City of Nacogdoches Hazard Mitigation Action Plan

Report For Nacogdoches City Council

212 East Pilar St.
Nacogdoches, Texas 75961

Prepared By:

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SECTION 1: EXECUTIVE SUMMARY

1.1 PURPOSE OF A HAZARD MITIGATION ACTION PLAN

The Federal Emergency Management Agency (FEMA) requires all cities to adopt plans that identify the potential hazards to the City and actions the City may take to reduce the risk of those hazards. The intent of the HMAP is that a jurisdiction will summarize the hazards to which it is exposed and develop mitigation actions to counter the impacts of future occurrences of such disasters. Congress established the Disaster Mitigation Act of 2000 to do the following things:

- Develop a program for pre-disaster mitigation,
- Streamline administration of disaster relief,
- Control Federal costs of disaster assistance, and
- Other purposes.

The City of Nacogdoches and surrounding area has experienced numerous flooding events, tornadoes, storms and urban interface wildfire. With the growing City population these events have an increased significance as to risk of exposure.

The City of Nacogdoches staff members and the community members are acutely aware of the importance of a Hazard Mitigation Action Plan (HMAP) and have become proactive in efforts to identify and reduce risk. Rising recovery costs from hazardous events have motivated the City of Nacogdoches to formulate strategies to reduce risks. The City of Nacogdoches HMAP will identify valuable resources, relay vital information and present carefully orchestrated strategies to help guide the community into implementing necessary steps to lessen devastating effects of natural and/or manmade disasters.

The City of Nacogdoches shall continue to develop relationships with employers and industry within the City to identify and implement mitigation strategies before disasters strike. These strategies are vital in reducing impacts from hazardous events at large companies, industry and critical facilities as well as in residential areas. This continued collaboration shall ensure that the City of Nacogdoches Hazard Mitigation Action Plan (HMAP)

shall be a tool for both private and public sectors to use to reduce risk from hazardous events.

The City of Nacogdoches HMAP shall assist the citizens of Nacogdoches in planning for future hazardous events occurring within the city's limits. Resources and information provided in this document shall aide interested parties by identifying risks for the occurrence of hazardous events and by defining strategies to mitigate hazardous impacts.

1.2 ORGANIZATION OF THE PLAN

The HMAP contains background information as to the purpose and development of the plan as well as a detailed analysis of the hazards affecting the City of Nacogdoches.

This plan is a collaborative effort between the citizens of the City of Nacogdoches, public agencies and regional and state organizations. The HMAP Steering Committee oversaw each phase in the development of this plan. Public meetings of this committee were conducted and input from the private sector was encouraged.

The City of Nacogdoches is the only local government in Nacogdoches County not covered under the County HMAP. As such the County of Nacogdoches was involved in the plan not only as the County Government but also representing the small, rural communities located in Nacogdoches County. The HMAP Steering Committee utilized input from representatives of the following departments and/or agencies listed below:

- City of Nacogdoches, City Manager
- City of Nacogdoches Fire Department, Fire Chief
- City of Nacogdoches Emergency Management, Coordinator
- City of Nacogdoches Police Department, Police Chief
- City of Nacogdoches Engineering Department, City Engineer
- City of Nacogdoches Planning Department, Planner
- City of Nacogdoches Public Works Department, Supervisor
- City of Nacogdoches Health Department, Health Manager
- City of Nacogdoches Inspections Department, Building Official
- Nacogdoches County, County Judge
- Nacogdoches County Emergency Management, Special Project Mgr
- Nacogdoches County Sheriff's Department, County Sheriff

- Nacogdoches Central Appraisal District, Chief Appraiser
- Nacogdoches County Road & Bridge Department, Road Administrator
- Stephen F. Austin University Forestry Department, Department Chair
- Stephen F. Austin State University GIS, Department Chair
- Texas Forest Service, District Forester
- Texas Department of Emergency Management, Plans Administrator
- Nacogdoches County Hospital District, Director of Trauma & EMS
- Deep East Texas Trauma Advisory Council
- Contractors, Environmental Consultants
- American Red Cross

Utilizing the data gathered along with public input, the HMAP Steering Committee developed procedures and actions to be implemented to reduce the risk for future loss of life and property from identified hazards.

The City of Nacogdoches represents one jurisdiction, thus planning members fully represented the jurisdiction covered.

Actions taken to develop the hazard profile and risk assessment included (but were not limited to) visual observations, interviews and historical data research. The Steering Committee members made actual site visits to locations with potential hazards.

Additionally, numerous first responders (both in the public and private sectors) were interviewed. Using the information gleaned from these interviews, the Steering Committee conducted additional research to compliment site visits and interviews. Please see Appendix C: Public Meetings for a list of participants and HMAP Steering Committee.

1.3 MISSION

The City of Nacogdoches Hazard Mitigation Plan serves as a primary guidance document for identifying potential hazards occurring within the City and for establishing mitigation strategies to foster sound public policy. Ultimately, this plan creates a safer community by increasing public awareness and by providing the necessary resources to lessen the risk for certain hazards.

1.4 GOALS AND OBJECTIVES

This plan shall provide a coordinated roadmap for governments, businesses, agencies, organizations and City of Nacogdoches citizens to implement in order to mitigate risks of hazardous events and associated outcomes to:

1.4.1 PROTECT LIFE AND PROPERTY

- Improve the City's ability to protect citizens by implementing strategies that lessen risk of loss due to hazardous events at homes, businesses and critical facilities.

- Refine the City's development policies and building codes as necessary to ensure the highest standards are met in areas identified as vulnerable.

- Implement mitigation strategies to reduce repetitive losses and damages.

1.4.2 PROMOTE PUBLIC INVOLVEMENT

- Solicit public involvement to develop outreach programs to inform the citizens of Nacogdoches of the identified risks and hazards.

- Maintain a list of resources to assist the public in implementing any of the identified mitigation strategies.

1.4.3 FORM PARTNERSHIPS AND TO AIDE IMPLEMENTATION

- Encourage formation of partnerships through enhanced dialogue that will elicit involvement of all segments of the community.

- Develop leadership skills within public and private sector entities in order to implement the City's mitigation strategies.

1.4.4 ASSIST EMERGENCY SERVICES

- Adopt policies that will ensure implementation of mitigation strategies at all critical facilities.

- Utilize public involvement to help strengthen emergency management operations.

- Incorporate all information in the HMAP in updates of emergency management plans and annexes.

1.4.5 PLAN IMPLEMENTATION / EVALUATION

The Nacogdoches City Council has formally adopted by Ordinance the City of Nacogdoches Hazard Mitigation Action Plan. The City of Nacogdoches Emergency Management Coordinator (EMC) will be responsible for ensuring upkeep and maintenance of this plan. Other City staff personnel will be involved in the implementation and ongoing maintenance of the plan and in the evaluation of performance measures.

1.5 PLAN EXPECTATIONS

Mitigation happens locally and local governments such as the City of Nacogdoches shall recognize hazards and shall initiate mitigation actions.
At a minimum, that means the City of Nacogdoches as a local government shall:

- Enact and enforce city building codes, zoning ordinances and other measures to protect life and property when and where it is reasonable and legal to do so.
- Make aware hazards that present risks to citizens and property and measures to take that will reduce risks and losses.
- Include taking responsibility for making informed choices regarding risk.
- Complying with federal and state regulations designed to reduce disaster costs and preserve and protect natural, historic and cultural resources
- Limit variances and property tax reductions that subsidize vulnerability and risk.
- Develop commitment and capacity to change the way hazardous areas are managed.
- Coordinate and integrate policies to manage exposure to hazards with policies to accomplish economic, social and environmental objectives
- Foster innovations in government and land management to better match institutional systems and tools with the problems posed by hazards.

1.6 RESOURCES AND REFFERENCES

Information contained in the City of Nacogdoches HMAP is based on information gathered from a variety of resources including, but not limited to those listed in Section 2.5 and Appendix A.

1.7 CONTENTS OF THE PLAN

The contents of this plan can be separated into related portions that provide background information regarding the City of Nacogdoches and this plan. The portions specifically outline the planning process utilized to create this plan. The content of this plan provides basic demographic and physiological information describing Nacogdoches. The plan gives general overviews of hazards. The plan provides information regarding the City of Nacogdoches Emergency Warning System, the importance of which relates to all hazards identified. This plan identifies the goals and objectives of this plan, which were utilized to create specific action items pertaining to each hazard identified.

The plan identifies each of the hazards which were found to be likely to occur in Nacogdoches. Portions of this plan contain:

- A description of the hazard
- Information from the hazard profile regarding the hazard's likelihood to occur in Nacogdoches
- History of the hazard in Nacogdoches
- Description of who is at risk of the hazard
- Identification of potential losses due to the hazard
- Recommended mitigation action items
- Implementation schedule for action items

This plan Contains Appendices supporting the information in the plan.

- Appendix A contains the references included in this plan.
- Appendix B provides a full name reference for acronyms utilized in the plan, as well as a glossary of terms which may be unfamiliar to the public or have meanings specific to this plan.
- Appendix C contains a list of steering committee members, agendas and notes from steering committee meetings and public meetings.

- Appendix D contains 2003 Plan Progress Table.
- Appendix E contains 2013 Plan Priorities Table.
- Appendix F explains the results of the risk analysis performed for each identified hazard.
- Appendix G Local Mitigation Plan Review Checklist
- Appendix H Link to access copy of City Ordinance.
- Appendix I contains the FEMA Crosswalk which correlates sections of the plan with applicable federal laws.
- Appendix J contains the resolution adopting the Updated City of Nacogdoches Hazard Mitigation Action Plan September 16, 2014.

SECTION 2: THE PLANNING PROCESS

2.1 HISTORY OF HMAP IN NACOGDOCHES

The City Council is the governing body of the City of Nacogdoches and has the authority to promote sound public policy regarding the natural and/or manmade hazards within the city's limits. After formal adoption, the City of Nacogdoches Emergency Management Coordinator (EMC) will be responsible for submission of the HMAP to the Texas Department of Public Safety. If approved by the Texas Department of Public Safety, the HMAP will then be forwarded to the Federal Emergency Management Agency (FEMA) for review. FEMA will address all the federal criteria outlined in FEMA Interim Final Rule 44 CFR Part 201.

The Nacogdoches City Council adopted an ordinance accepting the original HMAP on October 21, 2003. This original document was approved by FEMA in October 2004. City of Nacogdoches Emergency Management staff began revising and updating the HMAP in August 2008. After several months of review, staff determined the City of Nacogdoches would be better served by a complete revision of the HMAP, rather than a simple update of the 2004 HMAP.

2.2 PREPARATION OF THE PLAN

The plan contained in this document is the result of a collaborative effort of city staff and community members. Two community meetings, five steering committee meetings, and a public hearing held by the City Council, each posted and open to the public, allowed public input to drive the creation of this document. Figure 2-2 outlines this process. During the steering committee meetings drafts for each section were created. The section drafts were then presented to the public at community meetings. Revisions based on comments from community members were made to the section drafts and presented to the steering committee at the next steering committee meeting.

2.3 METHODOLOGY USED TO CHOOSE HAZARD MITIGATION ITEMS

All Mitigation Action Items included in this plan were decided on and approved by the steering committee. The committee's method of choosing, prioritizing and approval of Mitigation Action items was that of a general consensus of the steering committee. The decisions were made based on historical data, input

from city employees, input from employees, the hazard profile worksheets and public comment collected throughout the preparation of this plan. The HMAP Steering Committee also prioritized Mitigation Action Items as high, medium or low priority. The four step hazard mitigation planning process was utilized in creating the draft sections. This process is outlined in Figure 2-1.

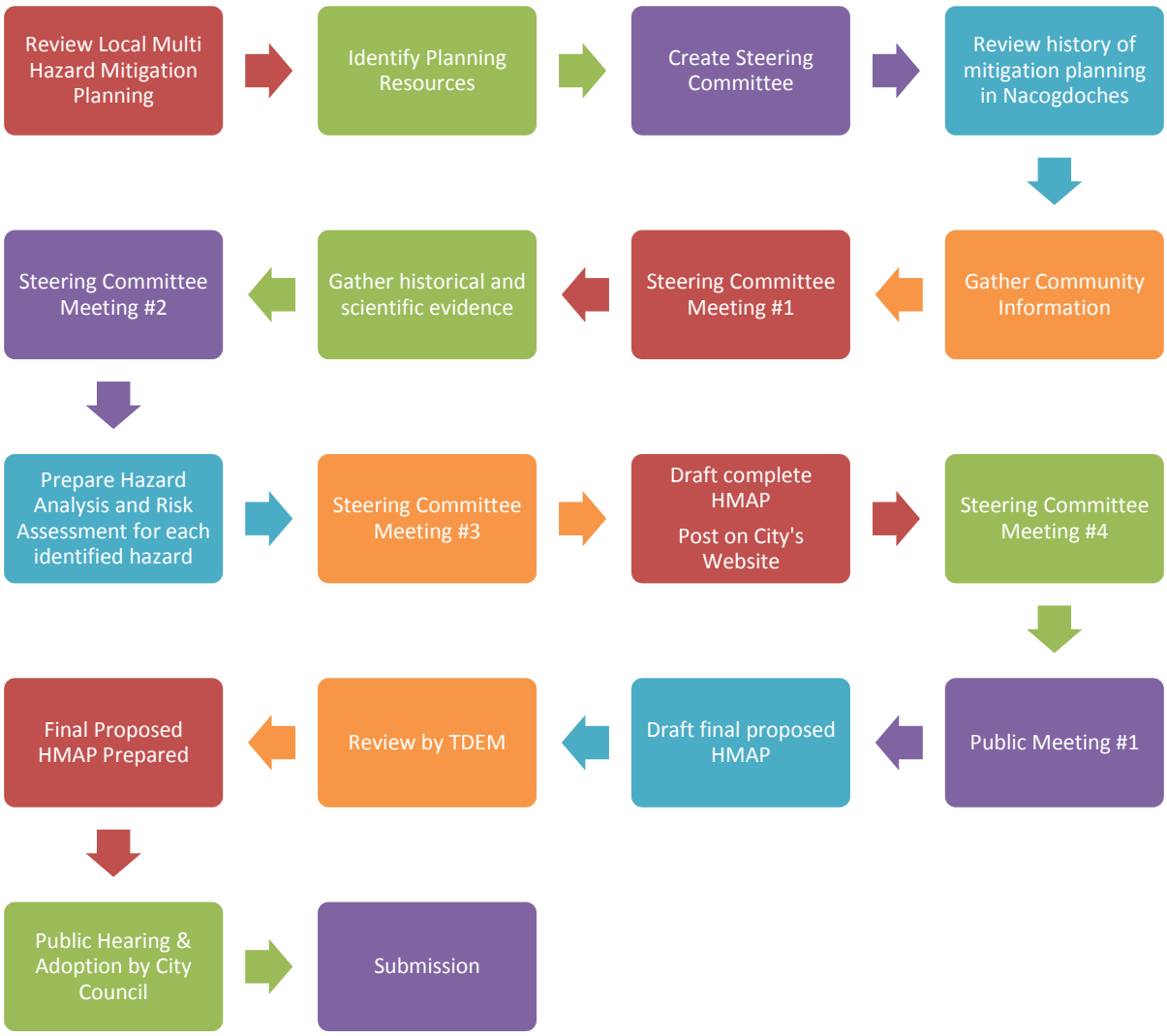
Action items will be continually evaluated throughout the plan period for cost vs. benefit, available funding, estimated effectiveness and forecast success rates.

FIGURE 2-1 THE HAZARD MITIGATION PLANNING PROCESS

2.4 THE PROJECT WORK PLAN

The work plan is outlined below. The basic process included staff gathering the scientific and historical data, presenting that data to the steering committee, drafting sections of the plan, posting the draft sections on the City's website, presenting the draft sections to the community in public meetings, and revising the sections of the plan in response to community comments.

FIGURE 2-2 WORK FLOW



2.5 INCORPORATION OF OTHER PLANS

The Steering Committee utilized the following plans and documents to develop the hazard mitigation action plan:

- City of Nacogdoches Comprehensive Plan was reviewed to ensure that the comprehensive plan did not conflict with the hazard mitigation action plan.

- Advanced City of Nacogdoches Emergency Management Plan is continually reviewed and updated as required. The City consistently maintains plans at a state of readiness including all annexes necessary for Advanced Certification.

- City of Nacogdoches Drought Contingency Plan was reviewed to ensure that the short and long-term water supply needs of the community were addressed. Additional generators and expanded capacity projects are ongoing to ensure consistent delivery of clean water. Changes were made in 2012 to the drought contingency to ensure that systems were in place to reduce consumption and ensure supplies of water.

- City of Nacogdoches Drainage Master Plan was reviewed to ensure compliance with flood studies.

- City of Nacogdoches Water Supply Study's were reviewed to ensure that the short and long-term water supply needs of the community were addressed. Additional generators and expanded capacity projects are ongoing to ensure consistent delivery of clean water.

- City of Nacogdoches Building and Fire Codes were updated in 2013 to the 2009 International Codes to ensure that construction and renovation was consistent with known hazards and that all work complies with modern construction standards.

- City of Nacogdoches Airport Master Plan was examined to ensure long-term viability of the airport as an emergency management asset. The airport master plan does not conflict with the HMAP.

Reviewing the action items contained in the above plans, as well as studies and historical data which related to each potential hazard, the Steering Committee evaluated relevant hazard mitigation actions and incorporated them into the draft HMAP.

2.6 HMAP STEERING COMMITTEE

The Steering Committee composed of city staff members is appointed by the City. The staff members hold positions on the emergency management team, and provide expertise regarding the regular working operations of their departments, as well as their departmental emergency management functions. The role of the steering committee was and is to review the raw data and assist in drafting the sections of the HMAP, as well as revising each section in response to community member comments from the public meetings. The steering committee attended public meetings to present draft sections of the plan. Notes from the steering committee meetings can be found in Appendix C.

HMAP Steering Committee

Steve Bartlett	City Engineer
Stacy Corley	Grants Coordinator
Keith Kiplinger	Fire Chief
Sarah O'Brien	Communications Director
Larissa Philpot	City Planner, EM Planning Section Chief
Jim Sevey	Police Chief
Wayne Shepherd	Public Works Director
Tommy Wheeler	Emergency Management Coordinator
	Building Official

2.7 OUTREACH TO THE PUBLIC

The steering committee identified members of the community who would be interested in the planning process. In addition to the newspaper advertisements, press releases, and Facebook postings, individual invitations were given to those identified community members, inviting them to participate in the community meetings. In addition to community members, an invitation was extended to the following organizations to give them the opportunity to be involved in the planning process:

- Nacogdoches County Emergency Management Team
- Nacogdoches County Hospital District
- Medical Center Hospital
- Nacogdoches Independent School District
- Stephen F. Austin State University

- Texas Department of Transportation, Lufkin District
- Nacogdoches Convention & Visitors Bureau

2.7.1. WEBSITE

Each draft section was placed on the City of Nacogdoches website, along with contact information for interested parties to mail or email comments. The completed HMAP is now on the City's website for public access.

2.7.2 PUBLIC MEETINGS

Draft sections of the plan were presented to the community at public meetings. Two stand alone public meetings were held and the final adoption of the plan was a public hearing held during a regularly scheduled City Council meeting. At the public meetings, the draft sections were presented and explained. The steering committee was available to answer technical questions. Comments gathered from the public at these public hearings were considered by the steering committee and discussed at their next meeting, and the applicable HMAP section was revised as necessary. Finally, the entire plan was presented to the public and the City Council for final adoption.

Agendas and notes from these meetings can be found in Appendix C.

TABLE 2-3 SCHEDULE OF PUBLIC MEETINGS

Meeting	Date
Work Group Meeting	February 22, 2011
Work Group Meeting	November 17, 2011
Work Group Meeting	December 12, 2011
Work Group Meeting	January 3, 2012
Work Group Meeting	January 17, 2012
Public Meeting	January 31, 2012
Public Hearing Council Adoption	September 2, 2014
Adoption	September 16, 2014

2.8 MONITORING AND MAINTENANCE OF THIS PLAN

The HMAP Steering Committee will monitor the actions items in the Plan each March.

The party responsible for the actions in the plan will be tasked with preparing an annual progress report to be submitted to the Nacogdoches Emergency Management Coordinator (EMC).

After receiving the annual reports from each party, the EMC will be responsible for convening annual meetings with the Steering Committee to present an overall progress report on action item status and discuss comments and questions concerning plan's progress, purpose and goals. Annual meetings will be open to the public and notice will be provided to the public in accordance with Texas open meetings statutes.

At the conclusion of the annual meeting a document will be created tracking progress of the plan and updates to the plan will be developed and disseminated to responsible parties within the organization by the EMC.

2.9 EVALUATING CHANGES THAT IMPACT THIS PLAN

The annual meetings will involve the gathering of hazard related data from the previous year and discussion of progress made toward action item implementation.

The HMAP Steering Committee will evaluate the plan to assess if significant changes have occurred in the premises upon which the plan was developed such as the following:

- Changes in data sources and/or methodology used to determine vulnerabilities and loss estimates, in terms of quality and availability
- changes in federal or state plans that could affect the continued implementation of any of the mitigation actions
- the identification of new hazards requiring new mitigation actions
- changes in community perception relative to specific hazards

In addition to these functions, the HMAP Steering Committee will work to educate and involve the public in hazard mitigation activities and to oversee the incorporation of this plan into future planning and public policy documents as these are updated or developed. The incorporation of this plan into other planning instruments will serve as an additional metric for success. This plan will ultimately be evaluated based on implementation of action items, the incorporation of mitigation principles into future public policy, improved public safety, and the overall reduction of losses for City of Nacogdoches residents.

2.10 PLAN MAINTENANCE

The City of Nacogdoches' Hazard Mitigation Plan is intended to remain current for a period of 5 years from approval date.

MONITORING AND EVALUATING THE PLAN

The plan will be monitored and evaluated on an annual basis by the Hazard Mitigation Steering Committee. The Emergency Management Coordinator will be responsible for coordinating an annual meeting of the Steering Committee. The annual meeting will serve as an opportunity for Committee to monitor and update any progress that has been made regarding the plan. It is suggested that department heads for each department responsible for any mitigation action be present at this meeting as well to give an update on actions pertaining to their department. The annual review meeting should take place in the first quarter of every year and should progress similar to the following agenda:

- Record occurrences of natural hazard events within the City since the adoption of the Plan
- Department heads provide an update on any mitigation actions that have been completed
- Department heads give suggestions or concerns about their experiences and efforts to implement the actions in this Plan. These suggestions should be documented and revisited during the Town's Plan update.
- Make minor adjustments to the plan as additional information becomes available, and
- Discuss and record alternative strategies to consider when the plan is formally updated.
- Discuss and assess the Plan's overall effectiveness at achieving the goals

-Discuss and review how the mitigation actions may have changed current planning tool's strategies, and goals and what updates may be needed.

