# Hurricane Harvey After Action Report on Individuals with Disabilities

### Texas Disability Task Force on Emergency Management

**Texas Division of Emergency Management** 

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#### Texas Disability Task Force on Emergency Management Hurricane Harvey After Action Report on Individuals with Disabilities

The Texas Disability Task Force on Emergency Management serves as a resource to the Texas Division of Emergency Management (TDEM) to provide input to the Texas emergency management community that would assist in enhancing state and local emergency management planning and response and to promote preparedness efforts for Texans with disabilities.

To support this mission, the Texas Disability Task Force (DTF) conducted an after-action discussion and survey regarding response and recovery efforts connected to individuals with disabilities affected by Hurricane Harvey. Several DTF members represented agencies directly involved in both the response and recovery efforts to Hurricane Harvey, while others represented disability-related organizations that received direct reports from clients and community members during the disaster. Task Force members were asked to discuss events experienced directly by themselves, to others within their organizations, or by their clients. Approximately two dozen members of the Disability Task Force participated in the process, either in-person, via phone conferencing, or through an online survey.

The results of the discussion and survey were used to develop the recommendations included in this report. These recommendations are organized by issue as follows; Communication Access, Evacuations, Sheltering, State and Federal Resources, Recovery Services and Supports, and Cross-Cutting Issues.

The purpose of this report is to provide input to the Texas Division of Emergency Management for inclusion planning for Texans with disabilities, to identify response strengths and areas for improvement, and to support the development of corrective actions.

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#### INTRODUCTION

#### **Background:**

Research clearly documents that people with disabilities are disproportionately vulnerable in emergency situations. <sup>1</sup> <sup>2</sup> They are more likely to lose their homes, experience property damage, and to die in disasters. <sup>3</sup> Additionally, they are more likely to be separated from their family members, overlooked by relief volunteers in shelters, and to suffer injuries or incur health-related complications. <sup>4</sup> <sup>5</sup> Compounding these difficulties, prior to disasters, people with disabilities are more likely to live in poverty, be unemployed, and have limited access to health care. <sup>6</sup> <sup>7</sup> <sup>8</sup>Targeted technical expertise and capacity is imperative in state and local departments of emergency management to adequately address the needs of citizens with disabilities and other access and functional needs. <sup>9</sup> <sup>10</sup>

The U.S. Census estimates the national disability prevalence rate at 18.7 percent<sup>11</sup> and the 2018 Texas disability rate is estimated to be 22.9%<sup>12</sup> Thus, given the current state population of 29.1 million, approximately 6.64 million Texans can be estimated to have a mobility, cognitive, sensory, mental health disability, or limitations to their independent living. The National Response Framework stipulates that "Emergency management staff in all jurisdictions have a fundamental responsibility to consider the needs of all members of the whole community, including...individuals with disabilities and others with access and functional needs" (2013, p. 4).<sup>13</sup> Section 308 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act prohibits disability-related discrimination during disaster relief and assistance activities.<sup>14</sup> Other federal laws, policies, and directives inform the whole community approach and there are legal implications for governmental entities that do not adequately address the needs of individuals with disabilities in their emergency management practices.<sup>15</sup>

#### **Hurricane Harvey Context:**

Hurricane Harvey was the most extensive and expensive disaster to affect Texas in recent memory. According to the Governor's Commission to Rebuild Texas report released in 2018 entitled *Eye of the Storm*, <sup>16</sup> Hurricane Harvey caused at least \$125 billion in damage in Texas—more than any other disaster except Hurricane Katrina.

The trajectory of Hurricane Harvey made for challenging emergency planning: After achieving Category 4 intensity on August 25<sup>th</sup>, Harvey made landfall at San José Island, Texas, at peak intensity. It made a second landfall on the Texas mainland, at Rockport, three hours later. This was followed by another landfall at Holiday Beach at Category 3 intensity. Afterwards, Harvey stalled near the coastline for about two days, dropping torrential and unprecedented amounts of rainfall over Texas. It lingered over Beaumont, Orange, and east Texas through August 28<sup>th</sup> and 29<sup>th</sup>, continuing to dump unprecedented amounts of water. It then emerged back over the Gulf of Mexico, strengthening slightly before making a fifth and final landfall in Louisiana on August 31st.

