

# **A Review of Local Government Emergency Management Planning and Policy Challenges**

Submitted to

The University of Texas at Arlington  
CAPPAA Department of Public Affairs  
and

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Public Administration Capstone  
Spring 2022

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April 26, 2022

Submitted in partial fulfillment of the requirements for the degree of Master's of  
Public Administration in the College of Architecture, Planning and Public Affairs of  
the University of Texas at Arlington



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## Table of Contents

Executive Summary.....3

Introduction and Background.....3

Methodology.....6

Conclusion.....29

Recommendations.....29

References.....32

    Appendices.....34

    Appendix 1. Local Government Emergency Management Planning Survey.....34

    Appendix 2. Local Government Emergency Management Planning Survey Results.....37

    Appendix 3. Tarrant County ARPA Funding Allocations to Local Governments.....38

    Appendix 4. Preparedness Standards for Emergency Management (TDEM-100).....40

## Executive Summary

Emergency Management Plans (EMP) are a necessary element of disaster preparedness for all local governments in Texas, but various challenges and policy issues can cause plans to differ across the state. There are thirty-seven small to midsized local governments in Tarrant County, and they can all choose to implement the Texas Division of Emergency Management's (TDEM) planning requirements in different ways. A team of graduate students in the public administration program at UTA, established objectives that include objectives include becoming familiar with Texas Government Code, Ch 418, Subchapter C to identify requirements of local emergency planning, researching past failures and emerging trends of EMPs, identifying plans and Emergency Management Directors for individual local governments, determining what resources were used to create and update local EMPs, analyzing the differences found between training and preparedness levels across Tarrant County, and reviewing the obstacles and considerations that are typically associated with EMPs for local governments. In this project, the team evaluated the individual plans, staff, and training requirements that each small and midsized city in Tarrant County has in place. This review includes recommendations for improving current substandard plans and will present three issues to be used in future evaluations of local EMPs in Tarrant County.

Small to midsize local governments are currently affected by the discrepancies found between different EMP plans across the region due to issues such as limited staffing or a lack of prior experience. These effects extend to the citizens in those communities, of course, who are impacted by the decisions and level of preparedness their local EMP coordinator or director is responsible for during times of crisis. The recommendations will address current gaps in preparedness and will positively impact the governments and their citizens as a result. The project team has several recommendations based off of research and the observed case studies. These recommendations include improving communication and coordination between local governments, updating and increasing training and support materials to account for staff turnover, and taking potential conflicts of interest into account when creating interlocal emergency management planning agreements.

## Introduction and Background

Tarrant County is located in North Central Texas in the Dallas/Fort Worth metropolitan area and is home to approximately 2.1 million residents. There are forty-one incorporated areas within Tarrant County ranging in population from 641 people in the Town of Westover Hills to 918,925 people in the City of Fort Worth. These incorporated areas in Tarrant County are required to have an emergency management plan either on their own or as a member of a group or county plan.



Tarrant County utilizes both a County Hazard Mitigation Plan that many local governments within Tarrant County participate in and a County Emergency Management Plan. Both plans were last updated 2020.

The team researched thirty-seven small to mid-sized local governments in Tarrant County to observe differences between their emergency management plans. There is a growing body of research on this topic that the project team reviewed for this report. City managers and researchers alike recognize that small and mid-sized local governments have struggled in recent years to create dynamic and adaptable plans for disaster recovery (Mills & Whitson, 2020). Texas has been hit particularly hard by natural disasters that have challenged local governments' emergency preparedness. The key to a successful local response to crisis is an established long-term plan for preparation and recovery, and attention to documentation and mitigation in the short-term response (Becker, 2009). Of course, it can be difficult to determine how effective or thorough a local government's EMP is as most communities are not handling constant emergencies, so it is important for local governments to create a system that allows for regular reviews of their EMPs and consistent training for their staff (Henstra, 2010).

This review includes research into the areas EMPs typically cover, including but not limited to state law requirements for an EMP, TDEM Guidelines for an EMP, and the purpose of an EMP. The team also researched challenges and potential policy issues that small to mid-sized communities struggle with when creating an EMP, including limited staffing or equipment for implementing an EMP, and developed an understanding of how EMPs differ between small and mid-sized local governments based on resource availability, size, and population.

The project team also reviewed the planning process for the small to midsize local governments in Tarrant County regarding their EMPs to determine how often the local governments in Tarrant County review and update their EMPs. The team also evaluated the various EMP Preparedness Levels of Tarrant County small and mid-sized local governments. Finally, the team determined what type of planning document each small to mid-sized local government utilizes for their emergency operations plan and identified benefits and challenges of implementing each type of plan.

The team became familiar with Texas Government Code, Ch 418, Subchapter C to identify requirements of local emergency planning, researched past failures and emerging trends of EMPs, identified plans and Emergency Management Directors for individual local governments, determined what resources were used to create and update local EMPs, analyzed the differences found between training and preparedness levels across Tarrant County, and reviewed the obstacles and considerations that are typically associated with EMPs for local governments. The scope of this project includes small to midsize local governments that are affected by the differences between EMPs across the Tarrant County region governments and extends to the citizens in those communities who are impacted by their governments' level of preparedness during times of crisis.

The project team evaluated the EMPs from across Tarrant County to recommend at least three considerations needed when developing a Strategic, Operational or Tactical EMP.

Over the duration of this project, the project team accounted for several constraints. One potential constraint was possible complications with technology and other equipment. At any point, the small to midsized local government websites containing the emergency management plans could go down or be unavailable due to other technical difficulties. Additionally, some cities' websites were out of date or lacking information on their EMPs. Research was also potentially affected by personnel shortages if the small to midsized city governments being evaluated lacked the personnel to keep their EMP updated and online. Some of the governments also do not have contact information available for their emergency management coordinators, which means it was difficult to obtain clarification or even access to some of the EMPs. Due to the nature of the type of information included in the EMPs, some local governments were also reluctant to share their plans, and the team had to make do with what information was publicly available or meet with the local directors and coordinators to discuss their EMPs. Time constraints also presented a challenge as all of the team members have jobs, additional classes, and other personal obligations outside of this project. There were constraints on how much time each team member may be able to spend on this project, as well as the time constraints that come along with any project that has deadlines. Fortunately, the team also has resources in the form of the instructor, the TDEM, the local government websites and other documentation, the academic resources and institutional support offered by UTA, and of course the knowledge and expertise of their fellow team members.

## Methodology

The team employed a two-pronged comprehensive approach to both learn the basics of emergency management planning and apply that knowledge to how local governments in Tarrant County utilize emergency management planning within their own communities. Each team member researched several topics related to emergency management planning and response. The topics centered around five main components of emergency management including legal requirements of emergency management planning, emergency management plan components and preparedness levels, interlocal agreements between Tarrant County communities, state and federal funding assistance, and case studies of past disaster declarations with regards to emergency management planning.

In addition, the project team compared local government emergency management planning within Tarrant County. Thirty-seven local governments were surveyed to determine if they utilized an emergency management plan in accordance with state law. The various planning levels (Basic, Intermediate, Advanced) between the local governments were also analyzed. Fort Worth, Arlington, Grand Prairie, and Westover Hills were not considered with the study.

The survey utilized by the project team included twelve questions (Appendix 1) to gather information about local government EMPs. To gather survey answers, each team member was



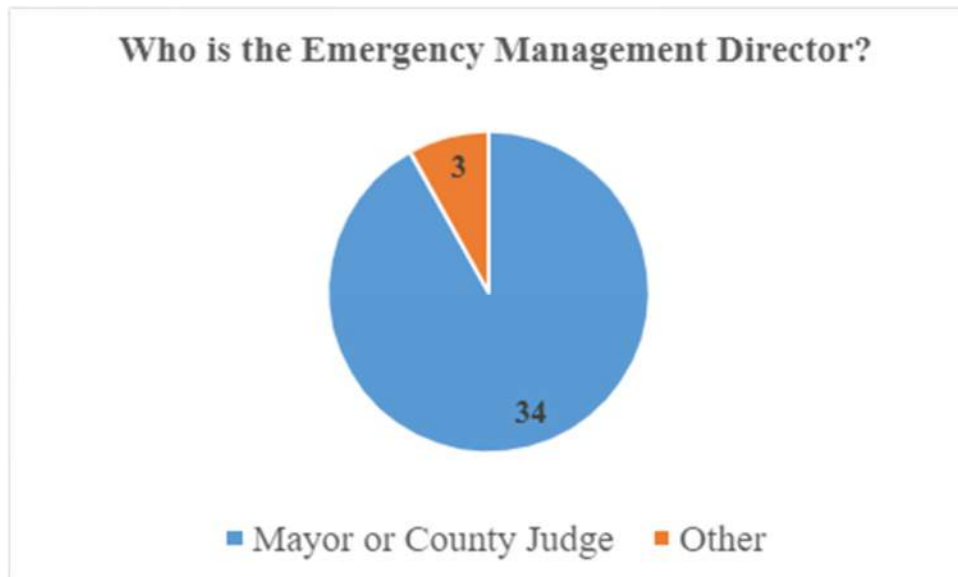
assigned a certain number of local governments (thirty-seven in total) and were set about on researching each local government's website to find answers to the survey questions. If the answers could not be found on the local government's website, the team member would contact the emergency management coordinator (if one was identified) or the local government's emergency services department. All avenues of contact were exhausted to gather the information needed, so as to be as thorough as possible when analyzing the results of the survey.

### *Results*

Thirty-four of thirty-seven EMPs were updated within the last five years and the other three were unknown due to lack of response. Thirty-four of thirty-seven EMP's were Operational while three of the thirty-seven were unknown due to lack of response. None of the EMP's that the team received data on were posted publicly. This may be due to the sensitive nature of information contained within the EMP. Of the local governments that responded to our request for information, all the EMP's utilized TDEM materials and utilized interlocal agreements for all or part of their EMP. Thirty-two of thirty-seven local governments have their own fire department while the other five utilized interlocal agreements with other municipal fire departments for emergency services.

The project team chose to highlight survey data below on the differences between the local governments related to their emergency management directors, emergency management coordinators, and the entity that administers and updates their emergency management plan.

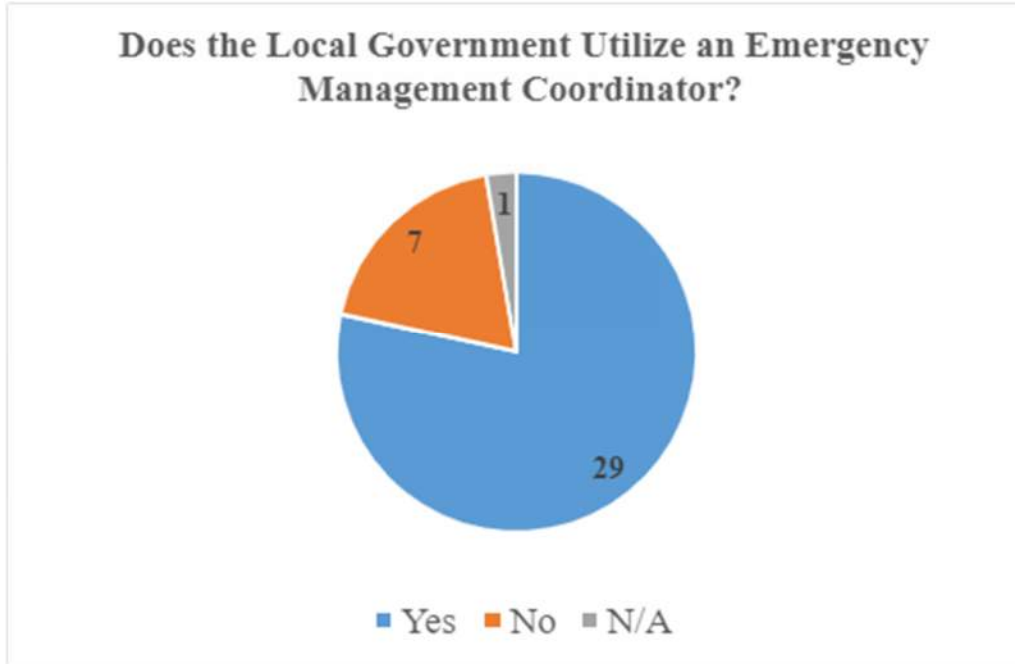
Figure 2: Emergency Management Director Survey Results



2022 Local Government Emergency Management Survey

All local governments had an emergency management director, with only three of thirty-seven local governments having someone other than the mayor or county judge as the emergency management director

