within the region. In answering this question, participants were specifically directed to consider topics including but not limited to resource needs and capabilities, as well as situational awareness. Of the 105 responses to this question, six respondents (5.7 percent) indicated that information-sharing was "excellent". 28 respondents indicated that information-sharing was "very good" (26.7 percent), 36 indicated that it was "good" (34.3 percent), 27 rated it as "fair" (25.7 percent), and 8 responded that information-sharing was "poor" (7.6 percent). These responses are summarized in Figure 5.

Figure 5: Response Stakeholder Survey

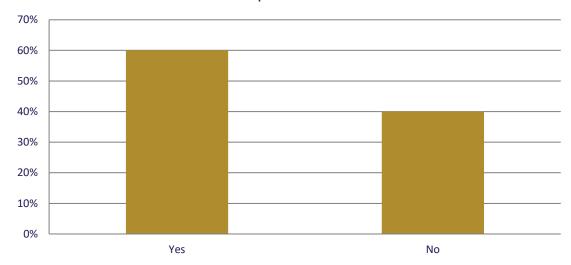
How would you rate the information sharing (e.g., resource needs/capabilities, situational awareness) within the region?



All respondents were asked if there are processes that would enhance coordination across the region to support regional responses. Of the 85 responses received, 51 respondents (60.0 percent) answered "yes", and 34 respondents (40.0 percent) answered "no". These responses are summarized in Figure 6.

Figure 6: Response Stakeholder Survey

Are there processes that would be helpful to develop to enhance coordination across the CAPCOG region in your response area?



Those answering affirmatively were asked to identify the processes which they believe would enhance regional coordination. Selected individual responses are shown below. Where possible, responses are represented as entered by the respondent:

- In day to day operations coordination is good. For this event, there seemed to be no meetings or coordination with the region and they would have been a valuable resource.
- Orientations upon arrival at various sites to assist in understanding what all is taking place and/or being offered.
- Always activate the DDC if the EOC is stood up.
- Systematic integration of language access objectives into CAPCOG management.
- Train the Red Cross personnel on CASHP and expectations. More training for shelter managers regarding the situations they may confront during their shift.
- Floodplain awareness and training with FPAs.
- Educate organizations on how to get plugged in to receive timely information and the process to get our volunteers involved/connected.
- Auto-text messages to everyone on the main communication teams plus include volunteers who might be needed for back up.
- Need better notification of status of rescue boat assets. Location, Staffing (e.g., TEEX swift water-qualified vs a locally trained boat operator). Would also be useful during water events to have a local multiagency coordination center for rescue specific assets that functions like the state Joint Air-Ground Coordination Center.

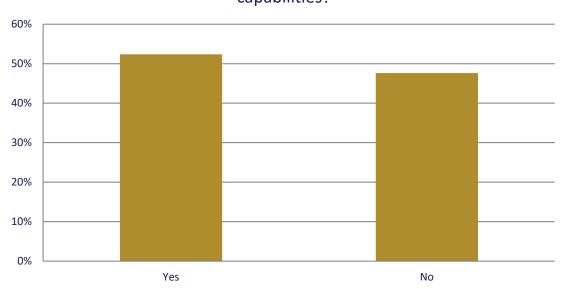
- Coordinate in advance with the American Red Cross on any last minute asks they request of departments outside of their EOC position.
- Better coordination with the State this was the single biggest issue.
- Unlike public safety, transportation, or other areas, there is no formal process that I know of for the various government entities in the region to coordinate their efforts to address their facility needs. In the event of a disaster, it would be helpful to have a central list of facility reps, or a shared list of properties that could be made available in emergency. A standing meeting of such real estate personnel would also enhance long-range coordination and planning.
- Need for practicing the Capital Area Medical Operations Notification Process with multiple scenarios.
- Feedback from EOC in response to requests.
- All people involved in any form of the emergency response in our region need to be aware of all the sheltering plans and aspects, so they understand how it all ties together.
- We can create a database of volunteers to assist with language services.
- Each county should make a list of available resources and share across the region by using CAPCOG as the "keeper" of these lists.
- Better regional response coordination that is used on a more regular basis, so the mechanisms and available resources can be exercised. If you never use something, then you never get the opportunities to refine it.
- Increase the WebEOC training so all know how to use it.
- The only real issue that we experienced is that we had a huge influx in patients in our ER's (mainly south) from the shelters. The majority of these were not emergencies and were primarily evacuees needing medication. It would be great to communicate to those evacuees needing help, where urgent cares and pharmacies are located and what they should come to the ER for.
- CAPCOG wide calls and briefings for the EMC/EM of the area.
- Cross-agency all accessible: SOPs to outline steps and proper channels, FAQs, dynamic inventory lists with appropriations and needs, and cross agency education on the processes.
- Involve other counties more in CASHP practices and conversations.
- Update regional response plans.
- Clearer, more accurate information from the State regarding the number of evacuees; better tracking of arrival time; when possible better information regarding status of the guests, such as pets, medical condition.
- More shared information, not just during report out.
- More visibility on what other agencies are doing/preparing for would be helpful. Finding out some resources are deployed when you're looking to fill a local need is not good. Awareness is key information.
- Sitrep [situation report] requirements specific to issues. For example, is your hospital receiving patients from any evacuated area? If yes, have these been coordinated through the regional medical operations? If No, why?
- More frequent training and updated and easily accessible resource manuals. Have EAP reps onsite at EOC.

- Clearly defined protocol for the activation of Travis County facilities as it relates to emergency management response.
- Incorporate the use of GeoSuite.
- Emergency event interagency coordination agreement.
- Let VOAD members meet with plan sections (e.g., Donations Management to understand plan and roles).
- Understand what all other agencies can actually provide versus trying to rush and buy things.
- Run a shelter like an event. Have people with the experience help set up and locate items.
- It would be helpful if City/County/ISDs could have a portal login ahead of time to push information into one place as opposed to emailing back and forth through different people.
- Centralized place to give/receive information. Texting system. List of who was in charge, and where. List of ongoing needs that can be accessed by all.
- More exercises. Probably tabletop make the most sense, with occasional full scale every other year.
- Have all City of Austin parties check with EOC communications for any detail before doing something on their own. This duplicates efforts or places to send supplies/assistance.

All respondents were asked if current shelter plans (as well as other related plans) adequately maximize regional response capabilities. Of the 84 responses received, 44 respondents indicated "yes" (52.4 percent) and 40 respondents indicated "no" (47.6 percent). These responses are summarized in Figure 7.

Do current plans adequately maximize regional response capabilities?

Figure 7: Response Stakeholder Survey



Respondents were provided the opportunity to comment on why they believe current response plans are adequate or inadequate. Selected individual responses are shown below. Where possible, responses are represented as entered by the respondent:

- I am not aware of regional language access plans; City of Austin language access should be integrated into regional response. City Homeland Security and Emergency Management has a plan, but it is specific only to the City.
- We can do a better job of prepositioning swift water boat squads regionally rather than keeping
 most resources clustered in the urban core. Additionally, better outreach to regional public safety
 partners to notify them that specialized rescue assets are available for request.
- Information technology is not included as one of the response areas to this survey, yet everyone needed it.
- The City of Austin's Emergency Operations Plan (as of 2016) does not include a role for the Office of Real Estate Services or the Building Services Department. Those are the two departments responsible for acquiring, overseeing, and maintaining City facilities, including any City-owned or -leased shelter and should at least be included in the Community Services Group. In addition, Appendix 11 to the Capital Area Shelter Hub Plan (CASHP) -- potential shelter sites -- is blank. CASHP also does not include a process for identifying, evaluating, or acquiring a shelter site that is not publicly-owned or is not on the list of Appendix 11. Plus, neither plan includes a discussion of the selection of a Mega Shelter site, nor a Plan B when the preferred Mega Shelter site is unavailable.
- For Hurricanes, the plan works well as there is usually adequate time. We need to practice a major mass causality event and respond in real time.
- All counties need to be involved in the communications, planning, and response. The Regional Animal Issues Committee needs to be involved in all animal sheltering communications and decisions.
- Security related to Mega Shelter. While the plan shouldn't/can't identify the exact security staffing levels needed there needs to be something that discusses the sharing of LE resources and the level at which that should occur. This would enhance response by the smaller agencies and we wouldn't be chasing down folks for last minute requests.
- Regional Animal Issues Plan should be CAPCOG regional and not just Travis, Bastrop, Hays and Williamson Counties.
- I don't believe they are clearly defined and/or exercised on a regular basis.
- Not sure which plan if any. For example, there was poor communication when the Mayor stated that we were in desperate need of Spanish speakers. His office failed to communicate with LAE prior to see if including untrained Spanish speakers as interpreters was appropriate.
- CASHP, Regional Animal Issues Committee need to spend time discussing emergency response plans and roles.
- Regional Mutual Aid plan needs to be update, add section on situation awareness.
- I have never seen the CASHP plan.

Hurricane Harvey After Action Report

Austin | Travis County

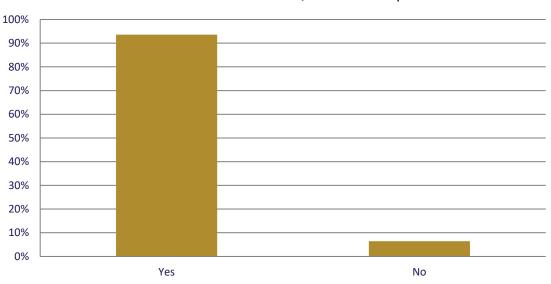
- CASHP: turnover in school districts causes holes in the plan. Maybe we should focus on core shelters and then have others support the core.
- Perhaps the issue is communication of those plans.
- City of Austin employees need to get WebEOC training prior to working in the EOC Logistics.
- Completion of a regional "status board" for hospital status, patient capacity (e.g., Southwest Texas Regional Advisory Council).
- State level plans are in dire need of revision. Use of CCG, for example, could have been better.
- Donations were not utilized. There needs to be a shelter point person to coordinate intake of donations, or an offsite location where shelter residents can go to utilize the donations.
- Feel that when agencies are sending volunteers/staff, they need to ensure they know what resources their agencies can provide.
- The school district needs to be given assistance to have generators at the shelters, for one, to be able to host multiple evacuees as well as one for the warehouse in order to preserve perishable food; it cannot be expected for school districts, with an already skinny budget, to bear this responsibility without support to properly take care of evacuees.
- We did not take advantage of many of the organizations willing to help because there wasn't a plan to use them.
- CASHP works well for one type of storm with one type of evacuation but needs to be modified to address all types of sheltering and be more flexible.
- From a Public utility perspective, they do.

Training and Exercises

Respondents were asked to indicate their interest in participating in training and exercising to support regional response operations, with particular regard to EOC and/or shelter operations. Of the 109 responses to this question, 102 respondents (93.6 percent) indicated that they would be interested in participating in such training and exercising, while 7 respondents (6.4 percent) indicated otherwise. These responses are summarized in Figure 8.

Do you desire to participate in future training/exercise initiatives focused on EOC and/or shelter operations?

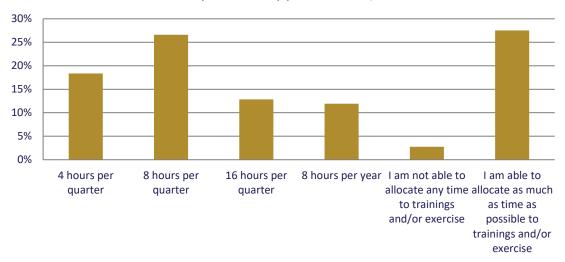
Figure 8: Response Stakeholder Survey



All respondents were subsequently prompted to indicate how much time throughout the course of a year they would be able to dedicate to training and exercising on EOC and/or shelter operations, pending workplace approval. There were 109 responses to this question. 20 respondents (18.4 percent) indicated that they are able to dedicate four hours per quarter, 29 respondents (26.6 percent) indicated they are able to dedicate eight hours per quarter, and 14 respondents (12.8 percent) indicated that they could dedicate eight hours per year. 3 respondents (2.8 percent) indicated that they could dedicate no time at all, and 30 respondents (27.5 percent) indicated that they could dedicate as much time as needed to training and exercising to support EOC and/or shelter operations. These responses are summarized in Figure 9.

Figure 9: Response Stakeholder Survey

How much time are you able to dedicate to these training and exercise initiatives throughout the year (pending supervisor approval, etc.)?

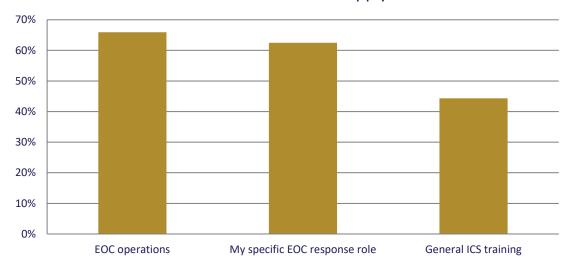


Respondents were asked to specify their interest in trainings and exercises among EOC operations, the respondent's specific EOC response role, and general ICS training (with more than one selection allowable). 88 respondents provided answers to this question. 58 respondents (65.9 percent) expressed interest in training and exercising on EOC operations, 55 respondents (62.5 percent) expressed interest in training and exercising on their specific EOC response role, and 39 respondents (44.3 percent) expressed interest in general ICS training. These responses are summarized in Figure 10.

Figure 10: Response Stakeholder Survey

Are you interested in having trainings/exercises focus on any of the specific topics or response elements below?

Please select all that apply.