Due to the erratic behavior of Hurricane Harvey, mandatory evacuation orders were not given for the greater Houston area or for surrounding communities. Given the multi-day rain and incredible inundation that accompanied Harvey's stall over the Texas coast, supplies, equipment, and personnel could not be deployed quickly to flooded areas. Due to the nature of rescue operations and transportation during the event, people were unevenly housed within three different types of shelters; 1) traditional Red Cross shelters, 2) pop-up shelters formed by community organizations, and 3) hotels. Inconsistency in sheltering arrangements led to differences in levels of services, support, and access to communication. As Red Cross and other organizations were trying to deploy resources into Houston and coastal communities, two other large hurricanes hit the U.S. and its territories, resulting in the diversion of some resources to those other areas.

The *Eye of the Storm* report did not include recommendations related to the needs of people with disabilities and other functional and access needs. This *Hurricane Harvey After Action Report on Individuals with Disabilities* thus serves as a supplement to the *Eye of the Storm* report and offers concrete, actionable recommendations from the Disability Task Force for the Texas Division of Emergency Management and other organizations.

#### A. COMMUNICATION ACCESS

#### **Issue: 911 Access and Capacity**

As of August 2017, Text-to-911 had not yet rolled out to all areas in Texas. As a result, some 911 call centers were at capacity during Hurricane Harvey, leading to long hold times or calls rolling to out-of-area call centers. Limited cell phone battery capacity and access to electricity for communication devices was a problem during long hold times for individuals dialing 911.

#### **Recommendations:**

- **A1.** The State of Texas is on-track to complete statewide implementation of Text-to-911 by the end of Fiscal Year 2019. The DTF recommends that the state continue its investment in accessible emergency communications by supporting the Texas Emergency Communications Commission's deployment of Next Generation 911 (NG911) technology. NG911 includes IP communications using voice, text, and video, and enhances the ability to locate 911 callers.
- **A2.** A meeting should be held specific to issues related to accessible emergency telecommunications in the context of alerts, warnings, notifications, and response to disasters.
- **A3.** Additional planning is needed at both the local and state levels to determine how to handle overflow calls during widespread emergencies, including plans for addressing 911 surge capacity and included in planning annexes, and the development of mutual aid plans.

#### Issue: Communication to State Operations Center (SOC)

Few resource requests specific to disability-related supports or access needs were received by the Texas SOC during Hurricane Harvey. State emergency management believed they responded to all requests received at the SOC. However, disability stakeholders were not clear on who to or how to report their needs to emergency management during the crisis. Some disability-related needs were not identified at the local level by emergency management and subsequently were not pushed up to the SOC. Specifically, disability-related organizations participating on daily conference calls hosted by the Houston Mayor's Office regularly discussed issues which appeared to not have been addressed either by local emergency management nor the SOC. Similarly, few requests for personal assistance were pushed up through the STAR process to the state level. While the STAR request process did appear to work, at the strategic level the State Operations Center received very few requests from local emergency management related to functional

support needs. During the response/rescue phase it was difficult for the SOC to determine resources needed at the local level when communicated by third parties and through social media. Given these communication problems, the level of effectiveness of the Hurricane Harvey response by local and statewide agencies on behalf of individuals with disabilities is not clear.

- **A4.** Establish a Disability Integration Specialist position within the Texas Division of Emergency Management (TDEM) to strengthen communication between local disability groups and emergency management.
- **A5.** Clarify lines of communication and develop protocols to ensure individuals with disabilities and disability advocates are able to communicate disability-related needs to local emergency management- and that these needs are then communicated, as appropriate, up to the SOC. Consider convening disability stakeholder calls during emergencies to ensure people are getting accurate information and to identify issues occurring at the local level. Identify social media outlets used by the disability community, while also recognizing not all people with disabilities can access social media.
- **A6.** Contact information for local Emergency Operations Centers (EOCs) and Texas Division of Emergency Management (TDEM) District Coordinators should be widely distributed and available to individuals with disabilities and disability-related organizations for emergency planning. Conversely, information about local disability-related organizations should be provided to local emergency managers to assist in their emergency planning.
- **A7.** Guidance and outreach to the public is needed to educate when it is appropriate for organizations and individuals to contact their local office of emergency management through 911 (for direct health and safety threats), versus 211 (for resources and information), or versus 311 (for urgent emergency assistance) to report unmet disability needs.
- **A8.** While TDEM provides support, it is up to local emergency management to connect with the disability community and disseminate information within that community. Local jurisdictions must create the capabilities and a planning process that include all hazards and the whole community, including individuals with disabilities and functional and access needs. Local jurisdictions need to understand how to build access and functional needs committees at the local level. The *FNSS Toolkit* and the *Effective Communications Toolkit* are available for reference for local jurisdictional plans. An assessment should be made by the DTF of the extent to which local emergency management are using these resources.