Figure 3: Emergency Management Coordinator Results



2022 Local Government Emergency Management Survey

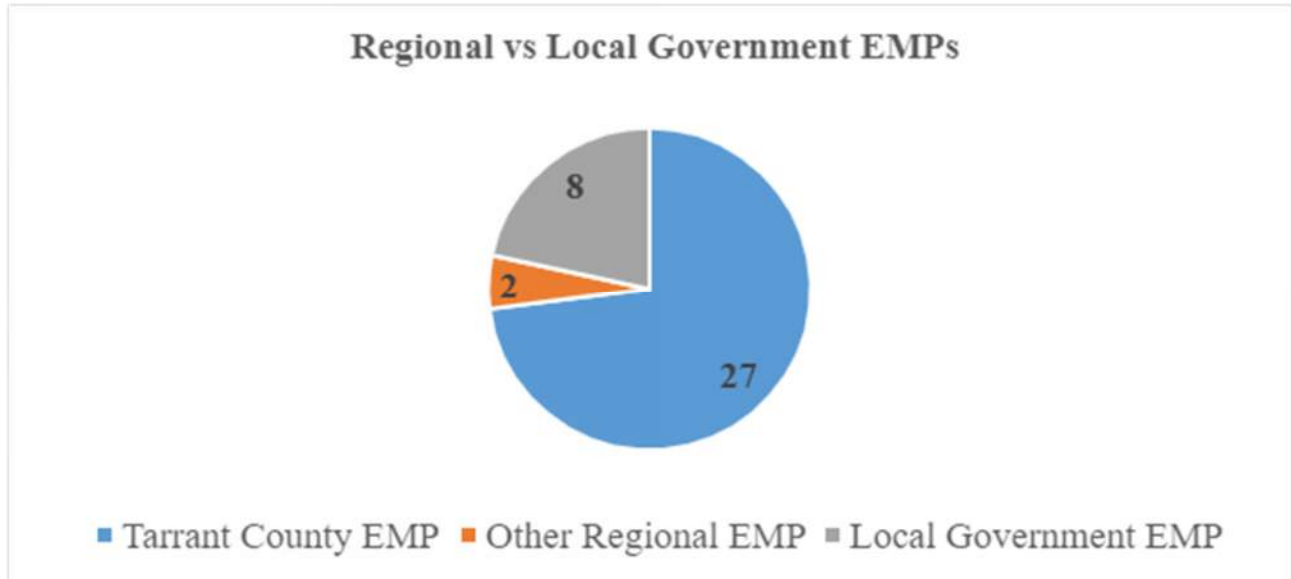
Twenty-nine of thirty-seven local governments had emergency management coordinators. Of the other eight, seven did not, and one was unknown due to lack of response. A majority of the local governments that did not have an emergency management coordinator were smaller municipalities with under 15,000 population. However, the City of Hurst does not have an emergency management coordinator and they have a population of almost 40,000 which made them the largest municipality without an emergency management coordinator.

One interesting aspect the team realized quickly was that over eighty percent of the thirty-seven local governments surveyed utilized either Tarrant County’s, Wise County’s, or Denton County’s emergency management plan instead of their own. Each jurisdiction that participates in their county’s emergency management plan must do so through the use of a resolution or ordinance.

Eight of thirty-seven local governments had their own emergency management plans. Twenty-seven of thirty-seven fell under Tarrant County’s EMP, and two of thirty-seven fell under other county EMPs. Most of the local governments that create and update their own emergency management plan are over 40,000 in population. However, the outliers are Pantego and Forest Hills.



Figure 4: Local Government Utilization of Regional vs Own EMP



2022 Local Government Emergency Management Survey

*Validity, Reliability, and Limitations*

Concerning the validity of the survey results, the external validity is low. These survey results cannot be applied to other local governments, as the process of emergency management planning differs from county to county, city to city, town to town, etc. Though the survey could be used to garner its own results among other local governments in other counties, it would not be safe to assume the results would be similar. Since the survey was created specifically for these local governments in Tarrant County, the results have a higher internal validity. The answers were derived specifically from information the local governments provided (whether through direct or indirect contact). Therefore the likelihood of the answers being influenced by other factors than those in question is extremely low.

In regard to reliability, the results are fairly reliable. Though if the process of the survey were to be repeated, it would be anticipated that answers could eventually be found for some of the survey questions that were answered as “unknown”. The team members could aim to employ other methods of communication, or the local government could undergo a change in employees, raising the chance of getting a response from the local governments that did not respond to inquiries. In addition to that possible change, EMPs are required to be updated every five years, meaning interlocal agreements could change, other local governments could decide to draft their own EMP, or a local government could do away with the role of emergency management coordinator; all of these changes would affect the results of the survey, if repeated after a five year mark for a local government.

The main limitation for the results of this survey was due to the response rate of the local governments if they did not have information posted publicly on their website. Some local governments were easier to contact than others, and this posed an issue for the team members when trying to gather answers for the survey.

### *Legal Requirements of Emergency Management Planning*

Emergency Management in Texas dates to the Texas Civil Protection Act of 1951, which created a state emergency management organization and plan to aid local governments with disaster response. Prior to the passage of the Texas Civil Protection Act, local governments managed disaster responses on their own with little coordination from the State.

Chapter 418 of the Texas Government Code and Title 37, Part 1, Chapter 7 of the Texas Administrative Code (TAC) requires mayors and county judges to serve as the emergency management director for their jurisdictions. However, local government officials can designate an emergency management coordinator to administer the local program. In addition, Texas Government Code Chapter 418.102 requires each county in Texas to create and maintain an emergency management program or participate with various local governments through an interjurisdictional emergency management program that serves the entire county (TML, 2020).

The Texas Division of Emergency Management requires four basic components for all emergency management plans. First, the plan must be legally adopted through city ordinance or county commissioner order that includes adoption of the National Incident Management System (NIMS). If the local government wishes to participate with another jurisdiction's emergency operations plan, instead of creating their own, they must pass a joint resolution that establishes an inter-jurisdictional emergency management program.

The local government must also prepare or participate in a NIMS compliant basic plan that is updated every five years. The basic plan must identify overall approaches to emergency management targeted to the agency's executive and operational staff. NIMS compliant functional annexes are also required in addition to the basic plan that identify more specific responsibilities and actions regarding a variety of emergency management components. TDEM suggested functional annexes are listed in Table 1. Functional annexes must be updated every five years and conform to State Planning Checklist requirements. Finally, each local government must utilize standard operating procedures (SOPs) that outline detailed requirements in support of emergency management operations.

### *Emergency Operations Planning Preparedness Levels*

TDEM designates three types of Emergency Operation Planning Preparedness levels: Basic, Intermediate, and Advanced. All local governments in Texas are required to provide or participate in an inter-jurisdictional emergency management program at the basic preparedness level. The differentiating factor between preparedness levels is related to the number and type of functional annexes that are included with the basic emergency operations plan as shown in Figure 5. Every

functional annex that is required for a lower level of preparedness is required for the higher preparedness level in addition to the functional annexes specific to the higher level.

Figure 5: Standardized Local Functional Annexes Coded by Preparedness Level

Standardized Local Functional Annexes Coded by Preparedness Level	
Basic Emergency Management Plan	Annex L Utilities
Annex A Warning	Annex M Resource Management
Annex B Communications	Annex N Direction and Control
Annex C Shelter and Mass Care	Annex O Human Services
Annex D Radiological Protection	Annex P Hazard Mitigation
Annex E Evacuation	Annex Q Hazardous Materials and Oil Spill Response
Annex F Firefighting	Annex R Search and Rescue
Annex G Law Enforcement	Annex S Transportation
Annex H Health and Medical Services	Annex T Donations Management
Annex I Emergency Public Information	Annex U Legal
Annex J Recovery	Annex V Terrorist Incident Response
Annex K Public Works and Engineering	Annex W Fixed Nuclear Power Plant (limited jurisdictions)

	<b>Basic Preparedness Requirement</b>
	<b>Intermediate Preparedness Requirement</b>
	<b>Advanced Preparedness Requirement</b>

Communities that choose to rely on an emergency management plan that satisfies only basic requirements may encounter several challenges during disaster events. First, many critical functional annexes at the basic level are missing. Missing function annexes that are often needed during a disaster include Firefighting, Law Enforcement, Health and Medical Services, Recovery, Public Works and Engineering, Utilities, Search and Rescue, and Transportation. For example, the recent winter storm Uri disaster in Texas had a larger impact on the Public Works Department compared to any other functional department in the Plano community. Many Texas communities lost water service because Public Works staff were unable to keep exposed water pumps from freezing in the prolonged subfreezing temperatures. In addition, many pump stations that had protected pumps suffered backup power generation failure and were unable to maintain system water pressure which makes the water unsafe for drinking from potential backflow issues.

Public Works staff also needed training on triage of excessive call volumes and dispatch for staff to perform customer meter shutoffs to save personal and public property and decrease water demand in the system. Communities that only plan to the basic level of preparedness were potentially less prepared to handle the impacts of Winter Storm Uri.

Another challenge for communities with only basic preparedness relates to funding. TDEM states in their planning requirements that “Jurisdictions participating in Department of Homeland Security grant programs and/or the Emergency Management Performance Grant (EMPG) program

are generally expected to achieve higher levels of planning and preparedness as a condition of grant eligibility” (TDEM-100 pg 13). The EMPG program authorizes just over \$355 million in annual funding that a municipality would be ineligible to receive at the basic preparedness level.

*Emergency Management Funding*

One of the most critical aspects of emergency management relates to funding. During a natural disaster residents, businesses, non-profit organizations, and local governments need funding to support recovery. There are a variety of federal relief funding mechanisms that can support communities of all sizes. The largest governmental entity that provides disaster related funding assistance is the Federal Emergency Management Agency (FEMA) under the Department of Homeland Security (DHS). FEMA provides three categories of disaster assistance which include individual assistance, public assistance, and hazard mitigation assistance (FEMA.GOV).

Figure 6: FEMA Disaster Assistance Categories

<b>Figure 6: FEMA Disaster Assistance Categories</b>		
<b>Category No.</b>	<b>Disaster Assistance Category</b>	<b>Assistance Offered</b>
1	Individual Assistance	Temporary Housing Repair Replacement Permanent Housing Construction Other Needs Assistance Business Physical Disaster Loans Home Disaster Loans Unemployment Assistance Special Tax Considerations Legal Services Crisis Counseling
2	Public Assistance	Category A: Debris Removal Category B: Emergency Protective Measures Category C: Road Systems and Bridges Category D: Water Control Facilities Category E: Public Buildings and Contents Category F: Public Utilities Category G: Parks, Recreational, and Other
3	Hazard Mitigation Assistance	Acquisition and Demolition Relocation Elevation/Flood Proofing

FEMA Guide to the Disaster Declaration Process and Federal Disaster Assistance

Individual assistance is primarily concerned with providing aid to individuals for direct and support services related to disaster recovery. Applications for individual assistance are typically handled through the resident's local government and funneled up through the state to the federal government. Public assistance typically goes to state and local governments to repair public infrastructure impacted by a disaster. Hazard mitigation assistance is concerned with reducing future losses to public and private. FEMA provides assistance through four grant programs which include Hazard Mitigation, Preparedness, Emergency Food and Shelter, and Resilience property (U.S. Department of Homeland Security, FEMA Guide to the Disaster Declaration Process and Federal Disaster Assistance, [https://www.fema.gov/pdf/rrr/dec\\_proc.pdf](https://www.fema.gov/pdf/rrr/dec_proc.pdf)).

One of the more recent disasters to impact Tarrant County was Winter Storm Uri in 2021. FEMA provided a total of over \$224M in funding for both individual and public assistance to Texas residents and local government recovery efforts. Tarrant County residents were able to apply for assistance through their local government or the Tarrant County website.

Another recent disaster that impacted the entire world is the COVID-19 pandemic. The COVID-19 pandemic required significant support at the Federal level for many states and local governments. The American Rescue Plan Act (ARPA) provided \$350 billion to state and local governments across the United States to provide relief and recovery from the effects of the COVID-19 pandemic. Tarrant County received approximately \$204 million to support COVID-19 relief and recovery in 2021 and is expected to receive a second tranche of \$204 million in 2022 (Tarrant County Administrator's Office, Tarrant County Recovery Plan Performance Report, 2021). A summary showing the amounts that each local government received is provided in Appendix 3.

### *Hazard Assessments*

As new challenges present themselves, new plans are necessary to keep citizens safe. In 2017 Tarrant County began research for the Tarrant County Hazard Mitigation Action Plan (HazMAP) which would be an update of the 2015 Local HazMAP, which was FEMA approved. The newest HazMAP would be completed in 2020. This plan is based on the hazards faced by the local communities as identified through public meetings that were attended by representatives and citizens of each jurisdiction in Tarrant County.