Respondents who expressed interest in general ICS training were provided the opportunity to narrow their interest to a specific training or a specific topic for training and exercising. A subsequent question prompted respondents to identify role-specific ICS trainings. The results of these two questions are combined and summarized in Table 1. Note that some respondents did not answer the questions as written, but instead suggested ideas for training or exercising outside of ICS as well; these responses are also included in Table 1.

Table 1: Response Stakeholder Survey

Specific Training or Training Topic	Number of Interested Respondents
Cost Recovery	5
Basics of ICS (e.g., 100, 200, 700)	4
Planning Section Chief	4
Logistics Section Chief	3
CAPCOG-specific Shelter Plans	3
Public Information Officer	3
Case Management	2
Medical Operations	2
Operations Section Chief	2
Incident Management Teams	2
Specific Exercises (e.g., Active Threat)	2

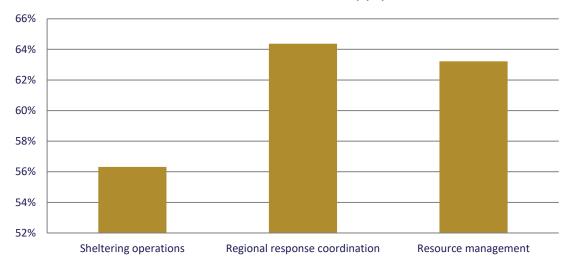
Specific Training or Training Topic	Number of Interested Respondents
Safety	2
Incident Commander (Type III)	2
Shelter operations (general)	2
Train the Trainer	2
Situation Unit Leader	2
Air Operations Branch Director	1
Communications	1
Facilities Unit Leader	1
Floodplain Administration	1
Language Access Management	1
Large Animal Sheltering	1
EMI Certification	1
Resource Unit Leader	1
Special Event Operations	1
Shelter Hub Training	1
Staging Area Management	1
Disease Outbreak in Shelters	1
Community Emergency Response Team	1
Evacuation/Re-Entry	1
Multi-Agency Resource Center Operations	1
Mass Casualty/Fatality Management	1

Respondents were also asked to specify their interest in trainings and exercises among sheltering operations, regional response coordination, and resource management (with more than one selection allowable). 87 respondents provided answers to this question. 49 respondents (56.3 percent) expressed interest in training and exercising on sheltering operations, 56 respondents (64.4 percent) expressed interest in training and exercising on regional response coordination, and 55 respondents (63.2 percent) expressed interest in training and exercising on resource management. These responses are summarized in Figure 11.

Figure 11: Response Stakeholder Survey

Are you interested in having trainings/exercises focus on any of the specific topics or response elements below?

Please select all that apply.



Respondents who expressed interest in training or exercising on resource management were provided the opportunity to narrow their interest to a specific kind of resource; for example, personnel or goods. Selected individual responses are shown below. Where possible, responses are represented as entered by the respondent. Note that some respondents did not answer the questions as written, but instead suggested ideas for training or exercising outside of resource management as well.

- Services.
- Language access personnel and technical infrastructure (web resources and analog phone lines).
- Rescue Assets.
- Medical rated type equipment (e.g., bariatric cots, medical cots).
- Finding locations for Mega Shelter purposes.
- Personnel volunteer certification, cross-training, and management.
- Donations coordination and agency planning.
- Animal resources.
- Response Resources (e.g., Strike Teams and Task Forces).
- Goods.
- Multi-Agency Resource Center.
- Personnel and allocating resources to the shelters.
- Personnel, equipment.
- Personnel

Respondents were subsequently asked to identify other specific topics or response elements on which they would like to train and/or exercise. Selected individual responses are shown below. Where possible, responses are represented as entered by the respondent.

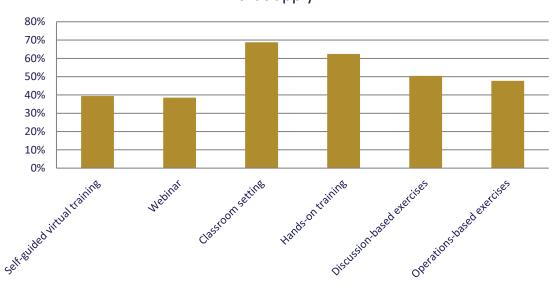
- Shelter management and overall improved communication between EOC and Red Cross.
- How to integrate rural responders with specialized response teams.
- Behavioral health crisis support services.
- Coordination of case management.
- Floodplain regulations.
- Do an exercise that involves the University of Texas at Austin so their emergency preparedness department, student health services center, school of nursing, college of pharmacy, school of social work, and medical school get to practice/learn their roles—so they are not learning them in the midst of a real large-scale disaster.
- The role of public health.
- Tabletop exercise with regional coordination.
- WebEOC refreshers.
- Cost Recovery.
- Multi-Agency (local, state, federal) coordination and communication.
- Shelter operations.
- Animal health.
- Continuity of Operations.
- Technology (making the coordination and response more automated; optimization of current processes).
- City and County joint training on shared roles and responsibilities and how those are coordinated from EOC to the shelter level.
- The use of Voluntary Organizations Active in Disaster resources and a single point of contact.
- Guidance on how to realign workload during a disaster so that same staff doesn't get overworked.
- Coordination between various agencies and communication between Logistics and shelter operations.
- More realistic tabletop and field drills.
- Process and documentation for identifying, monitoring, reimbursing and auditing of event costs.
- Learning what is already provided by agencies, versus what has to be purchased.
- Set up logistics.
- Suggest that ALL COA employees be required to take the online IS 100 course, all supervisor take IS 100 & 200, all managers that might support large scale disaster ops take IS 300. We need to be able to have non-primary emergency response agencies capable of fulfilling roles in Logistics, Finance Admin, and possibly Planning. Everyone needs to understand ICS.

Respondents were asked to indicate their preferred mode of receiving training (with more than one selection allowable). Of the 109 responses to this question, 43 respondents (39.5 percent) indicated a preference for self-guided virtual training, 42 respondents (38.5 percent) indicated a preference for webinar-based training, 75 respondents (68.8 percent) indicated a preference for training in a classroom

setting, 68 respondents (62.4 percent) indicated a preference for hands-on training, 55 respondents (50.5 percent) indicated a preference for discussion-based exercises, and 52 respondents (47.7 percent) indicated a preference for operations-based exercises. These responses are summarized in Figure 12.

How do you prefer to receive training? Please select all that apply.

Figure 12: Response Stakeholder Survey



Finally, respondents were asked to identify stakeholders that are not traditionally invited to trainings and exercises but should be based on their respective experience with the response to Hurricane Harvey. Selected individual responses are shown below. Where possible, responses are represented as entered by the respondent.

- Every department around the City and County should have a team that takes basic ICS classes.
- Language Access management and Americans with Disabilities Act management
- Red Cross, Austin Disaster Relief Network, Catholic Charities, Salvation Army, Central Texas VOAD for case management and Multi-Agency Resource Center.
- Floodplain administrators, financial officers.
- African American & Latino churches and University of Texas at Austin Medical Reserve Corps.
- Human Resources (specific to communications to employees).
- Travis County Search & Rescue (volunteer organization).
- Mental health (Integral Care); organizations with social workers/case managers (e.g., Any Baby Can, Caritas).
- Information Technologists.
- City and County department heads.
- Home Health, Dialysis, Hospice, Hospital Liaisons that are part of the Medical Operations Branch in the Capital Area Medical Operations Center.

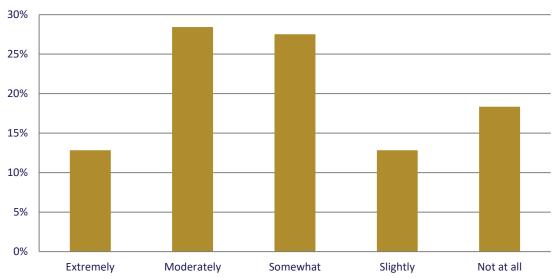
- Facility managers. If we have designated facilities, their staff needs to be involved in planning and aware of expectations, as well as kept up-to-date. These trainings include livestock sheltering, general shelter management, and trainings on how the County EOC would like the facility to respond if FEMA approaches them.
- Travis County department beyond Sheriff's Office, Office of Emergency Management, Health & Human Services, and Transportation & Natural Resources.
- Texas Animal Health Commission
- Texas Department of Emergency Management (Disaster District Committed and regional planning group)
- Agency PIOs should receive more training and learn to work with the Joint Information Center.
- Purchasing and financial staff.
- Community stakeholders.
- Some line staff
- Other animal welfare partners.
- Non-Profits that respond to disasters other than Red Cross such as Austin Disaster Relief Network.
- Travis Austin Recovery Group & Central Texas VOAD.
- Community medical partners that are non-traditional (e.g., dialysis, nursing homes, pharmacies, Home Health).
- Red Cross, Integral Care, Austin Disaster Relief Network, and Travis County Health & Human Services.
- Purchasing.
- Federal resources.
- All City of Austin team members should be trained for a specific response role to allow depth in personnel and eliminate the reliance on a handful of departments.
- All COA employees need IS-100: introduction to ICS. Supervisors need IS-100 and 200; managers, at least of departments that would support emergency ops, need G-300. All non-sworn staff in the public safety agencies need IS-100; supervisor and managers at these agencies need G-300. They also need to participate in tabletop exercises. Exercises could be for the occasional disaster or the more frequent large special events.
- School administrators are having to host evacuees and handle operations yet are not included on the sheltering expectations until it comes to them in real time.
- People/organizations working with people who have disabilities.
- All supervisors should attend so they will have a better understanding of the coordination and commitment that is required by the volunteers.

Planning

Respondents were next asked to indicate their familiarity with the plans used in the Harvey response. Of the 109 responses to this question, 14 respondents (12.8 percent) indicated that they were "extremely" familiar with the plans. 31 respondents (28.4 percent) indicated that they were "moderately" familiar with the plans, 30 respondents (27.6 percent) indicated that they were "somewhat" familiar with the plans, 14 respondents (12.8 percent) indicated that they were only "slightly" familiar with the plans, and 20 respondents (18.4 percent) indicated that they were "not at all" familiar with the plans. These responses are summarized in Figure 13.

How familiar were you with the plans used in the response to Hurricane Harvey?

Figure 13: Response Stakeholder Survey

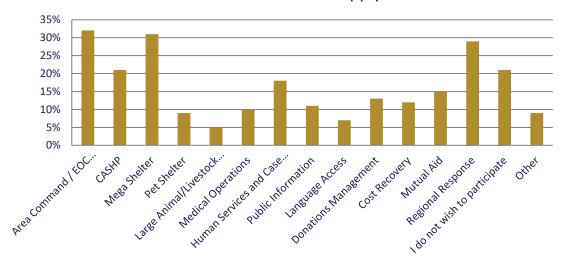


Respondents were then asked if they wished to participate in updating existing plans or developing a new plan in any of the Focus Areas identified as a part of this after-action process management, and if so, to identify the Focus Area (with more than one selection allowable). 100 responses were received to this question, which are summarized in Figure 14.

Figure 14: Response Stakeholder Survey

Do you wish to participate in updating existing plans or developing a new plan in any of the identified focus areas?

Please select all that apply.



Nine respondents indicated "Other" and provided comments identifying a Focus Area beyond those identified in the after-action report. Selected individual responses are shown below. Where possible, responses are represented as entered by the respondent.

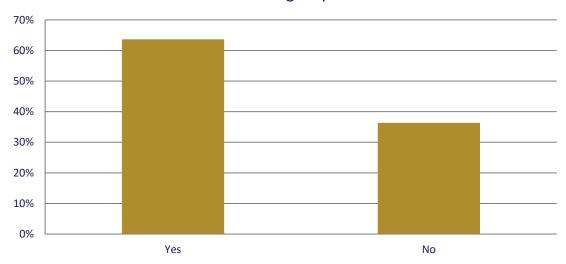
- Finance disaster plan (one response);
- Information technology/communications (three responses);
- Real-estate and related logistics (one response); and
- Spontaneous volunteer management (one response).

Volunteer Management

Respondents were asked if existing mechanisms for volunteer contact, recruitment, and/or deployment adequately addressed volunteer needs in their respective area of response. Of the 106 responses to this question, 62 respondents indicated that this question was not applicable. These responses have been removed from Figure 15 to show the remaining 44 responses, including 28 respondents who answered "yes" (63.6 percent of those who submitted a response other than "not applicable"), and 16 respondents who answered "no" (36.6 percent).

Figure 15: Response Stakeholder Survey

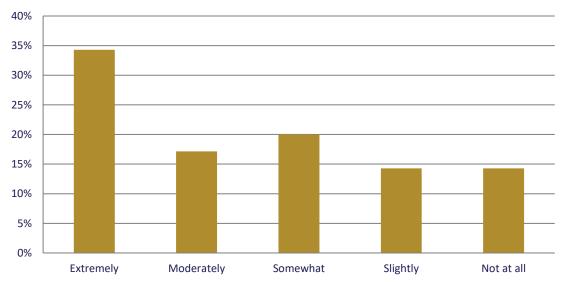
Did existing contact/recruitment/deployment mechanisms for volunteers in your area of response adequately address needs during response?



Respondents were also asked to indicate the effectiveness of vetting procedures for volunteers in their respective area of response. Of the 106 responses to this question, 71 respondents indicated that this question was not applicable. These responses have been removed from Figure 16 to show the remaining 35 responses. 12 respondents (34.3 percent of those who submitted a response other than "not applicable") indicated that vetting procedures for volunteers were "extremely" effective, six respondents (17.1 percent) indicated that vetting procedures for volunteers were "moderately" effective, seven respondents (20 percent) indicated that vetting procedures for volunteers were "somewhat" effective, five respondents (14.3 percent) indicated that vetting procedures for volunteers were "slightly" effective, and five more respondents indicated that vetting procedures for volunteers were "not at all" effective. These results are summarized in Figure 16.