Issue: Accessible and Effective Communication to the Public

American Sign Language (ASL) interpreters were not used during all emergency broadcast announcements and press conferences. There were reports that interpreters were occasionally out of camera-shot. In addition, there were problems with real-time captioning on some news announcements due to power outages. There were also concerns about inconsistent access to sign-language interpreters at some shelters and out-of-area interpreters who did not know signs for local landmarks. The availability of interpreters was unclear to the Deaf community at shelters. In some shelters, volunteers were relied upon to provide interpretation, rather than using hired interpreters or CART services.

#### **Recommendations:**

Communications Toolkit.

A9. The media should undergo effective communication training and be directed to use the Disability Task Force's Effective Communications Toolkit. Specifically, DTF should communicate to the Texas Association of Broadcasters the importance of inclusive communication planning and training prior to emergencies to ensure effective communication. A letter to broadcasters during the Harvey response by the Federal Communications Commission was helpful. Similar communications to broadcasters during disasters by the DPS Communications Office, TDEM, or SOC may also remind news organizations about their responsibility to ensure inclusive communication. Letters should be pre-written and contacts for broadcasters and news organizations maintained in advance of the next disaster.

A10. The DTF should continue further coordination efforts to ensure effective communication planning is in place for sheltering activities. Specifically, DTF should continue to update and distribute the Effective

**A11.** Investigate model practices for local government ASL interpretation contract management.

#### Issue: State of Texas Emergency Assistance Registry (STEAR)

There were concerns and confusion about the purpose and use of STEAR data and the expectations of registrants in STEAR. It is unclear the extent to which or how the STEAR data was used by local emergency planners during Hurricane Harvey. While numerous people with disabilities were preregistered in STEAR, few received assistance or wellness checks during or in the days immediately following the disaster. STEAR registration during emergency event is ineffective as that information cannot be used for planning purposes nor for evacuation purposes.

- **A12.** STEAR should continue to make clear that registration is not a guarantee of transportation or other assistance during a disaster event. Continue to clarify STEAR is strictly a planning tool and it is up to the discretion of local planners to use STEAR data during emergencies.
- **A13.** The STEAR Committee and DTF should meet to discuss and evaluate the potential usefulness of STEAR in addressing the evacuation and rescue needs of people with disabilities.
- **A14.** STEAR should consider development of legal data use agreements to share data/coordination during an emergency with agencies such as Meals on Wheels and other local partners that can effectively serve the response and recovery needs of STEAR registrants. Any data agreements should include substantial privacy protections for STEAR participants.
- **A15.** GIS, other data-mapping technology, and Census data (i.e. the American Community Survey) should be used to enhance STEAR data technology capabilities to allow for more effective planning, data analysis, and use of STEAR data by local emergency managers.
- **A16.** Local emergency offices using STEAR data for either planning or emergency use, as well as the identification of local data custodians, should be publicly listed online to allow greater local accountability to individuals who choose to register with STEAR.

#### **B. EVACUATIONS**

#### Issue: Evacuations vs. Rescue

There was confusion by the public and organizations on the difference between requesting assistance with *evacuation* before the hurricane made landfall and requesting assistance with *rescue* after its landfall. Given the erratic nature of the movements of Hurricane Harvey, most local emergency management jurisdictions did not give orders to evacuate before the storm. Most licensed facilities and households with individuals with disabilities chose not to evacuate before the storm and sheltered in-place. Some facilities did not have appropriate transportation to evacuate their residents pre-storm, if they chose to do so.

#### Recommendation:

- **B1.** DTF encourages additional transportation planning for long-term care facilities. Texas Health and Human Services (HHS) currently requires that licensed-care facilities not contract with the same transportation providers from the same area so that adequate transportation is available for evacuating congregate care facilities. However, there are no checks in place to determine if, in fact, vendors have made contracts with multiple licensed-care facilities in the same area.
- **B2.** There should be discussions and education of emergency management and the disability community on situations when facilities and households that include individuals with disabilities should consider self-evacuation. Congregate housing facilities need to take a conservative stance towards emergency message and consider self-evacuating before storms.