- Develop and distribute action items for each department to work on throughout the year. This list will be discussed and reviewed at each meeting.

Following the annual review, the Steering Committee will provide the City Council with a summary of the review and provide an opportunity for public input. The annual review summary will be posted on the website.

UPDATE

FEMA requires that all HMAPs be formally reviewed and updated every five years. The natural hazards that threaten Nacogdoches will be reviewed and updated as appropriate. If new hazards are added to the plan, the appropriate background information similar to what has been developed for the other natural hazards in this plan will also be developed in the updated plan. The progress on the implementation of existing mitigation measures will be reviewed. New mitigation measures will be considered and Town Hall meetings will be held to obtain public input.

The HMAP Steering Committee is responsible for preparing the formal updated to the plan. In order to allow ample time to complete the formal review and update of the plan, the Hazard Mitigation Planning Team should begin working on the update in January 2017 and be completed by January 2018 (12-18 months before the end of 5th year). This will allow time to involve the public through the Town Hall meetings and complete the update of the report prior to the FEMA deadline. Public response will follow the same methods as used in creating and developing the HMAP. The methods will include advertising, through social media, website, newspaper and the public notification system, to attend the public meeting to allow for any comments or questions about the HMAP. As with the review the draft HMAP, the public will have the opportunity to go on the website and review the HMAP and complete a survey and provide comments about the same. These recommended dates are subject to change depending on the actual date of FEMA's approval of the original document.

The incorporation of this plan into, Nacogdoches' Comprehensive Plan, Emergency Management Plan, Drought Contingency Plan, Drainage Master Plan, Water Supply Plan, and any future planning instruments will serve as an

additional metric for success. As these plans and programs are updated, they will be reviewed for consistency with the measures identified in the HMAP. Each responsible department will update the applicable plans or programs as appropriate to be consistent with the HMAP. These updated plans and programs will be provided to the Steering Committee for consideration in their annual review. By incorporating the HMAP into the updated Comprehensive Plan, the City will provide a means by which the data, information, and mitigation goals will be mitigated into the City of Nacogdoches planning mechanisms. Additionally, the Comprehensive Plan will provide a location in which the specific mitigation actions for each hazard to be incorporated as part of large scale, long-range plan for the community.

The City updates plans on an as needed basis. Some plans are updated more frequently than others, and some plans are updated as situations change. The Comprehensive Plan is currently budgeted to be updated in the 2014-2015 fiscal year. The Emergency Management Plan is updated per the State of Texas guidelines, with each annex updated on separate schedules. The Drought Contingency Plan was updated in 2011, and is updated as infrastructure and usage patterns change. The Drainage Master Plan and Water Supply Plan have not been updated recently, but are on the planning horizon to be updated in the next five years. The updates for these plans are typically drafted by a consultant or city staff, reviewed by an appointed committee of citizens, and then sent to the City Council for final approval and adoption.

2.11 MAJOR CHANGES IN THE PLAN

The previous HMAP did not include drought as a hazard whereas this updated plan does identify drought as a hazard. The updated HMAP incorporates the City of Nacogdoches Water Conservation Plan.

Previously hail, ice, wind and lightning storms where considered one hazard. Those hazards have now been separated. Winter storms, hail storms and Tornado-windstorms-thunderstorms. Tornado-windstorms-thunderstorms include lightning and are experienced most often together in the Nacogdoches area. The previous HMAP also included Chemical Spills and Industrial Accidents, the mitigation of which is handled through adopted fire, building and health codes.

Data updates are included throughout the HMAP. Data updates such as flood insurance policies, damage assessments and community changes. Population and demographic data collected during the 2010 census updates are include throughout this HMAP.

Previously approved Mitigation Action Item updates are found in the Implementation Schedule of each and every Mitigation Action Item.

SECTION 3: COMMUNITY INFORMATION

3.1 LOCATION

The City of Nacogdoches is located in Deep East Texas and is part of the Western Gulf Coastal Plain, which is characterized by pine forests and hardwood bottomlands. Nacogdoches is located at the intersections of U.S. Highway 59, State Highway 21 and State Highway 7. It is approximately 140 miles northeast of Houston, 90 miles southwest of Shreveport and 160 miles southeast of Dallas (Figure 3-1). Locally, the city lies between two creeks, Lanana and Banita, which have historically caused localized flooding events.

3.2 LAND AND DEVELOPMENT

Nacogdoches, the oldest town in Texas, is named for the Caddo family of Indians who once lived in the area. There is a legend of an old Caddo chief who sent his twin sons in two different directions to establish their own tribes. The cities of Nacogdoches, Texas and Natchitoches, Louisiana were formed as a result. The road between the cities became a trade route and the eastern portion of the El Camino Real. In 1779, Gil Y'Barbo was appointed Lt. Governor of the town of Nacogdoches and established the rules and laws under which the City was governed. He also laid out streets with the intersecting El Camino Real and El Calle del Norte as his central point. (McDonald)

The City of Nacogdoches' Hazard Mitigation Action Plan will be utilized for the future development of the city. One element of this plan includes a new future Land Use Plan, which is a graphic representation of the City's desired long-term growth pattern. The Current Land Use Map (Figure 3-2) and the Future Land Use map (Figure 3-3) are supported by goals and objectives plus more specific policy statements regarding the community's ongoing growth and development. Key Features of the Future Land Use Plan are to ensure adequate acreage in appropriate locations for a range of needed housing types, Reducing the strip commercial potential along the City's major roadway corridors, Expanding the City's parks and trails system to serve a growing population and protecting the flood plain from further urban encroachment. All of these tools serve as the basis for development review recommendations, decisions and potential

adjustments to the City's development-related ordinances and growth management policies.

FIGURE 3-1 LOCATION OF THE CITY OF NACOGDOCHES

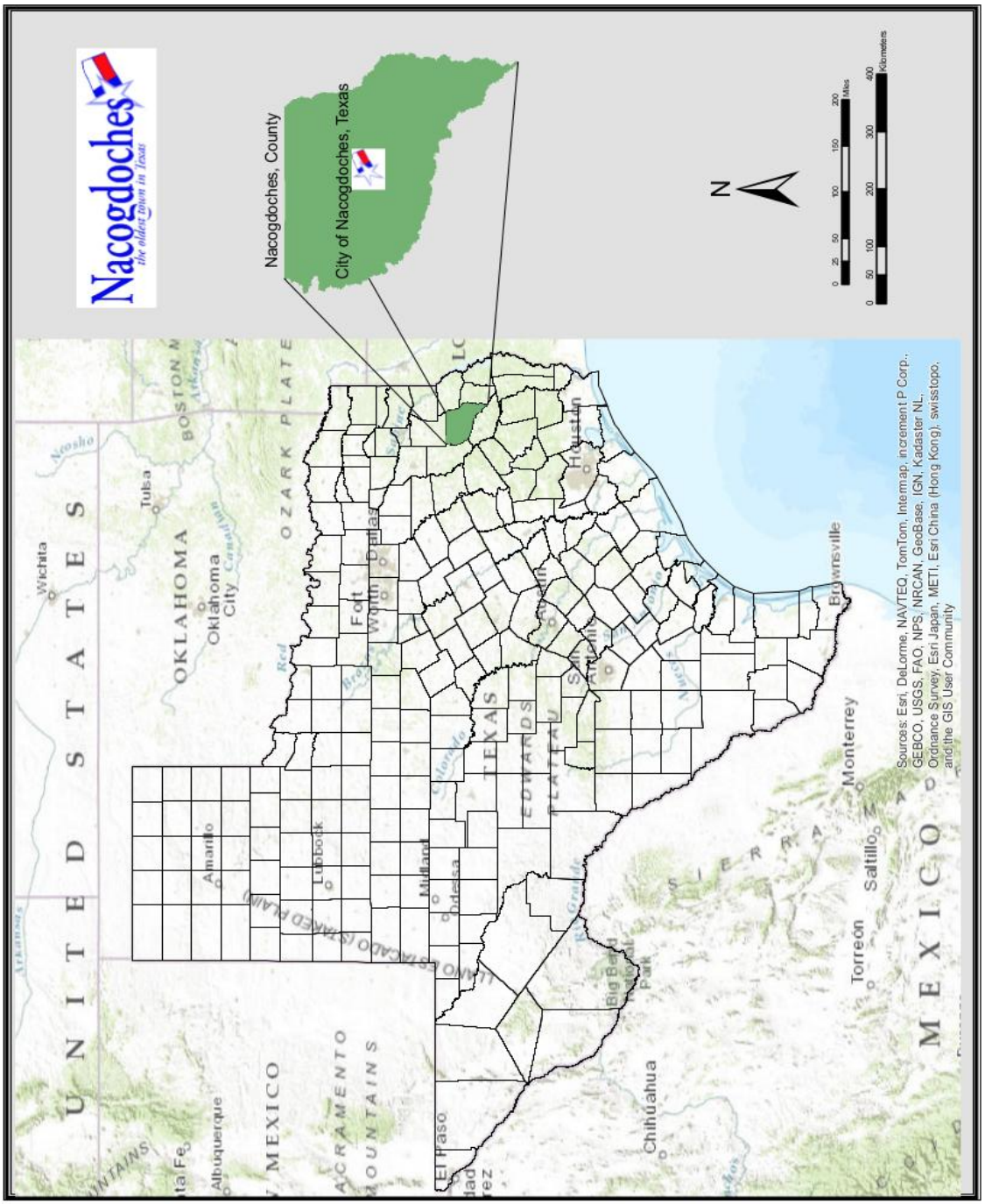


FIGURE 3-2 CURRENT LAND USE MAP

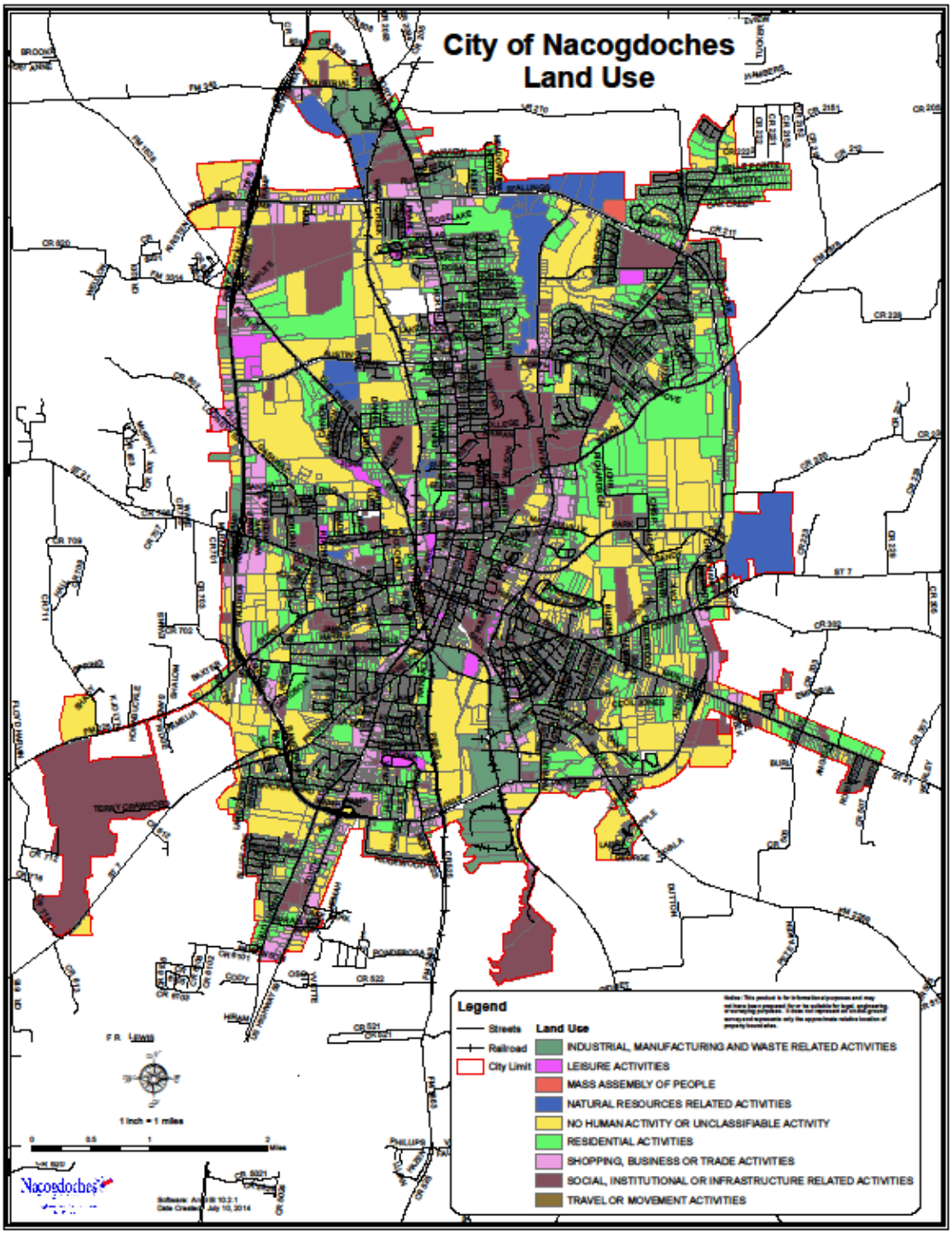
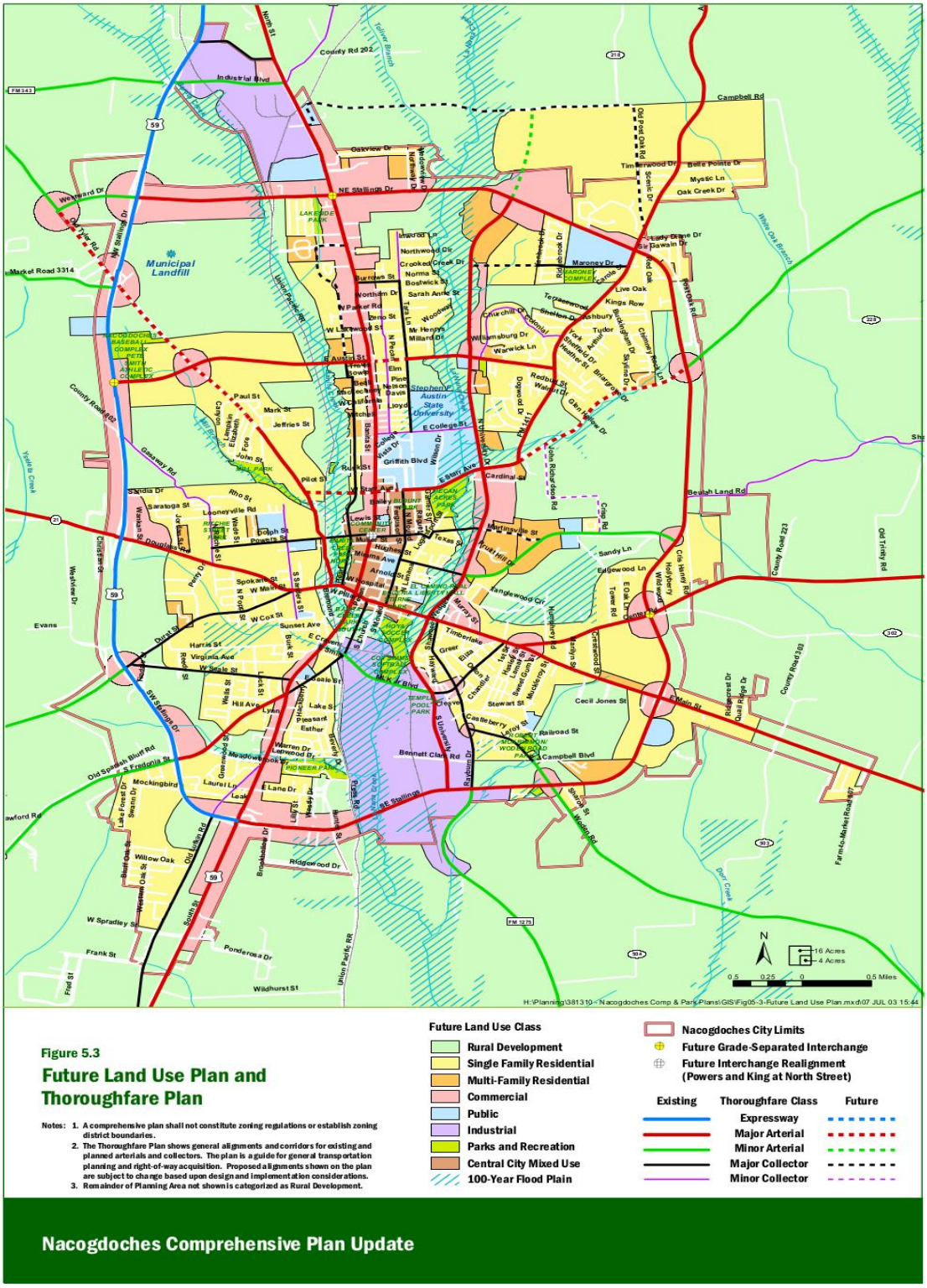


FIGURE 3-3 FUTURE LAND USE



3.3 CLIMATE

Climatically, the City of Nacogdoches is situated between colliding air masses that can produce extremely violent storms during any part of the year, but on average, severe storms most often are experienced in the early spring and fall seasons. In particular, dry, high pressure systems that originate in the high latitudes converge with wet, moist low pressure systems. These air masses generate enormous energy that can create favorable conditions for severe weather. Hence, the City of Nacogdoches is a prime area for severe weather including: violent thunderstorms, straight-line winds, tornadoes (on the cusp of the infamous tornado alley), hail, freezing rains, etc.

3.4 HYDROLOGY

The two major streams within the City of Nacogdoches are Lanana Creek and its main tributary, Banita Creek. Both streams originate in northern Nacogdoches County and flow South through the City of Nacogdoches. Banita Creek flows into Lanana Creek and Lanana continues southward to the Angelina River (Figure 3-4). Several miles of the Lanana Creek channel within Nacogdoches were straightened during the 1970's.

Stream flow in Lanana Creek at the Nacogdoches wastewater treatment plant (south of the City) averages 56.8 cfs, with monthly averages as low as 1.5 cfs during dry years. Instantaneous flows up to 25,650 cfs have occurred.
Other named streams within the city limits of Nacogdoches are Toliver Branch, Mill Branch and Egg Nog Branch. The streams within the City's boundaries are not affected by any significant wastewater discharges until reaching the City's wastewater treatment plant. The plant receives flows from the entire City including local industries. The stream levels within and downstream from Nacogdoches are also affected by urban runoff. There are several small lakes on minor tributary streams in Nacogdoches, none of which covers over 15 acres. The existing lakes cover only a negligible portion of the City and have little effect on flood control.

The Carrizo Sand Aquifer supplies all of the ground water used by the City of Nacogdoches. This aquifer outcrops in a band across the northern and northeastern parts of Nacogdoches County. The top of the formation in the

immediate Nacogdoches area varies from 400 to 500 feet below ground, and the aquifer is generally 60 to 90 feet thick in this area. The Carrizo Sand Aquifer contains water of a generally good quality.

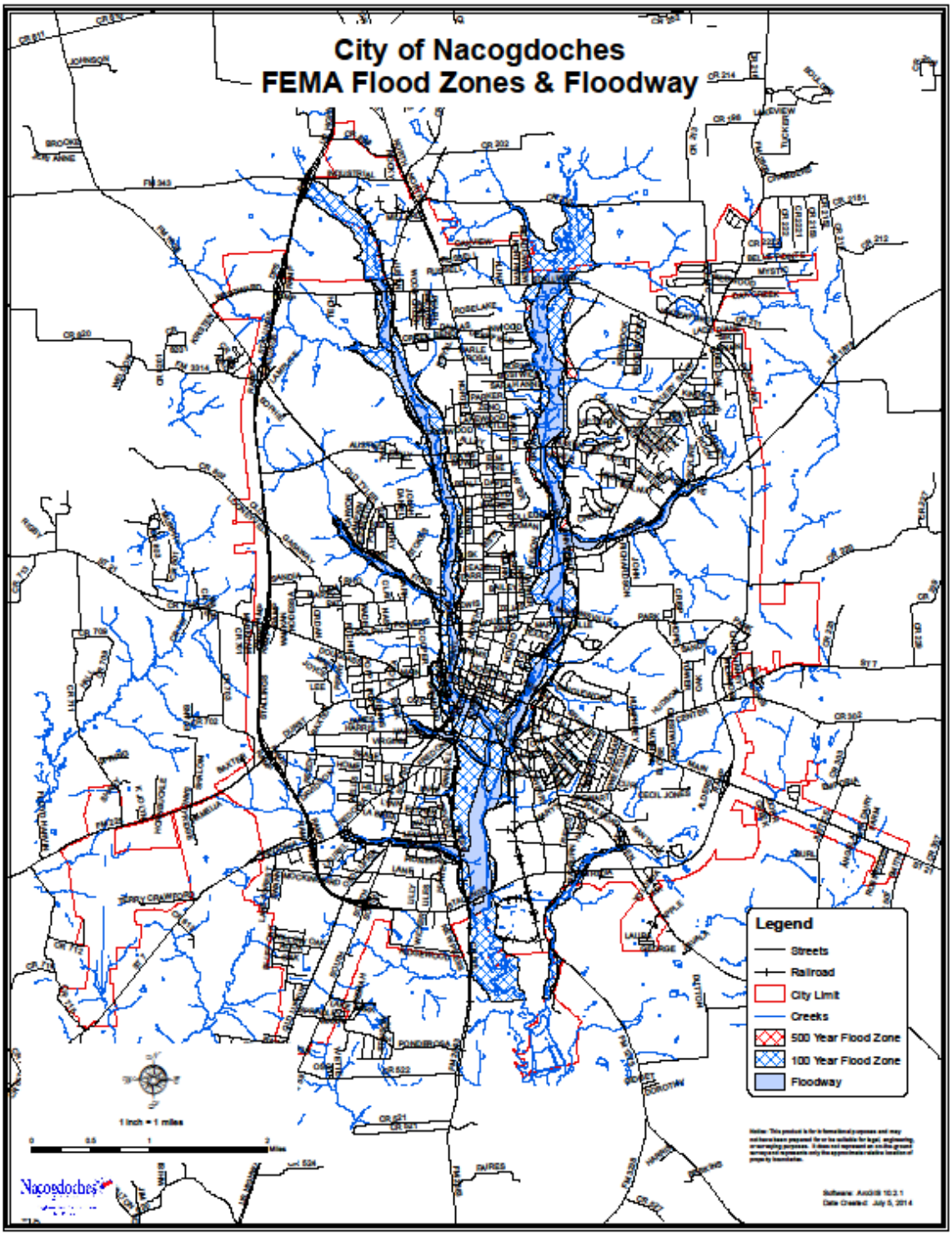


FIGURE 3-4 HYDROLOGY 1FIGURE 3-4 HYDROLOGY

3.5 GEOLOGY

The principal subsurface rocks in the City of Nacogdoches are classified as Cenozoic, within the Cenozoic subclass. Predominant surface rocks in the area are of the Claiborne Group, including in descending order the Stone City Formation, the Sparta Sand, the Therill Formation and the Weches Formation.