## Hazard Mitigation Plan Requirements CFR Title 44 Emergency Management and Assistance

<b>§201.6(c)(2)(i)</b>	[The risk assessment shall include a] description of the type, location and extent of all natural hazards that can affect the jurisdiction. The plan shall include information on previous occurrences of hazard events and on the probability of future hazard events.
<b>§201.6(c)(2)(ii)</b>	[The risk assessment shall include a] description of the jurisdiction's vulnerability to the hazards described in paragraph (c)(2)(i) of this section. This description shall include an overall summary of each hazard and its impact on the community. All plans approved after October 1, 2008 must also address NFIP [National Flood Insurance Program] insured structures that have been repetitively damaged by floods. The plan should describe vulnerability in terms of:
<b>§201.6(c)(2)(ii)(A)</b>	The types and numbers of existing and future buildings, infrastructure, and critical facilities located in the identified hazard areas;
<b>§201.6(c)(2)(ii)(B)</b>	An estimate of the potential dollar losses to vulnerable structures identified in this section and a description of the methodology used to prepare the estimate.
<b>§201.6(c)(2)(ii)(C)</b>	Providing a general description of land uses and development trends within the community so that mitigation options can be considered in future land use decisions.
<b>§201.6(c)(2)(iii)</b>	For multi-jurisdictional plans, the risk assessment section must assess each jurisdiction's risks where they vary from the risks facing the entire planning area.

Through data collection, analysis, and community feedback through these meetings, the 2020 HazMAP was created. FEMA's Disaster Mitigation Act of 2000 (DMA 2000) provides federal assistance to state and local emergency management entities to mitigate the effects of disasters. The HazMAP, as it is written, satisfies the requirements of the DMA 2000.

Code of Federal Regulation (CFR) Title 44 Emergency Management and Assistance sets forth certain requirements for mitigation plans for local governments. During the Hazard Identification and Risk Assessment these requirements were incorporated into the plan. The HazMAP would address 9 natural hazards that have or could potentially affect the area. These 9 natural hazards were determined through an assessment of previous federally declared disasters in Texas, historical events and potential events in

Tarrant County, and a review of local mitigation action plans. (2020 HazMAP)

The 9 natural hazards that the HazMAP would address are:

1. Drought
2. Earthquakes
3. Expansive Soils
4. Extreme Heat
5. Flooding (including dam failure)
6. Thunderstorms (including hail, wind, and lightning)
7. Tornadoes
8. Wildfires
9. Winter Storms

Each jurisdiction's ranking is based on previous occurrences and the probability of future occurrences. Thunderstorms and tornadoes ranked highest on the list, with earthquakes and drought ranking the lowest.



During the research for the 2020 HazMAP, vulnerabilities were evaluated. Vulnerability, as defined for this report is “the susceptibility of people, property, industry, resources, ecosystems, or historical buildings and artifacts to the negative impact of a disaster.” (2020 HazMAP p. 72) The Tarrant County Hazard Mitigation Planning Team conducted risk assessment to determine vulnerabilities in their jurisdictions. These vulnerabilities are social, environmental, economic, or political in nature. (2020 HazMAP p. 72)

Within Tarrant County, there are multiple critical facilities that are vulnerable to these hazards. Those facilities fall into 16 critical infrastructure sectors according to the Department of Homeland Security. Those sectors are:

- Chemical Sector
- Commercial Facilities Sector
- Communication Sector
- Critical Manufacturing Sector
- Dams Sector
- Defense Industry Sector
- Emergency Services Sector
- Energy Sector
- Financial Services Sector
- Food and Agriculture Sector
- Government Facilities Sector
- Healthcare and Public Health Sector
- Information Technology Sector
- Nuclear Reactors, Materials, and Waste Sector
- Transportation Sector
- Water and Wastewater Systems Sector

### *Tier II Chemical Reporting*

Hazardous chemicals are an important aspect of Emergency Management Planning. Tier II Chemical reports are used to keep citizens informed about what hazardous materials are being stored in their community (even if only for one day) and allows first responders to plan for responses to these facilities in the event of a release, whether accidental or intentional. These reports are also used by Local Emergency Planning Committees (LEPC) to develop community emergency response plans.

These reports give information such as how much of the chemical is kept on site, based on the most that will be there at one time, emergency contacts, evacuation routes, target hazards in the area, response routes for local first responders. When reporting the quantity of a hazardous substance, a facility must report the maximum amount of that substance that has been kept on the

property, even if only for a day. For example, if Acme Chemical stores one lb of a chemical on site 364 days a year, but for one day a year, has 10,001lbs on site, it is required to report that it stores 10,001 lbs of that chemical in a Tier II report.

Every year, the Texas Commission on Environmental Quality (TCEQ) in accordance with the Texas Community Right-To-Know Acts (TCRAs, Health and Safety Code, Chapters 505, 506, & 507) and the Texas Hazard Communication Act (TCHA) requires that facilities file a Tier II report for their hazardous substances for the previous calendar year. The submission of these reports at the state level is federal mandated by the Environmental Protection Agency under Section 312 of the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA) also known as the Superfund Amendments and Reauthorization Act (SARA), Title III.

All facilities that store hazardous chemicals above what is known as the “reportable quantity” must submit a Tier II report to TCEQ yearly between January 1<sup>st</sup> and March 1<sup>st</sup> with exception to facilities with ammonium nitrate, which must file within seventy-two hours if the facility meets the requirements of an ammonium nitrate facility and within ninety days if it does not meet the requirements of an ammonium nitrate facility.

A facility is considered to have hazardous chemicals if they are required to maintain a Material Safety Data Sheet (MSDS) or a Safety Data Sheet (SDS) based on Occupational Safety and Health Administration (OSHA) regulations for these chemicals.

The reportable quantities of these hazardous chemicals are as follows (please note that there is a special reporting requirement for what are considered extremely hazardous substances (EHS):

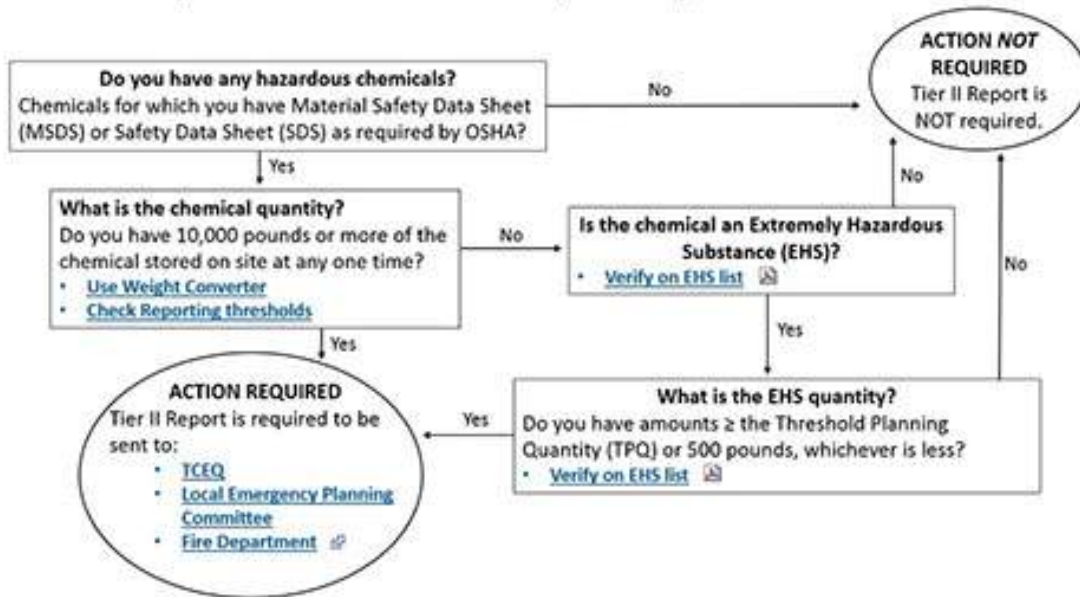
- Hazardous chemicals: 10,000 lbs.
- EHS: 500 lbs or the threshold planning quantity (TPQ), whichever is less.
- Retail fuel stations: if tanks are underground and in compliance with underground storage tank federal (40 CFR 280) requirements.
- Gasoline: 75,000 gallons
- Diesel Fuel (all grades combined): 100,000 gallons

Certain chemicals, such as those used in hospitals, agriculture, or radioactive waste, are exempt from being reported.

The Tier II Report must be filed with Tarrant County Office of Emergency Management and local fire departments in addition to their filing with TCEQ. The latest Tier II report must be kept on file until they update, at which time the updated report will replace the last one. These reports must be kept on file by TCEQ for thirty years. One thing to remember is that these reports are lag-time reports, meaning that the quantities listed are for the previous calendar year and not for the current calendar year.

Figure 7: Decision Tree for Tier II Chemical Reporting

**Determine if you need to file a Tier II Report for your chemicals**



Due to the potential security risk, it is not publicly known which facilities have reportable quantities of hazardous or extremely hazardous substances. These reports are, however, available at the request of the citizen through Texas Health and Safety Code (THSC), §505.007(a), or THSC, §506.007(a).

*Training Requirements for Basic, Intermediate and Advanced Preparedness Levels*

Planning is a major component related to emergency management planning. However, without proper levels of training emergency management plans would be impossible to execute. With the three different levels of preparedness plans provided by TDEM, there are many different levels of training required for individuals charged with managing the jurisdictions. All training requirements are laid out in the TDEM Preparedness Standards for Emergency Management in Texas (TDEM-100)

Training in any discipline is a continuous process. Emergency management is no different. While natural and man-made disasters are nothing new, the challenges presented by them in today’s world is changing the response needed to meet the needs of the citizens. Texas has experienced unprecedented flooding and record low temperatures in the last 5 years. With new challenges comes new knowledge to better prepare for the future. However, without basic training requirements, government leaders and first responders can find themselves unprepared for even the simplest disasters.

Section Two of the TDEM-100 describes what is required for The Basic Training Level of Preparedness. This provides the fundamental information that all Emergency Management

Directors (EMD) and Emergency Management Coordinators (EMC) should know as the basic function of their job. These courses provide information on legal authority, emergency management organization at the state and federal level, along with emergency management functions that should be addressed during the preparedness, mitigation, response and recovery phases of a disaster.

EMDs, at the Basic Level, must take the following courses:

1. FEMA Independent Study Course IS100 – Introduction to Incident Command System
2. G200 – Public Official’s Workshop on Emergency Management
  - a. Must be completed within 180 days after assuming office by any elected or appointed official with management or supervisory responsibilities.
3. FEMA Independent Study Course IS700.a – National Incident Management System (NIMS), An Introduction
4. FEMA Independent Study Course IS800.b – National Response Framework (NRF), An Introduction

EMCs, at the Basic Level, must take the following courses:

1. FEMA Independent Study Course IS100 - Introduction to Incident Command System (ICS)
2. FEMA Independent Study Course IS200- ICS for Single Resources and Initial Action Incidents
3. FEMA Independent Study Course IS700.a- National Incident Management System (NIMS), An Introduction
4. ICS 300 – Intermediate ICS for Expanding Incidents
5. ICS 400 – Advanced ICS, Command and General Staff – Complex Incidents
6. G610 – Basic Emergency Management Workshop

At the Intermediate Level of Preparedness, courses are used to add knowledge and training in emergency planning and disaster recovery.

EMDs, at the Intermediate Level, must take the following courses:

1. FEMA Independent Study Course IS100 - Introduction to Incident Command System
2. G200 – Public Official’s Workshop on Emergency Management
  - a. Must be completed within 180 days after assuming office by any elected or appointed official with management or supervisory responsibilities.

Recommend Training for EMD’s:

1. FEMA Independent Study Course IS700.a- NIMS, An Introduction

EMCs, at the Intermediate Level, must take, in addition to all the basic level training requirements, the following courses:

1. G230 – Principles of Emergency Management
2. G235.A – Emergency Planning
3. G620 – Texas Disaster Recovery

At the Advanced Level of Preparedness courses are designed to focus on community development, and emergency management programs that address hazard mitigation and preparedness activities.

EMDs at the Advanced Level must take the following courses:

1. FEMA Independent Study Course IS100 - Introduction to Incident Command System
2. G200 – Public Official’s Workshop on Emergency Management
  - a. Must be completed within 180 days after assuming office by any elected or appointed official with management or supervisory responsibilities.

Recommend Training for EMD’s:

1. FEMA Independent Study Course IS700.a- NIMS, An Introduction

EMCs, at the Advanced Level must take, in addition to all the Basic and Intermediate level training requirements, the following courses:

1. G710 – Mitigation Planning Course
2. G720 – Mitigation Grants Course
3. G920 – Texas Exercise Design and Evaluation Course
4. G975 – EOC Management & Operations and ICS Interface
5. G202 – Debris Management
6. G288 – Donations Management

EMCs are also required to take at least one preparedness, response, recovery, or mitigation course per year.

An individual designated as a “Certified Emergency Manager” by the International Association of Emergency Managers who has completed G610 will be considered to have met the training requirements for the Advanced Preparedness Level, in lieu of the courses listed.