#### **Issue: Wheelchair Access**

People who used wheelchairs were at a disadvantage during boat rescues as wheelchairs often did not fit in or were too heavy for the rescue boats. Most amphibious vehicles were also not adequate for people in wheelchairs. Once these individuals reached a shelter they then had limited mobility without their wheelchairs. Paratransit vehicles were also not able to travel through flooded streets. Some bus drivers were not comfortable using equipment for wheelchair accessibility or could not load electric wheelchairs. Some counties requested ADA accessible vans, which did not come through in time for evacuation purposes.

#### Recommendation:

**B3.** Require mandatory and regular training on the proper use of lift equipment on all vehicles used by operators assisting in evacuation.

**B4.** Encourage state and local emergency planners to use available data sources and sharing agreements to estimate the number of wheelchair and power chair users within their geographic areas and plan for evacuation vehicles and boats that can accommodate wheelchairs.

#### Issue: "Good Samaritan" Volunteer Assistance

Rescues relied heavily on the use of "Good Samaritan" volunteers, who were loosely organized and managed. Emergency managers quickly became volunteer managers and lacked adequate capacity to coordinate volunteers while simultaneously ensuring they followed safe and inclusive practices. One significant challenge was a lack of tracking of those helped by spontaneous volunteers. Spontaneous volunteers were also not trained on how to evacuate people with their assistance devices and service animals.

- **B5.** Emergency planners should anticipate the involvement of "Good Samaritan" volunteers in response and recovery options and plan accordingly. They should include coordination of volunteers and individuals with disabilities as part of best practices in training curriculum and planning requirements. Just-in-time training should similarly address the needs of individuals with disabilities.
- **B6.** Meals on Wheels in Harris County made contact with up to 4000 clients both pre-landfall and throughout subsequent flooding. Emergency managers should consider collaborating with volunteer agencies to develop a protocol for checking on individuals with disabilities and other access and functional needs before and during emergencies.

#### **Issue: Sheltering in Place Best Practices**

Residents were encouraged to prepare enough supplies, food, and medicines for 3-5 days to enable sheltering-in-place. During Hurricane Harvey this was not adequate preparation for some people with disabilities.

#### **Individual Preparedness Recommendation**

**B7.** Residents should be encouraged to prepare enough supplies, food, and medicine for 5-10 days when sheltering in place. Preparedness education for individuals with disabilities should be modernized to include reference to cell phone battery extenders, car battery power inverters, and/or solar chargers, etc., in the list of recommended emergency kit supplies.

#### C. SHELTERING

# Issue: Planning for Intellectual and Developmental Disability (I/DD) and Mental/Behavioral Health Populations

Concerns were raised about the lack of adequate spaces in some shelters for those with autism or other behavioral and sensory challenges. One report was that a family was asked to leave a shelter due to the behavior of their child.

#### **Recommendations:**

- **C1.** Shelter staff (both paid and volunteer, in Red Cross shelters, and in pop-up shelters) should be trained to address the specific needs of intellectual and developmental disability populations and mental/behavioral health populations, such as people with autism spectrum disorders. Communities should consider providing mental health first aid training for all shelter managers and volunteers. When necessary, they should also consider expediting alternate housing arrangements, such as the use of hotels, for intellectual and developmental disability populations and those with mental/behavioral health concerns.
- **C2.** Communities should coordinate with pre-screened mental/behavioral health teams to augment local resources, develop training materials, and provide advisory and planning services. It may be possible to coordinate with Local Mental Health Authorities (LMHAs) to create volunteer disaster mental health teams ready to deploy to adjacent counties. A task force of behavioral health experts could help coach shelter managers on appropriate accommodations for people with autism or behavioral disabilities.

#### Issue: Shelter Differences and Standard of Care

Depending on shelter type (Red Cross, pop-up, or hotel) there were significant differences in the types of resources available for individuals with disabilities. Some facilities lacked effective communication supports, could not provide appropriate and accessible shower and toileting facilities, and did not plan for or activate contracted personal care attendants. In addition, there were differences in available information and shelter rules at different facilities. DME and other medical needs were not consistently communicated by pop-up shelters up to the state level. It was also not clear where all pop-up shelters were located nor who was staffing these shelters. It was reported that one mega shelter did not have accessible showers until three weeks after the disaster. It is not clear what the standard-of-care is across different types of shelters for people with disabilities.