East Texas lies within a structural province known as the Gulf of Mexico Basin. The geological structures in East Texas are represented by two major elements, the East Texas Embayment and the Sabine Uplift. Nacogdoches lies within the East Texas Embayment, which covers approximately 90% of East Texas with a north-south axis running through Cherokee County (west of Nacogdoches).

3.6 POPULATION

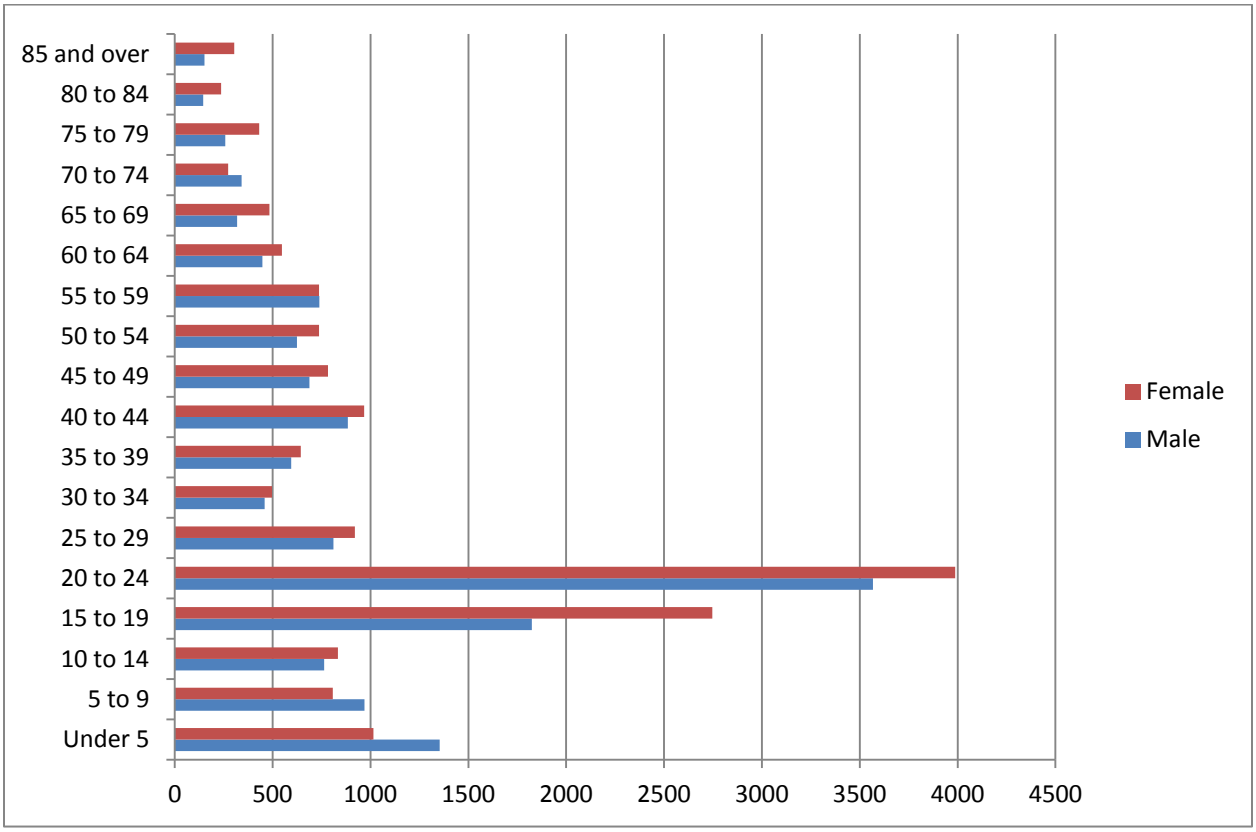
The City of Nacogdoches is the largest city in Nacogdoches County and comprises 25.9 square miles with a 2010 Census population of 32,996. Several different methods of estimating population growth project the Nacogdoches population to reach 42,000 by 2040, these projections can be seen in Figure 3-5. Nacogdoches is home to Stephen F. Austin State University (SFASU), which consistently boasts fall and spring enrollments of 12,000 students. Approximately 4,500 students enroll in summer sessions at the university. This represents a seasonal population flux of several thousand people between the school year and the summer months. The clear influence of the university can be seen in the age distribution of population. Approximately 23% of the population of the City of Nacogdoches is aged 20 to 24 years, as seen in Figure 3-6.

FIGURE 3-5 POPULATION PROJECTIONS

	1970	1980	1990	2000	2010	2020	2030	2040
Historical	22,544	27,149	30,872	29,914	32,996			
TWDB					32,996	36,501	39,946	43,074
Step Down 1					32996	33,524	34,898	36,050
Straight Line 2					32996	36,078	39,160	42,242
Exponential Growth 3					32996	36,296	39,925	43,918

Sources: 2010 Census, Texas Water Development Board, Texas State Demographer

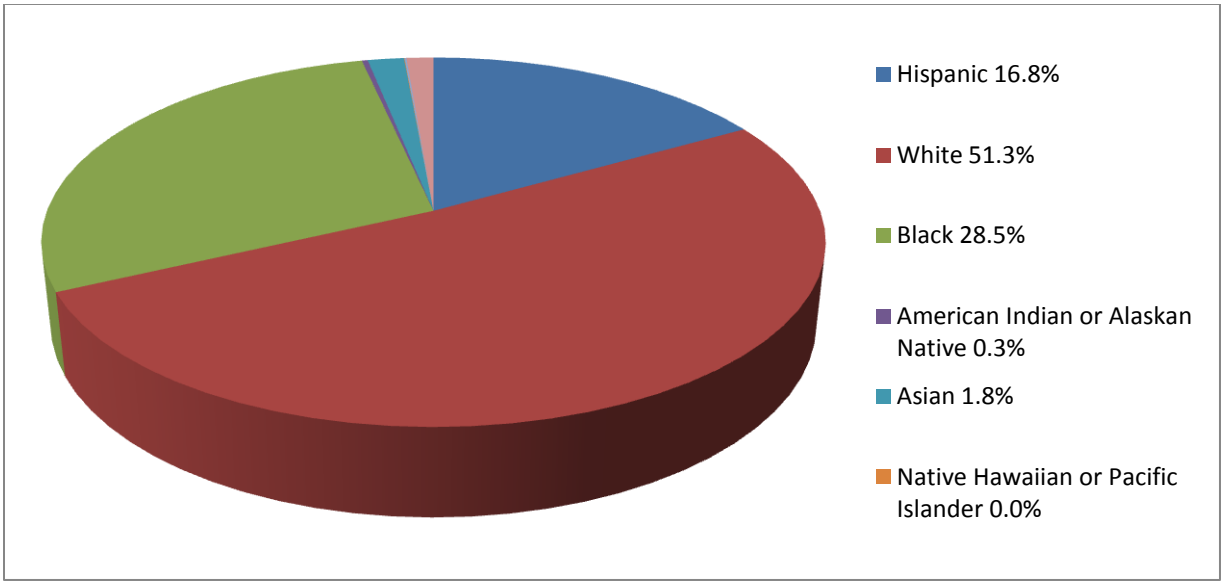
FIGURE 3-6 POPULATION BY AGE



Source: 2010 Census

The City of Nacogdoches racial makeup is comparable to many cities of its size throughout Texas, with a rapidly growing Hispanic population. Nacogdoches' Hispanic population has increased from the 2000 census to 16.8% of the population, as seen in Figure 3-7.

FIGURE 3-7 NACOGDOCHES RACE & ETHNICITY



Source: 2010 Census

3.7 SPECIAL POPULATIONS

The Steering Committee has identified several special needs populations within the City of Nacogdoches. 9.1% of Nacogdoches' citizens are over the age of 65. Several retirement communities have been developed in Nacogdoches recently, and several more are in the planning stages. There are approximately 2,400 children under the age of 5 residing in the City of Nacogdoches. Of people in Nacogdoches aged 5 – 85 years, approximately 18% are disabled. This is slightly higher than the state average. Nacogdoches has 9 nursing and/or convalescent homes to accommodate its larger than average disabled population.

Approximately 4% of Nacogdoches' residents reported speaking English "not well" or "not at all." Of these residents, the majority reported speaking Spanish as their primary language. The City has developed, equipped and staffed an Emergency Phone Bank to be activated during emergency events. The new system has the capability to send messages in Spanish as well as English.

44CFR Section 201.2 defines "special communities" as small and impoverished communities with populations of 3,000 or less that is identified by the state as a rural community, and is not a remote area within the corporate boundaries of a

larger city; is economically disadvantaged, by having an average per capita annual income of residents not exceeding 80% of national, per capita income, based on best available data; the local unemployment rate exceeds by one percentage point or more, the most recently reported, average yearly national unemployment rate. The City of Nacogdoches does not meet the criteria for designation as a special community.

3.8 LARGE GATHERINGS AND TOURIST ATTRACTIONS

The City of Nacogdoches is a popular East Texas tourist destination. Nacogdoches' various festivals and historic downtown district, as well as events at Stephen F. Austin State University often draw several thousand people. The events listed below occur annually:

- Texas Blueberry Festival
- Nine Flags Christmas Festival
- Scare on the Square
- Freedom Fest
- Azalea Trail
- PRCA Rodeo
- SFASU Sporting Events
- SFASU Graduation
- SFASU Homecoming
- SFASU Parent's Weekend

3.9 BUILDING AND CONSTRUCTION

The City of Nacogdoches is a place where the old and new often meet. Figure 3-8 shows the age of the Nacogdoches housing stock, as compared to the state. The approximately 450 historic structures in Nacogdoches are held to the same repair and maintenance standards as new construction. In 2013 The City of Nacogdoches adopted the 2009 International Building, Plumbing, Mechanical, Gas, Energy Conservation, Existing Building, Electrical and Fire Prevention Codes. Currently, the City employs the following four inspector positions with State of Texas licenses and International Code Council (ICC) indicated:

1. **Building Official** – Certified Building Official, State-licensed Plumbing Inspector, ICC Residential Electrical Inspector, ICC Residential Plumbing Inspector, ICC Residential Mechanical inspector, ICC Zoning & Property

Standards Inspector, ICC One and Two-Family Residential Inspector, State Registered Sanitarian, State-licensed Code Enforcement Officer, Structural Plan Reviewer

2. **Electrical Inspector** – ICC Commercial Plumbing Inspector, ICC Residential Electrical Inspector, ICC Residential Energy Inspector, ICC Residential Plumbing Inspector, State-licensed Master Electrician
3. **Plumbing Inspector** – State-licensed Master Plumber, State-licensed Medical Gas Inspector, State-licensed Plumbing Inspector
4. **Fire Inspectors** – Seven State-licensed Fire Inspectors
5. **State Registered Sanitarian**-employed beginning in 2004 as Environmental Health Manager- this position serves as health department manager, manger of inspection services, the City Code Enforcement Division manager, building inspections manager and the Emergency Manage Coordinator for Nacogdoches.
6. **Code Enforcement Division**- Beginning in 2004 the city stepped up its code enforcement division by certifying 6 code enforcement officers. This division is actively working to mitigate on-going issues related to fire mitigation, along with life safety, health and general welfare issues of mitigation. In 2004 the city stepped up its urban wildfire mitigation program. Utilizing the six mentioned certified code officers, this mitigation project abated 2,536 cases of high weeded lots and larger sections of land as of September 30, 2009. The forced removal of high weeds was done in an effort by the Code Enforcement Division to eliminate fuel sources for possible wildfires within the control boundary of Nacogdoches.

Between 2010-2012, the City of Nacogdoches issued 4,918 building permits, and approximately 5713 building inspections were conducted.

The following steps are taken in the building inspection process:

1. If the structure is to be a multi-family residential or commercial building, a pre-development meeting is held with City development staff.
2. Building plans are submitted to the Inspections Department by applicant.
3. Plans are reviewed by the City development staff for code compliance including compliance with all International Codes, local ordinances, State law and floodplain requirements.
4. Necessary revisions are indicated and plans are returned to applicant for correction.
5. Permit and inspection card are issued and the following inspections are conducted upon notification from contractor:

- Plumbing Rough-in
- Form (Pre-concrete pour)
- Framing
- Electrical Rough-in
- Plumbing Top-out
- Mechanical Rough-in
- Insulation
- Cover-up
- Final Plumbing
- Final Electrical
- Final Mechanical
- Driveway and Drainage
- Certificate of Occupancy

TABLE 3-8 HOUSING STOCK

	2010 Population	Total Housing Units	Occupied Housing Units (% of Total)	Housing Units Built Before 1980 (% of Total)
Nacogdoches	32,996	13,635	87.1%	55.3%
Texas	25,145,561	9,977,436	89.4%	48.6%

Source: 2010 Census

TABLE 3-9 MEDIAN HOUSEHOLD INCOME 2011

City of Nacogdoches	Texas	United States
$26,928	$50,920	$52,762

Source: U.S. Census Bureau

The chart below shows our major developments and annexations since 2003. The new development has not changed our vulnerability, as we have utilized the plans and ordinances already in place to ensure safe development occurs. The chart shows:

- Population change
- Annexations
- Development and Subdivisions

Year	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Population	30,622	30,859	31,042	31,580	31,806	32,198	32,804	32,996	33,813	33,847	33,868
% of population change from previous year.	0.22%	0.77%	0.59%	1.70%	0.71%	1.22%	1.85%	0.58%	2.42%	0.10%	0.06%
Acres Annexed	0	90.875	15.54	30.96	596.94	4.25	0	0	0	0	0
Homes Annexed	0	4	0	0	0	0	0	3	0	0	0
Business Annexed	0	0	1	0	1-A.L. Mangham, Jr. Regional Airport	1 Regents Academy	1- Nursing Home	4- Nacogdoches Millworks, Animal Science Products, Pilgrim Industries, Bailey Bark	0	0	0
New Construction	Police Station Reno.	N/A	Durst Taylor House Museum, Courthouse Annex	Grove Apts, Courthouse Reno, Marketplace II Retail Ctr.	Hospital Reno	N/A	N/A	Legends Apt., Ellington St. Apts	N/A	N/A	Village Marketplace Retail
Lots created in major subdivision	26	132	N/A	231	69	14	N/A	10	N/A	N/A	N/A

3.10 ECONOMY

The City of Nacogdoches' economy is driven by agriculture, poultry production and processing, education, manufacturing and healthcare. Additionally, Nacogdoches is home to many family-owned small businesses. This unique mix of employers has allowed a diversified Nacogdoches economy to remain relatively strong in recent years, as compared to larger metropolitan areas. The median household income has remained steady with the state average, as seen in Figure 3-8.

Over 30% of the population is employed in management and professional occupations, 29% in sales, 20% in service, 12% in production and transportation, 6% in construction and 1% in farming, fishing and forestry. The major employers for the City of Nacogdoches are shown in Figure 3.10 below:

TABLE 3-10 CITY OF NACOGDOCHES TOP TEN EMPLOYERS

Employer	Employees	Industry Sector
Pilgrim's Pride	1,725	Poultry Processing
Stephen F. Austin State University	1609	Poultry Processing
Nacogdoches Independent School District	972	Education
Nacogdoches County Hospital	740	Health Services
Etech, Inc.	455	Communications
Wal-Mart Supercenter	432	Retail
Nacogdoches Medical Center	377	Health Services
City of Nacogdoches	323	Government
Nacogdoches County	300	Government

Eaton	275	Specialty Transformer Manufacturing
Nibco Inc.	271	Industrial Supplies Manufacturing.
Parker Hannifin Corp	236	Chemical Products

Source: Nacogdoches Economic Development Corporation

3.11 TRANSPORTATION AND COMMUTING

Like most communities, the City of Nacogdoches faces challenging decisions on how best to address increased traffic, problem intersections and other locations with unsafe conditions for drivers, bicyclists and pedestrians. In addition, the City must deal with a variety of county, regional, state and federal agencies charged with maintaining important segments of the overall transportation system – particularly the various highways that cross the community.

Besides maintaining local streets and related infrastructure, the City has its greatest measure of control in regulating location, layout and design of land development relative to roadway, transit and sidewalk networks. This significant local government function has tremendous potential to ensure safe and efficient travel conditions and is a municipal government day-to-day responsibility that must incorporate long-term planning considerations.

In an ongoing effort to create a safe environment for commuting, the City's responsibilities include:

- Participating in inter-governmental planning for major transportation improvements, such as Interstate 69, upgraded highway interchanges, expanded transit services, and airport enhancement/development – particularly for economic development purposes;
- Coordinating with major traffic generators/attractors (such as Stephen F. Austin State University, Nacogdoches Medical Center, and significant industrial and commercial developments) in order to manage transportation conditions and issues cooperatively;

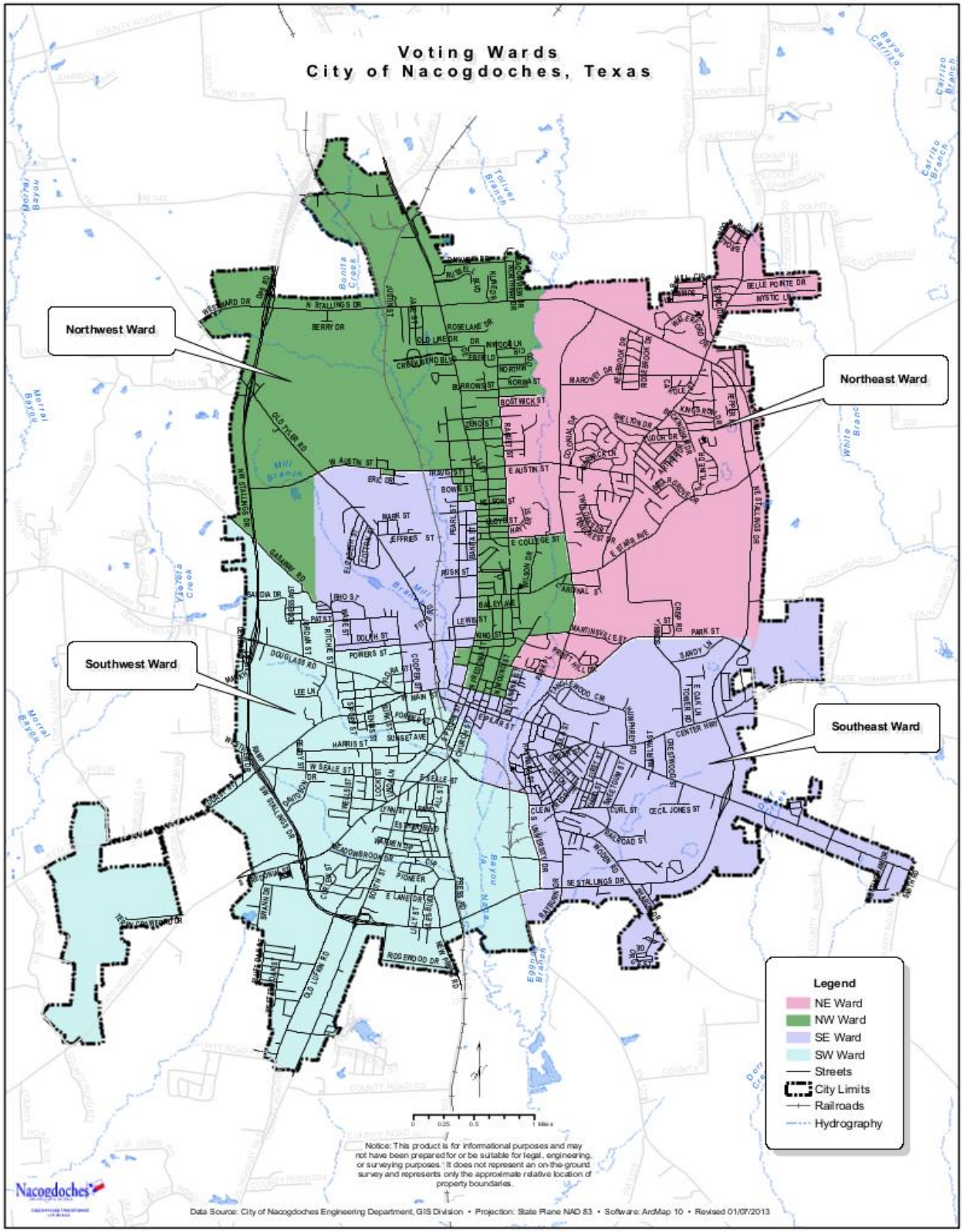
- Planning for new and expanded roadways through effective thoroughfare planning procedures that open new development areas within the community versus the urban fringe, to provide alternate travel routes and traffic relief for existing roadways that ensure advance knowledge of roadway segments likely to be built or widened in the future, and to extend roadways into new growth areas as appropriate;
- Upgrading capacity and safety at key intersections through road widening, additional lanes or turning lanes, new or adjusted signalization, better striping and signage, and crosswalks or other pedestrian enhancements;
- Managing access to developed properties along major roadways to control turning movements and reduce traffic conflict points, limit uncoordinated proliferation and proximity of driveways, and set the stage for eventual signalization at workable locations (as one public meeting attendee summed up, "We destroyed North Street in the 1970's");
- Establishing appropriate design and dimensional standards for various types of streets to ensure traffic speeds and flows that will be compatible with anticipated development in the vicinity;
- Requiring adequate off-street parking to avoid off-site impacts of overflow parking and traffic; and,
- Considering annexation where and when appropriate to ensure that areas requiring upgraded roads or services contribute tax revenue to support such improvements.