Figure 16: Response Stakeholder Survey

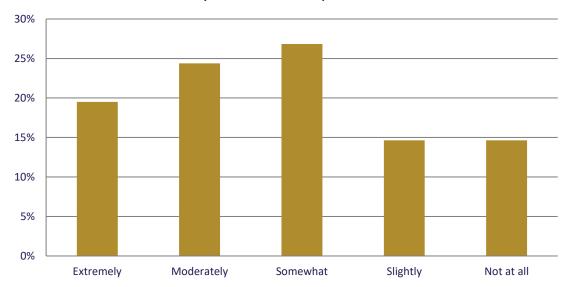
How effective were vetting procedures for volunteers in your area of response?



Respondents were asked to indicate the effectiveness of training procedures for volunteers in their respective area of response. Of the 106 responses to this question, 65 respondents indicated that this question was not applicable. These responses have been removed from Figure 17 to show the remaining 41 responses. Eight respondents (19.5 percent of those who submitted a response other than "not applicable") indicated that training procedures for volunteers were "extremely" effective, s10 respondents (24.5 percent) indicated that training procedures for volunteers were "moderately" effective, 11 respondents (26.8 percent) indicated that training procedures for volunteers were "somewhat" effective, six respondents (14.6 percent) indicated that training procedures for volunteers were "slightly" effective, and six more respondents indicated that training procedures for volunteers were "not at all" effective. These results are summarized in Figure 17.

Figure 17: Response Stakeholder Survey

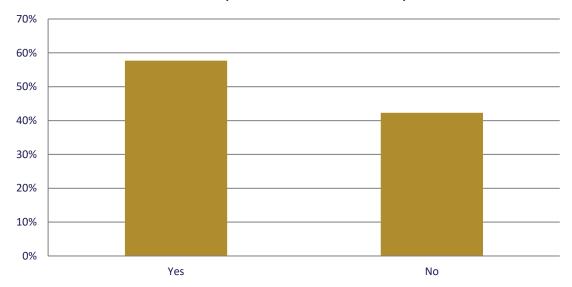
How effective were training procedures for volunteers in your area of response?



Respondents that indicated that their respective organizations had indeed contacted, recruited, and/or deployed volunteers during the Hurricane Harvey response were asked if their organization had solicited and/or received feedback from the volunteers concerning the collective experience of the volunteers. Of the 26 respondents who answered this question, 15 indicated "yes" (57.7 percent), that their organization had solicited and/or received feedback from their volunteers, and 11 respondents (42.3 percent) indicated "no". These results are summarized in Figure 18.

Figure 18: Response Stakeholder Survey

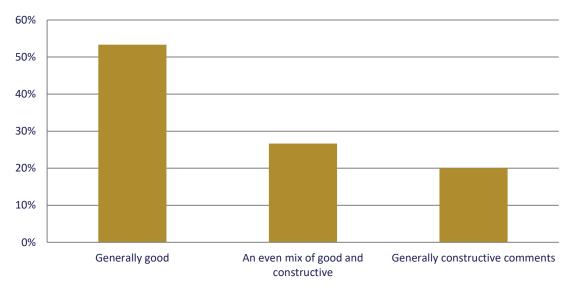
Did you solicit and/or receive feedback from your Hurricane Harvey volunteers on their experience?



Those answering affirmatively were asked to characterize the feedback received from their organization's volunteers. Of the 15 responses received, eight respondents (53.3 percent) indicated that volunteer feedback could be characterized as "generally good", four (26.7 percent) respondents indicated that volunteer feedback could be characterized as "an even mix of good and constructive", and three respondents (20.0 percent) indicated that volunteer feedback could be characterized as "generally constructive". These results are summarized in Figure 19.

Figure 19: Response Stakeholder Survey

How would you categorize the feedback received from volunteers?

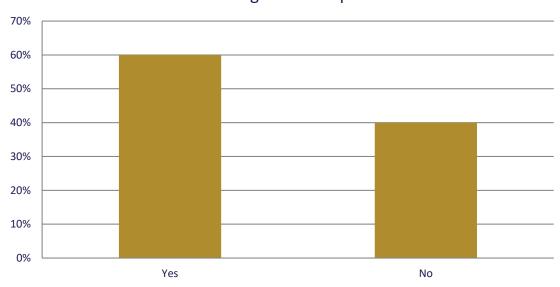


Transition from CASHP to Mega Shelter

Respondents were asked to indicate if they observed any challenges arising from transitioning from CASHP shelter operations to Mega Shelter operations. Of the 103 responses to this question, 53 respondents indicated that this question was not applicable. These responses have been removed from Figure 20 to show the remaining 41 responses. 30 respondents (60.0 percent of those who submitted a response other than "not applicable") indicated "yes", that they had observed challenges during the transition, while 20 respondents indicated "no" (40.0 percent).

Did you experience any challenges with the transition from CASHP to Mega Shelter operations?

Figure 20: Response Stakeholder Survey



Respondents answering affirmatively were subsequently asked to identify specific challenges that they observed during the transition from CASHP shelter operations to Mega Shelter operations. Selected individual responses are shown below. Where possible, responses are represented as entered by the respondent:

- Sign-in sheets were lost.
- The roles and responsibilities of COA shelter managers and Red Cross. COA shelter manager role and responsibilities with regard to facility operations at the Mega Shelter.
- Having continuity of care for behavioral health crisis support for evacuees once they transitioned from CASHP to Mega Shelter operations.
- Having positive communication w/ shelter managers.
- Lack of coordination of moving the different CASHP shelters. Plan was for them to go one at a time, but that did not pan out exactly that way.
- The plan changed too many times.
- Information sharing, true needs, timeline, responsibilities.

Austin | Travis County

- Lack of timely communication in order to coordinate change with groups providing resources for shelters.
- Delay and uncertainty about where the Mega Shelter would be.
- Coordination with EOC and Logistics.
- Coordination of movement of CATRAC assets and the recovery during demobilization.
- Security staffing plans.
- Not knowing there was a transition coming until it happened and then it got more confusing. The EOC set up for CASHP is totally different than normal EOC activation.
- Uncertainty of shelter location. This is something that should be pre-determined, as much as possible, in the plan.
- Duplication in effort. Often EOC would receive a request and fill it just to find out that the field received the request and filled it.
- Animal Services was directed to stay at the EOC. Area Command at the Mega Shelter did not know how to contact Animal Services even though the EOC was still staffed and activated.
- The lack of coordinated information and uniformed staff.
- Individual information on guests was not easily transitioned to next site.
- Pre-emptive processes and responsible parties were on-the-spot decisions.
- Notification time.
- Shelter guests were told that Mega Shelter was ready too early. It created anxiety and an apparent delay because people were thinking that they were going to move to the Mega Shelter earlier than it occurred.
- Having agencies understand that you can't always purchase any requests and other agencies understand that other agencies can provide some things free.
- There wasn't an easy way track what wasn't entered into WebEOC. Paper form requests needs to be looked at.
- The guest experience was perceived as unorganized. Lacking consistent communications regarding future services or rules associated with the transitioning of things.
- There was a strong effort to make things work across a large number of agencies. Demobilization was not addressed in the CASHP Plan at all and no one knew who was responsible for picking up supplies from the schools.

Respondents were also provided the opportunity to identify strengths that they observed during the transition from CASHP shelter operations to Mega Shelter operations. Selected individual responses are shown below. Where possible, responses are represented as entered by the respondent:

- Flexibility and dedication of the personnel on site made the Mega Shelter happen. People took on roles beyond their usual scope of work and beyond what had been planned for.
- There was a strong effort to make things work across a large number of agencies.
- Teamwork.
- Communication.
- Strengths had to do with our talented bus transportation personnel who are trained to take children to schools and other locations on time and safely. They are always ready to perform.

Hurricane Harvey After Action Report

Austin | Travis County

• Leadership and their responsiveness to the constantly changing needs. Our quick adaptability to the shortcomings and challenges posed.

Remaining Strengths and Areas of Improvement

Respondents were asked to identify any strengths observed across the entirety of the response to Hurricane Harvey that they had not yet noted during the course of this survey. Selected individual responses are shown below. Where possible, responses are represented as entered by the respondent:

- Many employees helped out in their own time, without expectation of compensation, and over and above call of duty.
- The greatest strength was the willingness of so many people to come together to assist others in their time of need. And giving those folks a central location to do so made it easier.
- Everyone was kind and professional. It was evident that many people were doing the best they could with what limited resources they had.
- The City's ability to problem solve on the fly.
- Coordination at EOC was great. Best place to get resources in the right place to do the work.
- Once I learned about the Central Texas VOAD conference call, then I received great information.
- Amazing dedication of the EOC team.
- Communication better and involvement of community resources improving.
- Broad expertise was available within the City.
- The individual compassion of citizens. Also, it is commendable that the responsible agencies are conducting an after-action review to look at how we can improve.
- It was nice to see so many people wanting to volunteer and help others in need. The food delivery and disbursement was well done.
- Everyone involved in the process wanted to do a good job. The livestock sheltering group had great communication and organization for the most part.
- Strong teamwork. Everyone banded together to get things done.
- The LAE Leadership and coordinators. Ability to adapt to changing needs based on feedback.
 Innovation.
- Better communication.
- The move to Mega Shelter.
- Very good coordination among governmental agencies and NGOs.
- Strong attempts to coordinate among City of Austin and Travis County staff to ensure service provision to guests.
- Determined effort to locate needed resources for guests.
- Mega Shelter having FEMA and Social Services co-located to support guests in transitioning to other housing.
- Excellent response and coordination of the Mental Health Authority Integral Care for guests.
- Just how quick 3-1-1 was able to adapt and advertise the 3-1-1 number and capture statistics on behalf of department who were assisting displaced hurricane survivors.
- EMCs were willing to listen and correct actions. City and County seemed to work well together.
- Local collaborations were very helpful.
- The use of EZ Text app made a monumental improvement to coordinating and scheduling shelter managers.

- Many dedicated, hard-working and smart people were responding and working long hours with great passion for their work.
- Everyone was very focused on helping people that evacuated.
- Hands-on training and partnership went very well.
- Everyone involved seemed very willing to do their part and help in any way possible.
- Moving from small to Mega Shelter smoothly.
- Through quick guidance and communication, all involved departments were able to provide information regarding employee hours (which was also verified through payroll) and other costs. Paper logs were prepared due to the possibility of power outages, using standardized forms that were created in house.
- Leads in logistics were great to work with. They helped with making sure we stayed on track.
- The dedication of the staff to get out there and get it done.
- The City of Austin and Travis County response activities were conducted well.

Respondents were asked to identify any areas for improvement observed across the entirety of the response to Hurricane Harvey that they had not yet noted during the course of this survey. Respondents to this question were subsequently prompted to identify how this area could be improved or corrected. Selected individual responses are shown in Table 2 with the area of improvement listed in the left column, and the corresponding corrective action listed in the right column (where applicable). Where possible, responses are represented as entered by the respondent:

Table 2: Response Stakeholder Survey

Area of Improvement	Suggested Corrective Action
There needs to be a formalized process where teams around the city are prepared to activate and will receive some form of compensation for activating. Response to a long-duration emergency needs to be more flexible and fluid.	This requires surge personnel from around the city, from among regional partners (especially IMTs) to supplement public safety and emergency management staff, and contracted assistance. These will make the response more efficient, as well as providing adequate financial and documentation assistance to hold up to audits. There needs to be more executive/senior-level personnel trained and ready to serve as Incident Commanders at the shelters and mega shelter.
There were services available at the MARC and Mega Shelter that folks who were there did not seem to be aware of. A better process of disseminating info both to the residents and the workers would be great.	Better training.
The different agency needs at Mega Shelter exceeded the space we had. Space wasn't used efficiently for the limited real estate we had. This had to be constantly monitored and corrected.	[No response provided]

Area of Improvement	Suggested Corrective Action
How to get connected to information sooner? What is the process to get my organization's volunteers involved?	Website with this information.
We had requests for assets from the State that we turned down due to a perception that it would become difficult to backfill those personnel. There is no reason that an organization the size of ATC EMS should not be able to deploy a Swift Water Rescue Boat Squad, the AMBUS, an Ambulance Strike Team, and several overhead personnel. This may require a modification to normal staffing such as transitioning small teams like special operations to "A/B" type staffing to backfill deployed personnel. This is acceptable and should be embraced, a standard planning assumption for disaster response should be a deployment of 10% of our resources.	Plan for a 10% deployment of resources during a disaster, embrace the opportunity to exercise this.
We need to meet with American Red Cross to fully delineate responsibilities.	[No response provided]
Interagency notification of deployments throughout Travis County.	[No response provided]
Some people left their pets behind at the shelter where they were staying.	People bringing pets to the shelter should get an extra wrist band that indicates that this person has a pet with them in the shelter. That way, when they are leaving, it's easier to monitor if they are taking their pet with them and not leaving their pet behind.
Confusing that CASHP EOC command organization did not follow ICS training.	If City of Austin and Travis County use their own model, it would be beneficial to have training on their structure for those groups that will be in EOC or interact with command. Need a clear chart of command structure & who is in each role & on duty.
Proactive training with respect to Mega Shelter and communication with State Operations Center.	Participate in Hurricane State Training Opportunities.
WebEOC connectivity.	[No response provided]
The mental health staff should be more prominent. There were a number of guests that needed some help but didn't know who to contact. Should not bring shelter guests into a secured area.	Make secure areas truly secure. Make volunteers abide by the restrictions.
[No response provided]	There needs to be more pre-planning involving all parties, especially the RAIC team to collect