These listings are the required courses as set forth by TDEM. FEMA, in their Developing and Maintaining Emergency Operations Plans, Comprehensive Preparedness Guide 101, suggest these courses to help prepare for a disaster:

- IS-1: Emergency Manager: An Orientation to the Position
- IS-10: Animals in Disaster, Module A – Awareness and Preparedness
- IS-11: Animals in Disaster, Module B – Community Planning
- IS-120.a: An Introduction to Exercises
- IS-130: Exercise Evaluation and Improvement Planning

- IS-197.EM: Special Needs Planning Considerations – Emergency Management
- IS-208.a: State Disaster Management
- IS-288: The Role of Voluntary Agencies in Emergency Management
- IS-366: Planning for the Needs of Children in Disasters
- IS-547.a: Introduction to Continuity of Operations
- IS-650.a: Building Partnerships with Tribal Governments
- IS-701.a: NIMS Multiagency Coordination Systems
- IS-702.a: NIMS Public Information Systems
- IS-703.a: NIMS Resource Management
- IS-704: NIMS Communications and Information Management
- IS-706: NIMS Intrastate Mutual Aid – An Introduction
- IS-860.a: National Infrastructure Protection Plan

The State of Texas, in Chapter 418. Emergency Management, Subchapter A. General Provisions, Sec. 418.005. Emergency Management Training, states who is defined as an EMD or EMC and shall take the required training.

While Section Two describes what personnel are required to know, Section Three of the TDEM-100 describes the exercise standards required to train these personnel in their emergency management/homeland security duties; test and validate plans, procedures policies and facilities, and enhance the capabilities required for emergency and disaster response and recovery activities. (TDEM-100 pg 3-1) As mentioned previously, all local governments and emergency management organizations are expected to achieve the basic preparedness.

In order to achieve, at a minimum, the basic level of preparedness, all local governments and emergency management organizations are required to conduct at least one emergency management exercise per year, these exercises are defined by the Homeland Security Exercise and Evaluation Program.

These exercises are a Tabletop/Discussion-based Exercise, Operations-based/Functional Exercise, Operations-based/Full-Scale Exercise, or an Actual Incident.

The Tabletop/Discussion-based Exercise is used to validate the emergency management plan, along with the policies, procedures, and assigned responsibilities. The exercise involves a discussion in which various issues related to a simulated emergency situation are discussed. The participants include elected, appointed, and other key personnel assigned to emergency management roles.



The Operations-based/Functional Exercise is used to test and evaluate the capabilities of functions or activities that are operationally interdependent. Key decision makers implement plans, policies, and procedures that also involve operations center personnel, and representatives of various response, recovery, and support organizations. To add more dimension to the scenario, Exercise Controllers will represent field units that are pertinent to the scenario, but not participating. Through communication with various groups outside the command post, the participants drive the scenario based on the feedback and actions taken.

### Exercise Requirements

EXERCISE REQUIREMENTS A. The minimum standards for any exercise are:

1. The chief elected official of the jurisdiction or plan-designated representative must participate.
2. A minimum of four (4) departments/agencies assigned an emergency management/homeland security role in the local emergency management plan must participate.
3. The coordination and control function of the jurisdiction must be tested and evaluated.
4. At a minimum, three additional emergency functions from the list below must be tested and evaluated:
  - a) Alert/Notification
  - b) Communications
  - c) Emergency Public Information
  - d) Damage Assessment
  - e) Health and Medical, including emergency medical services
  - f) Individual and Family Assistance
  - g) Public Safety, including Fire, Law Enforcement, Mass Care, etc.
  - h) Public Works and Engineering
  - i) Transportation
  - j) Resource Management
  - k) Warning

The Operations-based/Full-Scale exercise utilizes the same basic setup as the Functional Exercise, except resource are deployed. This exercise is used to analyze the plans and policies that are in place.

The last exercise, the Actual Incident, may be substituted in place of any of the aforementioned exercises. For a local government or organization to meet the Basic Preparedness Level for Exercise, they must receive credit from TDEM for one exercise annually. This exercise can be one of the four mentioned exercises, Tabletop, Functional Exercise, Full-Scale Exercise, or Actual Event. Local governments or organizations that are required to meet the Intermediate Preparedness Level for exercises must receive credit for both a Tabletop and Functional Exercise. The Functional Exercise must exercise multiple agency functions.

Local governments of organizations that are required to meet the Advanced Preparedness Level for Exercises must receive credit for a Tabletop exercise, a Functional-based exercise that exercises multiple emergency functions, or a Full-Scale Exercise every fourth year, in lieu of the functional exercise.

### *Interlocal Agreements in Emergency Management*

Many small to mid-sized local governments do not have the resources to respond to even basic emergencies. For instance, many smaller communities do not have their own fire department and instead must contract with other municipalities to provide services. Interlocal Agreements (ILAs) in the State of Texas fall under Texas Government Code 791. Interlocal Cooperation Contracts.

This code covers liability for the agreements in the case of fire or law enforcement services, contracting authority, laws applicable to the contracting parties, contract supervision and administration, approval requirements, and dispute resolution for the parties involved.

Interlocal agreements for fire, emergency medical services, and law enforcement are subject to the liability provision in Sec 791.006. This section states that the agency that would have been responsible for providing those services is responsible for any civil liability that arises from the furnishing of those services. This covers fire department services such as training, fire suppression, firefighting, ambulance services, hazardous materials response services, fire and rescue services, or paramedic services.

However, if the parties enter into a contract under Sec 791.006, they can agree to assign civil responsibility to the responsible party, whether it be the party receiving or furnishing. Sec 791.006 (a-1) states

To assign responsibility for civil liability under this subsection, the parties of the contract must assign responsibility in a written provision of the contract that specifically references this subsection and states that the assignment of liability is intended to be different than liability otherwise assigned in Subsection (a).

Sec 791.027 of this chapter covers Emergency Assistance. This section is a little more liberal in what it outlines. In order for a local government to provide emergency assistance, there need not be a contract or previous agreement if two conditions are met. Those conditions are

1. in the opinion of the presiding officer of the governing body of the local government desiring emergency assistance, a state of civil emergency exists that requires assistance from another local government and the presiding officer requests the assistance; and
2. before the emergency assistance is provided, the governing body of the local government that is to provide the assistance authorizes the local government to provide the assistance by resolution or other official action

Within Tarrant County, there are multiple ILAs between different local governments, all which reference Texas Government Code 791 and many that state that all parties must follow all applicable federal, state, and city statutes.

One such ILA is between the City of Keller and the City of Forth Worth. This ILA covers automatic aid response to “working” structure fires inside the respective jurisdictions. All responses are on an “as needed basis” and subject to the availability of equipment and personnel.

One important ILA in regard to emergency response is between the Cities of Benbrook and Azle and the Tarrant County 911 Emergency Assistance District. This ILA states that the Tarrant County 911 Emergency Assistance District will purchase new radio equipment for Azle and Benbrook, who are currently utilizing VHF/UHF radios, so that they can upgrade to the same 800mhz frequency utilized by the City of Fort Worth. This ILA will improve communication operability along with enhanced inter-agency command and tactical coordination.

Both the City of Lake Worth and the City of Sansom Park have an ILA for structure fire response. Fees for this agreement are based on the FEMA reimbursement schedule set by the Stafford Act,

along with Chapter 418 of the Texas Government Code. This agreement provides for automatic aid for structure fires, while also having provisions for mutual aid for any other emergency incident where assistance from outside is necessary or when the requesting city's resources have been depleted for other emergencies. This agreement also stipulates that both agencies shall conduct a minimum of one joint training or exercise annually.

The City of Burleson has an ILA with Tarrant County Emergency Services District One (ESD 1) for fire service. This ILA states that Tarrant County ESD 1 will pay the City of Burleson a flat rate for services of \$8000 per year. This is unlike others where there is a fee per call. Also, unlike others, this is not a reciprocal agreement, as ESD 1 is under no obligation to provide firefighter or emergency medical services for the City of Burleson. While operating in ESD 1, the City of Burleson's responding units will abide by and enforce the city fire code. During the course of this agreement, ESD 1 can, at any time, inspect the City of Burleson's equipment. Should ESD 1 find deficiencies in Burleson's equipment, the ESD is not required to pay Burleson until the deficiencies have been rectified. The contract can also be cancelled at any time through written notice 30 days in advance.

ILAs play an integral part in day-to-day emergency response as well as during times of declared disasters. Inter-operability and the ability to communicate, such as multiple agencies being on the same radio system help provide a better response to the communities served in times of need.

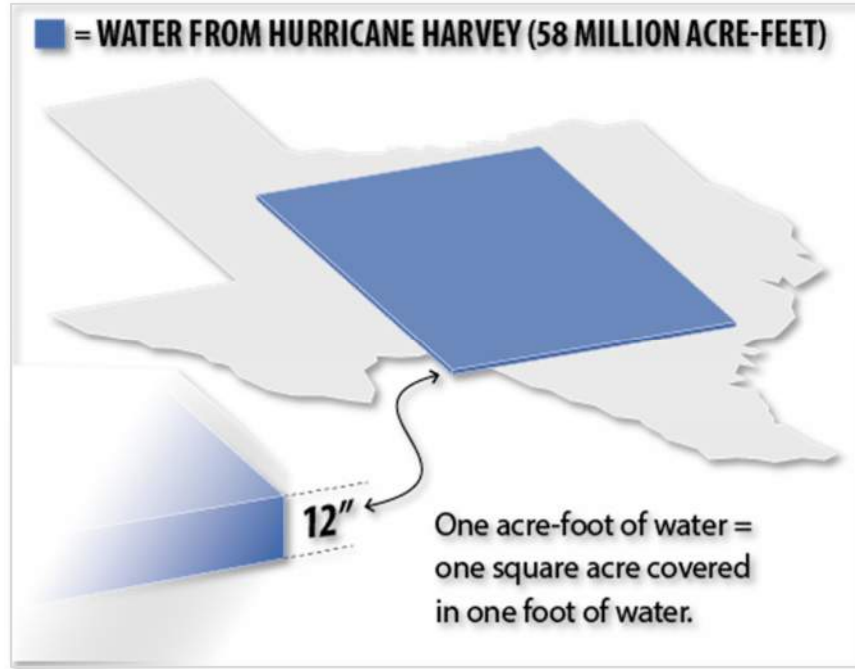
### *Emergency Management Planning Case Studies*

Emergency Management Planning is a process that never stops evolving and is based on assumptions from the local government officials' perspective. Common assumptions are that cities will continuously be exposed to hazards and natural disasters that the local government will not be able to address all hazards, proper mitigation actions can reduce disaster-related losses, and proper implementation of an EMP can reduce or prevent disaster related losses (Tarrant County EMP, 2015, p. BP-15). Understanding the limitations of an Emergency Management Planning is critical to local governments not to point out deficiencies but to realize that every major implementation of an EMP is an opportunity to refine and improve. Two such opportunities for Texas local governments and counties were the landfall of Hurricane Harvey and the conjunction of the Winter Storm Uri with the pandemic.

In 2017, Hurricane Harvey hit the Texas Gulf Coast, and over six days it produced approximately 58 million acre-feet of water (Fikac, 2019). It caused unprecedented flooding along the Texas coast with some areas receiving as much as 60 inches of rain (Fikac, 2019). Hurricane Harvey was responsible for 12-foot storm surges, 145 mph wind gusts which caused residential and business destruction, forced 42,000 people into shelters and killed at least 68 people (Fikac, 2019).

The destruction throughout the Texas Coast was so overwhelming that it is estimated that 13 million cubic yards of debris were cleared from the affected areas (Fikac, 2019). One local government, the city of Rockport, was hit so hard that it was single handedly burdened with the cleanup of over 2.5 million cubic yards of debris (Fikac, 2019).

Figure 8: Hurricane Harvey Flood Water Volume



Fikac, 2019

To date, the aid provided to Hurricane Harvey Survivors through flood insurance claims, small businesses disaster loans, FEMA payments and windstorm insurance payments amounts to over \$15.4 billion (Fikac, 2019).