- **C3.** Immediately activate personal care attendant contracts when mega shelters are opened.
- **C4.** DTF recommends contracting with providers for universally accessible equipment for response and recovery (bathrooms, showers, and laundry facilities).
- **C5.** Efforts should be made to recruit, train, and provide clearance for volunteers with specific skill sets, such as interpreters, mental health professionals, counselors, behavioral therapists, and personal care attendants. Home health agencies and personal care agencies may provide a valuable support network within shelters but a process needs to be formalized.
- **C6.** Emergency planners should carefully plan for an adequate supply of bariatric equipment and supplies.
- **C7.** Strategies should be developed to provide disability-related supplies and supports to individuals or families with disabilities who transition from shelters to hotels or other temporary shelters or who may have initially sheltered in other locations, such as mega shelters.
- **C8.** The DTF should continue to support the maintenance and dissemination of the *Functional Needs Supports Services Toolkit* and the *Effective Communications Toolkit* as aids to planning for Texas emergency managers and shelter workers. Feedback should be received to ascertain if these tools are also effective during the operational phase of disasters.

#### D. STATE or FEDERAL RESOURCES

#### **Issue: 2-1-1 Wait Times and Information Accuracy**

It is unclear to citizens during emergencies whether they should call 211, 311, or 911 to contact their local office of emergency management. During Hurricane Harvey, some individuals called multiple lines and waited for hours on hold only to get duplicate information from these sources. It was unclear how citizens could find the most up-to-date information and if 211 Texas had comprehensive information on resources and services for people with disabilities. It was also unclear if 211 was communicating caller needs to local emergency officials and planners.

#### **Recommendations:**

**D1.** It should be made clear to the public when it is appropriate to call 211 versus their local office of emergency management. It is also recommended that 211 and emergency management share the date and time stamp of information they provide to ensure the most up-to-date information is being communicated.

**D2.** The DTF and TDEM should work together to study how unmet functional and access needs may be better communicated to 211, how that information is tracked by 211 Texas, how disability-related needs may be best communicated to local offices of emergency management, and how disability-related needs can be more effectively relayed to the SOC during emergencies.

#### Issue: FEMA Access for Individuals with Disabilities

Several concerns were raised about the process for requesting accommodations with FEMA, how to appeal, and wait times for obtaining appropriate accommodations. The FEMA registration and appeals process was especially difficult for individuals with learning disabilities, limited literacy, cognitive disabilities, or were hard-of-hearing, or Deaf. Initially, FEMA only had a call-in number for individuals needing intake assistance. Eventually, they created a text line that was beneficial for the deaf and hard-of-hearing. Deaf Texans further recommend that FEMA use, hire, and train Deaf case managers fluent in ASL to staff call centers. There were issues regarding the long timeframe in receiving FEMA assistance and getting funding through the Texas Other Needs Assistance programs on timely basis.

#### Recommendations:

**D3.** FEMA should create a separate method of communications for those who are deaf, hard-of-hearing, Deaf, or have speech difficulties to ensure they can request the appropriate accommodations during the registration and appeals process. FEMA should also make appropriate accommodations to the intake process for individuals who have learning disabilities, limited literacy, or cognitive disabilities.

#### State-Level Policies for Evacuation Preparedness and Recovery

**D4.** The DTF should create a list of state and federal policies and rules that would assist people with disabilities if waived or amended during times of emergency. This would apply, in particular, to ensure adequate supplies could be secured in advance of an emergency and adequate services could be provided during the response and recovery phases. Policies at the state and federal level could include exceptions to rules regarding SNAP benefits, medication refills, recycling of durable medical equipment, local paratransit coverage limitations, medical transportation, etc. The Disability Task Force could assist State agencies that staff the State Operations Center or State Medical Center with reviewing their agencies' rules and policies.

#### E. RECOVERY SERVICES and SUPPORTS

#### **Issue: Accessible Housing Options**

There is a significant shortage of accessible housing for people with disabilities. These housing needs were exacerbated by the disaster, leaving many with limited or no options for staying in their communities. Placing individuals in accessible housing often meant they had to move far away from their original neighborhoods, as well as away from their local services and support. People with disabilities often must make considerable investments to make modifications and adaptations to their homes. Moving into new housing post-disaster created an additional cost to them.