Area of Improvement	Suggested Corrective Action
	appropriate resources/relationships (e.g., for feed, sanitation management, veterinary services) ahead of time.
[No response provided]	Utilizing and exercising regional Incident Support Personnel (members to respond to extended duration and Type III events. We never identify Type III events as Type III events and we should. Then when those events occur we should launch regional support personnel).
[No response provided]	Better communication and definition in expectations and roles.
City and County need to have non-public safety staff trained in NIMS/ICS to take over the plans, operations and logistics roles.	Provide the training and have exercises.
Processes, Communication, Technology, Staffing. Define roles.	Clearly defined and communicated SOPs, FAQs for City Departments and auxiliary agencies. Technology to track people, needs, and resources. Define roles: Case managers for case management; interpreters for interpreting. Interpreters shouldn't be placed into the role of social worker. Clearly defined roles and reporting structure overall. Job descriptions with duties and qualifications. Improved coordinated communication.
[No response provided]	I If plans were a little more specific versus being so broad.
No coordinated database regarding status of guests; paper and e-mail were utilized very inefficiently; led to confusion; duplication; information lost between shifts; issues escalating to a crisis that could have been avoided. Distribution of items to guests to ease their stay at the shelter or support them in their transition to next living environment. There were boxes of needed items that were not distributed and no coordination to release the items. Presentation of the shutdown of the Mega Shelter was not done in the most sensitive and supportive manner; created a sense of panic and fear. Need a better method to communicate information; the sense of urgency and support the guest will receive to exit the shelter into housing. Shutdown the large resource center at the Mega Shelter before all residents had exited the shelter.	Extend resources until shelter actually closes. Increase volunteers to distribute comfort items (blankets, towels, tooth brushes). Integrated case management data base that allows information to be entered on each guest that covers their medical condition; mental health needs; contact person; exit plan; FEMA status; and latest person to provide support. If have children ages and date of birth, able to cross reference family members that shared households at time of evacuation; also, resource distribution to the guests.

Area of Improvement	Suggested Corrective Action
Decrease in access to on-site of medical care as the mega shelter was winding down; should have medical resources available on-site until the last person exits the shelter	
Adding additional response plans based on scale and scope of storm.	The current plan is more limited in scope in comparison to how big and widespread Harvey actually was.
The deployment of external "case managers" through the FEMA contract and the out-of-town Red Cross volunteers doing casework were very problematic. They did not add value to the local case management we already had established in the Mega Shelter and added confusion.	We meet regularly with the local Red Cross team. If they cannot provide case management, they should not bring in non-local volunteers. I would like to see FEMA coordinate with us before bringing in contracted case managers who do not know local resources or have any monetary resources to assist evacuees.
Needing more communication from other agencies.	Meeting at beginning of shifts.
logistics needs a better way of tracking items; also, communication among the shelter and EOC needs to be enhanced. all requests need to go to one person/office instead of individuals calling in favors or requests.	[No response provided]
[No response provided]	Recognition activity for individuals who contributed to disaster relief efforts like an eighthour administrative leave.
[No response provided]	Practice.
Triggers for release of local assets to support larger response and support.	Establish triggers that allow lower level management/leadership to execute MOU's previously secured.
	Check lists, agreement on what will be used and how to capture expenditures/data for reimbursement.
Communication, white boards made it a bit tough to keep track of several requests coming in. Especially when it came to hospital beds, health needs.	knowing who can provide what and how much and how long they need to get it.
Need an electronic timesheet for asset tracking and time that does not require electricity of communications and uploads to a database once it has been connected to appropriate communications and electricity. This would be good for deployments or shelter activities. A system similar to the voting system here in Travis County.	A database up front for each respective area that connects to the Emergency Management office for their reporting.

Area of Improvement	Suggested Corrective Action
Make one decision about a shelter. The wasted resources at the convention center was embarrassing.	[No response provided]
Communication, who is doing what with district, city, county. Red Cross should be available for the walk-throughs.	Communication and proper assignments (with a backup person in case the assigned person is not available).
There needs to be a "seat at the table" to represent people with disabilities (of all kinds).	Centralized place to give/receive information. Texting system. List of who was in charge, and where. List of ongoing needs that can be accessed by all.
Funding process for emergency deployment.	Having "emergency ProCard users" already activated; bettering and documenting the process we had to create for securing per diems for our deployment.
One of the utilities staff were asked to serve in the EOC. A civilian with underlying health conditions, was sent out into the storm to purchase blankets without a ProCard and in a personal vehicle, and without any training, experience or communications other than her own cell phone. This was while the city had active messaging which warned "don't go out in the storm unless absolutely necessary". This was totally inappropriate and dangerous and should not have been done.	[No response provided]
Formalization of staff sign in at CASHP and Mega Shelter.	Use IS-211 or WebEOC to capture sign in and sign out.
Need to more clearly define the roles of the Mega Shelter Manager and the Mega Shelter Incident Commander.	Many times, the Incident Commander was trying to resolve shelter resident's problems and not viewing the shelter operations as a whole.
Feel more information was needed regarding contracts that were available for use.	[No response provided]

Accomplishments and Praise

Finally, respondents were asked to identify one area of the Hurricane Harvey response of which they are most proud. 75 respondents answered this question; and while each response offered unique praise, common themes emerged among respondents. Respondents indicated a high level of dedication and compassion among all responding personnel. Multiple respondents observed that every single person they worked with was of a single mind to support the victims of Harvey, regardless if that person was involved in case management, language access, EOC operations, public safety, or any other aspect of the response. The overwhelming willingness to help, it was noted, also extended to countless private citizens across the CAPCOG region.

Hurricane Harvey After Action Report

Austin | Travis County

Several respondents indicated pride in the mutual aid response that the City and the County provided to impacted communities. Others noted that the coordination between the City and the County and their responding partners across the region was remarkable. Teamwork was a common theme.

However, more than any other subject, respondents noted the innovation with which responding staff from the City, the County, and their regional partner problem-solved, particularly when circumstances were so extreme that no plan existed to guide some aspects of the response. Many of these same responses identified securing an alternative facility for the Mega Shelter—a process which some respondents indicate would otherwise take nearly a year to complete—as a crowing accomplishment for the City and the County. As one respondent observed, "We accomplished what needed to be done even if it was not the way we thought it would be done."

Action Prioritization Ranking

Overview

As part of the after-action process, the Project Management Team invited stakeholders and actors to participate in a series of 13 Focus Area Meetings to discuss critical elements of the response. At the conclusion of each Focus Area Meeting⁴, participants were provided a menu of three to four key action items identified during the meeting and were asked to select the one action item which should receive priority over the others. The results of these polls are captured in this appendix and are organized by Focus Area.

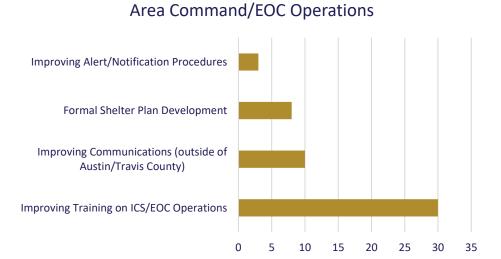
⁴ At the conclusion of the Cost Recovery Focus Area Meeting, two polls were conducted. The first poll addressed cost recovery action items while the second poll addressed action items regarding logistics.

Area Command/Emergency Operations Center (EOC) Operations: Planning, Logistics, Purchasing, Demobilization, and Finance Operational Coordination

Area Command/EOC Operations

Discussion at the Area Command/Emergency Operations Center (EOC) Focus Area Meeting indicated that potential action items include improving alert procedures to more efficiently notify EOC staff of activations, formally revising and developing shelter plans, improving communications between the City and County and their external partners (such as the State), and improving and implementing regularly scheduled training and/or staff development to improve understanding of ICS and EOC operations among potential EOC staff. Of the 51 respondents to the poll, 30 indicated that improving and implementing regularly scheduled training and/or staff development to improve understanding of ICS and EOC operations among potential EOC staff should be a priority action item for the City and the County. Figure 21 summarizes the responses to this poll.

Figure 21: Action Item Prioritization: Area Command/EOC Operations



Page 129

Logistics

Discussion at the Cost Recovery Focus Area Meeting indicated that potential action items regarding logistics include developing WebEOC enhancements and associated training, improving ProCard management processes (for the City) and establishing the use of ProCards (for the County), training on roles and responsibilities within the Logistics Section at the EOC, and developing a resource inventory and tracking system. Of the 11 respondents to the poll, six indicated that developing a resource inventory and tracking system should be a priority action item for the City and the County. **Error! Reference source not found.** summarizes the responses to this poll.

Action Item Prioritization: Logistics Developing WebEOC Enhancements and Training Improving ProCard Management (for the City) and Establishing ProCard Use (for the County) Training on EOC Logistics Roles and Responsibilities Developing a Resource Inventory and **Tracking System** 4 5 6 7 1 2 3

Figure 22: Action Item Prioritization: Logistics

Capital Area Shelter Hub Plan (CASHP)

Discussion at the Capital Area Shelter Hub Plan (CASHP) Area Meeting indicated that potential action items include planning for feeding capacity, conducting CASHP shelter assessments, conducting additional CASHP shelter trainings, and updating CASHP shelter plans to include tool development. Of the 46 respondents to the poll, 19 indicated updating CASHP shelter plans to include tool development should be a priority action item for the City and the County. Figure 23 summarizes the responses to this poll.

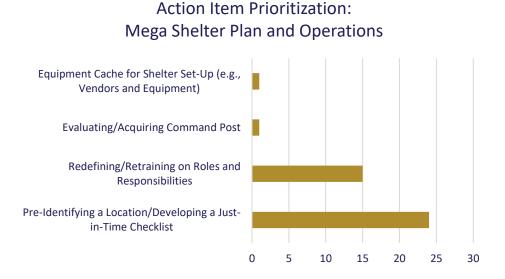
Figure 23: Action Item Prioritization: Capital Area Shelter Hub Plan (CASHP)



Mega Shelter Plan and Operations

Discussion at the Mega Shelter Plan and Operations Focus Area Meeting indicated that potential action items developing an equipment cache (both in terms of vendors and equipment) for shelter set-up, evaluating the existing mobile command post (CV-1) and acquiring a new mobile command post if necessary, redefining and retraining on Mega Shelter plan roles and responsibilities, and pre-identifying a Mega Shelter location and developing a just-in-time checklist to support shelter selection. Of the 41 respondents to the poll, 24 indicated a that pre-identifying a Mega Shelter location and developing a just-in-time checklist to support shelter selection should be a priority action item for the City and the County. Figure 24 summarizes the responses to this poll.

Figure 24: Action Item Prioritization: Mega Shelter Plan and Operations



Pet Shelter Services

Discussion at the Pet Shelter Services Focus Area Meeting indicated that potential action items include planning for non-traditional animals (such as snakes or exotic birds), engaging and educating regional partners to more fully leverage available regional resources (such as school district resources that may be available for sheltering exotic pets), training for pet and small animal sheltering operations for identified shelter staff, and developing standing contracts for pet and small animal sheltering resources and services (to alleviate stress on City of Austin Animal Services and to support shelter staff focus on the needs of human guests). Of the 21 respondents to the poll, nine indicated that standing contracts for pet and small animal sheltering resources and services should be a priority action item for the City and the County. Figure 25 summarizes the responses to this poll.

Action Item Prioritization:
Pet Shelter Services

Regional Partner Engagement/Education

Animal Sheltering Operations Training for Shelter Staff

Standby Contracts for Animal Sheltering Resources and Services

Response

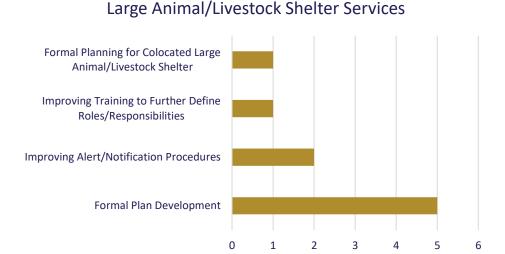
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Figure 25: Action Item Prioritization: Pet Shelter Services

Large Animal/Livestock Shelter Services

Discussion at the Large Animal/Livestock Shelter Services Focus Area Meeting indicated that potential action items include formal planning for colocating animal owners at the Large Animal/Livestock Shelter, improving and implementing regular training on specific roles and responsibilities for Large Animal/Livestock Shelter staff, improving alert procedures to more efficiently notify Large Animal/Livestock Shelter staff of activations, and formally revising and developing shelter plans specific to the Large Animal/Livestock Shelter. Of the nine respondents to the poll, five indicated that formally revising and developing shelter plans specific to the Large Animal/Livestock Shelter should be a priority action item for the City and the County. Figure 26 summarizes the responses to this poll.

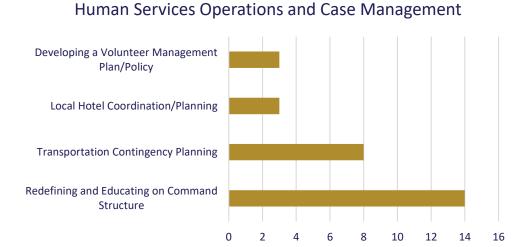
Figure 26: Action Item Prioritization: Large Animal/Livestock Shelter Services



Human Services Operations and Case Management

Discussion at the Human Services Operations and Case Management Focus Area Meeting indicated that potential action items include developing a volunteer management plan and/or policy, coordinating and planning with local hotels to provide case management for guests relocated to hotels, developing transportation contingency plans, and redefining the human services command structure and further educating human services staff on command structure. Of the 28 respondents to the poll, 14 indicated that redefining the human services command structure and further educating human services staff on command structure should be a priority action item for the City and the County. Figure 27 summarizes the responses to this poll.