Figure 9: Hurricane Harvey Aid Categorization

Aid Provided to Harvey Survivors as of Jan. 7, 2019

Type of Aid	Amount
National Flood Insurance Program, advance payments and claims paid (estimate)	\$8.80 billion
Small Business Administration disaster loans approved	\$3.42 billion
FEMA Individual Assistance payments	\$1.64 billion
Texas Windstorm Insurance Association	\$1.61 billion
<b>Total</b>	<b>\$15.47 billion</b>

Fikac, 2019

Governor Greg Abbot, assembled the Governor’s Commission to Rebuild Texas, after the catastrophic implications of Hurricane Harvey. The intent was, “with recovery operations and to

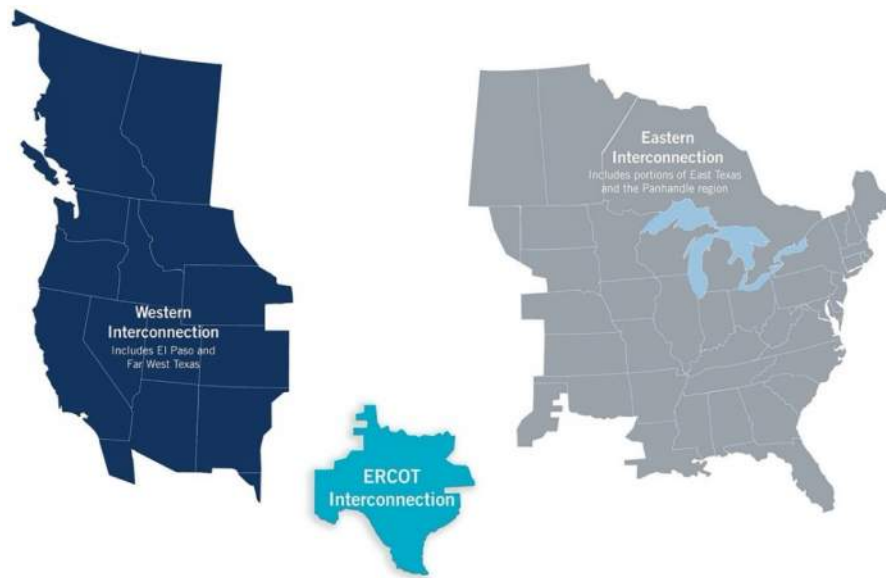
recommend improvements in communication, coordination and infrastructure to lessen the impact of future hurricane events (Fikac, 2019).” The report issued by the commission was Eye of the Storm and it recommended:

- ensuring state emergency responders are effectively organized, trained and equipped, and that local officials and emergency managers have better training.
- improving communication and coordination among state and local officials with emergency responsibilities. As an example, the report cited the use of Texas A&M AgriLife Extension Service agents, who are stationed throughout the state, as a “force multiplier” to speed communications among emergency professionals in the field and state and local officials. During Harvey, the agents forwarded local requests, comments and concerns to a response center at the Texas A&M University System, where experts worked to get answers. The exchanges were logged, allowing for analysis. The report recommends institutionalizing this arrangement.
- providing more timely assistance to survivors. The report suggests using state employees from various entities to create “recovery task forces” to help in specialized areas such as financial assistance.
- providing better, easily accessible information about storm risks to potential property purchasers as well as existing homeowners.
- using regulations and incentives to guide development away from areas at high risk of flooding.
- creating a catastrophic debris management plan and a guide to help local officials with the task.
- improving the state’s ability to withstand disasters through infrastructure projects. The report pointed out that billions in federal, state and local dollars are being spent in Harvey’s wake, calling it essential that “we don’t simply replace what was destroyed but that we also increase the state’s resilience (Fikac, 2019).”

Hurricane Harvey wreaked havoc on the Texas coast, infrastructure and tested the EMPs of many local governments. The commission collaborated with TDEM to improve the EMPs and preparedness for the state. It compiled “a list of more than 4,000 potential hazard-mitigation projects in counties affected by Harvey that would cost a total of \$108 billion (Fikac, 2019).” One of the main projects to ensure preparedness was a coastal spine which would act as a barrier for Galveston and the Houston Ship Channel against storm surges from future hurricanes.

Additionally, the pandemic tested the endurance and preparedness of Texas Communities, and the compounded nature of the February 2021 winter storm provided another instance of a failed EMP. It's important to realize that the Electric Reliability Council of Texas (ERCOT) is unique in that it is designed to be disconnected from the neighboring power grids unlike robust Western and Eastern Interconnection. The winter storm increased demand on the power grid during the extreme cold weather and the lack of winterization pushed the limits of ERCOT and the EMPs.

Figure 10: U.S. Electric Grid



Fikac, 2019

Temperatures dropped to 32°F on February 11<sup>th</sup> and steadily declined to 6°F through February 15<sup>th</sup> (Busby et al., 2021). “Shortly after midnight on the 15th, 8000 MW of gas power plants shut down because of fuel shortages or freezing equipment and 2000 MW of wind went offline due to low winds, frozen equipment such as substations, or precipitation that caused ice formation on turbine blades (Busby et al., 2021).” Texas had considered a winter emergency plan scenario of approximately 14 GW of outages due to demand but instead it fell short because 30 GW of generating capacity was rendered unavailable (Busby et al., 2021).

The added pressures of COVID-19 also contributed to difficulties in Emergency Management planning during the winter storm. Fortunately, many local governments’ emergency management plans included mitigation related to infectious disease outbreaks in their Hazard Identification and Risk Assessment which aided in their response. To make matters worse, “low-income people, particularly communities of color, had already been disproportionately affected by the coronavirus, in terms of the disease burden and unemployment, so the freeze further compounded their physical well-being and finances (Busby et al., 2021).”

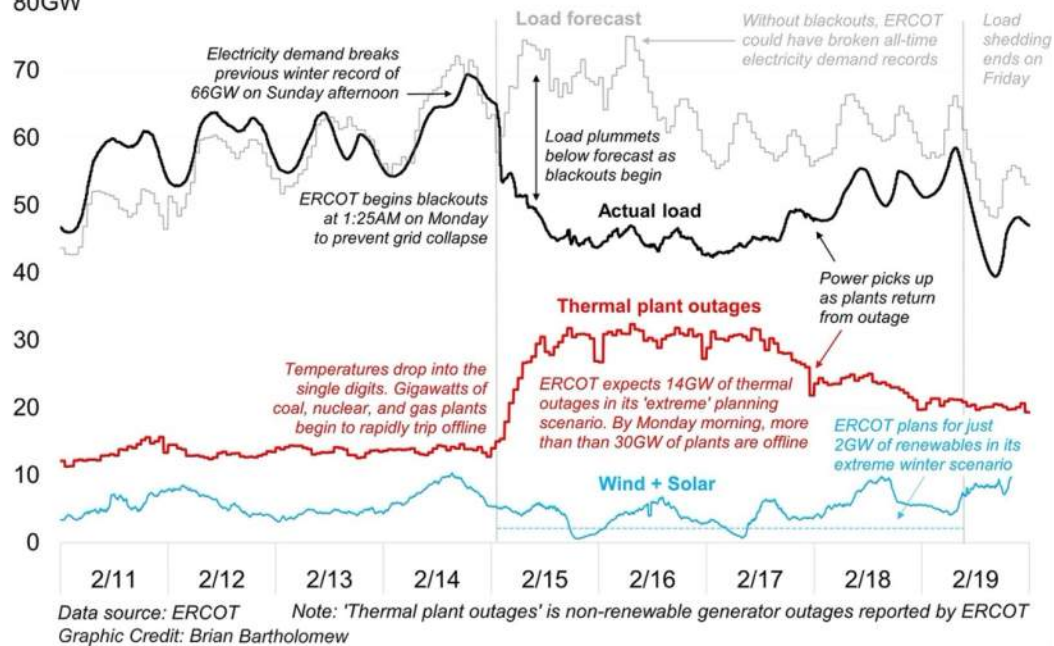
The complexity of the winter storm produced a catastrophic series of events that the EMP was not prepared for. Tarrant County did consider the following hazards: Extreme temperatures, winter storm, power failure and infectious disease outbreak. What the EMP could not account for was that four hazards would converge on the region at the same time.



Figure 11: ERCOT Load Summary by Energy Type

## Extreme Weather, Extreme Outages Pushed Texas into Blackouts

ERCOT electric load, load forecasts, thermal plant outages, and renewables  
80GW



Busby et al., 2021

The compounding nature of the event caused rolling power outages, an increase in power grid demands from the extreme cold temperatures, shortage of gasoline to run cars or generators, food shortages, a shortage of shelters, an inability to de-ice or clear the roads, and all the while the threat of a COVID-19 was still in full effect. (Ohara, Miznazi, and Wiseman, 2022).

### *Trends in Emergency Management*

When formulating the survey questions, the project team identified the basic requirements for an Emergency Management Plan and the required training for successful implementation of an Emergency Management Plan. As of late, emergency management has become a hot topic (in large part due to the COVID-19 pandemic), putting emergency management planning on the map for scrutiny by the public; this has brought about discussion of emerging trends in emergency management planning. To move forward with providing emergency management planning improvements, the team identified two emerging trends in emergency management.

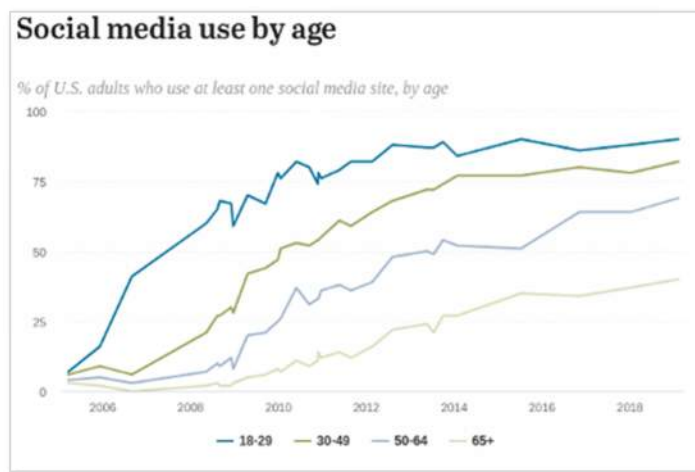
A trend that has been developing since the 1990s is the use of geographic information systems (GIS), which aid in the interpretation of geographic data. GIS has long been a part of FEMA's training course (*Future Trends and Implications* 2014), as a source of hazard identification, identification of at-risk populations, and post-disaster assessments. These results of the use of GIS are not particularly new but they are ever evolving and have expanded into different worlds of

emergency management. Where GIS has aided in natural hazard analysis, and the vulnerability of the “built environment” to natural hazards (Pence et al., 2019, p. 1269), it has now been integrated into nuclear hazard analysis. GIS has been applied to analysis of field data from historical accidents to map radiological hazards and protective action locations (Pence et al., 2019, p. 1270).

In addition to being of use for the impact of hazards, and post-assessment, GIS has more recently been used for training emergency managers. GIS is used in computer-modeling to simulate hazards to aid in visualization and training (*Future Trends and Implications* 2014). This use of GIS is commonly referred to as “virtual reality GIS” (VRGIS) and has been more recently used to simulate training scenarios for local government preparedness, including evacuation and response to natural and man-made disasters (Kamel Boulos et al., 2017, p. 3). The importance of VRGIS in training material, is owed to the fact that disasters rarely happen the same way; VRGIS allows for the simulation of the same disaster in a multitude of ways, allowing emergency managers to go through the events, learn them, and be able to anticipate what could happen next (Kentucky University, 2021).

Training aside, another trend in emergency management planning has been the use of social media. In today’s demographic, where a large part of the public is made up of people who use social media, it is important to find ways to communicate with the masses in the quickest and most effective way possible (Mitcham et al., 2021, p. 3). Below is a graph from the Pew Research Center that shows the growing use of social media amongst different ages.

Figure 12: Social Media Use in Various Age Groups



Pew Research Center, 2022

The population of older adults will soon overtake the population of youth in the country (Vespa, 2018), which is why the growing use of social media amongst the 30-50 year old demographic is important to note. As of late, that percentage is upwards of 75% of that demographic (Pew Research Center, 2022), which could prove useful during disasters. Emergency managers at the

local level have found that using social media has been a great way to foster trust in their communities, which aids community engagement, something vital to the cooperation of the public during an emergency (Mitcham et al., 2021, p. 4). In addition to being a great way to engage community member, social media is a fast tool when warnings need to be sent out to the public quickly. As technology expands and progresses, the platforms for social media to use when being a part of warning systems will also expand.

Currently, there exists a Social Media Emergency Management (SMEM) Guidance Tool that aids emergency managers in the use of social media as a part of their emergency management plans (Mitcham et al., 2021, p. 6). The tool has only been released since August 2020, so is in a beta testing stage. There will likely be many adjustments as emergency managers begin to learn how they are able to use social media, and where it can be helpful. For instance, the use of social media during an ongoing disaster has been a hot topic during the COVID-19 pandemic, but the SMEM Guidance Tool does not yet have an outline on how to disperse the information during ongoing disasters; how to craft the message, essential information to include, use of partnerships to aid in amplification (Mitcham et al., 2021, p. 6). These details contain a critical step in social media being used to its full potential during an ongoing disaster.

## Conclusion

Over the course of the project, information was obtained to determine the disaster preparedness for thirty-seven small to midsized local governments in Tarrant County. The project team became familiar with Texas Government Code, Ch 418, Subchapter C to understand and identify requirements of local emergency planning. Information was gathered after seeking input from city local Emergency Management Directors and Coordinators regarding their EMP through a twelve-question survey. The information was considered and compared to the resources contained in the current EMP in conjunction with the case studies. The team identified requirements of local emergency planning, researched past failures, emerging trends of EMPs, identified plans and Emergency Management Directors for individual local governments, determined what resources were used to create and update local EMPs, analyzed the differences found between training and preparedness levels across Tarrant County, and reviewed the obstacles and considerations that are typically associated with EMPs for local governments. As a result, a better understanding was obtained regarding the strength, weakness and challenges associated with the task, and through the input of emergency management officials.