- **E1.** Additional housing recovery funds should be provided for those with accessibility needs so their housing meets accessibility and visitability standards.
- **E2.** FEMA should maintain a publicly available database of where accessible mobile homes/trailers are to be placed in communities.
- **E3.** During emergencies, individuals with disabilities should have equal opportunity to be housed in community-based temporary housing as those without disabilities, rather than being placed in congregate care, such as in nursing homes, during emergencies. State, federal, and public health agencies should continue to be vigilant in ensuring individuals with disabilities are provided equal access to non-congregate temporary housing as are people without disabilities.
- **E4.** Local governments and non-profits should improve ease of eligibility and enrollment for displaced individuals with disabilities into new housing or housing renovation programs.

#### F. CROSS-CUTTING ISSUES

#### **Issue: Disability Integration Specialist**

The DTF after-action discussion highlighted the fact that the State of Texas requires additional emergency management capacity to equitably meet the needs of Texans with disabilities experiencing disaster. The concern and response by the disability sector were admirable during Hurricane Harvey. However, their capabilities could have been more effectively augmented by state resources and support had a more formal relationship been established before the storm.

- **F1.** TDEM should establish and hire a full-time disability integration specialist. The primary function of the disability integration specialist should be to address disability-related communications and preparedness in advance of emergencies, provide a single-point-of-contact in the State Operations Center during emergencies, and provide oversight and coordination during the preparedness, response, recovery, and mitigation phases of a disaster.
- On May 16, 2018, members of the DTF voted unanimously in support of this proposal. On May 17, 2018 the proposal was brought to the Texas Emergency Management Advisory Council (TEMAC) quarterly meeting by Dr. Laura Stough, Chair of the Disability Task Force, on behalf of the DTF, and was subsequently endorsed by TEMAC.
- **F2.** TDEM should consider a virtual disability operation center to support the State of Texas with operations during emergencies.
- A previous Disability Task Force recommendation to TDEM was made to consider a virtual operation center to support disability-related needs.

#### CONCLUSION

Research indicates wide-scale disasters disproportionately impact individuals with disabilities. Hurricane Harvey wrought serious damage upon both the Texas disability community and the critical infrastructure upon which they rely. To mitigate future disproportionate impacts on the disability community, DTF respectfully requests that TDEM seriously consider these recommendations, incorporate them into the emergency management planning process as appropriate, and establish workgroups to operationalize the recommendations made in this report.

#### COMPLETE LIST OF RECOMMENDATIONS

#### A. COMMUNICATION ACCESS

- **A1.** The DTF recommends that the state continue its investment in accessible emergency communications.
- **A2.** A meeting should be held specific to issues related to accessible emergency telecommunications in the context of alerts, warnings, notifications, and response to disasters.
- **A3.** Additional planning is needed at both the local and state levels to determine how to handle overflow calls during widespread emergencies.
- **A4.** Establish a Disability Integration Specialist position within the Texas Division of Emergency Management (TDEM).
- **A5.** Ensure individuals with disabilities and disability advocates are able to effectively communicate disability-related needs to local emergency management and that these needs are then communicated, as appropriate, up to the SOC during emergencies.
- **A6**. Contact information for local Emergency Operations Centers (EOCs) and Texas Division of Emergency Management (TDEM) District Coordinators should be widely distributed to the disability community.
- A7. Educate when it is appropriate to contact local office of emergency management through 911 (for direct health and safety threats), versus 211 (for resources and information), or versus 311 (for urgent emergency assistance) to report unmet disability needs.
- **A8.** Local jurisdictions need to understand how to build access and functional needs committees at the local level.
- **A9.** The media should undergo effective communication training and use the Disability Task Force's Effective Communications Toolkit.
- **A10.** DTF should continue to update and distribute the Effective Communications Toolkit.
- **A11.** Investigate model practices for local government ASL interpretation contract management.
- **A12.** Continue to clarify STEAR is strictly a planning tool and it is up to the discretion of local planners to use STEAR data during emergencies.
- **A13.** Evaluate the potential usefulness of STEAR in addressing the evacuation and rescue needs of people with disabilities.
- **A14.** Consider development of legal data use agreements to share data/coordination during an emergency with local agencies.
- **A15.** GIS, other data-mapping technology, and Census data should be used to enhance STEAR data for more effective planning.
- **A16.** Local emergency offices using STEAR data should be publicly listed online to allow greater local accountability.