3.12 FORM OF GOVERNMENT

The City of Nacogdoches is a home rule city which operates under the Council-Manager form of government. One council member is elected from each ward, and the mayor is elected at large, forming the City Council. The City Council appoints the city manager, municipal court judge, city attorney, and health officer. The city manager hires city department heads, who each in turn manage departments varying in size from two to seventy five employees. The total employment for the City of Nacogdoches varies seasonally, but is approximately 319.

In addition to the regular city staff, the City of Nacogdoches relies on the advice and decisions of various boards and committees which are appointed by the City Council.

FIGURE 3-11 CITY COUNCIL WARDS



3.13 HISTORY OF HAZARDOUS EVENTS

Historically, the City of Nacogdoches has experienced numerous flooding events, tornadoes, accidents, storms and urban interface wildfire. With the growing City population these events have an increased significance as to risk exposure.

The City of Nacogdoches lies between the Lanana and Banita Creeks, which throughout history have caused localized flooding events. The last federally declared disaster due to flooding occurred in the wake of Tropical Storm Allison in April 2001. An estimated 25 businesses were impacted; 15 of which sustained uninsured losses. In addition, over 30 families were displaced due to flood damage to their homes.

Since Tropical Storm Allison, significant flooding events have occurred within the city's limits on two additional occasions. Thus, the City of Nacogdoches is acutely aware of the importance of a Mitigation Action Plan and has also become proactive in its efforts for risk-reduction. Rising recovery costs from hazardous events have motivated the City of Nacogdoches to formulate strategies to reduce risks. The City of Nacogdoches HMAP will identify valuable resources, relay vital information and present carefully orchestrated strategies to help guide the community into implementing necessary steps to lessen devastating effects of natural and/or manmade disasters.

However, flooding is not the most significant event to affect the City of Nacogdoches in recent years. In August 2005 the City of Nacogdoches sheltered over 2,500 evacuees from New Orleans and other Gulf Coastal cities for over 20 days. The City of Nacogdoches sheltered Hurricane Katrina evacuees along with Hurricane Rita evacuees throughout Rita's winds and rain. Nacogdoches is a unique community that both shelters coastal evacuees and suffers the impact of hurricanes and tropical storms locally. As Nacogdoches is located in the pine forest of East Texas the effects of wind, rain, drought and freezing weather are especially significant.

The City of Nacogdoches claimed expenses in excess of $690,000 for Hurricane Katrina for shelter operations and emergency housing expenses for evacuees who lost their homes. FEMA paid over $634,000 in reimbursement. Expenses were claimed in excess of $499,000 for Hurricane Rita for shelter operations,

labor, debris removal and damage to parks and buildings, resulting in FEMA reimbursement in the amount of $557,006.67.

In August 2008 the City of Nacogdoches experienced consequential effects of two hurricanes within a 3-week period. The City of Nacogdoches claimed an estimated $206,457 in high wind damages by Hurricane Gustav for labor and shelter operations. Of this amount, FEMA paid $107,726. Hurricane Ike caused significant wind damage within our city as a high wind event and an estimated $2,274,483 was claimed for debris removal, damage to parks and buildings, shelter operations and labor for emergency personnel. Of this amount FEMA paid over $2,030,916 in reimbursement.

However, Hurricanes even though frequent along the Texas Gulf Coast were not included as a separate hazard in this plan. Research by the National Oceanic and Atmospheric Agency (NOAA) indicates that while the elements of hurricanes and tropical storms have an impact in this the City of Nacogdoches, that impact is manifested by the consequential effects of a hurricane or tropical storm. Those consequential effects are thunderstorm, Severe Winds, lightning, tornados and flooding. Each of these components has been included herein and addressed in the corresponding hazard chapters.

Lightning is discussed as a component of thunderstorm and high wind activity.

There is limited potential for terrorist activities, but consideration and planning for such events are completed and maintained as a separate security-sensitive document by the City of Nacogdoches Police Department and the Nacogdoches County Law Enforcement community. That document will not be part of this plan, since the public nature of the plan precludes disclosure of this security-sensitive material.

TABLE 3.12 PRESIDENTIAL DISASTER DECLARATIONS

Presidential Disaster Declarations in the City of Nacogdoches 2000-2013

Declaration Number	Declaration Date	Event	Incident Duration
FEMA-DR-1791	September 13, 2008	Hurricane Ike	09-07-2008 to 10-02-2008
FEMA-DR-3294	September 10, 2008	Hurricane Ike	09-07-2008 to 09-26-2008
FEMA-EM-3290	August 29, 2007	Hurricane Gustav	08-27-2008 to 09-07-2008
FEMA-EM-3277	August 18, 2007	Hurricane Dean	08-17-2007 to 09-05-2007
FEMA-DR-1606	September 24, 2005	Hurricane Rita	09-23-2005 to 10-14-2005
FEMA-EM-3261	September 21, 2005	Hurricane Rita	09-20-2005 to 10-14-2005

FEMA-EM-3216	September 2, 2005	Hurricane Katrina	08-29-2005 to 10-01-2005
FEMA-EM-3171	February 1, 2003	Loss of Space Shuttle Columbia	02-01-2003 to 02-01-2003
FEMA-DR-1379	June 9, 2001	Severe Storms & Flooding	06-05-2001 to 06-20-2001
FEMA-DR-1356	January 8, 2001	Severe Winter Storm	12-12-2000 to 01-15-2001
FEMA	August 23, 2000	Chicken Fire	08-23-2000 to 10-09-2000.

3.14 EMERGENCY OPERATIONS

Prior to year 2008 the City of Nacogdoches and the County of Nacogdoches Emergency Management operations worked separate and independent of each other. Beginning in September of 2008 city and county forces merged to form Joint Emergency Operations working as a Unified Command under the National Incident Management System.

3.14.1 EMERGENCY OPERATIONS CENTER

In 2003 the City of Nacogdoches constructed a dedicated Emergency Operations Center (EOC) within its police department building through grant funding. That EOC was equipped with state-of-the-art technology and communications equipment that is vital to public safety and the protection of life and property. The EOC has worked well through several events; however limited space prevented joint functions by the City and County.

In September 2009 the City of Nacogdoches partnered with Nacogdoches County to build a new EOC funded by a $1,000,000 grant awarded to Nacogdoches by FEMA. This state of the art facility now serves as a joint EOC. The city and county also have plans of the facility hosting a combined city/county communication dispatch center and a training facility for emergency management, fire, police and emergency first responders. We expect to have the communication dispatch center completed in 2015.

3.14.2 OFFICIAL WEBSITE

The City of Nacogdoches Website contains vital information in times of emergency events. Staff is dedicated to the timely maintenance of pertinent information for public dissemination. The City's website offers a quick resource

for contact information, including the number for the Emergency Phone Bank. Warnings and safety precautions can be placed on the website for the duration of an emergency event. In addition the City provides emergency communications using Facebook, Twitter and other social media outlets.

3.14.3 EMERGENCY PHONE BANK

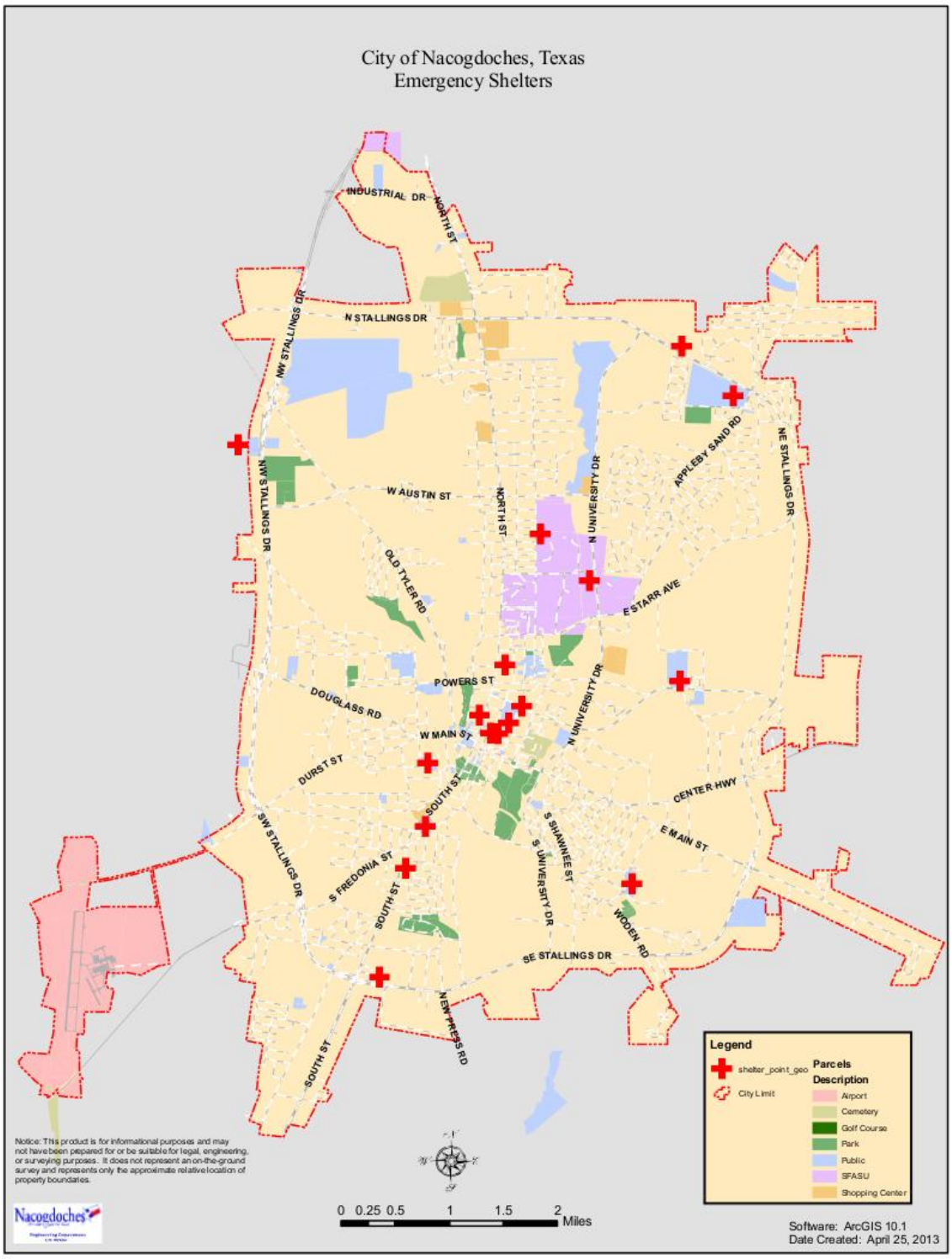
The City of Nacogdoches has also developed, equipped and staffed an Emergency Phone Bank to be activated during emergency events. The phone bank is designed to divert non-emergency calls for help in the event of a disaster or other emergency. Staff directs callers to emergency shelters, provides the latest incident information, directs pertinent calls to the City's Information Officer, and most importantly relieves the call volume on the City's dispatch and emergency personnel. Equipped with 8 telephones, cable television, a facsimile machine, Internet access, maps, and a resource manual, the City of Nacogdoches Emergency Phone Bank has become an integral part of our emergency response and recovery operation.

3.14.4 EMERGENCY SHELTERS

Annex C of the City of Nacogdoches Emergency Management Plan outlines the City's sheltering capabilities. Currently, thirteen shelter sites throughout the City, as seen in Figure 3-13, have been designated and are on a strict inspection schedule. These sites can accommodate approximately 1,200 people. In addition, American Red Cross has trained and certified eighteen City employees in shelter management and an additional 189 volunteers to work as shelter managers.

Nacogdoches County was notified in 2009 of a $5,000,000.00 grant awarded to Nacogdoches County to be used to build an additional shelter to house evacuees. This project is complete and plans are now underway to utilize this project to best fit the need of the Nacogdoches Emergency Plan as related to sheltering of evacuees.

FIGURE 3-13 EVACUATION SHELTER LOCATIONS



SECTION 4: NACOGDOCHES' EMERGENCY WARNING SYSTEM

4.1 WARNING SYSTEM

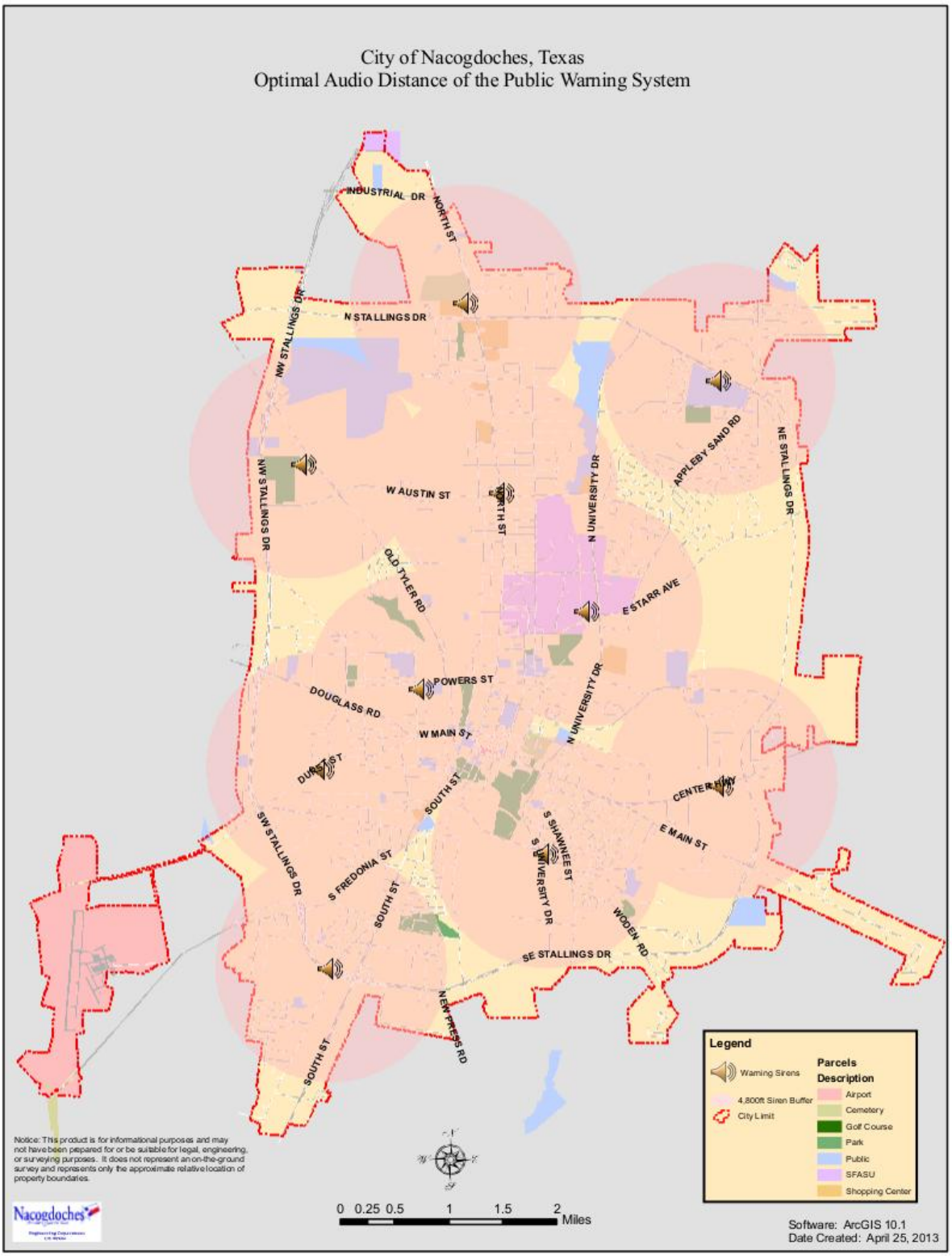
Timely warnings to the public can save lives, decrease injuries and reduce some types of property damage. The City of Nacogdoches has an outdoor warning system consisting of 10 sirens that cover approximately 85% of the City's geographic area and approximately 95% of its population. Please see Figure 4-1 at the end of this section for a map of the coverage area. Testing procedures are regularly scheduled to ensure the system is in good working order at all times.

Although effective at alerting the citizens of Nacogdoches, the sirens cannot provide instructions or other commentary. Local radio and television stations will broadcast Emergency Alert System (EAS) messages when requested by local government officials. These messages indicate the impending weather event along with the necessary safety precautions that should be taken. In addition, the local National Oceanic and Atmospheric Administration (NOAA) Weather Radio station will broadcast weather watches and warnings issued by the National Weather Service (NWS). Weather radios are activated when such messages are broadcast.

The primary objective of a warning system is to notify key officials of emergency situations, disseminate timely and accurate warnings and instructions to the population at risk from the threat or occurrence of emergency situations. Rapid dissemination and delivery of warning information and instructions may provide time for citizens to take action to protect themselves and their property.

The focal point of the warning function is the Local Warning Point (LWP), which operates around the clock and is located in the City's Police Department/Emergency Communications Center. Detailed information regarding the procedures to operate the City's outdoor warning system are contained in Annex A of the City of Nacogdoches Emergency Management Plan.

FIGURE 4-1 COVERAGE -OUT DOOR WARNING SYSTEM



SECTION 5: OVERVIEW OF NATURAL HAZARDS

5.1 POTENTIAL NATURAL HAZARDS

Using a list of potential hazard types found in Matrix C of FEMA's Local Multi-Hazard Mitigation Planning Guidance, the steering committee created a list of natural hazards that might occur in Nacogdoches by utilizing historical records, geological and climatologically data. Hazards were determined by the steering committee to be either highly likely, likely, occasional, or unlikely to occur in the future. Table 5-1 defines the location, maximum probable extent, probability of future events and overall significance. Table 5-2 shows Potential Natural Hazards for Nacogdoches and the location, extent, probability of future events and overall significance for this jurisdiction.

TABLE 5-1 DEFINITIONS OF PROBABILITY OF OCCURRENCE

Location (Geographic Area Affected)

- **Negligible:** Less than 10 percent of planning area or isolated single-point occurrences
- **Limited:** 10 to 25 percent of the planning area or limited single-point occurrences
- **Significant:** 25 to 75 percent of planning area or frequent single-point occurrences
- **Extensive:** 75 to 100 percent of planning area or consistent single-point occurrences

Maximum Probable Extent (Magnitude/Strength based on historic events or future probability)

- **Weak:** Limited classification on scientific scale, slow speed of onset or short duration of event, resulting in little to no damage
- **Moderate:** Moderate classification on scientific scale, moderate speed of onset or moderate duration of event, resulting in some damage and loss of services for days
- **Severe:** Severe classification on scientific scale, fast speed of onset or long duration of event, resulting in devastating damage and loss of services for weeks or months
- **Extreme:** Extreme classification on scientific scale

Probability of Future Events

- **Unlikely:** Less than 1 percent probability of occurrence in the next year or a recurrence interval of greater than every 100 years.
- **Occasional:** 1 to 10 percent probability of occurrence in the next year or a recurrence interval of 11 to 100 years.
- **Likely:** 10 to 90 percent probability of occurrence in the next year or a recurrence interval of 1 to 10 years
- **Highly Likely:** 90 to 100 percent probability of occurrence in the next year or a recurrence interval of less than 1 year.

Overall Significance

- **Low:** Two or more criteria fall in lower classifications or the event has a minimal impact on the planning area. This rating is sometimes used for hazards with a minimal or unknown record of occurrences or for hazards with minimal mitigation potential.
- **Medium:** The criteria fall mostly in the middle ranges of classifications and the event's impacts on the planning area are noticeable but not devastating. This rating is sometimes used for hazards with a high extent rating but very low probability rating.
- **High:** The criteria consistently fall in the high classifications and the event is likely/highly likely to occur with severe strength over a significant to extensive portion of the planning area.

TABLE 5-2 POTENTIAL NATURAL HAZARDS

Hazard	Location	Maximum Probable Extent	Probability of Future Events	Overall Significance
Drought	Extensive	Extreme	Likely	Medium
Flood	Limited	Moderate	Likely	Medium
Hail Storm	Extensive	Moderate	Likely	Low
Severe Winter Weather	Extensive	Moderate	Likely	Medium
Tornado/ Severe Winds/ Thunderstorm	Extensive	Moderate	Likely	Medium
Wildfire	Extensive	Severe	Highly Likely	Medium

5.2 HAZARD PROFILES

FEMA hazard analysis worksheets were used to perform a preliminary study of potential hazard for the City of Nacogdoches. These worksheets can be found in Appendix F. The hazard analysis worksheets profile each hazard based upon:

- Potential severity of the impact: substantial, major, minor, or limited
- Probably of occurrence: highly likely, likely, occasional, or unlikely
- Seasonal pattern, if any
- Probably duration
- Warning time: minimal, 3-6 hours warning, 6-12 hours warning, more than 12 hours warning
- Cascading potential

5.3 HAZARDS STUDIED IN GREATER DETAIL

Based on an analysis of hazards, six larger hazard categories were created that have a likelihood of occurrence of not likely, occasional, likely, or highly likely. These hazards were grouped due to the similarity of mitigation and response action (i.e. Tornado, High Wind and Thunderstorms are all very similar meteorological phenomena that require similar treatment and are most often found together in East Texas). These hazards are each discussed in depth in Sections 5 through 10. Each section contains:

- Description of the hazard
- Hazard profile
- History of the hazard in Nacogdoches
- Description of who and what is at risk from the hazard
- Identification of potential losses and damages due to the hazard
- List of mitigation action items

TABLE 5-3 CITY OF NACOGDOCHES NATURAL HAZARDS

Hazard	How Identified
Flood	Citizens of Nacogdoches Input, past weather Review of FIRM's occurrences. Steering Committee consensus

Wildfire	Citizens of Nacogdoches Input, Texas Forest Service Fire reports, Steering Committee consensus
Tornado/ High Wind/ Thunderstorms	Citizens of Nacogdoches Input, Review of past weather occurrences, Steering Committee consensus
Winter Storm	Citizens of Nacogdoches Input, National Weather Service Review of past weather occurrences, Steering Committee consensus
Hail	Citizens of Nacogdoches Input, Review of past weather occurrences, Steering Committee consensus
Drought	Citizens of Nacogdoches Input, National Weather Service Review of past weather occurrences, Steering Committee consensus

SECTION 6: FLOODING HAZARD

6.1 DESCRIPTION OF FLOODING

Flooding occurs when storm water accumulates faster than natural creeks and rivers and manmade drainage can channel the water downstream. This can be a hazard to life and property.