Figure 27: Action Item Prioritization: Human Services Operations and Case Management

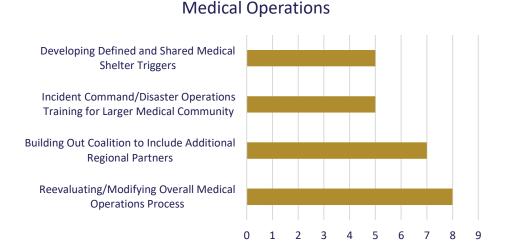


Page 135

Medical Operations

Discussion at the Medical Operations Focus Area Meeting indicated that potential action items include developing defined and shared medical shelter triggers, providing incident command and disaster operations training for all members of the larger medical community, building out the Capital Area Public Health and Medical Preparedness Coalition to include additional regional partners, and reevaluating and modifying the overall medical operations process. Of the 25 respondents to the poll, eight indicated that reevaluating and modifying the overall medical operations process should be a priority action item for the City and the County. Figure 28 summarizes the responses to this poll.

Figure 28: Action Item Prioritization: Medical Operations

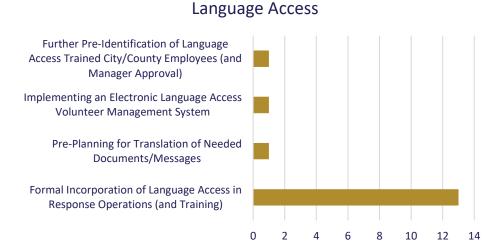


Page 136

Language Access

Discussion at the Language Access Area Meeting indicated that potential action items include further preidentification of language-access-trained City and County employees (and securing supervisory approval), implementing and electronic language access volunteer management system, better pre-planning for the translation of documents and pre-scripted messages used in shelter operations, and formally incorporating language access into response operations and associated trainings. Of the 16 respondents to the poll, 13 indicated that formally incorporating language access into response operations and associated trainings should be a priority action item for the City and the County. Figure 29 summarizes the responses to this poll.

Figure 29: Action Item Prioritization: Language Access



Page 137

Public Information

Discussion at the Public Information Focus Area Meeting indicated that potential action items include planning for media coordination during shelter operations, establishing coordinated pre-event messaging regarding public information policies, developing coordinated guidance on responses to expected questions, and providing a dedicated location in the JIC as a part of improvements to the EOC. Of the 25 respondents to the poll, nine indicated that providing a dedicated location in the JIC as a part of improvements to the EOC should be a priority action item for the City and the County. Figure 30 summarizes the responses to this poll.

Public Information

Media Coordination Planning for Shelters

Establishing Coordinated Pre-Event Messaging on Public Information Policies

Developing Coordinated Guidance on Responses to Expected Questions

Providing a Dedicated Location for the JIC as Part of EOC Improvements

0 2 4 6 8 10

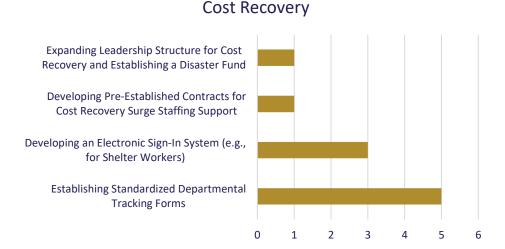
Figure 30: Action Item Prioritization: Public Information

Cost Recovery

Discussion at the Cost Recovery Focus Area Meeting indicated that potential action items regarding cost recovery include expanding the leadership structure for cost recovery and establishing a disaster fund, developing pre-established contracts for cost recovery surge staffing support, developing an electronic sign-in system for shelter workers to improve record-keeping, and establishing standardized departmental tracking forms for resource requests and expenses. Of the 10 respondents to this poll, five indicated that establishing standardized departmental tracking forms for resource requests and expenses should be a priority action item for the City and the County. Figure 31 summarizes the responses to this poll.

Action Item Prioritization:

Figure 31: Action Item Prioritization: Cost Recovery

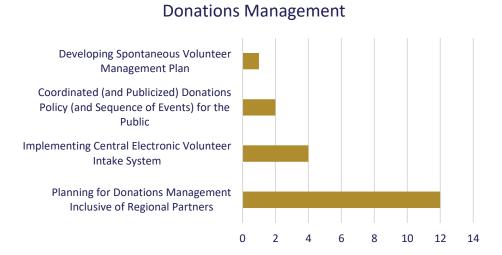


Page 139

Donations Management

Discussion at the Donations Management Focus Area Meeting indicated that potential action items include developing a management plan for spontaneous volunteers, developing a coordinated and publicized donations policy for the public to include a sequence of events, recruiting volunteers through a central electronic volunteer intake system, and further donations management planning inclusive of regional partners. Of the 19 respondents to the poll, 12 indicated that donations management planning inclusive of regional partners should be a priority action item for the City and the County. Figure 32summarizes the responses to this poll.

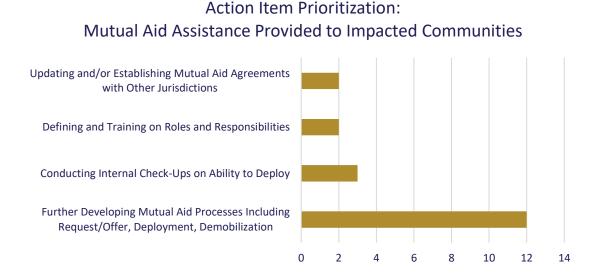
Figure 32: Action Item Prioritization: Donations Management



Mutual Aid Assistance Provided to Impacted Communities

Discussion at the Mutual Aid Assistance Provided to Impacted Communities Focus Area Meeting indicated that potential action items include updating and/or establishing mutual aid agreements with other jurisdictions, defining roles and responsibilities in arranging the provision of mutual aid assistance and incorporating those definitions into training, conducting internal check-ups to assess ability to deploy, and further developing processes for the provision of mutual aid assistance including requests and offers for assistance, deployment, and demobilization. Of the 19 respondents to the poll, 12 indicated that further developing processes for the provision of mutual aid assistance including requests and offers for assistance, deployment, and demobilization should be a priority action item for the City and the County. Figure 33 summarizes the responses to this poll.

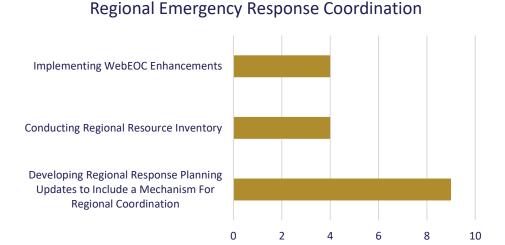
Figure 33: Action Item Prioritization: Mutual Aid Assistance Provided to Impacted Communities



Regional Emergency Response Coordination

Discussion at the Regional Emergency Response Coordination Focus Area Meeting indicated that potential action items include implementing WebEOC enhancements, conducting a regional resource inventory, and developing regional response planning updates to include a mechanism for regional coordination. Of the 17 respondents, nine indicated that developing regional response planning updates to include a mechanism for regional coordination should be a priority action item for the City and the County. Figure 34 summarizes the responses to this poll.

Figure 34: Action Item Prioritization: Regional Emergency Response Coordination



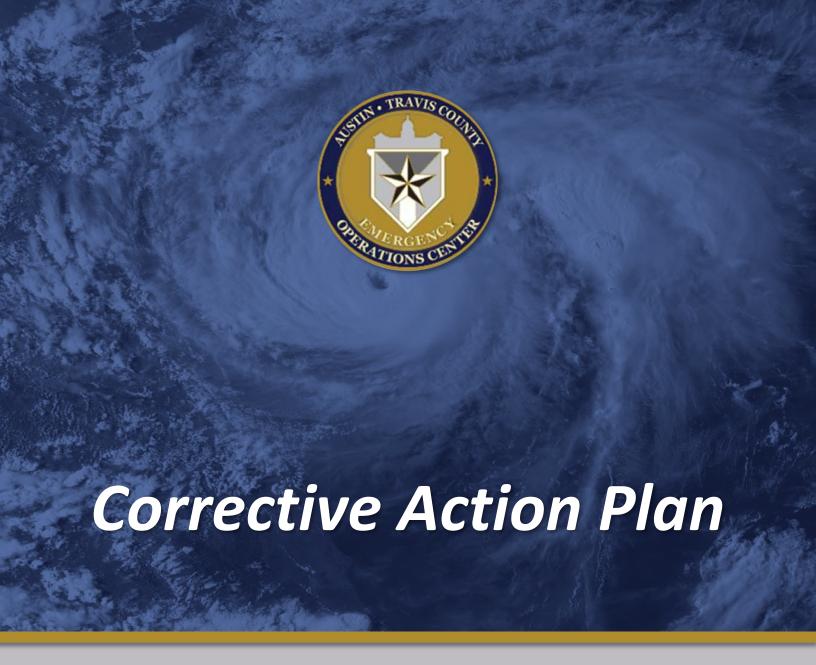
Acronyms and Abbreviations

Table 3: Acronyms and Abbreviations

Acronym	Meaning
AAC	After Action Conference
AAR	After Action Report
ADA	Americans with Disabilities Act
ADRN	Austin Disaster Relief Network
AE	Austin Energy
AFD	Austin Fire Department
AHS	Austin Humane Society
AISD	Austin Independent School District
APH	Austin Public Health
APD	Austin Police Department
ARC	American Red Cross
ASL	American Sign Language
ATC EMS	Austin-Travis County Emergency Medical Services
CAECD	Capital Area Emergency Communications District
CAMOC	Capital Area Medical Operations Center
CAP	Corrective Action Plan
CAPCOG	Capital Area Council of Governments
CASHP	Capital Area Shelter Hub Plan
CATRAC	Capital Area Trauma Regional Advisory Council
СМО	City of Austin Office of the City Manager
COA	City of Austin
СРІО	City of Austin Communications and Public Information Office
CTECC	Austin/Travis County Combined Transportation, Emergency & Communications Center
СТМ	City of Austin Communications and Technology Management
CTSSC	Central Texas School Safety Consortium
CV-1	Command Vehicle-1
DDC	Disaster District Committee
EMC	Emergency Management Coordinator

Acronym	Meaning
EOC	Emergency Operations Center
ESD	Emergency Services District
ESF	Emergency Support Function
ETN	Emergency Tracking Network
FEMA	Federal Emergency Management Agency
GATN	Greater Austin Telecommunications Network
HRD	City of Austin Human Resources Department
HRMD	Travis County Human Resources Management Department
HSEM	City of Austin Office of Homeland Security and Emergency Management
ICP	Incident Command Post
ICS	Incident Command System
IGRO	City of Austin Intergovernmental Relations Office
IMT	Incident Management Team
ISD	Independent School District
JFO	Joint Field Office
JIC	Joint Information Center
LAC	Language Access Coordinator
MAFN	Medical and Functional Needs
MARC	Multi-Agency Resource Center
МОС	Medical Operations Center
NGO	Non-Governmental Organization
ОРІ	Over-The-Phone Interpretation
ORES	City of Austin Office of Real Estate Services
PIO	Public Information Officer
PPD	Presidential Policy Directive
RAIC	Regional Animal Issues Committee
SOC	State Operations Center
STAR	State of Texas Assistance Request
ТАНС	Texas Animal Health Commission
TC	Travis County
TC FMO	Travis County Fire Marshal

Acronym	Meaning
TC HHS	Travis County Health & Human Services
TC IGR	Travis County Intergovernmental Relations
TC ITS	Travis County Information Technology Services
TC OEM	Travis County Office of Emergency Management
ТС РВО	Travis County Planning & Budget Office
TC SO	Travis County Sheriff's Office
TC TNR	Travis County Transportation & Natural Resources
TDEM	Texas Division of Emergency Management
TEMAT	Texas Emergency Management Assistance Teams
TIFMAS	Texas Intrastate Fire Mutual Aid System
VAL	Voluntary Agency Liaison
VERT	Veteran Emergency Response Team
VOAD	Voluntary Organizations Active in Disaster
VRI	Video Remote Interpretation











Corrective Action Plan

	Area Command / EOC							
Rec. #	Corrective Action(s)	Report Location	Responsible Agencies (Primary)	Responsible Agencies (Supporting)	Target Completion Date			
	Trainin	g						
1	Establish a protocol for position shadowing in the EOC for new personnel.	1.1	HSEM, TC OEM		10/2018			
2	Develop and facilitate year-round trainings with City and County Personnel pre-identified to serve in response operations.	1.3, 1.14	HSEM, TC OEM		10/2018			
3	Develop a protocol to ensure regular pre-incident ICS training, including, at minimum, IS-100, IS-200, and IS-700, for all potentially responding personnel.	1.13, 10.14	HSEM, TC OEM	HRD, HRMD	10/2018			
4	Develop and facilitate year-round trainings with nontraditional response partners pre-identified to serve in response operations.	1.3	HSEM, TC OEM	EOC Branches	10/2018			
5	Identify a method to allocate time for regular, year-round trainings.	1.7	HSEM, TC OEM	HRD, HRMD	04/2019			
	Staffin	g						
6	Develop and sustain a sufficient base of City, County, and regional partner employees to fill positions within the response operational structure.	1.7, 1.14	HSEM, TC OEM	City/County Public Safety Agencies, CATRAC, EOC Branches	10/2018			
7	Develop or revise policies to address timekeeping and compensation for exempt City and County employees during an activation.	1.7, 1.15, 2.11, 3.13, 4.5, 5.11	HRD/HSEM, HRMD/TC OEM		10/2018			
8	Establish standby contracts for staffing surge support and other related emergency management consulting services.	1.9	HSEM, TC OEM	City/County Purchasing Offices	04/2019			