## Recommendations

The project team's research has resulted in multiple insights to make recommendations for local governments to consider for future evaluation of emergency management. The three suggestions the project team discovered are lessons learned from case studies and research, staff turnover and potential conflict of interests.

### *Case Study Lessons Learned*

The case studies demonstrated that that local governments are continuously exposed to hazards and natural disasters and local governments are not able to address all hazards. The six lessons learned that can assist in hazard mitigation and emergency management planning are:

- State emergency responders must stay organized, trained, and equipped, and local officials and emergency managers continue to implement realistic training.
- Administrators must implement policies to improve the ability to withstand disasters through infrastructure projects.
- Communication and coordination must be improved continuously among state and local officials with emergency responsibilities.
- ERCOT is insulated from the neighboring power grids and requires interconnectivity to maintain increased demand on the power grid during extreme cold weather
- VRGIS is a powerful economical simulation training tool that needs to be utilized with more frequency for more emergency managers and government officials.
- Social media should be employed regularly during emergencies to aid in community engagement during an emergency.

If these lessons are addressed, they allow for better responsiveness to citizenry in local communities. Additionally, if they are implemented, they can mitigate the impact due to the level of preparedness of the EMP and improve the decisions of their local EMP coordinator or director. Finally, they can ensure the improvement of infrastructure and training of emergency managers and local officials for the complexity of future emergencies.

### *Setup Organizational and Operational Structure to Minimize Effects of Staff Turnover*

Another challenge is that Emergency Management requires significant training and understanding of both capabilities within a local government, NIMS, and surrounding communities. The Emergency Management Director must understand the NIMS training and incident command structure and understand local and regional resources available during a disaster. Consistent leadership with a background in emergency management is important for continuity of operations and execution of strategic and tactical plans during an emergency.

Local governments that rely on their mayor to serve as the Emergency Management Director without designating an Emergency Management Coordinator are at higher risk for issues during emergencies for several reasons. First, mayors routinely turnover due to local government elections which means a new official must get acclimated and trained every few years. In addition, mayors rarely have a background specific to emergency management. Many mayors of smaller communities are farmers or businesspeople that have never really had to think about emergency management. Establishing an emergency management coordinator with a background in

emergency management helps reduce risk of communication or operational breakdowns during an emergency and all communities should consider the addition of an emergency management coordinator.

The emergency management coordinator should review first responder and support department SOPs to ensure clear communication and response during a disaster. Policies and procedures should be written and saved in a place where other departments have access for review. Maintaining written plans helps ensure continuity of operations when turnover happens.

The project team understands that a recommendation to utilize an emergency management coordinator could create potential policy issues. An emergency management coordinator would be a new full-time employee that impacts the local government's operating budget. Local governments typically do not budget for disasters because that money is tied up for the year and not utilized if no disasters happen during that fiscal year.

### *Minimize Conflicts of Interest*

Emergency management planning accounts for many situations, but the team believes that more consideration should be given to potential conflicts of interest. The cities and towns in Tarrant County that were researched vary greatly in size and population. There is also a wide range in the number of resources and amount of planning that each city or town seems to have. Many of the towns have populations of 1000 to 3000 people, and as can be expected, have relatively small local governments without dedicated emergency management offices or departments. Some of these smaller governments also rely on larger surrounding cities for emergency management resources. For example, local governments that lack the funding necessary to invest in resources for inclement weather, such as snowplows, may form agreements with nearby governments of larger cities that allow for them to share resources when necessary. These agreements potentially make up a large part of the smaller towns' emergency management planning.

What happens, however, when conflicts of interest arise between some of the smaller towns in Tarrant County that have these agreements with larger cities for help in disaster scenarios? Even larger cities still have limited resources. What happens when these resources cannot be used to help all of the affected areas at once? Would the local government of a larger city in agreement with a neighboring town respond to the smaller city as per their agreement, or would they prioritize addressing the needs of their own population first?

The project team recommends that potential conflicts of interest should be discussed and outlined in depth by the local governments who form interlocal agreements to prevent these issues from happening, or to help smaller cities and towns prepare contingency plans for themselves in the event that these conflicts do occur. The team recognizes that this may take additional time and coordination in the planning process, but still believes that this consideration is worth looking into.

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## Appendices

### *Appendix 1. Local Government Emergency Management Planning Survey*

# Emergency Management Survey

1. What is the name of the local government?

2. What is the population of the local government?

3. What preparedness level is the EOP?

- Basic
- Intermediate
- Advanced

4. Who is the emergency management director?

- Mayor
- 
- Other

5. Does the local government have an emergency management coordinator?

Yes

No

6. Does the local government have its own plan?

Yes

No

7. Was the EOP updated within the last five years?

Yes

No

8. What type of EOP does the local government use?

Strategic

Operational

Tactical

9. Is the EOP posted publicly?

Yes

No

10. Does it appear that the local government used TDEM materials when creating/updating their EOP?

- Yes
- No
- I can't tell

11. Does the local government have its own fire department?


- Yes
- No

12. Does the local government utilize an inter-local agreement for all or part of their EOP?

- Yes
- No

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4/18/2022

Appendix 2. Local Government Emergency Management Planning Survey Results

ID	Local Government	Preparedness Level	EM Director	Population	EM Coordinator?	Own EMP?	Updated w/in 5 yrs?	Type of EMP	Public?	Utilized TDEM?	Has Fire Dept?	Utilizes IIA?
1	Azele	Basic	Mayor	12,796	Yes	No	Yes	Operational	No	Yes	Yes	Yes
2	bedford	Basic	Mayor	49,323	Yes	No	Yes	Operational	No	Yes	Yes	Yes
3	Benbrook	Basic	Mayor	23,215	Yes	No	Yes	Operational	No	Yes	Yes	Yes
4	Blue Mound	Basic	Mayor	2,394	Yes	No	Yes	Operational	No	Yes	Yes	Yes
5	Burleson	Basic	Mayor	48,225	Yes	Yes	Yes	Operational	No	Yes	Yes	No
6	Colleyville	I can't tell	Mayor	26,462	Yes	Yes	I can't tell	I can't tell	No	Yes	Yes	No
7	Crowley	Basic	Mayor	15,439	Yes	No	Yes	Operational	No	Yes	Yes	Yes
8	Dalworthington Gardens	Basic	Mayor	2,188	Yes	No	Yes	Operational	No	Yes	No	Yes
9	Edgediff	Basic	Mayor	3,016	Yes	No	Yes	Operational	No	Yes	Yes	Yes
10	Eules	Basic	Mayor	55,763	Yes	No	Yes	Operational	No	Yes	Yes	Yes
11	Everman	Basic	Mayor	6,255	No	No	Yes	Operational	No	Yes	Yes	Yes
12	Flower Mound	Basic	Mayor	76,555	Yes	Yes	Yes	Operational	No	I can't tell	Yes	No
13	Forest Hills	Basic	Mayor	12,994	No	No	Yes	Operational	Yes	Yes	Yes	Yes
14	Grapevine	Basic	Mayor	53,317	Yes	No	Yes	Operational	Yes	Yes	Yes	Yes
15	Haltom City	Basic	Mayor	44,223	Yes	Yes	Yes	Operational	No	I can't tell	Yes	No
16	Haslet	Basic	Mayor	1,626	Yes	No	Yes	Operational	No	Yes	Yes	Yes
17	Hurst	Basic	Mayor	38,976	No	No	Yes	Operational	No	Yes	Yes	Yes
18	Keller	Basic	Mayor	399,627	Yes	No	Yes	Operational	No	Yes	Yes	Yes
19	Kennedale	Basic	Mayor	8,197	Yes	No	Yes	Operational	No	Yes	Yes	Yes
20	Lake Worth	Basic	Mayor	4,929	Yes	No	Yes	Operational	No	Yes	Yes	Yes
21	Lakeside	Basic	Mayor	1,616	No	No	Yes	Operational	No	Yes	Yes	Yes
22	Mansfield	Basic	Mayor	69,557	Yes	Yes	Yes	Operational	No	Yes	Yes	No
23	Newark	Basic	Mayor	1,290	No	No	I can't tell	I can't tell	No	I can't tell	No	Yes
24	North Richland Hills	Basic	Mayor	70,202	Yes	No	Yes	Operational	No	Yes	Yes	Yes
25	Pantego	Basic	Mayor	2,531	Yes	Yes	Yes	Operational	No	Yes	Yes	No
26	Pelican Bay	Basic	Mayor	1,586	No	No	Yes	Operational	No	Yes	No	Yes
27	Reno	Basic	Mayor	2,962	No	No	I can't tell	I can't tell	No	I can't tell	No	Yes
28	Richland Hills	Basic	Mayor	8,030	Yes	No	Yes	Operational	No	Yes	Yes	Yes
29	River Oaks	Basic	Mayor	7,703	Yes	No	Yes	Operational	No	Yes	Yes	Yes
30	Saginaw	Basic	Mayor	23,871	Yes	No	Yes	Operational	No	Yes	Yes	Yes
31	Sansom Park	Basic	Other	5,828	Yes	No	Yes	Operational	No	Yes	Yes	Yes
32	Southlake	Advanced	Other	32,376	Yes	Yes	Yes	Operational	Yes	Yes	Yes	No
33	Trophy Club	Basic	Other	13,688	I can't tell	Yes	Yes	Operational	No	I can't tell	Yes	Yes
34	Watauga	Basic	Mayor	24,555	Yes	No	Yes	Operational	No	Yes	Yes	Yes
35	Westlake	Advanced	Mayor	1,768	Yes	No	Yes	Operational	No	Yes	Yes	Yes
36	Westworth Village	Advanced	Mayor	2,692	Yes	No	Yes	Operational	No	Yes	No	Yes
37	White Settlement	Advanced	Mayor	17,565	Yes	No	Yes	Operational	No	Yes	Yes	Yes

*Appendix 3. Tarrant County ARPA Funding Allocations to Local Governments*

**Tarrant County ARPA Disaster Funding  
Allocations to Local Governments**

City	Funding
Newark city	\$305,272.30
Lakeside Town	\$394,723.02
Westlake Town	\$423,466.20
Haslet city	\$476,492.38
Pelican Bay city	\$496,810.84
Dalworthington Gardens city	\$587,252.70
Blue Mound city	\$605,836.64
Pantego Town	\$624,172.82
Westworth Village city	\$683,145.86
Edgecliff Village Town	\$749,800.28
Reno (Parker Co) city	\$793,906.18
Lake Worth city	\$1,213,160.02
Sansom Park city	\$1,424,273.64
Everman city	\$1,536,520.68
River Oaks city	\$1,890,606.80
Richland Hills city	\$1,970,641.66
Kennedale city	\$2,142,109.54
Roanoke city	\$2,326,214.50
Trophy Club Town	\$3,085,182.86
Forest Hill city	\$3,218,243.90
Azle city	\$3,308,190.20
Crowley city	\$4,078,556.72
White Settlement city	\$4,423,226.98
Benbrook city	\$5,823,465.38
Flower Mound Town	\$5,927,220.00
Saginaw city	\$6,023,676.42
Watauga city	\$6,066,047.82
Mansfield	\$6,550,549.00
Colleyville city	\$6,712,769.14
Grapevine	\$6,860,286.00
Southlake city	\$8,022,317.88
North Richland Hills	\$9,515,205.00
Hurst city	\$9,578,165.86
Eules City	\$10,393,946.00
Haltom City city	\$10,871,360.74
Keller city	\$11,698,718.02
Burleson city	\$11,949,477.40
Bedford city	\$12,153,653.02
Grand Prairie	\$36,709,655.00

**Local Government Emergency Management Planning**

<b>Arlington</b>	\$81,498,709.00
<b>Fort Worth</b>	\$173,745,090.00



*Appendix 4: Preparedness Standards for Emergency Management (TDEM-100)*

Texas Division of Emergency  
Management



Preparedness Standards  
for Emergency  
Management in Texas

TDEM-100

June 2000

FOR ADDITIONAL INFORMATION

Requests for additional copies of this *guide* and questions, comments, or suggestions should be addressed to:

Preparedness Section  
Division of Emergency Management  
P.O. Box 4087  
Austin, Texas 78773-0223

Telephone: (512) 424-2452  
Facsimile: (512) 424-5637

Copies of many of the legal references, forms and other materials referred to in this document are available for review on the Texas Division of Emergency Management website: <https://tdem.texas.gov/>

## FOREWORD

This document describes standards used to evaluate local emergency management programs in Texas.

The general objectives of emergency management are to effectively and efficiently prepare for, mitigate against, respond to, and recover from emergencies and disasters. It also extends those planning concepts into prevention and protective mission initiatives. The preparedness standards outlined in the following pages allow local officials and the Texas Division of Emergency Management (TDEM) to evaluate local emergency preparedness. This document provides a set of objective standards to assess three key activities: planning, training, and exercises. Local governments may use their preparedness assessment to identify general areas where improvement is needed. TDEM uses the results to measure the effectiveness of preparedness programs and identify areas where additional emphasis may be needed.