6.2 HAZARD PROFILE

Flooding occurs in natural riverine areas that have experienced urban development within the watershed. The different types of flooding can be defined in two different categories. Some flooding is caused by extended periods of steady precipitation in which water eventually saturates the soil and causes streams and rivers to slow rise over a period a day or multiple days. The other type of flooding is called a flash flood. These floods develop quickly due to a short period of extremely heavy rainfall. High velocities and dangerous, turbulent flows are typically associated with flash floods. Flash floods can be extremely dangerous because there is little or no warning time for a flash flood. Regardless of whether a flood occurs over a period of minutes or days, floods have significant probability to cause extensive property damage, disable critical facilities, and also threaten the safety of the public.

Drainage for the City of Nacogdoches, surrounding areas and significant areas north of the City is provided by Banita and Lanana Creeks. A major portion of each stream passes through the most densely developed areas of the City. When flooding or flash flooding events occur, almost every sector of the City is at risk. With the combination of tropical moisture from the Gulf of Mexico and the dry hot air from the Rockies, thunderstorms can spring up at a moment's notice and drop large amounts of rain within a relatively brief period of time.
Historically, significant flooding events have occurred in the City at least once every two years. An estimated 465 structures are currently located in the 100-year floodplain and are subject to repetitive damages from flooding. Atmospheric conditions combined with the location of Lanana and Banita Creeks in the City of Nacogdoches create an environment conducive to flooding and subsequent damage to property.

Inadequate and insufficient drainage infrastructure also contributes to the City's risk of flooding. In addition, with the advent of a growing city, storm water runoff has increased. Please see Figure 3-4, The City of Nacogdoches, 2010 FEMA Floodway & Flood zones.

6.3 HISTORY OF FLOODING IN NACOGDOCHES

History records that on June 26, 1902, a tropical storm produced flash flooding in the City of Nacogdoches. It was recorded that the "City drowned in 14.22 inches of rain in a 24-hour period." All bridges along Banita and Lanana Creeks were swept away and communication to the outside world was lost. The last catastrophic flooding event occurring in the City of Nacogdoches was in 1975 in which eight citizens lost their lives and property damage was estimated as high as $20 million. Various flood control projects such as stream channelization and drainage improvements have been made since these catastrophic flooding events, lessening the effects of similar rainfall events. However, there are still some homes and businesses located within the floodplain and even the floodway, and thus these structures have experienced losses due to flooding events.

While damages to property owners were minimal with each of these smaller flooding events, the City effectively mobilized its swift water rescue team and initiated evacuation procedures according to its emergency plan. The City of Nacogdoches Swift Water Rescue Team consists of ten (10) members and recently re-certified in 2009. The City recently purchased an additional 15-foot rescue boat and trailer with 20hp motor to aid in rescue efforts.

The National Climatic Data Center has a database of local flooding events in Nacogdoches. In Nacogdoches County 26 events were reported between 1/1/1996-9/30/2013 according to National Climate Data Center's storm events database.

6.4 WHO IS AT RISK?

The National Flood Insurance Program (NFIP) was created by Congress in 1968 to provide homeowners an avenue by which they might financially protect themselves from the damage and destruction caused by flooding. The City of Nacogdoches participates in the National Flood Insurance Program. City efforts include floodplain management by a Certified Floodplain Manager and licensed Civil Engineer. The City has adopted the 2009 International Codes and enforces floodplain/floodway restrictions on all new construction. A local ordinance

provides that no construction can occur within the floodway and that structures built in the flood plain must be more than 12 inches above the base flood elevation. Elevation certificates for those properties in or near the flood plain are required and records are maintained by the City's engineering department. In addition, public education materials are frequently distributed regarding compliance with the floodplain management program and participation in the NFIP.

The City of Nacogdoches utilizes hydraulic water surface profiles found in a detailed study published in 1980 by the Federal Emergency Management Agency. This study provides hydraulic and hydrologic information for Lanana and Banita Creeks as well as several un-named tributaries within the Nacogdoches City limits. The City employs a Professional Engineer, designated as the Flood Manager, who provides site specific Base Flood Elevations (BFE) for building construction and oversees permits for structures within the flood plain. This study provides significantly more detailed engineering data than high water marks typically used at low water crossings and in rural areas.

Flood levels for a 100 year event along Lanana Creek range from elevation 265.1 to elevation 316.5 at the northern end of the City. Water surface elevations along Banita Creek, for a 100 year interval storm, can vary from elevation 265.1 at its confluence with Lanana Creek up to elevation 356.0 at the northern extent of the study. Numerous permanent survey monuments are located within the City to provide an elevation reference for engineers, surveyors and builders to use when verifying building floor elevations. City ordinances require that all structures and mechanical equipment be constructed at least 12” above the BFE.

The properties in and around the floodplains and floodways in the City of Nacogdoches are subject to recurrent flooding events on an almost annual basis. Since flooding is such a pervasive problem throughout the City, many residents have purchased flood insurance to help recover their losses. In year 2003 data from the National Flood Insurance Program (NFIP) reflected over 102 policies in force in the City of Nacogdoches for a total of $13,102,000. Since 1978, total payments in the amount of $1,713,085 have been made on 165 claims from Nacogdoches residents to the NFIP.

Currently (April 2013) NFIP reflects 173 policies in force for a total coverage of $43,321,100. With 208 claims and total payments to date equal 1,713,092. This data indicates an increase of 71 policies, an increase of $30,219,100 in coverage and a net total increase in claims of 44 during the past 10 years.

Flood Insurance is vital in assisting in the recovery from flooding events. However, a pitfall to this process occurs when property owners rebuild in the same vulnerable areas and are repeatedly plagued by flooding. To the NFIP, these properties are called repetitive loss properties and are of concern because they continue to place lives and property at risk. Many programs have been developed including buyouts, relocation and elevation of structures for these repetitive loss property owners. The following table illustrates the number of repetitive loss properties and respective claim amounts in the City of Nacogdoches. The City is currently listed as a Category C for having over ten repetitive loss properties. Figure 6-2 shows the distribution of repetitive loss properties for the City of Nacogdoches.

FIGURE 6-2 REPETITIVE LOSSES

Repetitive Loss	The City of Nacogdoches		
RL Total Buildings:	24		
RL Residential Buildings Total:	16	Insured Losses:	7
Single Family	12	Resident Total Paid(6):	$40,299.00
2-4 Family	1	Non-Res Total Paid (1):	$3,080.28
Multi Family	3		
RL Payments (Residential Building)			
Building:			
Single Family	$140,344.00		
2-4 Family	$31,119.35		
Multi Family	$348,092.91		
Content:			
Single Family	$25,197.09		
2-4 Family	n/a		
Multi Family	n/a		
RL Non-Residental Buildings:	8		
Payments Building:	$73,670.03		
Payments Content:	$144,465.63		

Many flood-prone properties in the City of Nacogdoches do not have flood insurance as indicated in above table. If left unassisted, these repetitive loss properties will influence higher insurance rates and will contribute to the rising cost of taxpayer-funded disaster assistance from the federal government.

Since the approval of the first HMAP, The City of Nacogdoches received funding from FEMA through the Pre-Disaster Mitigation program to purchase properties as identified on FEMA's repetitive lost list. Eight (8) properties were identified as eligible in the voluntary program and two (2) property owners participated in the program. One commercial property appraised at $220,100 was purchased

by the City of Nacogdoches through the program and brought back to pre-development status for a total project cost of $222,053 and FEMA reimbursement of $166,539.75. The other property was a residential structure appraised at $10,000 for a total project cost of $10,416.63 and FEMA reimbursement of $9,645.35.

The FEMA Flood Insurance Rate Map (FIRM) has been recently updated for the City of Nacogdoches. These maps identify areas with a higher potential for flooding. The maps highlight the 100-year and 500-year flood plains. There is a 1% chance of a flood occurring in the 100 year flood plain in any given year. There is a 0.2% chance of a flood occurring in the 500 year flood plain in any given year. Figure 6-3 shows the 100-year and 500-year flood plain for the City of Nacogdoches.

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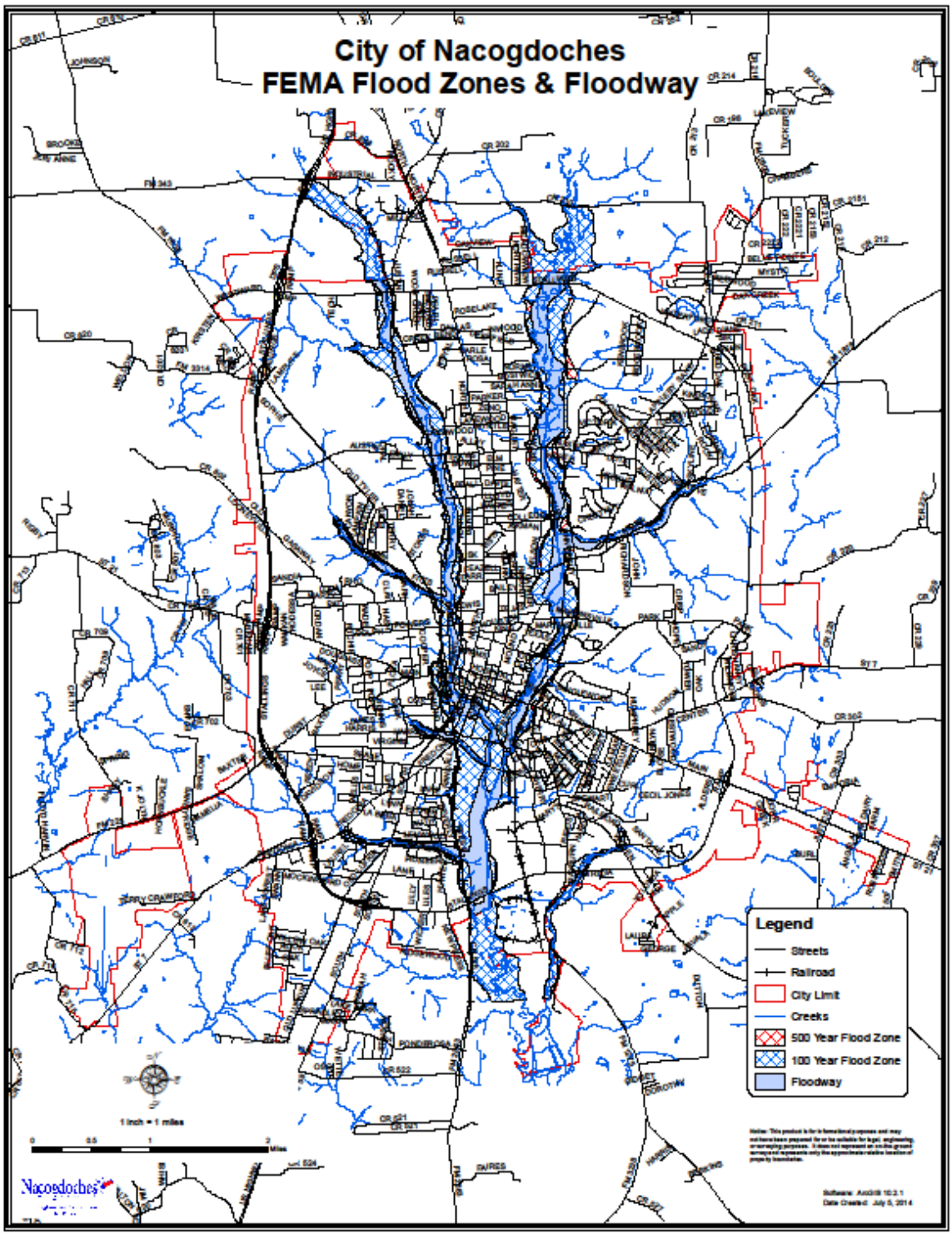
FIGURE 6-3 100-YEAR AND 500-YEAR FLOOD PLAIN



6.5 POTENTIAL DAMAGES AND LOSSES

Potential damages and losses include those properties located within the flood plain and those properties in areas where flash flooding could occur. Based on past experience, losses could be significant.

6.6 FLOODING MITIGATION ACTIVITIES

Mitigation activities listed in this section include programs and activities that have recently been or are in the process of being implemented by the City of Nacogdoches.

6.6.1 CITY OF NACOGDOCHES CODE OF ORDINANCES

The City of Nacogdoches uses building codes, zoning ordinances, floodplain management and planning strategies identified in the Comprehensive Plan to restrict development in areas prone to flooding and to ensure that applicable safeguards are imposed.

Chapter 42 of the Code of Ordinances provides for floodplain management in the City of Nacogdoches.

> The Nacogdoches Comprehensive Plan Update was adopted on July 15, 2003. It indicates that floodplains should not be encroached upon by future development unless such development complies with stringent floodplain management practices. It also calls for the management of creeks, bayous and floodplain areas in an environmentally sound manner; ensuring their continued use for floodplain management, wildlife habitat and recreational use.

6.6.2 ACQUISITION OF OPEN SPACE IN THE FLOODPLAIN

The City of Nacogdoches has initiated many programs to maintain its natural systems. Through the years, the City has acquired approximately 100 acres of land lying in the floodplain and transformed them into parks and trails.

The following City parks are located in the floodplain:

- Banita Creek Park North
- Banita Creek Park South (Festival Plaza)

- Pecan Acres Park
- El Camino Real Park (Liberty Hall)
- Coy Simms Softball Complex
- Youth Soccer Fields
- Lanana Trail

In addition, the City has also purchased four residential properties classified as having repetitive losses and demolished the structures for a total cost of over $400,000.

6.6.3 WASTEWATER MANAGEMENT

The City of Nacogdoches Wastewater Treatment Plant maintains and operates fourteen lift stations and is responsible for maintaining 320 miles of water mains and 425 miles of sanitary sewer mains. This facility is located along the east side of Lanana Creek, approximately one mile south of South Loop 224 off of FM 1275. The treatment facility consists of typical activated sludge process components such as influent structure, equalization pond, oxidation ditch, Orbital unit, clarifiers and sludge processing. The treatment capacity is 12.58 MGD average daily flow and 25 MGD maximum 2-hour peak flow.

At the present time, all wastewater treatment facilities are protected from flooding by a levy system, the top of which is set one foot above the 100-year floodplain elevation. If the plant is expanded in the future, the levy system must also be expanded for flood control.

6.7 FLOOD MITIGATION ACTIONS

Action F-1: Analyze flood-prone properties in the City of Nacogdoches and identify appropriate mitigation options for each repetitive loss structure. Establish a priority system that ranks each repetitive loss structure in order of priority. Acquire properties and remove them from the floodplain.

Related Goals and Objectives: Stop repetitive flood losses. Remove structures from the flood way

Estimated Cost: $ 327,000

Benefits: Provide an organized plan for reducing repetitive flood losses. By reducing repetitive losses, the potential for property damage and injury to residents is reduced.

Priority: High

Responsible Department/Organization: Engineering, Grant and Planning Departments

Implementation Schedule: Scheduled for Each year of this HMAP based on the availability of funds.

Potential Funding Sources: Operating budget, general revenue, FEMA, PDM, HMGP

Action F-2: Conduct Flood Control Study and implement actions such as channelization, detention, retention, etc to stop repetitive flood losses.

Related Goals and Objectives: Stop repetitive flood losses

Estimated Cost: $250,000

Benefits: Promotes most efficient use of public infrastructure to reduce flood hazard.

Priority: Medium

Responsible Department/Organization: City Engineering

Implementation Schedule: This item was carried over from past HMAP. This was not funded last HMAP due to lack of funds. Item scheduled for 2st year of this HMAP based on the availability of funds.

Potential Funding Sources: Operating budget, general revenue, FEMA, PDM, HMGP

Action F-3: Implement program to remove surface water drainage obstructions within the City of Nacogdoches by implementing a program to replace roadway bridges using pilings and conduct obstruction removal programs on an ongoing basis.

Related Goals and Objectives: Stop repetitive flood losses

Estimated Cost: **$**12,000,000 (replace 10 bridges and conduct annual de-snagging and debris removal)

Benefits: Elimination of surface water obstructions. This would allow flood water to drain more rapidly.

Priority: Medium

Responsible Department/Organization: City of Nacogdoches Public Works Department and Engineering Department

Implementation Schedule: This item was carried over from past HMAP. This was not funded last HMAP due to lack of funds. Scheduled for 3rd year of this HMAP based on the availability of funds

Potential Funding Sources: Operating budget, general revenue, FEMA, PDM, HMGP

Action F-4: Review and update, if necessary, all City codes and ordinances pertaining to floodplain management to ensure their compliance with state and federal laws and to achieve cohesion with the mitigation strategies contained herein.

Related Goals and Objectives: Ensure compliance with state and federal laws

Estimated Cost: Routine code staff time $30,000 per year

Benefits: Protect new construction from flooding. Reduce structures in floodplain.

Priority: High

Responsible Department/Organization: Engineering Department

Implementation Schedule: October 2014

Potential Funding Sources: City General Fund Operating budget, general revenue, FEMA, PDM, HMGP

Action F-5: Develop and promote a public education program regarding flood hazards, NFIP, and flood plain regulations.

Related Goals and Objectives: To have a flood safety wise city, save lives and property

Estimated Cost: $30,000 per year

Benefits: Increase public awareness of flooding hazards and flood mitigation. Potentially this will increase participation in flood insurance program, and increases citizen safety during flood events.

Priority: High

Responsible Department/Organization: Engineering and Planning

Implementation Schedule: October2014

Potential Funding Sources: Operating budget, general revenue, FEMA, PDM, HMG

Action F-6: Implement storm water drainage fee to assist funding of flood mitigation infrastructure projects

Related Goals and Objectives: Save lives and property

Estimated Cost: Revenue Neutral

Benefits: By increasing funding, more projects may be undertaken, increasing the benefits of such projects.
Priority: Medium
Responsible Department/Organization: Engineering and Finance
Implementation Schedule: FY 2015
Potential Funding Sources: Operating budget, general revenue, FEMA, PDM, HMG

SECTION 7: WILDFIRE

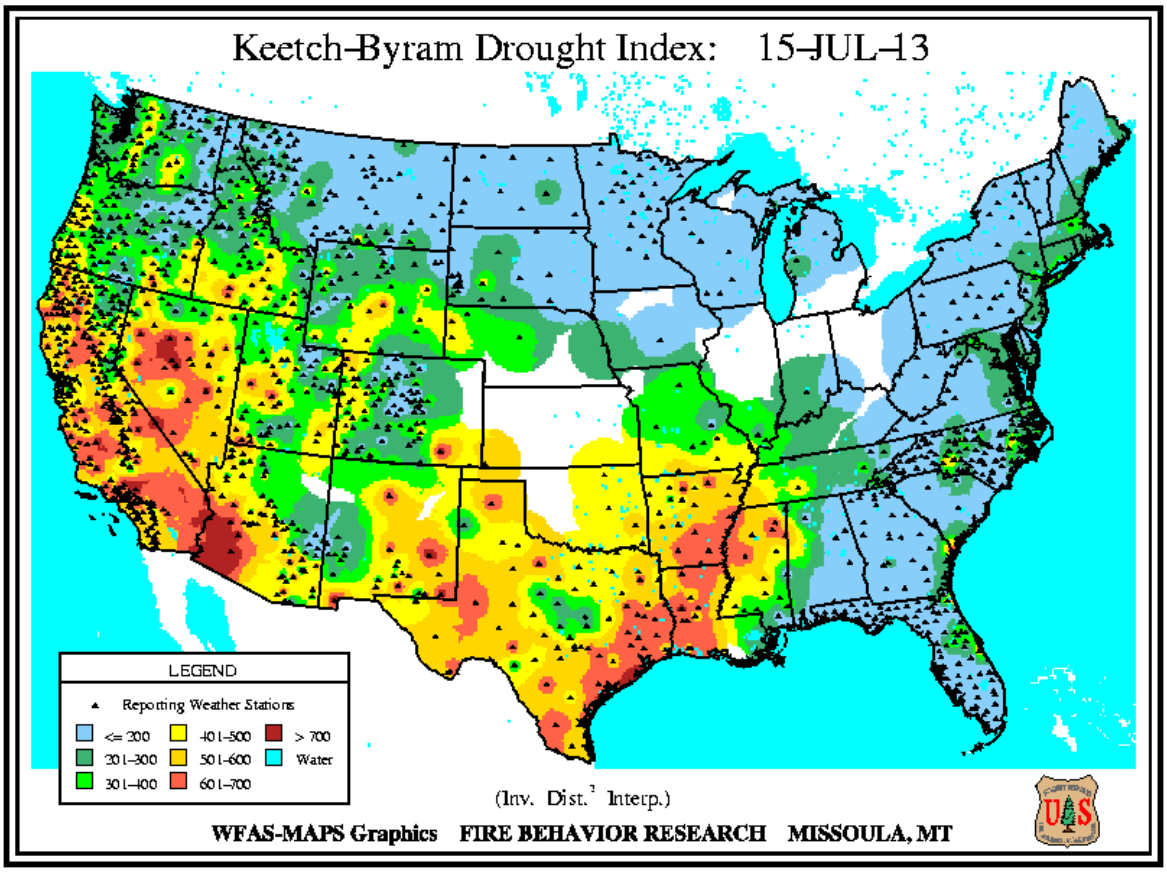
7.1 DESCRIPTION OF WILDFIRE

Wildfire is defined as a sweeping and destructive conflagration especially in a wilderness or a rural area.

Multiple fuel types are associated with wildfires. The spread of the wildfire is based largely on the vertical arrangement of fuels present. Wildfires are termed to be ground (sub-surface), surface, Ladder or crown/canopy. These fires/fuels are based largely on the effects of weather. Listed below is an explanation of the Keetch and Byram drought index and Time lag measuring dead fuel moisture.

Keetch and Byram (KBDI) designed a drought index specifically for fire potential assessment. It is a number representing the net effect of evapotranspiration and precipitation in producing cumulative moisture deficiency in deep duff and upper soil layers. It is a continuous index, relating to the flammability of organic material in the ground.