	Area Command / EOC							
Rec. #	Corrective Action(s)	Report Location	Responsible Agencies (Primary)	Responsible Agencies (Supporting)	Target Completion Date			
9	Establish standby contracts with staffing companies for temporary support as backfill for personnel serving the response and identify other routes for personnel support.	1.9	HSEM, TC OEM	City/County Purchasing Offices	04/2019			
10	Identify and sustain a list of retired personnel willing and able to support in response operations.	1.9	HSEM, TC OEM	HRD, HRMD	04/2019			
11	Explore avenues for obtaining an emergency management experienced and dedicated GIS analyst to assist in response operations.	1.9	HSEM, TC OEM		10/2019			
12	Revise plans to include seeking support from regional IMTs early-on in response.	1.10	HSEM, TC OEM	CAPCOG	10/2018			
13	Improve the collective understanding among partner agencies of the role and time commitment of staff responding in the EOC.	1.17	HSEM, TC OEM, City/County Executives, CMO	EOC Branches	04/2019			
	Operatio	ons						
14	Create digital copies of ICS forms that are programmed to auto load duplicated information into all pages that require the same information.	1.2	HSEM, TC OEM, CAPCOG	CATRAC, CTM, TC ITS	04/2019			
15	Revise Planning Section operations for a battle rhythm that includes a second mandatory and inclusive mid-operational period briefing per operational period.	1.18, 7.6	HSEM, TC OEM	CAPCOG	10/2018			
16	Establish an accessible online document library to include ICS forms, EOC job aids, and any other necessary EOC documents.	1.19, 10.14	HSEM, TC OEM	CAPCOG	10/2018			
17	Develop simple job aids and tools for use by responding personnel in the EOC.	1.14, 10.14	HSEM, TC OEM	EOC Branches, CAPCOG	04/2019			
18	Assess the viability of CV-1 as an Incident Command Post. If it is continued to be used, identify and address necessary technological upgrades to the vehicle.	3.20	APD, AFD, ATC EMS, HSEM, City Fleet Services, CMO	СТМ	10/2019			
19	Evaluate and enhance the process for citywide coordination. Incorporate this into applicable plans.	9.8	HSEM, CPIO	Mayor's Office, IGRO, CMO, TC OEM	04/2019			

	Area Command / EOC						
Rec. #	Corrective Action(s)	Report Location	Responsible Agencies (Primary)	Responsible Agencies (Supporting)	Target Completion Date		
20	Coordinate to provide a recommendation to TDEM for necessary ETN improvements, and if necessary, explore alternate technologies for the functions ETN is intended to fill.	6.11, 7.4	HSEM, TC OEM	CATRAC, CAPCOG, CTM, TC ITS	10/2018		

	Activation Notifications							
Rec. #	Corrective Action(s)	Report Location	Responsible Agencies (Primary)	Responsible Agencies (Supporting)	Target Completion Date			
21	Implement a wireless messaging system to offer notifications to all City and County personnel through SMS text, email, or traditional pagers.	1.4	HSEM, TC OEM	All City/County Agencies, CAPCOG, CAECD	10/2018			

	Resource Management							
Rec. #	Corrective Action(s)	Report Location	Responsible Agencies (Primary)	Responsible Agencies (Supporting)	Target Completion Date			
22	Revise pertinent response plans (e.g. shelter plans) to include a baseline list of resource needs for sheltering operations, as well as provisions for scaling up or down.	1.20	HSEM, TC OEM	CASHP Core Team, RAIC, City/County Purchasing Offices	10/2019			
23	Establish an existing inventory of resources within the CAPCOG region, which, upon activation of necessary plans, can be compared to the baseline list to identify resource gaps.	1.20	CAPCOG	HSEM, TC OEM, CATRAC, CASHP Core Team, RAIC	10/2019			

	Resource Management							
Rec. #	Corrective Action(s)	Report Location	Responsible Agencies (Primary)	Responsible Agencies (Supporting)	Target Completion Date			
24	Determine the requirements for an electronic tool to track supplies and resources within the region, including shelter-specific supplies and resources. Assess the suitability of WebEOC to meet the identified requirements. If found deficient, identify alternative methods for resource tracking that address the identified requirements.	1.12, 1.21, 2.29, 3.25,13.7	CAPCOG, CTM, TC ITS	CASHP Core Team, CATRAC, RAIC, HSEM, TC OEM, APD, AFD, TC SO, TC FMO, City/County Purchasing Offices	10/2019			

	Improvement Area: WebEOC							
Rec. #	Corrective Action(s)	Report Location	Responsible Agencies (Primary)	Responsible Agencies (Supporting)	Target Completion Date			
25	Identify WebEOC self-registration eligible positions in the EOC. Document the procedure to allow EOC personnel to self-register for a WebEOC position and publish/exercise just-in-time use instructions for EOC personnel.	1.26	CAPCOG	HSEM, TC OEM	04/2019			
26	Provide WebEOC trainings to potential users on a regular basis, including any specific practices, such as resource management.	1.21, 1.26, 10.14	CAPCOG	HSEM, TC OEM	04/2019			
27	Assign an employee with sufficient WebEOC experience as a WebEOC administrator to the EOC during responses.	1.26	HSEM, TC OEM, CAPCOG	CTM, TC ITS	10/2018			
28	Revise response plans to enable identified appropriate users to view STAR requests.	12.6	CAPCOG	HSEM, TC OEM	04/2019			

	Purchasing / Procurement							
Rec. #	Corrective Action(s)	Report Location	Responsible Agencies (Primary)	Responsible Agencies (Supporting)	Target Completion Date			
29	Identify personnel who may need purchasing capabilities during an emergency response and develop a practice to update this list yearly, prior to hurricane season. (NOTE: Separate rec TBD for County)	1.22, 10.5	City/County Purchasing Offices	EOC Branches	10/2018			
30	Issue ProCards to the identified individuals pre-disaster in the "dormant" status.	1.22, 10.5	City Purchasing Office	HRD	10/2018			
31	Explore efficient mechanisms for City departments to notify the Purchasing Office of deploying/mobilized personnel for ProCard use.	1.22, 10.5	City Purchasing Office	HSEM/HRD	10/2018			
32	Conduct associated ProCard training on a regular basis to all with such access in the City.	1.22, 10.5, 10.6	City Purchasing Office	HSEM	04/2019			

	Logistics							
Rec. #	Corrective Action(s)	Report Location	Responsible Agencies (Primary)	Responsible Agencies (Supporting)	Target Completion Date			
33	Create agreements between the City and County allowing reciprocity of drivers for City / County vehicles by the opposite jurisdiction and explore the possibility of non-City/County employees operating City/County vehicles.	1.23	City/County Fleet Services, City/County Legal Depts.	HSEM, HRD/Risk Management, TC OEM, HRMD/ Risk Management	04/2019			
34	Pre-identify and maintain a list of City and County staff members to be qualified (or trained) to drive City and County vehicles and who have special licenses.	1.24	City/County Fleet Services, HRD, HRMD	HSEM, TC OEM	04/2019			
35	Establish standby contracts with moving companies for the movement of equipment and supplies.	1.24	City/County Purchasing Offices	HSEM, TC OEM, Central Texas VOAD	04/2019			

	External / Regional Coordination						
Rec. #	Corrective Action(s)	Report Location	Responsible Agencies (Primary)	Responsible Agencies (Supporting)	Target Completion Date		
36	Develop a procedure to document communication with the DDC Chair pre-event to communicate situation assessment, local intentions, and DDC intentions related to the potential/on-going hazard.	1.5, 13.2, 13.5	CAPCOG, HSEM, TC OEM		04/2019		
37	Establish a regional response structure to operate within to coordinate with the DDC when it activates and during instances in which the DDC does not activate.	1.6, 1.11, 12.10, 13.3, 13.6	CAPCOG, HSEM, TC OEM		04/2019		
38	Update resource management plans/annexes and associated department SOPs to establish a protocol for regional resource requests detailing the conditions in which resources must be returned to the home jurisdictions and the policies for compensation when resources are not returned in the identified condition.	1.11, 12.10, 13.9	CAPCOG, CATRAC	HSEM, TC OEM, APD, AFD, ATC EMS, TC SO, TC FMO, Utilities/Public Works, ISDs	04/2019		
39	Evaluate and update the <i>Capital Area Regional Response Plan</i> with input from all applicable stakeholders.	13.1	CAPCOG	HSEM, TC OEM	04/2019		
40	Develop and facilitate trainings and exercises on regional response on a regular basis.	13.1	CAPCOG	HSEM, TC OEM	04/2019		
41	Institute regularly scheduled regional conference calls, including triggers for initiating the call and incorporate this development into the <i>Capital Area Regional Response Plan</i> .	13.4	CAPCOG	HSEM, TC OEM, CATRAC	04/2019		
42	Include the development of an EOC Support Team into the Regional Response Plan revisions.	13.8	CAPCOG	HSEM, TC OEM, CATRAC	04/2019		

	Cost Recovery							
Rec. #	Corrective Action(s)	Report Location	Responsible Agencies (Primary)	Responsible Agencies (Supporting)	Target Completion Date			
43	Develop a cost recovery plan that identifies all roles, responsibilities, triggers, and operations for cost recovery functions, beginning with predisaster activities, through closeout activities. Include these practices in all pertinent response plans.	10.1, 10.10, 10.12, 10.15	HSEM, TC OEM, City/County Purchasing Offices, City/County Controller's Offices	HRMD, TC Auditor, TC HHS, TC TNR, TC SO, TC PBO	10/2019			
44	Identify and establish alternative methods for supporting response costs within the region, to include exploring a city fund and county fund and evaluating distribution of cost recovery responsibility across departments.	1.25, 10.2, 10.4	CMO, City Budget Office, TC PBO	HSEM, TC OEM, City/County Controller's Offices	10/2019			
45	Explore methods for sharing response costs between the City and the County.	1.25, 10.2, 10.4	TC Auditor, TC PBO, CMO, City Budget Office	HSEM, TC OEM, City/County Controller's Offices	10/2019			
46	Identify personnel within City departments to assist in cost recovery functions while the response is still active.	10.3	HSEM, TC OEM, City/County Purchasing Offices, City/County Controller's Offices	HRMD, TC Auditor, TC HHS, TC TNR, TC SO, TC PBO	10/2019			
47	Establish standby contracts for cost recovery staffing support.	10.7	HSEM, TC OEM, City/County Purchasing Offices	СМО	10/2019			
48	Clarify the use of reporting codes for emergency costs and departmental task orders set up to track specific types of costs, such as costs related to mutual aid, shelter operations, and response within the community.	10.11	City/County Controller's Offices		10/2019			
49	Revise WebEOC resource boards to include a field for purchase justification. Document this practice in all applicable response plans.	10.13	HSEM, TC OEM	CAPCOG	10/2019			

	Cost Recovery							
Rec. #	Corrective Action(s)	Report Location	Responsible Agencies (Primary)	Responsible Agencies (Supporting)	Target Completion Date			
50	Document the process of cataloguing mutual aid documentation through a SharePoint site and incorporate this practice into pertinent response plans.	12.2	HSEM, TC OEM		10/2019			

	Mutual Aid								
Rec. #	Corrective Action(s)	Report Location	Responsible Agencies (Primary)	Responsible Agencies (Supporting)	Target Completion Date				
51	Verify the adequacy of the reimbursement provisions of each mutual aid agreement to which the City, County, and/or partner jurisdiction are signatories.	10.16, 12.11	HSEM, TC OEM, City/County Legal Depts.	Responding Departments, CMO	04/2019				
52	Develop an FAQ document to address reimbursement questions for personnel responsible for executing agreements and for those deploying.	10.16	HSEM, TC OEM, City/County Legal Depts.	Responding Departments	04/2019				
53	Develop a Mutual Aid Plan including mobilization and demobilization protocols, as well as lines of authority for requests and practices for STAR requests.	12.1, 12.3, 12.8, 12.9	HSEM, TC OEM, City/County Legal Depts., City/County Controller's Offices	Responding Departments, CMO	04/2019				
54	Evaluate existing plans for appropriateness and adequacy of included mutual aid deployment information.	12.4	HSEM, TC OEM, City/County Legal Depts., City/County Controller's Offices	Responding Departments, CMO	04/2019				

	Mutual Aid								
Rec. #	Corrective Action(s)	Report Location	Responsible Agencies (Primary)	Responsible Agencies (Supporting)	Target Completion Date				
55	Advocate to the state level to require STAR requests to be channeled to the appropriate EOC.	12.5	HSEM, TC OEM	CAPCOG, City/County Executives	10/2018				
56	Institutionalize the use of WebEOC for recording mutual aid requests, regardless of the method of receipt.	12.7	HSEM, TC OEM	CAPCOG, City/County Executives	10/2018				
57	Develop mission ready packages for frequently requested City/County/regional resources.	12.12	HSEM, TC OEM	Responding Departments	10/2019				

	Sheltering								
Rec. #	Corrective Action(s)	Report Location	Responsible Agencies (Primary)	Responsible Agencies (Supporting)	Target Completion Date				
	Planni	ng							
58	Develop a single, scalable shelter plan with all applicable regional stakeholders.	2.3, 3.10, 6.20	HSEM, TC OEM	CASHP Core Team, Mega Shelter Planning Team, Services Team	10/2019				
59	Include methods for standing up a reception center into revised, scalable shelter plans.	2.4, 3.10	HSEM, TC OEM	CASHP Core Team, Mega Shelter Planning Team, Services Team	10/2019				