This document outlines standards that jurisdictions must meet in order to achieve the Basic, Intermediate, or Advanced level of preparedness. Use of these standards does not imply a community's emergency management efforts should be limited only to the criteria outlined in this document. The preparedness standards do not assess staffing levels, funding for emergency programs, the level of training provided for emergency responders, or the availability of response equipment or emergency facilities. These are local responsibilities that play a key role in determining capabilities to prepare for, mitigate against, respond to, and recover from emergencies.

The TDEM-100 integrates concepts from the National Preparedness Guidelines (NPG), National Incident Management System (NIMS), National Response Framework (NRF), the FEMA Comprehensive Preparedness Guide 101 (CPG 101), and the National Infrastructure Protection Plan (NIPP).

TDEM promulgates standards for local emergency planning pursuant to §418.043 of the Texas Government Code. Training standards for elected and appointed individuals who head emergency management programs are promulgated pursuant to §418.005, §418.101, and §418.1015 of the Texas Government Code.

In November 2005, the NIMS National Integration Center published guides for integrating the NIMS concepts into Emergency Operations Plans. The TDEM-100 incorporates the concepts and suggestions found in these documents.

# Preparedness Standards for Emergency Management in Texas

TDEM-100

## TABLE OF CONTENTS

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FOREWORD.....	i
TABLE OF CONTENTS.....	iii
EXPLANATION OF TERMS.....	iv
SECTION 1—PLANNING STANDARDS.....	1-1
I. BACKGROUND.....	1-1
II. PLANNING REQUIREMENTS.....	1-3
SECTION 2—TRAINING STANDARDS.....	2-1
I. TRAINING REQUIREMENTS.....	2-1
SECTION 3—EXERCISE STANDARDS.....	3-1
I. BACKGROUND.....	3-1
II. EXERCISE REQUIREMENTS.....	3-2
SECTION 4—POINTS OF CONTACT.....	4-1
I. REGIONAL LIAISON OFFICERS.....	4-1
II. DIVISION OF EMERGENCY MANAGEMENT STAFF.....	4-1

## EXPLANATION OF TERMS

AAR	After Action Report
COG	Council of Governments
CPG 101	FEMA Comprehensive Preparedness Guide 101
EMC	Emergency Management Coordinator
EMD	Emergency Management Director
EMI	Emergency Management Institute
EPCRA	Emergency Planning & Community Right-to-Know Act
FEMA	Federal Emergency Management Agency
HSEEP	Homeland Security Exercise Evaluation Program
ICS	Incident Command System
IP	Improvement Plan
NIMS	National Incident Management System
NIPP	National Infrastructure Protection Plan
NPG	National Preparedness Guidelines
NRF	National Response Framework
RLO	Regional Liaison Officer
SOP	Standard Operating Procedures
TDEM	Texas Division of Emergency Management



## SECTION 1—PLANNING STANDARDS

### I. BACKGROUND

A. The State of Texas has adopted planning standards designed to ensure common emergency functions are adequately addressed in local emergency plans. It promotes a common understanding of the fundamentals of planning and decision-making to help planners examine a hazard or threat, and produce integrated, coordinated, and synchronized plans. The standards should help state agencies, and local, and regional governments in their efforts to develop and maintain viable, all-hazard emergency plans.

B. Local emergency management planning requires four types of documents:

#### 1. Legal Documents

- a) County and municipal emergency management programs must be legally established by commissioner's court orders and city ordinances. Joint resolutions provide the legal basis for inter-jurisdictional emergency management programs.
- b) Adoption of the National Incident Management System (NIMS) by either a Commissioner's Court, City Council or Commission Order, Ordinance, or Resolution.

#### 2. Basic Plan

The Basic Plan provides an overview of the jurisdiction's approach to emergency operations. It details emergency response policies, describes the response organization, and assigns tasks. Although the Basic Plan guides the development of operationally oriented functional annexes, its primary intended audience consists of the jurisdiction's chief executive, his or her staff, and agency heads. The Basic Plan should meet the needs of this audience while providing a solid foundation for development of functional annexes. A Basic Plan is considered current if it was prepared and/or updated in the last five years, and contains NIMS-specific requirements in the State Planning Standards Checklist.

#### 3. Annexes to the Basic Plan

Annexes to emergency management plans provide specific information and direction. Annexes should focus on operations. While the Basic Plan provides information relevant to the emergency management plan as a whole, annexes should emphasize responsibilities, tasks, and operational actions that pertain to the function being covered. Annexes should cover, in general terms, the activities to be performed by anyone with a responsibility under the function. An annex should identify actions that not only ensure effective response, but also aid in preparing for emergencies and disasters. Table 1 outlines the complete set of annexes TDEM recommends each jurisdiction develop and maintain. Annexes are considered current if they

have been prepared and/or updated within the last five years, and if they meet the State Planning Standards Checklist requirements. Annexes B, D, F, G, H, I, K, M, N, and V contain NIMS specific requirements in the State Planning Standards Checklist.

4. Standard Operating Procedures

Standard Operating Procedures (SOPs) provide greater detail on how mission tasks should be performed. SOPs are typically prepared at the department or section level. They are specific instructions designed to ensure required actions to perform a given task are accomplished in a timely, complete, and correct manner. Local SOPs are not evaluated as part of the preparedness assessment for planning.

- C. All jurisdictions are expected to meet Basic Level planning requirements, which is the minimum acceptable level of preparedness. Requirements for the Basic Level of planning preparedness include preparation of legal documents establishing an emergency management program, a Basic Plan, and a limited set of functional annexes.
- D. Intermediate or Advanced Level Planning Preparedness requirements may be met by preparing and maintaining additional functional annexes to the Basic Plan. Jurisdictions participating in Department of Homeland Security grant programs and/or the Emergency Management Performance Grant (EMPG) program are generally expected to achieve higher levels of planning preparedness as a condition of grant eligibility.

Table 1—Standardized Local Functional Annexes	
Basic Emergency Management Plan	Annex L Utilities
Annex A Warning	Annex M Resource Management
Annex B Communications	Annex N Direction and Control
Annex C Shelter and Mass Care	Annex O Human Services
Annex D Radiological Protection	Annex P Hazard Mitigation
Annex E Evacuation	Annex Q Hazardous Materials and Oil Spill Response
Annex F Firefighting	Annex R Search and Rescue
Annex G Law Enforcement	Annex S Transportation
Annex H Health and Medical Services	Annex T Donations Management
Annex I Emergency Public Information	Annex U Legal
Annex J Recovery	Annex V Terrorist Incident Response
Annex K Public Works and Engineering	Annex W Fixed Nuclear Power Plant (limited jurisdictions)

## II. PLANNING REQUIREMENTS

### A. Basic Level of Planning Preparedness

1. The Basic Level of Planning Preparedness is the minimum acceptable level of preparedness. It provides a basic capacity for directing and controlling emergency operations, warning and protecting the population, and dealing with hazardous materials. The planning documents required for this level of preparedness meet planning requirements of the federal Emergency Planning and Community Right-to-Know Act (EPCRA).
2. Required Documents
  - a) Legal documents establishing the local emergency program appropriate for the jurisdiction:
    - 1) Commissioner's Court Order establishing a county emergency management program.
    - 2) City Ordinance establishing a city emergency management program.
    - 3) Joint resolution establishing an inter-jurisdictional emergency management program.
    - 4) Commissioner's court order or city ordinance adopting NIMS.
  - b) A current NIMS-compliant emergency management Basic Plan that has a revision date within the last five years.
  - c) Current NIMS-compliant annexes with a revision date within the last five years for the following functional areas:
    - 1) Annex A—Warning
    - 2) Annex B—Communications
    - 3) Annex C—Shelter and Mass Care
    - 4) Annex E—Evacuation
    - 5) Annex I—Public Information
    - 6) Annex M—Resource Management
    - 7) Annex N—Direction and Control
    - 8) Annex O—Human Services
    - 9) Annex Q—Hazardous Materials and Oil Spill Response
    - 10) Annex V—Terrorist Incident Response

### B. Intermediate Level of Planning Preparedness

1. The Intermediate Level of Planning Preparedness provides enhancement over a basic capacity through inclusion of additional emergency support functions. This level provides an increased capability for responding to and managing emergencies and disasters.

### 2. Required Documents

- a) All documents required for the Basic Level of Planning Preparedness; and
- b) Current NIMS-compliant annexes prepared and/or updated within the last five years and covering the following functional areas:
  - 1) Annex D – Radiological Emergency Management
  - 2) Annex F – Firefighting
  - 3) Annex G – Law Enforcement
  - 4) Annex H – Health and Medical Services
  - 5) Annex J – Recovery
  - 6) Annex K – Public Works and Engineering
  - 7) Annex L – Utilities
  - 8) Annex R – Search and Rescue
  - 9) Annex S – Transportation

### C. Advanced Level of Planning Preparedness

- 1. The Advanced Level of Planning Preparedness is the highest level of planning preparedness, and demonstrates the greatest capability to respond to and manage emergencies and disasters.

### 2. Required Documents

- a) All documents required for the Basic and Intermediate Levels of Preparedness; and
- b) Current NIMS compliant annexes prepared and/or updated within the last five years and covering the following functional areas:
  - 1) Annex P – Hazard Mitigation
  - 2) Annex T – Donations Management
  - 3) Annex U – Legal

### D. Obtaining Preparedness Credit for Planning

- 1. Copies of all new and updated legal documents establishing emergency management programs and new and updated Basic Plans and Annexes, together with complete (signed) planning standards checklists covering those documents, should be submitted to TDEM.
- 2. Local planning documents are maintained by TDEM. Planning data is entered into a database maintained by TDEM. A copy of the local jurisdiction's Preparedness Profile is sent electronically to each jurisdiction following the review of new/revised documents. You may request a copy of your jurisdiction's preparedness profile at any time by contacting the Policy and Plans Unit at TDEM. The Councils of Government (COGs) are provided with copies of Preparedness Profiles on a monthly basis.



### E. Planning Assistance

1. Pursuant to § 418.043 of the Government Code, TDEM publishes planning standards that specify minimum content for the local Basic Plan and functional annexes. TDEM also produces a template of the Basic Plan and Annexes that local governments may use in developing their planning documents.
2. Copies of the current State planning standards and document templates are available for download on the TDEM website: <https://tdem.texas.gov/>
3. TDEM publishes the *Local Emergency Management Planning Guide* (TDEM-10) to provide guidance for local emergency planning. Regional Liaison Officers (RLOs) and COGs are available to assist jurisdictions in resolving emergency planning problems.
4. TDEM offers emergency planning courses for local jurisdictions, including G-235.A Advanced Emergency Planning. This course is designed to provide students knowledge of the emergency management planning process, state planning standards, planning techniques, and the steps in the development of a basic emergency management plan and functional annexes. Additional information on this and other courses is available on the TDEM website and at [www.preparingtexas.org](http://www.preparingtexas.org).

## SECTION 2—TRAINING STANDARDS

### I. TRAINING REQUIREMENTS

#### A. Background

1. Professional development is a continuous process in emergency management. As agencies and individuals become better prepared and more experienced, the need for relevant training poses increasing challenges. TDEM strives to improve its curriculum to reflect core competencies of emergency personnel throughout the State.
2. TDEM offers a wide variety of emergency management training courses and an extensive array of hazardous materials courses for local and state emergency responders and local officials. All courses are offered at *no cost* to qualified students and TDEM reimburses students for travel and lodging expenses in most cases. FEMA also offers online and resident emergency management courses through the Emergency Management Institute (EMI).
3. The website [www.preparingtexas.org](http://www.preparingtexas.org) is intended to assist Texas agencies and organizations that have a Homeland Security or Emergency Management role. Through this site, emergency management personnel and local officials may access training course descriptions and schedules, register online, and view reimbursement requirements. After completing courses, registered individuals may upload certificates and credentials to an online transcript that can be printed for their records. The site also provides training exercise schedules, emergency management articles, and links to other emergency management agency sites such as FEMA's EMI homepage.
4. Emergency management training provides the knowledge and skills needed to develop and maintain an emergency program. Local elected officials, department and agency heads, and emergency management personnel should develop an understanding of general emergency management concepts, pertinent laws, organizational arrangements, and operational concepts to achieve a Basic Level of Preparedness with respect to emergency training.
5. Pursuant to § 418.005 of the Texas Government Code, elected law enforcement officers, county judges, and appointed state or local public officials with management or supervisory responsibilities who are responsible for or play a role in emergency management, preparedness, response, or recovery should participate in the TDEM Public Officials Workshop. The workshop covers the fundamentals of emergency management in Texas and is conducted by Regional Liaison Officers (RLOs) on an arranged basis. Local jurisdictions should contact their RLO for further information. TDEM is also working to develop a new online course to satisfy this requirement.
6. Once all required courses are completed, emergency management personnel may complete any DHS, Center for Disease Control and Prevention, or TDEM accredited course(s) of their choice to fulfill training requirements. The



Texas training catalog of accredited courses is available on [www.preparingtexas.org](http://www.preparingtexas.org).