#### **B. EVACUATIONS**

- **B1.** Additional transportation planning is needed for long-term care facilities.
- **B2.** Congregate housing facilities need to take a conservative stance towards emergency messages and consider self-evacuating before storms.
- **B3.** Require mandatory and regular training on the proper use of lift equipment on all vehicles used by operators assisting in evacuation.
- **B4.** Encourage state and local emergency planners to use available data to estimate the number of wheelchair and power chair users within their geographic areas and plan for evacuation vehicles and boats that can accommodate wheelchairs.
- **B5.** Emergency planners should anticipate the involvement of "Good Samaritan" volunteers and include coordination of volunteers and individuals with disabilities as part of best practice.
- **B6.** Emergency managers should consider collaborating with volunteer agencies to develop protocols for checking on individuals with disabilities and other access and functional needs.
- **B7.** Residents should be encouraged to prepare enough supplies, food, and medicine for 5-10 days when sheltering in place.

#### C. SHELTERING

- **C1.** Shelter staff should be trained to address the specific needs of populations with intellectual and developmental disability and mental/behavioral health issues.
- **C2.** Communities should coordinate with pre-screened mental/behavioral health teams to augment local resources, develop training materials, and provide advisory and planning services
- **C3.** Immediately activate personal care attendant contracts when mega shelters are opened.
- **C4.** DTF recommends contracting with providers for universally accessible equipment for response and recovery.
- **C5.** Recruit, train, and provide clearance for volunteers with specific skill sets, such as interpreters, mental health professionals, counselors, behavioral therapists, and personal care attendants.
- **C6.** Emergency planners should carefully plan for an adequate supply of bariatric equipment and supplies.
- **C7.** Strategies should be developed to provide disability-related supplies and supports to individuals or families with disabilities who transition from shelters to hotels or other temporary shelters.
- **C8.** The DTF should continue maintenance and dissemination of the Functional Needs Supports Services Toolkit and the Effective Communications Toolkit as aids to planning.

#### D. STATE or FEDERAL RESOURCES

- **D1.** It should be made clear to the public when it is appropriate to call 211 versus their local office of emergency management.
- **D2.** The DTF and TDEM should work together to study how unmet functional and access needs may be better communicated to 211, how that information is tracked by 211 Texas, how disability-related needs may be best communicated to local offices of emergency management, and how disability-related needs can be more effectively relayed to the SOC during emergencies.
- **D3.** FEMA should create a separate method of communications for those who are deaf, hard-of-hearing, Deaf, or have speech difficulties to ensure they can request the appropriate accommodations during the registration and appeals process. FEMA should also make appropriate accommodations to the intake process for individuals who have learning disabilities, limited literacy, or cognitive disabilities.
- **D4.** Create a list of state and federal policies and rules that would assist people with disabilities if waived or amended during times of emergency.

#### E. RECOVERY SERVICES and SUPPORTS

- **E1.** Additional housing recovery funds should be provided so housing meets accessibility and visitability standards.
- **E2.** FEMA should maintain a publicly available database of where accessible mobile homes/trailers are to be placed in communities.
- **E3.** State, federal, and public health agencies should continue to be vigilant in ensuring individuals with disabilities are provided equal access to non-congregate temporary housing as are people without disabilities.
- **E4.** Local governments and non-profits should improve ease of eligibility and enrollment for displaced individuals with disabilities into new housing or housing renovation programs.

#### F. CROSS-CUTTING ISSUES

- **F1.** TDEM should establish and hire a full-time disability integration specialist.
- **F2.** TDEM should consider a virtual disability operation center to support the State of Texas with operations during emergencies.