	Sheltering							
Rec. #	Corrective Action(s)	Report Location	Responsible Agencies (Primary)	Responsible Agencies (Supporting)	Target Completion Date			
60	Develop a re-entry strategy with all applicable stakeholders.	2.5, 3.11, 4.15, 6.18, 7.16	HSEM, TC OEM	CASHP Core Team, Mega Shelter Planning Team, Services Team (TC HHS as lead), Central Texas VOAD	10/2019			
61	Update practice for collecting regular census information and critical documentation and include this in revised sheltering plans and trainings.	2.14, 2.21, 3.16	HSEM, TC OEM	CASHP Core Team, Mega Shelter Planning Team, Services Team	10/2019			
62	Identify, explore, and address gaps in emergency sheltering tools and plans, such as facility plans, the establishment of uniform operational periods, and feeding capabilities.	2.6, 2.10, 2.24, 2.27, 2.28	HSEM, TC OEM	CASHP Core Team, Mega Shelter Planning Team, Services Team (TC HHS as lead), Central Texas VOAD	10/2019			
63	Develop a cross-shift debrief checklist to be included in any updated shelter manager field guides.	2.20, 6.17	HSEM, TC OEM	CASHP Core Team, Mega Shelter Planning Team, Services Team	10/2019			
64	Develop a shelter demobilization plan, including resource tracking, and incorporate into applicable trainings.	2.29, 3.25	HSEM, TC OEM	CASHP Core Team, Mega Shelter Planning Team, Services Team	10/2019			
65	Incorporate the GAATN into shelter planning.	3.2	CTM, TC ITS					

	Sheltering							
Rec. #	Corrective Action(s)	Report Location	Responsible Agencies (Primary)	Responsible Agencies (Supporting)	Target Completion Date			
66	Include regional partners and capabilities into shelter planning efforts.	3.12, 9.15	HSEM, TC OEM	CASHP Core Team, Mega Shelter Planning Team, Services Team	10/2019			
67	Re-examine the operational structure used in current shelter plans. If revisions are identified, incorporate the revised operational structure into the shelter plan and associated training activities.	3.17	HSEM, TC OEM	CASHP Core Team, Mega Shelter Planning Team, Services Team	10/2019			
68	Identify a planning team for revising credentialing protocols and improve current credentialing protocols and processes.	3.21, 6.5, 7.10	HSEM, TC OEM	CASHP Core Team, Mega Shelter Planning Team, Services Team	10/2019			
69	Include provisions for security assignments into shelter planning efforts.	3.23	HSEM, TC OEM, APD, TC SO, TC Constables	CASHP Core Team, Mega Shelter Planning Team, Services Team	10/2019			
70	Include provisions for standard signage and takeaway sheets within the shelter into shelter plan revisions.	6.19	HSEM, TC OEM	CASHP Core Team, Mega Shelter Planning Team, Services Team	10/2019			
71	Revise shelter and plans and relevant tools to be more flexible to different types of disasters, including contingency location for colocated pet and large animal shelters.	4.11	HSEM, TC OEM	CASHP Core Team, Mega Shelter Planning Team, Services Team, RAIC	10/2019			

	Sheltering							
Rec. #	Corrective Action(s)	Report Location	Responsible Agencies (Primary)	Responsible Agencies (Supporting)	Target Completion Date			
	Shelter S	ites		.,,				
72	Develop a just-in-time shelter site selection checklist.	3.4	HSEM, TC OEM	CASHP Core Team, Mega Shelter Planning Team, Services Team	10/2019			
73	Develop a shelter pre-identification checklist.	3.4, 3.7	HSEM, TC OEM	CASHP Core Team, Mega Shelter Planning Team, Services Team, ORES	10/2019			
74	Pre-identify additional large population shelter locations and incorporate identified site needs into shelter plans, including special considerations for isolated spaces. If possible, identify, obtain, and equip a facility that has a dedicated primary use as a mega shelter.	3.3, 3.4, 3.8	HSEM, TC OEM, ORES		10/2019			
75	Maintain an understanding of available regional facilities for potential mega shelter operations.	3.5	HSEM, TC OEM, ORES, TC Facilities Management		10/2019			
76	Develop a list of all stakeholders to include in the shelter site selection process, to also include the selection of pet and large animal shelter locations.	3.5, 3.6, 3.22	HSEM, TC OEM	CASHP Core Team, Mega Shelter Planning Team, Services Team, RAIC, ORES	10/2019			
77	Develop a procedure for coordination with state and federal counterparts to coordinate facility needs and maintain situational awareness during the shelter activation process.	3.9	HSEM, TC OEM, IGRO		10/2018			

	Sheltering								
Rec. #	Corrective Action(s)	Report Location	Responsible Agencies (Primary)	Responsible Agencies (Supporting)	Target Completion Date				
	Trainin	g							
78	Establish a protocol for position shadowing in shelters for new personnel.	2.1	CASHP Core Team, Mega Shelter Planning Team, Services Team	HSEM, TC OEM	10/2018				
79	Develop and facilitate year-round trainings with City and County Personnel pre-identified to serve in shelter operations, including animal shelter operations and training for those identified to serve as shelter managers.	2.1, 2.16, 3.1, 3.13, 4.3	CASHP Core Team, Mega Shelter Planning Team, Services Team	HSEM, TC OEM, ARC, ISDs	10/2019				
80	Develop and facilitate trainings with personnel responding from partner agencies.	2.16, 3.1, 3.13, 4.3, 18, 23	CASHP Core Team, Mega Shelter Planning Team, Services Team	HSEM, TC OEM	10/2019				
81	Develop a protocol to ensure regular pre-incident ICS training, for all personnel potentially serving in shelter operations.	2.17, 3.13	CASHP Core Team, Mega Shelter Planning Team, Services Team	HSEM, TC OEM, ARC, ISDs	10/2019				
82	Develop and facilitate year-round trainings with school administrators at pre-identified shelter locations.	2.8, 18	CTSSC	CASHP Core Team, Mega Shelter Planning Team, Services Team	10/2019				
83	Develop a just-in-time training for responding shelter staff, including a more robust shelter manager-specific training.	1.8, 1.16, 2.12, 2.19, 2.23, 3.14, 3.18, 7.5, 8.13	CASHP Core Team, Mega Shelter Planning Team, Services Team	HSEM, TC OEM, ARC, ISDs	10/2019				
84	Identify essential shelter personnel and provide this group with training on a more frequent basis to enhance cohesion among responding personnel.	2.22	CASHP Core Team, Mega Shelter Planning Team, Services Team	HSEM, TC OEM	10/2019				

	Sheltering							
Rec. #	Corrective Action(s)	Report Location	Responsible Agencies (Primary)	Responsible Agencies (Supporting)	Target Completion Date			
85	Develop a method for allocating time for regular, year-round shelter operations trainings, including animal sheltering operations.	2.11, 3.13, 4.3, 4.5, 5.11	CASHP Core Team, Mega Shelter Planning Team, Services Team, RAIC	HSEM, TC OEM	10/2019			
	Operation	ons	-					
86	Explore platforms for electronic sign-in for all shelter personnel. If procured, develop associated trainings and procedures for delivering training.	2.21, 3.16, 6.9, 10.8	CTM, TC ITS	CASHP Core Team, Mega Shelter Planning Team, Services Team, ARC, HRD, HRMD	04/2019			
87	Procure and utilize a singular electronic registration process with established information permissions and all necessary information for casework included.	6.10, 6.12, 6.15, 7.8	CTM, TC ITS	CASHP Core Team, Mega Shelter Planning Team, Services Team, ARC	04/2019			
88	Institute a regularly scheduled regional call when sheltering operations are undertaken within the region.	2.26	CASHP Core Team, Mega Shelter Planning Team, Services Team, CAPCOG		10/2019			
89	Establish an accessible online document library to include ICS forms, shelter job aids, and any other necessary shelter-related documents and tools.	2.7, 6.8	CTM, TC ITS	CASHP Core Team, Mega Shelter Planning Team, Services Team	10/2018			
90	Include mandatory and inclusive meetings at the beginning and end of each operational period without exception to, at minimum, identify available resources and define roles for personnel across all responding agencies or groups, into the established shelter battle rhythm.	2.15, 7.6	CASHP Core Team, Mega Shelter Planning Team, Services Team		10/2019			

	Sheltering							
Rec. #	Corrective Action(s)	Report Location	Responsible Agencies (Primary)	Responsible Agencies (Supporting)	Target Completion Date			
91	Develop a shelter orientation to be delivered to shelter personnel prior to deployment that includes the locations of personnel and services within their assigned facility and the roles of shelter personnel.	2.18, 3.19, 6.16	CASHP Core Team, Mega Shelter Planning Team, Services Team		10/2019			
	Staffin	g						
92	Develop and sustain a sufficient base of City, County, and regional partner employees to fill all positions within the sheltering response.	2.11, 3.13, 4.5, 5.11	CASHP Core Team, Mega Shelter Planning Team, Services Team	HRD, HRMD, ESDs, Central Texas VOAD				
93	Clarify with executive levels of all agencies on the time commitment needed to sustain shelter operations.	2.13, 2.16, 3.15	HSEM, TC OEM		04/2019			
94	Explore and develop a program for workforce reentry following an activation.	2.13, 2.16, 3.15	HRD, HRMD		04/2019			
95	Re-engage in mutual aid discussions for school district personnel to fill shelter roles outside of their day-to-day district.	2.25	CASHP Core Team, Mega Shelter Planning Team, Services Team, CTSSC		04/2019			
96	Pre-identify shelter staff needs, capabilities, and gaps at various level of shelter plan activation.	2.10	CASHP Core Team, Mega Shelter Planning Team, Services Team		04/2019			
97	Pre-identify potential personnel to address the staffing gaps identified.	2.10	HRD/HSEM, HRMD/TC OEM	Responding Departments, Central Texas VOAD	04/2019			
98	Develop a protocol and directives to officially reassign staff pre- identified as shelter managers to shelter operations once a trigger is reached.	2.9	HRD, HRMD	HSEM, TC OEM	04/2019			

	Human Services Operations							
Rec. #	Corrective Action(s)	Report Location	Responsible Agencies (Primary)	Responsible Agencies (Supporting)	Target Completion Date			
99	Identify partner organizations from Harvey response for inclusion into future planning, trainings, and exercises.	6.1	APH, TC HHS	ARC, ADRN, Central Texas VOAD, Integral Care, CommUnity Care, Dell Medical School—Dept. of Psychiatry	10/2018			
100	Develop, confirm, and provide a capabilities list to the EOC for inclusion into planning, training, exercises, and response operations.	6.2	APH, TC HHS, Central Texas VOAD	HSEM, TC OEM	10/2018			
101	Expand the MOC in the EOC to include both ESF #6 (Mass Care) and ESF #8 (Public Health and Medical Services).	6.3	APH, TC HHS, CAMOC, Medical Operations Command, ATC EMS	HSEM, TC OEM	10/2018			
102	Develop a stand-alone MARC Plan, including provisions for dedicated space for shelter guests with environmental sensitivities or behavioral conditions, protocols for shift changes, and a corresponding registration process.	3.24, 6.4, 6.14, 6.21	APH, TC HHS, CAMOC, Services Team	HSEM, TC OEM, Central Texas VOAD, Integral Care, CommUnity Care	10/2018			
103	Develop accompanying training for the MARC Plan and deliver/participate in regular trainings.	6.8	APH, TC HHS, CAMOC, Services Team	HSEM, TC OEM, Central Texas VOAD	04/2019			
104	Include the Capital Area Public Health and Medical Preparedness Coalition in plan revisions, including implementing vetting standards.	6.6, 6.7, 7.12, 7.13	APH, TC HHS, CAMOC	HSEM, TC OEM, ATC EMS	10/2018			
105	Include the development of key agency contacts and available services information sheets at both the shelter and the MARC into shelter plan revisions.	6.13	APH, TC HHS, Central Texas VOAD, ARC, ADRN, Services Team	HSEM, TC OEM, Integral Care	10/2018			

	Medical Operations							
Rec. #	Corrective Action(s)	Report Location	Responsible Agencies (Primary)	Responsible Agencies (Supporting)	Target Completion Date			
106	Develop agreements with neighboring jurisdictions and/or regional organizations for medical personnel surge support.	7.2	CAMOC	APH, TC HHS, ATC EMS	10/2018			
107	Revise emergency procedures to include direct coordination of RACs when needed.	7.3	CAMOC	APH, TC HHS, ATC EMS	10/2018			
108	Revise shelter plans to include a trigger point for when the on-site medical clinic should be discontinued and procedures for transfer of care.	7.15	CAMOC	APH, TC HHS, ATC EMS, Primary Care Providers, CommUnity Care	10/2018			
109	Identify regional medical operations partner to be included in future response planning efforts, including the evaluation of the utility of regular operational period debriefings.	7.1	CAMOC	APH, TC HHS, ATC EMS	10/2018			
110	Re-evaluate the medical operations org chart created during Harvey, revise it as necessary, and include it into applicable sheltering and response plans.	7.7	CAMOC	CASHP Core Team, Mega Shelter Planning Team, Services Team	10/2018			
111	Include planning for transportation of shelter guests to medical appointments into shelter plan revisions.	7.9	CAMOC	CapMetro	10/2018			
112	Develop a training and methodology of delivery for just-in-time training on shelter plans and operational structures for qualified medical personnel.	7.11, 7.14	CAMOC	APH, TC HHS, ATC EMS, CASHP Core Team, Mega Shelter Planning Team, Services Team	10/2019			