7. NIMS compliance activities recommend the completion of the following Independent Study courses: IS 100, IS 200, IS 700, and IS 800. Others, holding specific positions, must complete Incident Command System (ICS) training. Complete NIMS training information, guidelines, and the *NIMS Five-Year Training Plan* is available online at <http://www.fema.gov/emergency/nims/NIMSTrainingCourses.shtm>
8. Jurisdictions participating in Department of Homeland Security grant programs and/or the Emergency Management Performance Grant (EMPG) program are generally expected to achieve higher levels of training preparedness or to complete specific training as a condition of grant eligibility.

### B. Basic Training Level of Preparedness

1. Training required for the basic preparedness level provides fundamental information on emergency management in Texas with which all Emergency Management Directors (EMDs), i.e. Mayors and County Judges, and Emergency Management Coordinators (EMCs) should be familiar. Training addresses the legal authorities pertinent to emergency management; the organization of emergency management at the state and federal level, and emergency management functions that should be addressed during the preparedness, mitigation, response, and recovery phases of emergency management. All course descriptions are found on [www.preparingtexas.org](http://www.preparingtexas.org).
2. Emergency Management Directors
  - a) Required Training:
    - 1) FEMA Independent Study Course IS100 – Introduction to Incident Command System (ICS)
    - 2) G200–Public Official's Workshop on Emergency Management
      - (a) This course must be completed by any elected law enforcement officer or County Judge, or an appointed public officer of the State or a political subdivision, who has management or supervisory responsibilities.
      - (b) Elected officials must complete this course of training no later than 180 days after taking the oath of office or otherwise assumes the responsibilities of the office.
      - (c) This workshop is conducted by Regional Liaison Officers (RLOs) on an arranged basis. Local jurisdictions should contact their RLO for additional information.
    - 3) FEMA Independent Study Course IS700.a – National Incident Management System (NIMS), An Introduction

- 4) FEMA Independent Study Course IS800.b – National Response Framework (NRF), An Introduction

### 3. Emergency Management Coordinators

#### a) Required Training:

- 1) FEMA Independent Study Course IS100 – Introduction to Incident Command System (ICS)
- 2) FEMA Independent Study Course IS200 – ICS for Single Resources and Initial Action Incidents
- 3) FEMA Independent Study Course IS700.a – National Incident Management System (NIMS), An Introduction
- 4) ICS 300 – Intermediate ICS for Expanding Incidents
- 5) ICS 400 – Advanced ICS, Command and General Staff - Complex Incident
- 6) G610—Basic Emergency Management Workshop

#### b) Recommended Training:

- FEMA Independent Study Course IS800.b – National Response Framework (NRF), An Introduction

### C. Intermediate Level of Preparedness

1. The courses of instruction for this level of preparedness add training in emergency planning and disaster recovery to the fundamental emergency management training required for the Basic Level of Preparedness. All course descriptions can be found on [www.preparingtexas.org](http://www.preparingtexas.org).

### 2. Emergency Management Directors

#### a) Required Training:

- 1) FEMA Independent Study Course IS100 – Introduction to Incident Command System
- 2) G200 – Public Official's Workshop on Emergency Management

- (a) This course must be completed by any elected law enforcement officer or County Judge, or an appointed public officer of the State or a political subdivision, who has management or supervisory responsibilities.

## Section 2—Training Standards

(b) Elected officials must complete this course of training no later than 180 days after taking the oath of office or otherwise assumes the responsibilities of the office.

(c) This workshop is conducted by Regional Liaison Officers (RLOs) on an arranged basis. Local jurisdictions should contact their RLO for further information.

b) Recommended Training:

FEMA Independent Study Course IS700.a – NIMS, An Introduction

3. Emergency Management Coordinators

Required Training:

All training required for the basic level, plus:

- G230 – Principles of Emergency Management
- G235.A – Emergency Planning
- G620 – Texas Disaster Recovery

D. Advanced Preparedness Level for Training

1. Training required for this level of preparedness focuses on skills needed for a community to develop and implement an effective comprehensive emergency management program that addresses hazard mitigation; preparedness activities, such as emergency exercises; and emergency response operations. All course descriptions can be found on [www.preparingtexas.org](http://www.preparingtexas.org).

2. Emergency Management Directors:

a) Required Training:

1) FEMA Independent Study Course IS100 – Introduction to Incident Command System

2) G200 – Public Official's Workshop on Emergency Management

(a) This course must be completed by any elected law enforcement officer or County Judge, or an appointed public officer of the State or a political subdivision, who has management or supervisory responsibilities.

(b) Elected officials must complete this course of training no later than 180 days after taking the oath of office or otherwise assumes the responsibilities of the office.

## Section 2—Training Standards

(c) This workshop is conducted by Regional Liaison Officers (RLOs) on an arranged basis. Local jurisdictions should contact their RLO for additional information.

b) Recommended Training:

1) FEMA Independent Study Course IS700.a – NIMS, An Introduction

3. Emergency Management Coordinators:

a) Required Training

All training required for the Basic and Intermediate levels, plus:

- G710—Mitigation Planning Course
- G720—Mitigation Grants Course
- G920—Texas Exercise Design and Evaluation Course
- G975—EOC Management & Operations and ICS Interface Course
- G202—Debris Management
- G288—Donations Management

At least one preparedness, response, recovery, or mitigation course per year.

b) An individual designated as a “Certified Emergency Manager” by the International Association of Emergency Managers who has completed G610 will be considered to have met the training requirements for the Advanced Preparedness Level, in lieu of the courses listed in Section 2.a) above.

E. Obtaining Preparedness Credit for Training

Individuals who complete emergency management courses offered by TDEM will have their training accomplishments recorded in the Division’s training database, [www.preparingtexas.org](http://www.preparingtexas.org). However, individuals who have satisfied preparedness training requirements by taking qualifying courses in other states, through colleges or universities, or from other providers should scan their certificates and upload them into [www.preparingtexas.org](http://www.preparingtexas.org) to be included on their transcript. Department of Homeland Security grants may impose additional and/or specific training and documentation requirements.

### F. Training Assistance

TDEM offers each of the courses listed above and others annually. The annual TDEM training calendar lists dates and locations of courses and provides instructions on applying for specific classes. Copies of the training calendar are available on [www.preparingtexas.org](http://www.preparingtexas.org) and on the TDEM website at <https://tdem.texas.gov>.



## SECTION 3-EXERCISE STANDARDS

### I. BACKGROUND

- A. Emergency management exercises are conducted to train personnel in their emergency management/homeland security duties; test and validate plans, procedures policies and facilities, and enhance the capabilities required for emergency and disaster response and recovery activities.
- B. All local governments and emergency management organizations are expected to achieve a Basic Level of Preparedness. Jurisdictions participating in Department of Homeland Security grant programs and/or the Emergency Management Performance Grant (EMPG) program are generally expected to achieve higher levels of exercise preparedness or to complete specific training as a condition of grant eligibility.
- C. To achieve this, local governments must conduct and evaluate at least one emergency management exercise each year. The recommended exercises, as defined by the Homeland Security Exercise and Evaluation Program (HSEEP) include:

#### 1. Discussion-based/Tabletop Exercise

A tabletop exercise involves elected, appointed, and other key personnel assigned a role in emergency preparedness, response, and/or recovery. It is intended to validate emergency management/homeland security plans, policies, procedures, and assigned responsibilities by stimulating discussion of various issues related to a simulated emergency situation. Participants respond to a series of questions or messages describing an emergency or disaster scenario.

#### 2. Operations-based/Functional Exercise

A functional exercise is designed to test and evaluate the individual and organizational capabilities of selected functions or activities that are operationally interdependent. Functional exercises are focused on exercising the implementation and use of plans, policies, and procedures by key decision makers, operations center personnel, and representatives of response and/or recovery and support organizations. These exercises may be conducted for Incident Command Posts (ICP) and other coordination and control centers, such a Medical Operations Center (MOC), Multi-Agency Coordination Center (MACC), etc. Exercise Controllers and Simulators represent all responding field units and organizations pertinent to the scenario who are not participating in the exercise. Exercise staff initiate and drive the scenario through interaction with participants via messages or injects and responding to messages or direction from participants.

#### 3. Operations-based/Full-Scale Exercise

A full-scale exercise includes all the components of the functional exercise with the addition of actual deployment of response personnel and resources.



The full-scale exercise focuses on implementing and analyzing the plans, policies, systems, and procedures examined and developed in discussion-based exercises and refined during operations-based exercises.

#### 4. Actual Incident

An emergency or disaster that requires a major response by a jurisdiction may be substituted for the required operations-based exercise. The same documentation requirements apply to jurisdictions seeking substitute credit for an actual incident. Additional information is available from the TDEM Training and Exercise Unit.

### II. EXERCISE REQUIREMENTS

#### A. The minimum standards for any exercise are:

1. The chief elected official of the jurisdiction or plan-designated representative must participate.
2. A minimum of four (4) departments/agencies assigned an emergency management/homeland security role in the local emergency management plan must participate.
3. The coordination and control function of the jurisdiction must be tested and evaluated.
4. At a minimum, three additional emergency functions from the list below must be tested and evaluated:
  - a) Alert/Notification
  - b) Communications
  - c) Emergency Public Information
  - d) Damage Assessment
  - e) Health and Medical, including emergency medical services
  - f) Individual and Family Assistance
  - g) Public Safety, including Fire, Law Enforcement, Mass Care, etc.
  - h) Public Works and Engineering
  - i) Transportation
  - j) Resource Management
  - k) Warning

- B. Jurisdictions and organizations participating in TDEM-sponsored exercises conducted by the National Emergency Response and Rescue Training Center (NERRTC) or other government-sponsored exercises to fulfill current HSEEP exercise requirements must document their compliance with the participation requirements as listed above. Documentation submitted must comply with the HSEEP After Action Report (AAR)/Improvement Plan (IP) requirements. Jurisdictions participating in these exercises and submitting documentation for exercise credit are to report only those participants specific to their jurisdiction. If the published regional or multi-jurisdiction AAR does not contain a jurisdiction-specific IP, each jurisdiction must submit an IP to the TDEM Training and Exercise Unit.
- C. Obtaining Preparedness Credit for Exercises
1. Local jurisdictions must document exercises by completing an AAR and associated IP. This documentation should be submitted to the TDEM Training and Exercise Unit, allowing 60 days for review and correction of any potential deficiencies in the documentation. A sample AAR and IP is found at <https://tdem.texas.gov>.
  2. Provisions exist for awarding exercise credit for an actual major emergency or disaster response that prevents a jurisdiction from conducting a scheduled exercise. Additional information is available by contacting the Training and Exercise Unit at TDEM.
  3. Jurisdictions participating in Department of Homeland Security grant programs and/or the Emergency Management Performance Grant (EMPG) program are generally expected to achieve higher levels of exercise preparedness or to complete specific exercises as a condition of grant eligibility.
- D. Basic Preparedness Level for Exercises
- A jurisdiction will meet the exercise requirement for the Basic Level of preparedness by conducting, documenting, reporting, and receiving credit from TDEM for one exercise annually, either a discussion-based tabletop, an operations-based functional, a full-scale exercise, or credit for an actual event.
- E. Intermediate Preparedness Level for Exercises
- A jurisdiction will meet the exercise requirement for the intermediate level of preparedness by annually conducting, documenting, reporting, and receiving credit for a discussion-based tabletop exercise and an operational-based functional exercise which exercises multiple emergency functions.

### F. Advanced Preparedness Level for Exercises

1. A jurisdiction will meet the exercise requirement for the advanced level of preparedness by annually conducting, documenting, reporting, and receiving TDEM credit for:
  - a) A discussion-based tabletop exercise, and:
  - b) An operations-based functional exercise that exercises multiple emergency functions.
  - c) An operations-based full-scale exercise which is required at least every fourth year, in lieu of the functional exercise.

### G. Exercise Assistance

The TDEM Training and Exercise Unit offers the G920 *Texas Exercise Design and Evaluation* course to train members of the State and local emergency management community in the design, development, conduct, and reporting of emergency management exercises. A course description and schedule is available on [www.preparingtexas.org](http://www.preparingtexas.org).

## SECTION 4-POINTS OF CONTACT

I. REGIONAL LIAISON OFFICERS (RLO)

Regional Liaison Officers contact information may be viewed from the TDEM website:

<https://tdem.texas.gov>

II. TEXAS DIVISION OF EMERGENCY MANAGEMENT (TDEM)

The TDEM Staff Directory may be viewed from the TDEM website:

<https://tdem.texas.gov>