#### REFERENCES

1

- <sup>1</sup> Alexander, D., Gaillard, JC, & Wisner, B. (2012). Disability and disaster. In B. Wisner, JC Gaillard, & I. Kelman, I. (Eds.), Handbook of hazards and disaster risk reduction and management (pp. 413-423). New York: Routledge.
- <sup>2</sup> Davis, E.A., Hansen, R., Kett, M., Mincin, J., & Twigg, J. (2013). Disability. In D. S. K. Thomas, Phillips, B.D., Lovekamp, W.E., & Fothergill, A. (Eds). Social vulnerability to disasters, 2nd ed., (pp. 199-234). Boca Raton, FL: CRC Press.
- <sup>3</sup> Stough, L. M., & Kelman, I. (2018). People with disabilities and disasters. In H. Rodriguez, J. Trainor, & W. Donner (Eds.), Handbook of disaster research (2nd ed. pp. 225-242). Cham, Switzerland: Springer. doi:10.1007/978-3-319-63254-4\_12
- <sup>4</sup> Brittingham, R. and T. Wachtendorf. (2013). The effect of situated access on people with disabilities: an examination of sheltering and temporary housing after the 2011 Japan earthquake and tsunami. Earthquake Spectra, 29(S1): S433-S455. doi.org/10.1193/1.4000116.
- <sup>5</sup> Stough, L. M., & Kelman, I. (2018). People with disabilities and disasters. In H. Rodriguez, J. Trainor, & W. Donner (Eds.), Handbook of disaster research (2nd ed. pp. 225-242). Cham, Switzerland: Springer. doi:10.1007/978-3-319-63254-4\_12
- <sup>6</sup> Stough, L. M., Sharp, A. N., Resch, J. A., Decker, C., & Wilker, N. (2015). Barriers to the long term recovery of individuals with disabilities following disaster. Disasters, 40(3), 387-410. doi:10.1111/disa.12161
- <sup>7</sup> Cooper, E., A. O'Hara, and A. Zovistoki (2011) Priced Out in 2010: The Housing Crisis for People with Disabilities. Technical Assistance Collaborative, Inc., Boston, MA.
- <sup>8</sup> World Health Organization and The World Bank (2011) World Report on Disability. WHO Press, Geneva.
  - http://whqlibdoc.who.int/publications/2011/9789240685215\_eng.pdf?ua=1
- <sup>9</sup> Kailes, J.I. and A. Enders. (2007). Moving beyond "special needs": A function-based framework for emergency management and planning. Journal of Disability Policy Studies, 17(4), 230-237.
- <sup>10</sup> Stough, L. M., Sharp, A. N., Decker, C., & Wilker, N. (2010). Disaster case management and individuals with disabilities. Rehabilitation Psychology, 55(3), 211-220.
- <sup>11</sup> Brault, M. W. (2012). Americans with disabilities: 2010. Current Population Reports. U.S. Department of Commerce, Economics and Statistics Administration, U.S. Census Bureau.
- <sup>12</sup> Centers for Disease Control and Prevention (2019, June). Disability impacts all of us. Retrieved from <a href="https://www.cdc.gov/ncbddd/disabilityandhealth/infographic-disability-impacts-all.html">https://www.cdc.gov/ncbddd/disabilityandhealth/infographic-disability-impacts-all.html</a>
- <sup>13</sup> U.S. Homeland Security (2016, June). National Response Framework, 3<sup>rd</sup> Edition. Retrieved from <a href="https://www.fema.gov/media-library-data/1466014682982-9bcf8245ba4c60c120aa915abe74e15d/National\_Response\_Framework3rd.pdf">https://www.fema.gov/media-library-data/1466014682982-9bcf8245ba4c60c120aa915abe74e15d/National\_Response\_Framework3rd.pdf</a>
- National Association of County and City Health Officials (NACCHO), Association of State and Territorial Health Officials (ASTHO), in collaboration with the Office of the Assistant Secretary for Preparedness and Response (ASPR) and the HHS Administration for Community Living (ACL) (2019). Capacity-building toolkit for including aging and disability networks in emergency planning. Retrieved from <a href="https://www.naccho.org/uploads/downloadable-resources/Capacity-Building-Toolkit-for-Aging-and-Disability-Networks-2-5-19.pdf">https://www.naccho.org/uploads/downloadable-resources/Capacity-Building-Toolkit-for-Aging-and-Disability-Networks-2-5-19.pdf</a>
- <sup>15</sup> United States Department of Justice (2019) Information and technical assistance on the Americans with Disabilities Act. Retrieved from <a href="https://www.ada.gov/emerg\_prep.html">https://www.ada.gov/emerg\_prep.html</a>
- Rebuild Texas (2018, November). Eye of the storm: Report of the governor's commission to rebuild Texas. Retrieved from https://www.rebuildtexas.today/wp-content/uploads/sites/52/2018/12/12-11-18-EYE-OF-THE-STORM-digital.pdf