The KBDI attempts to measure the amount of precipitation necessary to return the soil to full field capacity. It is a closed system ranging from 0 to 800 units and represents a moisture regime from 0 to 8 inches of water through the soil layer. At 8 inches of water, the KBDI assumes saturation. Zero is the point of no moisture deficiency and 800 is the maximum drought that is possible. At any point along the scale, the index number indicates the amount of net rainfall that is required to reduce the index to zero, or saturation.



The inputs for KBDI are weather station latitude, mean annual precipitation, maximum dry bulb temperature, and the last 24 hours of rainfall. Reduction in drought occurs only when rainfall exceeds 0.20 inch (called net rainfall). The computational steps involve reducing the drought index by the net rain amount and increasing the drought index by a drought factor.

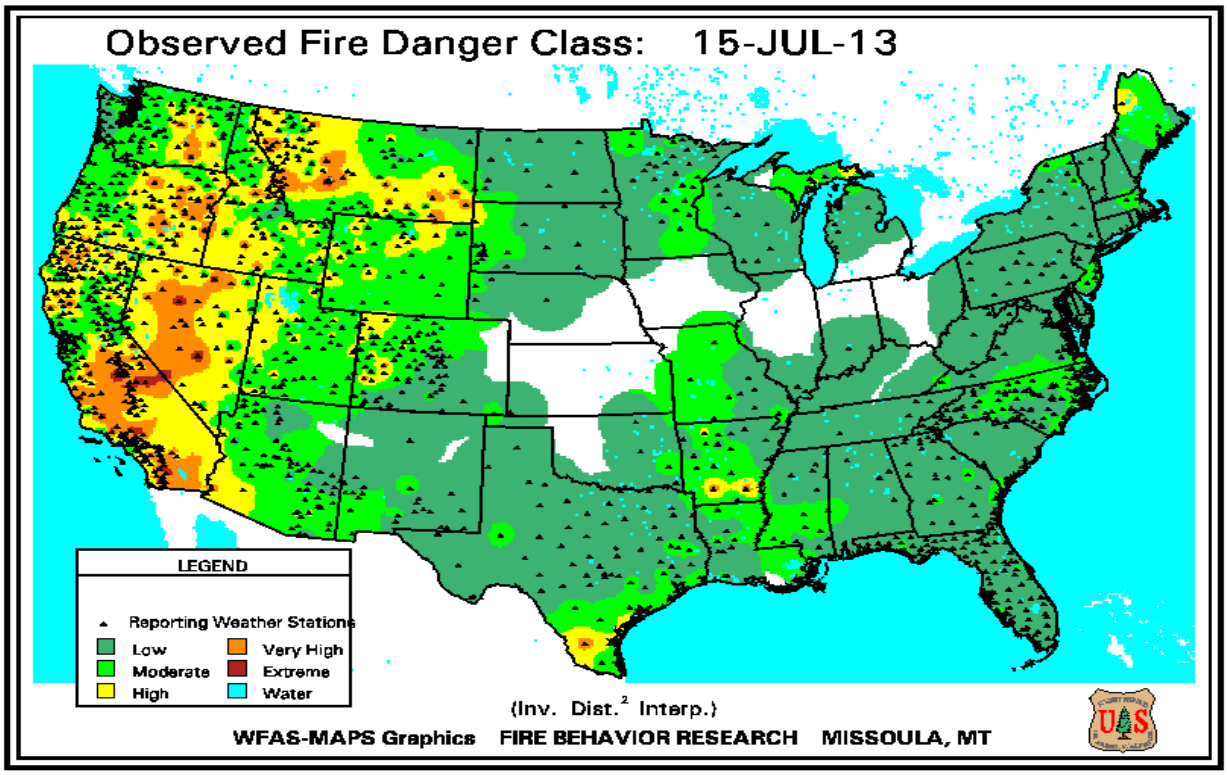
KBDI = 0 - 200: Soil moisture and large class fuel moistures are high and do not contribute much to fire intensity. This is typical of spring dormant season following winter precipitation.

- KBDI = 200 - 400: Typical of late spring, early growing season. Lower litter and duff layers are drying and beginning to contribute to fire intensity.
- KBDI = 400 - 600: Typical of late summer, early fall. Lower litter and duff layers actively contribute to fire intensity and will burn actively.
- KBDI = 600 - 800: Often associated with more severe drought with increased wildfire occurrence. Intense, deep burning fires with significant downwind spotting can be expected. Live fuels can also be expected to burn actively at these levels.

Dead Fuel Moisture

Dead fuel moisture responds solely to ambient environmental conditions and is critical in determining fire potential. Dead fuel moistures are classed by time lag. A fuel's time lag is proportional to its diameter and is loosely defined as the time it takes a fuel particle to reach 2/3's of its way to equilibrium with its local environment. Dead fuels in NFDRS fall into four classes:

- 1-hour, less than 1/4" diameter - Fine flashy fuels that respond quickly to weather changes. Computed from observation time temperature, humidity, and cloudiness.
- 10-hour, 1/4 to 1" diameter - Computed from observation time temperature, humidity, and cloudiness. Or can be an observed value, from a standard set of "10-Hr Fuel Sticks" that are weighed as part of the fire weather observation.
- 100-hour, 1 to 3" diameter - Computed from 24-hour average boundary condition composed of day length, hours of rain, and daily temperature/humidity ranges.
- 1000-hour, 3 to 8 " diameter - Computed from a 7-day average boundary condition composed of day length, hours of rain, and daily temperature/humidity ranges.



7.2 HAZARD PROFILE

The potential severity of impact from wildfire/grassfire is major. People can be injured and significant portions of property can be destroyed by wildfires and grassfires. These types of fires are highly likely to occur within the next year.

Wildfires and grassfires are usually associated with drought conditions as the dry groundcover can fuel these fires sparked by arson, cigarettes, fireworks, lightning, other human activities, and lightning. The warning time for a wildfire or grassfire is short. Fire suppression may take only a few minutes for a minor grassfire or as long as several days for a major wildfire.

7.3 HISTORY OF WILDFIRES IN NACOGDOCHES

In 2008 the City of Nacogdoches responded to assist the County on what would be known as the "Angelina River Bottom Fire." This fire grew to nearly 7000 acres. The largest wildfire recorded for the Nacogdoches area occurred in 2000 in the Melrose community. This fire was known as the "Chicken Fire" (referenced in Table 3-12, Presidential Disaster Declarations) and burned an estimated 20,000 acres including pine plantations, hardwood forests and grasslands. These fires were located outside of the City of Nacogdoches. While the fires did not reach the City limits, no natural or man-made barriers exist between this area and the City. Additionally, the City is made up of similar fuel types in a wildland urban interface. The City of Nacogdoches Fire Department routinely responds to wildland fires in the city, ETJ and all other rural areas. In most instances the fires have been a direct result of extremely hot temperatures and long periods of drought.

7.4 URBAN WILDLAND FIRE MITIGATION ITEMS

The City of Nacogdoches primarily has a fire intensity of very low to moderate, but there are a few very small areas of high fire intensity, as seen in Figure 7-1 Fire Intensity Scale Map.

The Wildland Urban Interface depicts where our citizens and their structures meet or intermix with wildland fuels. The City of Nacogdoches is situated in the heart of the East Texas Piney woods and as such many of our residents and their

structures are expanding and encroaching on the urban interface, as seen in Figure 7-2.

7.4.1 FIRE CODE

The International Fire Code 2009 was adopted by the City of Nacogdoches and is included in the Code of Ordinances as Section 38-91 entitled "Fire Prevention Code" which can be viewed through the City's website.

FIGURE 7-1, CHARACTERISTIC FIRE INTENSITY SCALE

City of Nacogdoches, TX Fire Intensity Scale

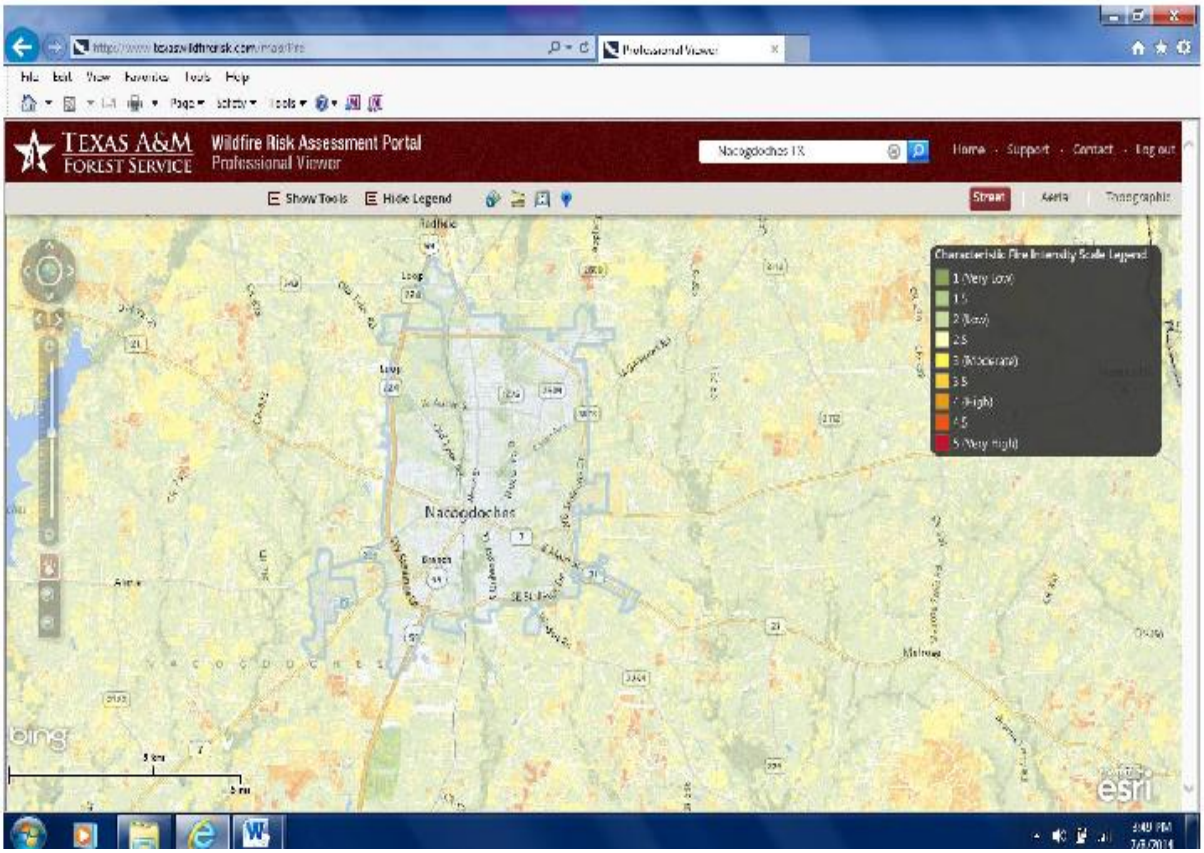
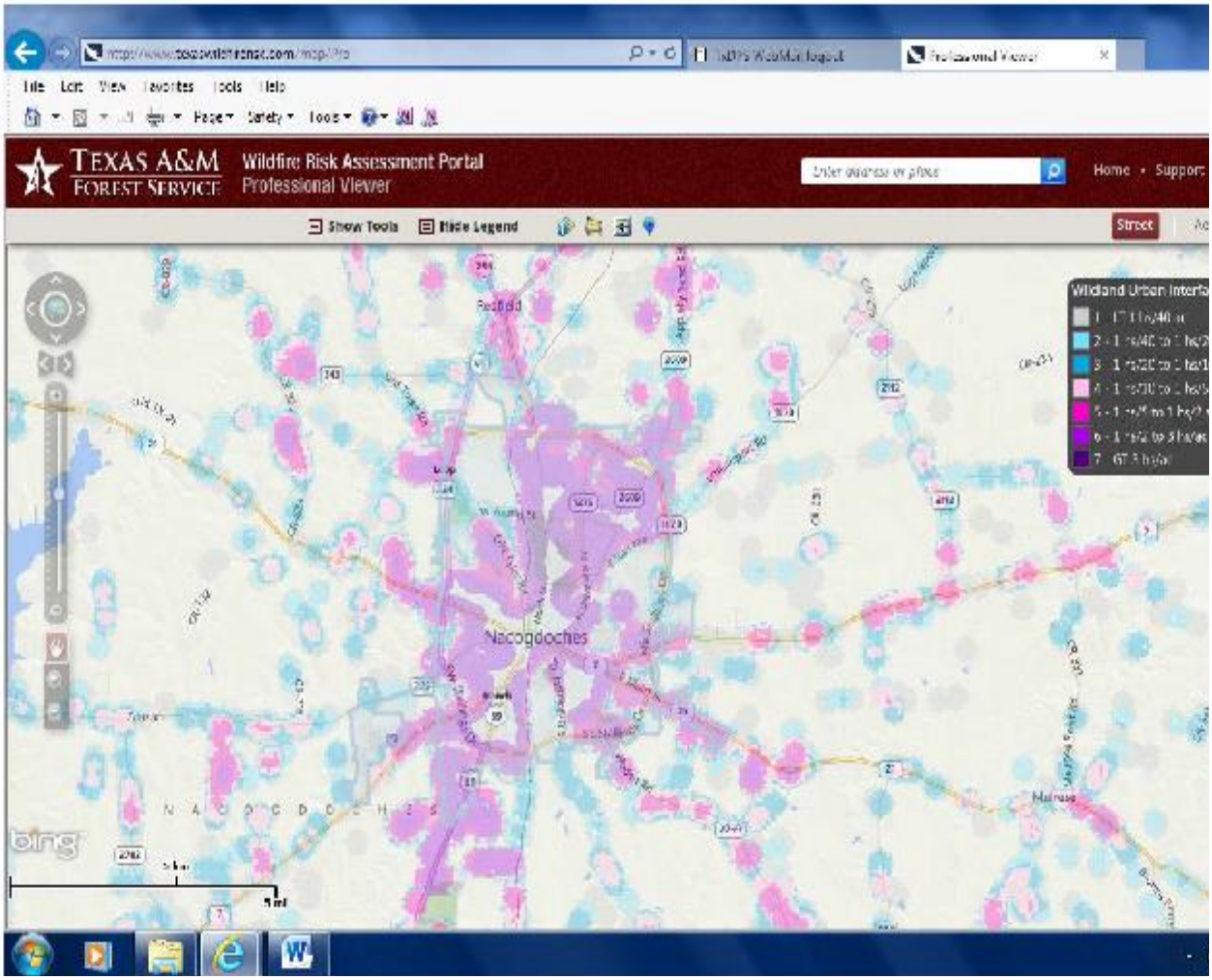


FIGURE 7-2, WILDLAND URBAN INTERFACE

City of Nacogdoches TX Wildland Urban Interface



7.4.2 FIRE SUPPRESSION

The City of Nacogdoches maintains a career fire and rescue department (NFD) with structural and wildland capabilities. Current training and certification levels for wildfires vary among members but all firefighters are trained to a basic level with the majority of members certified as wildland firefighters.

The department has an administrative staff consisting of a Chief, Fire Marshal and two administrative captains who are all certified wildland firefighters. 18 qualified operations staff members are on duty each day for fire and rescue services. In addition, the City has a call-back system that alerts off-duty personnel of major incidents and regularly receives a response of 12-20 off-duty members when necessary.

The department maintains five fire stations, each equipped with Type I engines. Additionally, the department maintains one ladder truck, two Type III engine, a Type IV engine and one Type VI engine (Types III-VI are wildland type engines). The department also maintains mutual aid relationships with the Lufkin Fire Department and neighboring volunteer firefighting organizations. The City of Nacogdoches is actively involved in the Texas Intrastate Fire Mutual Aid System (TIFMAS).

7.4.3 ZONING ORDINANCE

Within the City of Nacogdoches Zoning Ordinance Development Standards are outlined to maintain adequate distance between both residential and commercial buildings to effectively fight fire.

7.4.4 OUTDOOR BURNING ORDINANCE

On September 9, 2002 the City of Nacogdoches adopted Section 82-5 “Burning of garbage, refuse and wastes” which reads as follows:

> No outdoor burning is allowed within the Corporate City Limits of Nacogdoches without prior written authorization from the Texas Natural Resource Conservation Commission except for ceremonial,

> non-commercial preparation of food, warming or small recreational fires. (Ref: Article 81.207, Outdoor Burning in Texas.)

Prior to the adoption of this ordinance, citizens of Nacogdoches could burn leaves, pine straw and other trash in their yards. This created a hazardous situation by placing neighboring residences at greater risk for fire.

The City of Nacogdoches actively enforces this ordinance, and has recorded over 200 incidents since its adoption in 2002.

7.4.5 WEEDS AND OTHER OFFENSIVE ACCUMULATIONS

Section 34 of the City of Nacogdoches Code of Ordinances provides states the following:

> It shall be unlawful for any owner, occupant or person in charge of any premises within the city to allow weeds to grow or grass to be over 12 inches in height upon the premises or to allow trash or rubbish to accumulate thereon to such an extent as is reasonable calculated to create a fire hazard or to become injurious to the health of the citizens. Either act is declared to constitute a public nuisance.

Nacogdoches employs a full time Code Enforcement Officer whose responsibilities include ensuring that the above ordinance is enforced. Maintaining weeded lots and properties free of excessive trash and tall grass helps to reduce the risk of fire/wildfire from occurring within the City.

Beginning in 2004 to present, the city stepped up its urban wildfire mitigation program. Utilizing 6 newly certified code officers, this mitigations project abated to date September 30, 2009, and 2,536 cases of high-weeded lots and larger sections of land. The forced removal of high weeds was done in an effort by the code enforcement division to eliminate fuel sources for possible wildfires within the control boundary of Nacogdoches.

7.4.6 UNSAFE STRUCTURES

Provisions have also been made in Section 15 of the Code of Ordinances for the removal and/or demolition of unsafe structures in the city limits. The city has actively enforced this ordinance resulting in 210 structures removed,

demolished or made safe, posing no danger as of September 30, 2009. The following is an excerpt from Section 14-418 of the Code of Ordinances:

> The minimum urban standards code which comprises this article is declared to be remedial and shall be construed to secure the beneficial interests and purposes thereof, which are public safety, health and general welfare through structural strength, stability, sanitation, adequate light and ventilation, and safety to life and property from fire and other hazards incident to the construction, alteration, repair, removal and demolition of unsafe buildings.

7.5 WHO IS AT RISK?

The entire planning area is at risk of the wildfire hazard, especially those living within close proximity to the urban wildland interface. Structures close to these undeveloped areas are at a greater risk than other property. Grassy areas along roadways leading to forest lands or grazing lands pose an elevated risk as well.

The numerous pine trees and forested areas in and around the City of Nacogdoches are considered to be interface areas. Residences, buildings and other developments are encroaching onto the forests and expanding the urban interface.

7.6 POTENTIAL DAMAGES AND LOSSES

Estimating damages and losses in wildfires is often difficult. By far the largest loss in our area for 2008 was the “Angelina River Bottom Fire”. This fire alone burned approximately 7000 acres damaging or destroying millions of dollars in timber land. The city recorded around 100 calls for service for wild land fire alone. No structures were lost during this fire and no injuries were reported.
Wildfires and grass fires should be expected within the city and the ETJ due to the landscape of our area. Many of our open areas have been developed, but the timber and grasslands still exist.

7.7 WILDFIRE MITIGATION ACTION ITEMS

Action W-1: Develop and distribute informative brochure outlining Urban Interface Wildfire threats and safety precautions and distribute to the public.

Related Goals and Objectives: Increased public education/involvement in wildfire hazard mitigation

Estimated Cost: $20,000 initially plus $5,000 per year

Benefits: By increasing public awareness, residents will understand the steps necessary to reduce the spread of fire to their property, thus reducing the City's overall fire hazard.

Priority: High

Responsible Department/Organization: Fire Department/Emergency Management/Code Enforcement

Implementation Schedule: Beginning in October 2014

Potential Funding Sources: City General Fund, Operating budget, FEMA, PDM, HMGP

Action W-2: Purchase a 2,000 gallon tender (tanker truck) and Type III Engine.

Related Goals and Objectives: Enhance wildland fire fighting capabilities to ensure sufficient resources and assist in the reduction of hazard to life and property caused by Urban Wild Fire.

Estimated Cost: $450,000 (tender, engine) plus $250,000 per year (replacement)

Benefits: Increased ability to quickly extinguish wildland fires.

Priority: High

Responsible Department/Organization: Fire Department

Implementation Schedule: Beginning in FY 2015

Potential Funding Sources: Operating budget, general revenue, DHS AFGP, PDM, HMGP, Texas Forest Service TIFMAS Grant.

Action W-3: Purchase UTV with firefighting capabilities.

Related Goals and Objectives: Enhance wildland fire fighting capabilities to ensure sufficient resources and assist in the reduction of hazard to life and property caused by Urban Wild Fire.

Estimated Cost: $80,000

Benefits: Increased ability to quickly contain and extinguish wildland fires minimizing hazard to life and property.
Priority: High
Responsible Department/Organization: Fire Department
I**mplementation Schedule:** Beginning FY 2016
Potential Funding Sources: Operating budget, general revenue, FEMA, PDM, HMG

Action W-4: Revise City of Nacogdoches Landscaping Ordinance to include plantings more resistant to fire in landscaping design and adopt a revised "Fire Wise" landscaping ordinance.

Related Goals and Objectives: To have an updated fire safe landscaping ordinance adopted by city council, save property and reduce hazards to live
Estimated Cost: $25,000
Benefits: Reduction of fire hazard to life and property
Priority: High
Responsible Department/Organization: Planning and Fire department
Implementation Schedule: October 2016
Potential Funding Sources: City General Fund

Action W-5: Develop and implement a Fire Prevention inspection service for residential property owners including wildland urban interface inspections.

Related Goals and Objectives: Reduction of hazard to life and property
Estimated Cost: $50,000
Benefits: By reducing fire hazards for individual residences, the overall fire hazard for the City is reduced.
Priority: High
Responsible Department/Organization: Fire Department
Implementation Schedule: October 2015
Potential Funding Sources: Operating budget, general revenue, FEMA, PDM, HMG

Action W-6: Identify urban interface neighborhoods, conduct public awareness campaigns for these neighborhoods and provide special firefighter training to address any special issues pertaining to fighting wildfires in these neighborhoods.

Related Goals and Objectives: Reduction of fire hazard to life and property

Estimated Cost: $80,000 (study) plus $100,000 per year for fuel reduction and property acquisition.

Benefits: Will identify areas to focus public awareness campaigns in areas with the highest potential for fire hazard. Assist in training firefighters for special conditions for each neighborhood.