	Animals							
Rec. #	Corrective Action(s)	Report Location	Responsible Agencies (Primary)	Responsible Agencies (Supporting)	Target Completion Date			
	Large Animal / Lives	tock Shelterin	g	.,,				
113	Revise shelter plans to include provisions for holding an initial planning meeting upon sheltering activation, guidance for colocating large animal owners with animals and stray pets/small animals at the large animal shelter, methods for communication with the large animal shelter, and a checklist of expectations for the large animal shelter volunteers.	5.1, 5.2, 5.6, 5.8, 5.9, 5.13, 5.15	CASHP Core Team, TC AgriLife, RAIC	Austin Animal Services, TAHC	10/2018			
114	Review and formalize the large animal registration forms used in Harvey response and include into sheltering plans.	5.3	CASHP Core Team, TC AgriLife	RAIC	10/2018			
115	Develop a list of alternate facilities for large animal sheltering, including capabilities and special considerations for each site, and guidance for when an event may be concurrently occupying space at each location.	5.5, 5.7	RAIC, TC AgriLife	CASHP Core Team, ORES, TC Facilities Management	10/2018			
116	Develop a regional approach to large animal shelter operations and resource management and incorporate this into sheltering plans.	5.4, 5.10	RAIC, CAPCOG	CASHP Core Team	12/2018			
117	Include demobilization procedures into sheltering plans, including provisions for an interim shelter for evacuated livestock owners who are unable to return home when the shelter is demobilized and provisions for fecal management.	5.17, 5.18	CASHP Core Team	RAIC, TC AgriLife	12/2018			
118	Develop a just-in-time training for incoming large animal shelter staff.	5.12	TC AgriLife	RAIC, CASHP Core Team	10/2018			
119	Establish the proper routing of livestock-related call during a response, including the development of a list of phone numbers, and provide training to responding staff on the routing.	5.16	Austin 3-1-1, HSEM, TC OEM	RAIC, TC AgriLife	10/2018			
120	Explore other disaster-assistance-related funding that may be available specific to the costs incurred during large animal/livestock sheltering.	5.19	HSEM, TC OEM, CAPCOG	RAIC	4/2019			

	Animals							
Rec. #	Corrective Action(s)	Report Location	Responsible Agencies (Primary)	Responsible Agencies (Supporting)	Target Completion Date			
	Pet Shelte	ring						
121	Revise shelter plans to include guidance for sheltering strays, guidance and tools for ensuring accountability among pet owners while at the shelter, provisions for engaging a pet shelter lead, processes for communicating with TAHC, and the facilitation of an initial pet sheltering planning meeting upon shelter activation.	4.2, 4.7, 4.9, 4.10, 4.12, 4.13	CASHP Core Team, Austin Animal Services	HSEM, TC OEM, TC AgriLife, TAHC, RAIC	10/2018			
122	Formally codify the pet sheltering relationships established during Harvey and include these responsibilities into shelter plans.	4.1	CASHP Core Team, Austin Animal Services	AHS, RAIC	10/2018			
123	Identify additional agencies and partners with capacity to support pet sheltering operations, to include provisions for co-locating exotic pets with owners.	4.3, 4.4, 4.14	Austin Animal Services, ARC	RAIC, TC AgriLife	10/2018			
124	Develop an animal resource inventory within the region.	4.4	RAIC, CAPCOG	CASHP Core Team	10/2018			
125	Develop a just-in-time training for incoming pet shelter staff.	4.6	Austin Animal Services, AHS	CASHP Core Team, RAIC	10/2018			
126	Exercise pet sheltering operations, including communication with the EOC and the support available through doing so.	4.8	Austin Animal Services, CASHP Core Team, ARC, CTSSC	HSEM, TC OEM, RAIC	12/2018			

	Donations Management						
Rec. #	Corrective Action(s)	Report Location	Responsible Agencies (Primary)	Responsible Agencies (Supporting)	Target Completion Date		
127	Revise the Donations Management Annex to clarify roles and responsibilities and elements from the Tactical Donations Management Plan developed during Harvey Response.	11.1, 11.2,11.3	HSEM, TC OEM	ADRN, ARC, Central Texas VOAD	04/2019		

	Donations Management						
Rec. #	Corrective Action(s)	Report Location	Responsible Agencies (Primary)	Responsible Agencies (Supporting)	Target Completion Date		
128	Train all relevant stakeholders on the Donations Management Annex.	11.3	HSEM, TC OEM	ADRN, ARC, Central Texas VOAD	04/2019		
129	Create an Unmet Needs Committee and incorporate the Committee into associated plans and trainings.	11.4	Central Texas VOAD	HSEM, TC OEM	04/2019		
130	Develop pre-scripted messages to guide public donations in the wake of a disaster.	11.8	Regional PIO Group, Central Texas VOAD	HSEM, TC OEM	04/2019		
131	Develop templates for donation location information (addresses, points of contact, etc.) to be provided to shelter staff and other response entities.	11.9	Regional PIO Group, Central Texas VOAD	HSEM, TC OEM	04/2019		
132	Assess the suitability of WebEOC as a tool for donations management.	11.12	CTM, TC ITS, Central Texas VOAD, CAPCOG	HSEM, TC OEM	04/2019		
133	Explore the possibility of expanding warehousing capabilities.	11.13	Central Texas VOAD	ORES, TC Facilities Management	04/2019		
134	Coordinate with the State to identify and vet potential distribution points in vulnerable areas of the state.	11.14	Central Texas VOAD	State VAL	04/2019		

	Volunteer Management							
Rec. #	Corrective Action(s)	Report Location	Responsible Agencies (Primary)	Responsible Agencies (Supporting)	Target Completion Date			
135	Create a Volunteer Management Plan for the City, County, and regional partners, including recruitment, credentialing, and coordination protocols, as well as the preferred method for directing volunteers, guidance on managing spontaneous volunteers, and pre-scripted messaging for the public.	5.14, 8.3, 8.4, 11.5, 11.6, 11.7, 11.10, 11.11	HSEM, TC OEM	TC HHS, Central Texas VOAD, COA Volunteer Coordinator Network, HRD, HRMD	04/2019			

	Public Information						
Rec. #	Corrective Action(s)	Report Location	Responsible Agencies (Primary)	Responsible Agencies (Supporting)	Target Completion Date		
136	Establish a schedule of public information briefings and incorporate into applicable plans.	9.1, 9.10	HSEM PIO, TC PIO	Regional PIO Group	10/2018		
137	Revise applicable shelter plans to include media strategies, such as the determination of a media staging area early-on in site setup and a walkthrough with the media, and provisions for holding press conferences at shelters.	9.4, 9.13, 9.14	Regional PIO Group	CASHP Core Team, Mega Shelter Planning Team	04/2019		
138	Revise applicable shelter plans to include logistics for visits from state and local public officials.	9.16	IGRO, TC IGR	CASHP Core Team, Mega Shelter Planning Team	04/2019		
139	Develop pre-event media messaging to detail the types of information that will be made available, and time and method of distribution to the media.	9.5, 9.12	Regional PIO Group		10/2018		
140	Formalize the shift-change binder process created during Mega Shelter PIO operations and include this in future PIO trainings.	9.3	HSEM PIO	Regional PIO Group	10/2018		

	Public Information							
Rec. #	Corrective Action(s)	Report Location	Responsible Agencies (Primary)	Responsible Agencies (Supporting)	Target Completion Date			
141	Develop and facilitate regular trainings on the <i>Regional Joint Information Plan</i> and include PIO elements into other trainings and exercises.	9.2	Regional PIO Group		04/2019			
142	Expand and formalize the Travis County capacity to preform PIO functions.	9.7	TC OEM	HSEM, City PIO	04/2019			
143	Incorporate best practices, including standardized PIO reporting procedures and tools, such as WebEOC, related to briefings at shift changes into regular PIO trainings.	9.9, 9.10	Regional PIO Group	CAPCOG	04/2019			
144	Evaluate the allocation of space in the EOC to provide a dedicated spot for the JIC that meets the operational needs of the JIC. Make identified modifications.	9.11	HSEM, TC OEM	СТМ	04/2019			
145	Determine necessary software for JIC operations and ensure this is installed on EOC computers and responding PIOs are able to access it.	9.17	Regional PIO Group	CAPCOG, CTM, TC ITS	04/2019			

	Language Access							
Rec. #	Corrective Action(s)	Report Location	Responsible Agencies (Primary)	Responsible Agencies (Supporting)	Target Completion Date			
146	Identify a trigger point for coordination between the City translation and interpretation team and applicable organizations to deploy members of the team to the JIC when necessary.	8.23	COA LAC, COA Language Access Team, TC Language Access Work Group, TC HHS	HSEM, TC OEM	10/2018			

	Language Access						
Rec. #	Corrective Action(s)	Report Location	Responsible Agencies (Primary)	Responsible Agencies (Supporting)	Target Completion Date		
147	Identify existing interpretation and translating teams in the CAPCOG region, including first responders and Seton, and coordinate with pertinent partners to develop activation procedures for these teams for future responses.	8.2, 8.20, 8.28	COA Language Access Team, TC Language Access Work Group, TC HHS, City/County Purchasing Offices	Responding Departments	04/2019		
148	Identify and develop pre-positioned contracts to provide professional translators and interpretation services on-call for important, rush, or longer documents.	8.6, 8.24	COA LAC, TC Language Access Work Group, TC HHS, City/County Purchasing Offices		04/2019		
149	Identify and regularly train bilingual case managers.	8.26	COA Language Access Team, Integral Care, APH, TC Language Access Work Group, TC HHS		10/2019		
150	Include familiarization with shelter organization and management structures into any City, County, or regional partner interpretation training.	8.27	COA Language Access Team, TC Language Access Work Group, TC HHS	HSEM, TC OEM	04/2019		
151	Expand the base of vetted City employees trained in best practices for translation and interpretation. Consider developing similar programs within the region.	8.1	Austin LAC, COA Volunteer Coordinator Network	TC Language Access Work Group	04/2019		
152	Incorporate the Travis County Language Access Workgroup into future operations and planning. Consider developing similar workgroups within the region.	8.14	TC OEM	Austin LAC, HSEM, TC Language Access Work Group, TC HHS	04/2019		

	Language Access						
Rec. #	Corrective Action(s)	Report Location	Responsible Agencies (Primary)	Responsible Agencies (Supporting)	Target Completion Date		
153	Determine policies that incorporate City and County language access workers into emergency response policies for timekeeping and scheduling.	8.15	HRD, HRMD	Austin LAC, TC Language Access Work Group	04/2019		
154	Develop pre-scripted messaging to be broadcasted in multiple languages to guests arriving at shelters informing them of the availability of interpretation services with information on how to engage language access teams once inside the shelter.	8.17	Austin LAC, TC Language Access Work Group	HSEM, TC OEM	10/2018		
155	Revise applicable plans and checklists to include the provision of Wi-Fi hubs and analog telephone lines at shelters for VRI and OPI support.	8.7, 8.8	CTM, TC ITS	Austin LAC, TC Language Access Work Group, HSEM, TC OEM	04/2019		
156	Identify and procure a secure method for communications about status updates and progress notes regarding specific shelter guests.	8.5, 8.9	CTM, TC ITS	Austin LAC, TC Language Access Work Group, TC HHS, HSEM, TC OEM	10/2018		
157	Revise language access and/or shelter plans to identify key roles and responsibilities for language access services in all relevant incidents, including processes for coordination between Public Information functions and language access teams and access to contracted language access services.	8.11, 8.21, 9.6	COA LAC, TC Language Access Work Group, Regional PIO Group	CASHP Core Team, Mega Shelter Planning Team, Services Team, Austin LAC, TC Language Access Work Group	10/2018		

	Language Access							
Rec. #	Corrective Action(s)	Report Location	Responsible Agencies (Primary)	Responsible Agencies (Supporting)	Target Completion Date			
158	Develop a policy that defines roles and responsibilities for interpreters in shelters, including the handoff of responsibility to proper personnel.	8.25	Austin LAC, TC Language Access Work Group	HSEM, TC OEM	04/2019			
159	Revise language access and/or shelter and MARC plans to include provisions for language access managers in the shelters who bear the responsibility for the dissemination of information collected from interpreters.	8.5, 8.10, 8.28	Austin LAC, TC Language Access Work Group	Central Texas VOAD, APH, TC HHS, HSEM, TC OEM	04/2019			
160	Identify and translate all necessary shelter documentation prior to shelter activation. Revise language access and/or shelter and MARC plans to include specific assignments for multilingual signage	8.18, 8.19	CASHP Core Team, Mega Shelter Planning Team, Services Team	Austin LAC, TC Language Access Work Group, Central Texas VOAD	10/2018			
161	Locate the language access team, as well as VRI and OPI services, at each critical service station, and update applicable response plans.	8.16	CASHP Core Team, Mega Shelter Planning Team, Services Team	Austin LAC, TC Language Access Work Group	10/2018			
162	Incorporate language access needs, requirements and coordination into response plans.	8.12	APH, TC HHS, CASHP Core Team, Mega Shelter Planning Team, Services Team, CAMOC, Central Texas VOAD	Austin LAC, TC Language Access Work Group	04/2019			
163	Develop written translation of service offerings in known (or presumed) common languages, distribute to partner agencies and the public, as necessary.	8.22	Austin LAC, TC Language Access Work Group	CASHP Core Team, Mega Shelter Planning Team, Services Team	10/2018			