Priority: High

Responsible Department/Organization: Engineering, GIS and Fire Departments

Implementation Schedule: October 2016

Potential Funding Sources: Operating budget, general revenue, FEMA, PDM, HMG

Action W-7: Fire wise fuel reduction projects that would ideally require a contractor to reduce 1 hour fuels on public and private property, particularly those fuels left from the drought and Severe Winds.

Related Goals and Objectives: Reduce fire hazards to life and property

Estimated Cost: $100,000 per year x 5 years = $500,000, plus a $25,000 maintenance cost per year

Benefits: Reduce available fuels and overall fire hazard.

Priority: High

Responsible Department/Organization: Fire Department and Engineering department

Implementation Schedule: October 2014.

Potential Funding Sources: Operating budget, general revenue, FEMA, PDM, HMG

SECTION 8: TORNADO/SEVERE WINDS/ THUNDERSTORMS

8.1 DESCRIPTION OF TORNADOES, SEVERE WINDS AND THUNDERSTORM

A tornado is a violently rotating column of air that extends from a thunderstorm to the earth. Tornadoes are one of the most violent natural storms. Tornadoes can reach wind speeds of 250 miles per hour or more and can measure up to one mile in width and 50 miles in length.

A thunderstorm, also known as an electrical storm, a lightning storm, thundershower or simply a storm, is a form of turbulent weather characterized by the presence of lightning and its acoustic effect on the Earth's atmosphere known as thunder. Nacogdoches experiences thunderstorms in the spring and summer. Strong thunderstorms can produce tornadoes at any time of the year, but the springtime is the most common time that East Texas experiences them. These thunderstorms can also produce strong winds.

Severe Winds are noted for having high winds of at least 34 miles per hour. A high wind can occur independently of a thunderstorm.

Tornados have been measured reflecting utilization of Enhanced F-Scale for tornado measurement beginning Feb. 2, 2007. The updated scale is designed to better reflect wind speeds with expected damages. Table 15-2 gives us an overview of the Enhanced F-Scale ratings, wind speed, intensity and type of damage expected.

TABLE 15-2

Table 15-2
Enhanced F-Scale

EF-Scale Number	Intensity	Wind Speed (miles per hour)	Type of Damage
EF0	Gale tornado	65-85	Peels surface off roofs; some damage to chimneys; branches broken off trees; shallow-rooted trees pushed over; mobile homes pushed off foundations or overturned; sign boards damaged.
EF1	Moderate tornado	86-110	Roofs torn off frame houses; windows and glass doors broken; moving autos blown off roads; mobile homes demolished; boxcars overturned.
EF2	Significant tornado	111-135	Roofs torn off well-constructed houses; foundations of frame homes shifted; large trees snapped or uprooted; light-object missiles generated; cars lifted off ground.
EF3	Severe tornado	136-165	Some walls torn off well-constructed houses; trains overturned; most trees in forest uprooted; heavy cars lifted off the ground and thrown; structures with weak foundations blown away some distance.
EF4	Devastating tornado	166-200	Well-constructed houses and whole frame houses completely leveled; structures with weak foundations blown away some distance; trees debarked; cars thrown and small missiles generated.
EF5	Incredible tornado	>200	Strong frame houses leveled off foundations and swept away; with strongest winds, brick houses completely wiped off foundations; automobile-sized missiles fly through the air in excess of 100 m (109 yd); cars thrown and large missiles generated; incredible phenomena will occur.

Tornadoes come in various strengths and sizes as shown in Table 15-3.

TABLE 15-3

Table 15-3
Tornado Sizes and Strengths

Weak	Strong	Violent
69% of all tornadoes	29% of all tornadoes	2% of all tornadoes
<5% of tornado deaths	Nearly 30% of all tornado deaths	70% of all tornado deaths
May last 1-10 minutes	May last 20 minutes or longer	May last one hour or more
Winds < 110 mph	Wind speeds 110-205 mph	Wind speeds greater than 205 mph

While the Fujita scales are commonly used across the world as a measure of intensity for tornadoes, the scale is not used to measure winds from straight-

line, non-tornadic windstorms. The Beaufort Wind Scale (developed in 1805 by Sir Francis Beaufort of England) is used to measure straight-line winds. The scale, shown in Table 15-4, provides a description of each wind speed's appearance on land and on water. For the purposes of Nacogdoches, the description of appearance on water is typically used to describe windstorms based on observed wind speed. Table 15-4 depicts the Beaufort Wind Scale.

TABLE 15-4

Table 15-4
Beaufort Scale

Beaufort Number	Wind Speed (mph)	Seaman's Term	Effects on Land
0	Under 1	Calm	Calm; smoke rises vertically.
1	1-3	Light Air	Smoke drift indicates wind direction; vanes do not move.
2	4-7	Light Breeze	Wind felt on face; leaves rustle; vanes begin to move.
3	8-12	Gentle Breeze	Leaves, small twigs in constant motion; light flags extended
4	13-18	Moderate Breeze	Dust, leaves and loose paper raised up; small branches move.
5	19-24	Fresh Breeze	Small trees begin to sway.
6	25-31	Strong Breeze	Large branches of trees in motion; whistling heard in wires.
7	32-38	Moderate Gale	Whole trees in motion; resistance felt in walking against the wind.
8	39-46	Fresh Gale	Twigs and small branches broken off trees.
9	47-54	Strong Gale	Slight structural damage occurs; slate blown from roofs.
10	55-63	Whole Gale	Seldom experienced on land; trees broken; structural damage occurs.
11	64-72	Storm	Very rarely experienced on land; usually with widespread damage.
12	73 or higher	Hurricane Force	Violence and destruction.

8.2 HAZARD PROFILE

Due to its location in the Pineywoods of East Texas, Nacogdoches is particularly vulnerable to damage from tornadoes, severe winds and thunderstorms. Large stands of tall pine trees and above ground utility lines pose a significant threat to life of property during these types of events.

Tornadoes are associated with strong thunderstorms. When the cool dry air meets the warm, moist air, a thunderstorm can form. Thunderstorms that rotate

are referred to as "super cells" and typically produce the strongest and most deadly tornadoes. The spring thunderstorms are the most likely time of the year for tornadoes to occur in the Pineywoods of East Texas.

The National Weather Service issues a tornado watch when tornadoes are possible for the area. A tornado warning is issued when a tornado has been spotted or the conditions in the atmosphere are typical of what is required for tornado development.

8.3 TORNADOES, HIGH WIND & THUNDERSTORMS IN NACOGDOCHES

Tornado.

In the past 60 years, 41 tornadoes have touched down in Nacogdoches with damages totaling over $10 million. Tornadoes are classified in a range from F0 to F5, the last being the most dangerous at wind speeds of 261-318 miles per hour. The following chart shows the history of tornadoes occurring within the immediate area of the City of Nacogdoches from 1953 to present:

	Time	Fujita	Fatalities	Injuries	Width	Length	Counties	Damage
2/19/1953	17:30:00	?	0	0	10	0	Nacogdoches	$5K-$50K
4/30/1954	08:00:00	2	0	25	883	68	Trinity, Angelina, Nacogdoches, San Augustine	$50K-$500K
3/27/1961	20:30:00	3	2	4	200	13	Nacogdoches	$50K-$500K
11/22/1961	08:30:00	3	1	10	150	21	Nacogdoches, Rusk	$50K-$500K
2/11/1965	10:15:00	3	0	0	200	42	Nacogdoches, Shelby	$50K-$500K
2/11/1965	10:30:00	2	0	0	10	31	Nacogdoches, Rusk, Shelby, Panola	$50K-$500K
12/27/1968	13:40:00	1	0	0	33	13	Nacogdoches	-
5/10/1971	10:30:00	2	0	0	67	0	Nacogdoches	$500-$5000
5/10/1971	11:00:00	2	0	0	50	0	Nacogdoches	$500-$5000
1/25/1976	02:10:00	?	0	0	10	0	Nacogdoches	$5K-$50K
5/31/1976	21:00:00	1	0	0	10	0	Nacogdoches	$500-$5000
9/11/1978	13:00:00	?	0	0	10	0	Nacogdoches	$500-$5000
11/26/1978	08:00:00	0	0	0	10	0	Nacogdoches	$500-$5000
11/21/1979	08:00:00	1	0	0	77	2	Nacogdoches	$5K-$50K

	Time	Fujita	Fatalities	Injuries	Width	Length	Counties	Damage
3/17/1980	05:45:00	1	0	0	33	12	Cherokee, Nacogdoches	$5K-$50K
5/18/1981	17:00:00	2	0	0	100	1	Nacogdoches	-
5/18/1981	17:00:00	2	0	0	150	7	Nacogdoches	-
4/19/1982	15:30:00	1	0	0	100	3	Nacogdoches	$50-$500
12/10/1983	15:50:00	2	0	3	50	8	Nacogdoches	$500K-$5M
8/30/1984	14:45:00	0	0	0	10	0	Nacogdoches	-
8/10/1986	20:30:00	1	0	1	10	0	Nacogdoches	$50K-$500K
1/24/1987	20:19:00	0	0	0	10	0	Nacogdoches	-
5/17/1989	16:00:00	2	0	14	400	31	Trinity, Nacogdoches	$500K-$5M
5/17/1989	16:40:00	1	0	0	10	0	Nacogdoches	-
2/9/1990	17:16:00	2	0	1	100	25	Nacogdoches	-
5/3/1990	14:32:00	1	0	0	10	0	Nacogdoches	-
5/12/1990	06:45:00	1	0	0	10	0	Nacogdoches	-
11/19/1991	14:46:00	1	0	0	30	0	Nacogdoches	$5K-$50K
4/15/1994	11:37:00	0	0	0	10	0	Nacogdoches	$500-$5000
9/5/1995	08:35:00	0	0	0	13	0	Nacogdoches	$500-$5000
10/23/1997	17:20:00	0	0	0	150	11	Angelina, Nacogdoches	-
3/2/1999	17:30:00	2	0	0	150	5	Nacogdoches, Shelby, San Augustine	$360,000
4/26/1999	12:12:00	1	0	0	100	5	Nacogdoches	$190,000
5/4/1999	18:52:00	2	0	0	200	22	Cherokee, Nacogdoches	-
3/30/2002	18:15:00	0	0	0	50	3	Nacogdoches	-
3/30/2002	18:50:00	3	0	6	440	49	Polk, Angelina, Nacogdoches, San Augustine	$6,220,000
4/6/2003	14:41:00	2	0	0	440	27	Angelina, Nacogdoches	$2,500,000
4/6/2003	14:50:00	0	0	0	25	0	Nacogdoches	$30,000
9/13/2008	07:21:00	0	0	0	75	0.25	Nacogdoches	$50,000
12/23/2009	22:37:00	1	0	0	50	0.49	Nacogdoches	$1,000
11/8/2011	14:02:00	1	0	0	150	12.35	Nacogdoches, Rusk	-

Source: www.tornadohistoryproject.com

On April 6, 2003 a tornado with a magnitude of F0 passed through the southwest portion of the City of Nacogdoches resulting in approximately $30,000 in damages to homes. Fallen trees and broken limbs were scattered throughout the streets. Through notification via the City's Outdoor Warning System and television/radio broadcasting, no injuries were reported for this event.

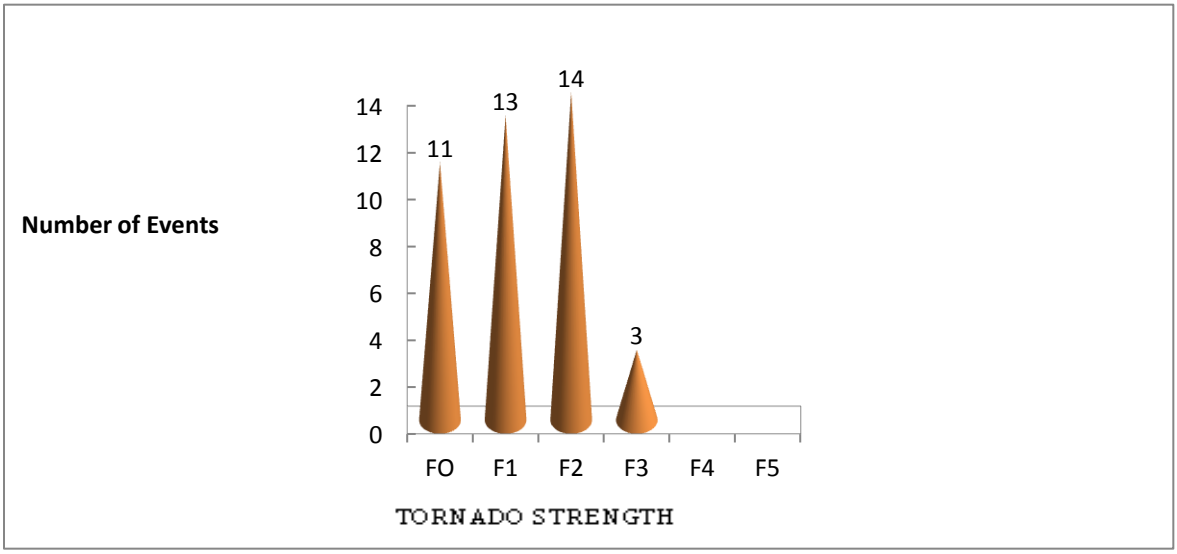


FIGURE 8-1

The above graph is a summary of Tornado events in Nacogdoches for the past 60 years. Nacogdoches has experienced 41 events ranging from a F0 to a F3.

There is no doubt that, because of the geographic location of Nacogdoches County, the City is at risk of being struck by both tornadoes and high winds. While the distinct characteristics of the hazards are somewhat different, their impacts affect the community in the same way. Therefore, the probability of tornadoes and/or high winds occurring in Nacogdoches has been collectively analyzed.

Neither tornadoes nor high winds have a specific geographic location in which they are probable to strike. Therefore, it must be assumed that the entire City of Nacogdoches is at risk. This analysis determined that the expected occurrence of tornadoes F0-F3 and high winds in Nacogdoches is likely, meaning its occurrence is probable within the next year.

According to the Enhanced Fujita Tornado Damage Scale and the Beaufort Wind Scale, it is possible that the City could experience up to an EF-5 tornado and

straight line winds in excess of 64 knots. However, in the event of a tornado it is more likely that the City would experience a tornado of magnitude EF-1 to EF-3. In the event of high winds, City of Nacogdoches can expect to experience winds ranging anywhere from a Strong Breeze to Strong Gale winds. The velocity associated with these forces ranges from approximately 25 to 54 mph.
With the potential of winds reaching Hurricane Force during a storm.

Thunderstorms.

Nacogdoches experiences thunderstorms annually. However, the severities of the storms vary from weak to extreme. See below for a breakdown of types of thunderstorms and storms potential impact.

Extreme Weather Madness
Thunderstorm Criteria

THUNDERSTORM TYPES	Rainfall Rate/hr	MAX WIND GUST	HAIL SIZE	PEAK TORNADO Possibility	LIGHTNING FREQUENCY (5 min Intervals)	Darkness Factor	STORM IMPACT
T-1 – Weak thunderstorms or Thundershowers	.03-.10	< 25 MPH	None	None	Only a few strikes during the storm.	Slightly Dark. Sunlight may be seen under the storm.	1. No damage. 2. Gusty winds at times.
T-2 – Moderate Thunderstorms.	.10"-.25"	25-40 MPH	None	None	Occasional 1-10	Moderately Dark. Heavy downpours may cause the need for car lights.	1. Heavy downpours. 2. Occasional lightning. 3. Gusty winds. 4. Very little damage. 5. Small tree branches may break 6. Lawn furniture moved around
T-3 – Heavy Thunderstorms 1. Singular or lines of storms.	.25"-.55"	40-57 MPH	1/4 " to ¾"	EF0	Occasional to Frequent 10-20	Dark. Car lights used. Visibility low in heavy rains. Cars may pull off the road.	1. Minor Damage. 2. Downpours that produce some flooding on streets. 3. Frequent lightning could cause house fires. 4. Hail occurs within the downpours. 5. Small branches are broken. 6. Shingles are blown off roofs.
T-4 – Intense Thunderstorms 1. Weaker supercells 2. Bow Echos or lines of Storms	.55" – 1.25"	58 to 70 MPH	1" to 1.5"	EF0 to EF2	Frequent 20-30	Very Dark. Car lights used. Some street lights come on.,	1. Moderate Damage. 2. Heavy rains can cause flooding to streams and creeks. Roadway flooding. 3. Hail can cause dents on cars and cause crop damage. 3. Wind damage to trees and buildings. 4. Tornado damage. 5. Power outages
T-5 – Extreme Thunderstorms 1. Supercells with family of tornadoes. 2. Derecho Windstorms	1.25" – 4"	Over 70 Mph	Over 1.5" to 4"	EF3 to EF5	Frequent to Continuous. > 30	Pitch Black, Street Lights come on. House lights maybe used	1. Severe Damage to Trees and Property. Damage is widespread. 2. Flooding rains. 3. Damaging hail. 4. Damaging wind gusts to trees and buildings. 5. Tornadoes F3-F5 or family of tornadoes can occur. Tornadoes can cause total devastation. 6. Widespread power outages.

Copyright 2010 AccuWeather.com by Sr. Meteorologist Henry Margusity

FIGURE 8-2

8.4 Tornado, Severe Winds & Thunderstorm Mitigation Activities

The following mitigation activities included in this section are currently being used by the City of Nacogdoches.

8.4.1 OUTDOOR WARNING SYSTEM

Timely tornado warnings to the public save lives, decrease injuries and reduce some types of property damage. The City of Nacogdoches has an outdoor warning system consisting of 10 sirens that cover approximately 85% of the City's geographic area and approximately 95% of its population. Please see Map 7-1 at the end of this section for a graphic of the coverage area. Testing procedures are regularly scheduled to ensure the system is in good working order at all times.

Although effective at alerting the citizens of Nacogdoches, the sirens cannot provide instructions or other commentary. Local radio and television stations will broadcast Emergency Alert System (EAS) messages when requested by local government officials. These messages indicate the impending weather event along with the necessary safety precautions that should be taken. In addition, the local National Oceanic and Atmospheric Administration (NOAA) Weather Radio station will broadcast weather watches and warnings issued by the National Weather Service (NWS). Weather radios are activated when such messages are broadcast.

The primary objective of a warning system is to notify key officials of emergency situations and disseminate timely and accurate warnings and instructions to the population at risk from the threat or occurrence of emergency situations. Rapid dissemination and delivery of warning information and instructions may provide time for citizens to take action to protect themselves and their property.

The focal point of the warning function is the Local Warning Point (LWP), which operates around the clock and is located in the City's Police Department/Emergency Communications Center. Detailed information

regarding the procedures to operate the City's outdoor warning system are contained in Annex A of the City of Nacogdoches Emergency Management Plan.

8.4.2 CITY OF NACOGDOCHES COMPUTER WEATHER TOOLS

The City of Nacogdoches subscribes to several internet-based weather radar systems. These resources allow Emergency Management staff the ability to track major weather events threatening the community and thereby, place on stand-by key personnel. It also allows City staff opportunity to ready appropriate resources (sanding equipment for icy conditions, barricades for potential flooding, etc.).

8.4.3 CITY OF NACOGDOCHES BUILDING CODE

The 2009 International Building Code adopted by the City of Nacogdoches provides consideration for wind loads up 90 miles per hour. The code stipulates that all buildings and structures constructed in the City of Nacogdoches be designed to withstand 90 mile an hour winds coming from any horizontal direction. You can view the City's Building Code through the City's website. See Appendix H.

8.4.4 CITY OF NACOGDOCHES ZONING ORDINANCE

The following requirements reduce risk for damage to the property or structure by increasing wind resistance.

Section 88-317 of the City of Nacogdoches Code of Ordinances stipulates that manufactured homes used for residential purposes adhere to the following:

- Manufactured homes shall be secured to the ground through the appropriate use of tie downs as required in the standard Building Code Section 14-31.
- Manufactured homes shall be skirted with suitable, weatherized material similar in type of material and color to the sided of the manufactured home.
- Ordinance Passed in 2004 making Mobile homes (those built before 1976) no longer permitted inside the city. Manufactured homes (built after

1976) are permitted only as replacements to existing manufactured homes.

8.4.5 KTRE-TV LIVE DOPPLER RADAR

KTRE-TV, the local news station has become the first in Deep East Texas to have Live Doppler Radar. The benefit to the citizens of Nacogdoches is earlier storm detection and warning. Utilizing the Doppler radar called Live Doppler 9; KTRE-TV meteorologists are now able to detect storm's patterns as well as rotation to track the formation of tornadoes. This information is immediately passed along to the viewers of KTRE-TV, helping ensure the safety of the citizens of the City of Nacogdoches.

8.4.6 VOLUNTEER SKY WARN COALITION

The Nacogdoches Community has an extremely active Sky Warn Group. Sky Warn is comprised of volunteers – including HAM radio operators, these individuals' alert Emergency Management officials to storm strengths, characteristics, etc. This group is also a critical component in the reporting of storm damages.

8.4.7 AM RADIO WARNING SYSTEM

In 2009, the city installed a low power AM radio station for use in emergency situations. The station's coverage is limited to the south and east areas of Nacogdoches. This is coverage was sufficient to direct hurricane evacuees to the shelter check in point. The station can also be used in other emergencies and for public education purposes. Then in 2010 an additional tower and transmitter was installed to insure total coverage of the city if the need was to arise. The station is located in the police department and is staffed by the Public Information Officer.

8.4.8 DAMAGE ASSESSEMENT

In May of 2012 the City of Nacogdoches began investigating how to improve and simplify the damage assessment process used when assessing damaged property caused from manmade disasters, natural disasters, or other types of

incidents. City staff determined the assessment process could be dramatically improved and simplified. The new process was developed by taking information from other cities, organizations, and from its own employees. The new process came with new training and a user friendly handbook.

Training for the new damage assessment process was designed to be completed quickly so that it would expedite the time the overall damage assessment process would take to complete. The training was also designed so that it could be successfully taught in the field. Test runs of this training were performed on several test subjects and proved to be a success with training times ranging from ten minutes to thirty minutes. The tested students retained the knowledge of the simplified training and were able to perform damage assessment after receiving that training.

The user friendly handbook was comprised of several different items that would not only help train the user, but also assist the user with being time efficient while performing the damage assessment. The handbook contained an overview of the handbooks purpose, table of contents for easy navigation, descriptions of damage levels, photos of damage levels, and photos of dangerous situations in which the assessor should use caution. The handbook also contained instructions on what to do when those dangerous situations were located and provided telephone numbers for the different agencies to assist with those dangers.

Staff discovered in June of 2012 the City of Nacogdoches was using a software program, Spillman, which could possibly assist in the damage assessment process. The Spillman system utilized a geographical based system to monitor where the emergencies were located in the city and where the resources, patrol cars, were located. The Spillman system was also shared with Nacogdoches County as well and allowed the county to do the same. A test run, using the software, was performed during an emergency drill and proved to be a success. The software allowed the damage assessor to perform his assessment considerably faster and making the entire damage assessment process more efficient. It also proved to be a success by allowing the City of Nacogdoches Incident Management Team the ability to transfer that information from the computer system on to map with ease which helped assessing the overall damage of the incident in the area.

8.5 WHO IS AT RISK?

Tornadoes, severe winds and thunderstorms have no specific geographic location in which they are probable to strike. Therefore, it must be assumed that the entire City of Nacogdoches is at risk of being impacted by these hazards.
A risk analysis of tornado events in the City of Nacogdoches was conducted by comparing the frequency of each hazard with the potential severity of the hazard. The following Figure 8.2 reflects tornado frequency per year for the past 47 years within the City of Nacogdoches:

FIGURE 8.2 TORNADO HAZARD FREQUENCY

Hazard	Total Events	Years in Record	Recurrence Interval	Hazard Frequency	Hazard Frequency %
Tornado	39	47	1.2	.83	83.9

Source: National Weather Service

Just 130 miles from the Gulf of Mexico, the City of Nacogdoches receives an abundance of tropical moisture. This moisture mixes with hot dry air from the Rockies and can form a trigger for the development of severe storms and tornadoes. When moist tropical air is trapped under a hot middle layer in the atmosphere, only one “breakthrough point” is necessary for the formation of a super cell thunderstorm.

Many consider the tall beautiful pine trees of East Texas an asset that attracts visitors to the area. This asset however, places property and lives in danger during tornadoes because of the ease at which they are blown down. Nacogdoches contains approximately 450 sites that are locally declared historic structures. These structures vary in age, but all are at least 50 years old. These houses were built using techniques and materials that do not meet current wind resistance standards. While newer homes are built to withstand wind gusts up to 90 miles an hour, less strong winds have been known to snap a pine tree and send it crashing into homes, cars and possibly even people.

FIGURE 8.3 SEVERE WINDS AND LIGTNING FREQUENCY

Storm Type	Total Number of	Years on Record	Recurrence Interval	Hazard Frequency
Wind	82	42	0.4	2.67
Lightning	2	9	4.5	0.022

Source: National Weather Service

According to a recent site survey there are approximately 690 manufactured homes in the City of Nacogdoches. Persons living in these homes are at a greater risk for injury or death if a tornado occurs. In addition, construction standards for manufactured homes are more lenient which raises the risk for substantial property loss.

8.6 POTENTIAL DAMAGES AND LOSSES

Most of the damage occurring during a tornado comes from the strong winds associated with it. It is estimated that wind speeds can reach as much as 300 miles per hour during extremely violent tornadoes. With wind speeds this high, tornadoes can launch automobiles into the air and rip homes and buildings to shreds. In addition, downed power lines and gas leaks can create a hazardous situation.

Manufactured Housing is at great risk for substantial damage during a tornado because of inadequate foundation and historically poor quality of construction. Great strides have been made in recent years to improve the construction of manufactured housing; however, experts insist that manufactured homes should be abandoned in the event a tornado warning is issued.

While most of the damage from tornadoes is caused by Severe Winds, injuries and fatalities mainly result from flying debris. Early warning can alert citizens to take immediate shelter for protection from flying and falling debris.

According to Gary Woods, Chief Appraiser for the Nacogdoches Appraisal district, the 2012 year net tax value of all structures within the city limits of Nacogdoches City is $1.386 Billion USD. Potential damages and loss could range

from $1,386,000,000.00 at the high end down to $0.00 depending on the percent of the city is destroyed.

8.7 TORNADO/SEVERE WINDS/ THUNDERSTORM MITIGATION ACTIONS

Action WT-1: Improve early warning system by subscribing to a community-wide emergency notification system.

Related Goals and Objectives: Implement an Emergency Callout System that will mass communicate instantly critical predefined messages to small portions, large portions and if needed all of our residents. Reduce possible injuries and deaths

Estimated Cost: $20,000 per year

Benefits: Reduce injuries and deaths by allowing more time for residents to seek shelter before arrival of thunderstorms, windstorms and tornadoes.

Priority: High

Responsible Department/Organization: Emergency Management and Information Technology Departments

Implementation Schedule: October 2013

Potential Funding Sources: City General Fund, Homeland Security Grant Money, FEMA Grants, Court Technology Fund

Action WT-2: The International Building Code provides the framework for constructing structures that will most effectively withstand high winds. As the IBC is periodically updated, the City will update and enforce the code to require all structures within the City Limits be built to these standards.

Related Goals and Objectives: Save lives, reduce injury, protect property

Estimated Cost: $1,000 per year

Benefits: This action will help to reduce risk to existing buildings and infrastructure and limit risk to new and redevelopment by providing standards for the design and construction of structures that will more effectively withstand the forces caused by tornadoes and high winds.

Priority: High

Responsible Department/Organization: Fire Chief

Implementation Schedule: October 2014 -2018

Potential Funding Sources: City General Fund

Action WT-3: The City will aim to educate the public on the dangers of tornadoes and high winds in an effort to bring awareness to the community. This mitigation action will focus on the following efforts:
Distribute and advertise FEMA "How-To" documents to educate citizens on how to protect their property from high winds.
<http://www.fema.gov/library/viewRecord.do?id=3263>

Related Goals and Objectives: Save lives, reduce injury, protect property
Estimated Cost: $1,000 per year
Benefits: This action will help to reduce risk to existing buildings and infrastructure by directing attention to best practices for storm-readiness.
Priority: High
Responsible Department/Organization: Fire Chief
Implementation Schedule: October 2014 -2018
Potential Funding Sources: City General Fund

Action WT-4: Conduct public safety campaigns and create local "safe places" for use as tornado shelter. Based on the study of existing facilities and by hardening structures such as community centers, fire stations, schools and libraries creating safe places for the public to go during a Tornado.

Related Goals and Objectives: Reduce injuries and save lives
Estimated Cost: $3,000,000
Benefits: Include reduced injuries and deaths by providing safe shelter for residents who may live or work in structures that are not safe during Severe Winds.
Priority: High
Responsible Department/Organization: Emergency Management
Implementation Schedule: October 2016-2018
Potential Funding Sources: City General Fund, Homeland Security Grant Money, FEMA Grants.

Action WT-5: The City will aim to educate the public on the dangers of tornadoes, thunderstorms and high winds in an effort to bring awareness to the community. This mitigation action will focus on the following efforts:
Increase advertisement of the NacWise Alert to enroll more citizens in the program, providing them with real-time updates of storm conditions and emergency shelter availability.

Related Goals and Objectives: Save lives, reduce injury, protect property
Estimated Cost: $500.00
Benefits: This action will help make citizens aware of weather conditions and directing attention to best practices for storm-readiness.
Priority: High
Responsible Department/Organization: Fire Chief
Implementation Schedule: October 2014 -2018
Potential Funding Sources: City General Fund

Action WT-6: Conduct Thunderstorm/Lightning Awareness Programs. Use outreach programs to promote awareness of lightning dangers. Visiting schools and telling children about the dangers of lightning and how to take safety precautions.

Related Goals and Objectives: Reduce injuries and save lives
Estimated Cost: $500.00
Benefits: More informed citizens.
Priority: High
Responsible Department/Organization: Emergency Management
Implementation Schedule: October 2016-2018
Potential Funding Sources: City General Fund, Homeland Security Grant Money, FEMA Grants.

SECTION 9: SEVERE WINTER STORM

9.1 DESCRIPTION OF SEVERE WINTER STORMS

Winter storms develop when moisture in the air is lifted up into the atmosphere into cold air (subfreezing temperatures) that form clouds and causes precipitation. The precipitation falls in the form of snow, ice, or sleet (raindrops that are super cooled in the air before falling to the ground). Winter storms typically involve strong winds, extreme cold, snow storms, sleet, ice and/or freezing rain.

The term "wind chill" refers to how cold the wind makes the outside temperature feel to the human body. The National Weather Service has developed a table relating wind speed to actual temperatures that results in the wind chill temperature a person feels. Winter temperatures in Nacogdoches average 36-38 degrees Fahrenheit. During a winter storm event temperatures can drop well below freezing. Figure 9-1 Wind Chill Chart.

FIGURE 9.1 WIND CHILL CHART

Wind (mph)	Temperature (°F)									
	40	**35**	**30**	**25**	**20**	**15**	**10**	**0**	**-5**	**-10**
5	36	31	25	19	13	7	1	-8	-16	-22
10	34	27	21	15	9	3	-4	-16	-22	-28
15	32	25	19	13	6	0	-7	-19	-26	-32
20	30	24	17	8	4	-2	-9	-22	-29	-35
25	29	23	19	9	3	-4	-8	-24	-31	-37
30	28	22	15	8	1	-5	-12	-26	-33	-39
35	28	21	14	7	0	-7	-14	-27	-34	-41
40	27	20	13	6	-1	-8	-15	-29	-36	-43
45	26	19	12	5	-2	-9	-16	-30	-37	-44
50	26	19	12	4	-3	-10	-17	-31	-38	-45
55	25	18	8	4	-3	-8	-18	-32	-39	-46
60	25	17	10	3	-4	-8	-19	-33	-40	-48

Source: National Weather Service

Nacogdoches experiences severe winter storms periodically during the winter months, as the name suggests. Nacogdoches occasionally has ice, sleet, freezing rain, and sometimes snow associated with its winter storms. As indicated in the The extent scale for winter storms is shown in Figure 9.2, we can expect 0.25 inches of ice and 2 plus inches snow during a winter storm event.

FIGURE 9.2 WINTER STORM EXTENT SCALE FOR WINTER

Category	Accumulation of Snow/Ice	Notice
Winter Storm Watch	≥ 0.25”(ice) or ≥ 2” (snow) or ≥ 0.25” (sleet)	24 – 36 Hours
Winter Storm Warning	≥ 0.25” (ice) or ≥ 2” (snow) or ≥ 0.25” (sleet)	≤ 24 Hours
Heavy Snow Warning	≥ 2” (snow)	12 – 24 Hours
Winter Storm Warning	≥ 0.25”(ice)	12 – 24 Hours
Winter Weather Advisory	Mixture of < 0.25” freezing drizzle, < 0.25” freezing rain, <0.5” sleet, and/or < 0.5”snow	12 – 24 Hours
Snow Advisory	< 2”(snow)	12 - 24

Source: National Weather Service

9.3 HAZARD PROFILE

Ice and winter storms have a major impact on the City when they blow through town. The frozen precipitation on the ground creates problems for motorists. The weight of the ice can also damage telephone and power lines, as well as break tree limbs. The icy conditions can bring the city to a stop for several days on end. The probability that a winter storm will occur in Nacogdoches is likely.

9.4 HISTORY OF SEVERE WINTER STORMS IN NACOGDOCHES

Nacogdoches typically experiences one or two icy, cold days every winter. Otherwise, the temperatures usually drop below freezing without any precipitation. Rarely, snow will fall in the area. Figure 9.3 lists information on the winter storms in Nacogdoches from 1994 through 2013.

FIGURE 9.3: HISTORY AND HAZARD FREQUENCY OF STORMS

Storm Type	Total Number Events	Years Recorded	Recurrence Interval	Hazard Frequency
Winter/Ice	10	20	2	0.5

Source: National Weather Service

Based on the History and Hazard Frequency of Storms chart listed above, an ice/winter storm can be expected to impact Nacogdoches every 1-2 years. According to the icing data, the average ice/winter storm can be expected to last approximately two and one-half days. This will result in average event costs of de-icing materials and city staff overtime.

9.5 WHO IS AT RISK?

All people and property are at risk of experiencing an ice/winter storm in Nacogdoches. While Nacogdoches has sanding equipment to assist with icy roadways and bridges, motorists in Nacogdoches are not accustomed to driving on ice or snow, which puts them at a greater risk of being involved in an accident. Similarly, people exposed to the extreme cold for extended periods of time can suffer from frostbite, hypothermia, and even death. Most winter storm deaths are indirectly related to the storm itself. People typically die from automobile accidents or hypothermia.

9.6 POTENTIAL DAMAGES AND LOSSES

Developing estimates for damages and losses as a result of ice or winter storms is difficult. Very few historical records on damages as a result of ice and winter storms are readily available. Information regarding injuries and deaths as a result of icy roadways in Nacogdoches are not available at this time. The historical NOAA data that is available indicates that no injuries or deaths have resulted from events depicted. However, the risk of injury and death cannot be

overlooked as both are a reality of walking and driving on icy roadways and pathways.

Because this hazard applies to the entire city, numerous assumptions can be used to develop cost estimates. People and property exposed to ice and winter storms and the potential costs if a single storm hits Nacogdoches in any given year and results in a one percent loss of property.
This scenario is a conservative assumption. Most property damage would likely be due to trees falling due to the weight of the ice, waterlines bursting as a result of the frozen conditions, and the loss of landscapes. Vehicle damage could also be quite significant.

The City of Nacogdoches should expect to continue experiencing ice and winter weather event each year. The overall costs and damages associated with these storms can vary tremendously, depending on the intensity and duration of the storm.

Future buildings, roadways, and infrastructure will be exposed to winter storms. The de-icing program shall be expanded into new developments as appropriate. No specific count of future structures or roadways that might be impacted can be specified at this time.

9.7 SEVERE WINTER STORM MITIGATION ACTIONS

City of Nacogdoches Winter Storm Mitigation Actions

Action IW-1: Expand the Nacogdoches City's de-icing program by purchasing additional equipment and materials to treat additional lengths of roadway during a winter storm. Currently the de-icing programs consist of sanding the roadways using sand, manual labor, hand shoves and pickup trucks.

> **Related Goals and Objectives:** Save lives, reduce injuries and protect property, educate employees
> **Estimated Cost:** The cost will be that of de-icing equipment and materials, as well as staff training. $126,000 First year then $67,000 each year after
> **Benefits:** Increased mobility along roads in icy weather.
> **Priority:** High

Responsible Department/Organization: City of Nacogdoches Public Works and City of Nacogdoches Engineering Department
Implementation Schedule: within 2 years this is a
Potential Funding Sources: general fund (already included in the general fund); FEMA grants, grants

Action IW-2: Expand and improve community resiliency by working with internal and external customers/partners to identify ways to reduce emergency risks from natural events. Purchase and install a Weather Bug Tracking Station, Streamer and Motion Camera for the Emergency Operations Center. The system will be integrated into the local emergency management system and will provide real-time weather data in Nacogdoches, mapping, forecast tables, radar and satellite information. Data will be available to local media outlets and citizens via mobile apps and the internet.

Related Goals and Objectives: Save lives, reduce injuries and protect property, public education and involvement
Estimated Cost: $22,000 purchase of cameras and equipment + $5,000 annual maintenance cost
Benefits: Real time reporting of dangerous conditions will increase public awareness of current situations and safety along with decreased damages to life and property.
Priority: Medium
Responsible Department/Organization: Emergency Management Coordinator
Implementation Schedule*:* October 2015
Potential Funding Sources: general fund; FEMA grants, grants.

Action IW-3: Expand and improve community resiliency by working with internal and external customers/partners to identify ways to reduce emergency risks from natural events. Purchase 8-10 cameras to collect and relay weather related information and images to a web based network such as Weather Bug or Anything Weather. By partnering with a web based network, our community will have access to the most accurate current, extended and hourly weather forecasts for our specific neighborhood and be able to see real time images of road conditions. We will also have the ability to pinpoint severe weather and/or dangerous conditions, giving the public the most current information pertaining to their neighborhood, streets and roadways.

Related Goals and Objectives: Save lives, reduce injuries and protect property, public education and involvement.
Estimated Cost: $9,000 –11 ,000 purchase of cameras and equipment
Benefits: Real time reporting of dangerous conditions will increase public awareness of current situations and safety along with decreased damages to life and property.
Priority: Medium
Responsible Department/Organization: Public Information Office
Implementation Schedule*:* October 2015
Potential Funding Sources: general fund; FEMA grants, grants.

Action IW-4: Develop and conduct public awareness program related to winter storms, including road conditions, safety tips, "Are You Ready" campaign, travel strategies, care of pipes, tree maintenance, and others and present effective information to community members.

Related Goals and Objectives: Save lives, reduce injuries and protect property, public education and involvement
Estimated Cost: $5,000 plus $1,000 per year
Benefits: Education will increase public safety along with decreased damages due to vehicle collisions, bursting water pipes, falling tree limbs, and others.
Priority: Medium
Responsible Department/Organization: Public Information Office
Implementation Schedule*:* October 2015 - Ongoing
Potential Funding Sources: EMPG, General Fund, FEMA grants, grants.

Action IW-5: Develop a program to bury existing utilities including power, telephone, cable and fiber optic lines. In the event of a severe winter storm that can distribute significant amounts of ice, above ground power lines are at substantial risk of failure due to the additional weight caused by ice build-up. In addition to ice build-up, above ground power lines are at risk of failure due to high winds. To mitigate these risks the City will implement a program to bury existing power lines as is determined to be feasible.

Related Goals and Objectives: Save lives, reduce injuries and protect property,

Estimated Cost: Many variables including number of utilities, length, etc.
Benefits: This action will help to reduce risk to existing buildings and infrastructure and limit risk to new and redevelopment by providing protection to power lines that supply the community with electricity. While this action will directly reduce risk to existing infrastructure and to new and redevelopment, it will also help to maintain the safety of the public by ensuring a consistent power supply in the event of a natural disaster.
Priority: Medium
Responsible Department/Organization: City Engineer
Implementation Schedule*:* October 2015 - Ongoing
Potential Funding Sources: Utility companies, developers, general fund

SECTION 10 HAILSTORM

10.1 DESCRIPTION OF HAILSTORM

Hail is precipitation that forms during a thunderstorm but falls in the form of spherical ice balls called hailstones. The precipitation is carried upwards in the thunderstorm where it freezes in to ice and grows as more precipitation freezes to it. The frozen ice remains in the upper layer of the thunderstorm until it become too heavy to remain uplifted and falls to the ground as hailstones. Hailstones range in size from 0.25 inches in diameter (pea size) to greater than 4½ inches in diameter (softball size). Hailstones damage automobiles, crops, livestock, roofs, and windows. The larger hailstones can kill people and livestock.

TABLE 10.1 NOAA /TORRO HAILSTORM INTENSITY SCALES

Size	Intensity Category	Hail Diameter (inches)	Approximate Size	Typical Damage
H0	Hard Hail	Up to 0.33	Pea	No damage
H1	Potentially Damaging	0.33 – 0.60	Marble or Mothball	Slight
H2	Potentially Damaging	0.60 – 0.80	Dime or Grape	Significant to crops
H3	Severe	0.80 – 1.20	Nickel or Quarter	Severe to crops, structures,
H4	Severe	1.20 – 1.60	Half Dollar to Ping Pong Ball	Widespread glass, vehicle
H5	Destructive	1.60 – 2.0	Silver Dollar to Golf Ball	Wholesale destruction of glass, damage to roofs, injuries
H6	Destructive	2.0 – 2.4	Lime or Egg	Aircraft bodywork dented, brick walls pitted
H7	Very Destructive	2.4 – 3.0	Tennis Ball	Severe roof damage, risk of serious injuries
H8	Very Destructive	3.0 – 3.5	Baseball to Orange	Severe damage to aircraft bodywork
H9	Super Hailstorms	3.5 – 4.0	Grapefruit	Extensive structural damage. Risk to severe or fatal injuries

H10	Super Hailstorms	4+	Softball and up	Extensive structural damage. Risk of severe or fatal injuries

10.2 HAZARD PROFILE

The potential severity of Hail Hazard Profile Summary impact caused by a hail storm is limited in the area that is typically impacted by a hail storm event. Hailstorms may injure or even kill people. However, the frequency of occurrence and the localized impacts will likely cause only minor problems with critical facilities.

10.3 HISTORY OF HAILSTORM IN NACOGDOCHES

The following Chart reflects the history of storms in the City of Nacogdoches. 71 hail storms reported in the Nacogdoches in during the past 48 years.

Storm Type	Total Number Events	Years Recorded	Recurrence Interval	Hazard Frequency
Hail	71	48	0.66	1.51

National Weather Service

The chance of Nacogdoches being hit by a hailstorm within Potential Severity of Impact within the next year is likely. The size of the hailstone varies, depending on the severity of the storm. Warning time for hail is minimal, if at all. Hailstones are typically associated with spring thunderstorms in North Texas. The thunderstorms themselves typically allow several hours of notice prior to occurring. However, hailstones do not provide any real notice before falling from the sky.

The City of Nacogdoches experiences one to two H-3 (severe) to H-5 (destructive) hailstorms each year.

10.4 WHO IS AT RISK?

The entire planning area is equally at risk to damage from hailstorms. Attendees of the numerous spring and summer outdoor festivals and events held in Nacogdoches each year are specifically at risk of injuries if they do not seek shelter during a hailstorm.

10.5 POTENTIAL DAMAGES AND LOSSES

Determining potential damages and losses is difficult for hail events. Hail typically damages roofs, windows, vehicles, and crops. The City of Nacogdoches has very few, if any, crops to assess. Replacing roofs and windows can be costly. Repairing vehicles can also be costly. Insurance companies likely have increased claims due to hail damage following a significant hail storm. Roofing costs currently run between $6 and $10 per square foot for a residential roof for asphalt shingles. Commercial roofs currently cost $8 to $15 per square foot, depending on the material. Removal of existing roof costs $0.50 to $1.20 per square foot.

A variety of assumptions can be made to develop possible roof replacement costs. Assuming a residential property has a 2,000 square foot roof, the typical replacement cost, could be approximately $17,000. Assuming a 2,000 square foot commercial roof needs to be replaced; the typical cost could be $26,400. These examples provide an idea as to the extent of damage that could be incurred by property owners in the event a hail storm destroys their roofs.

Based on the information provided by the NWS, between one and two hail storms occur in Nacogdoches every year on average. A large percent of these storms occurred in April or May. Thus Nacogdoches shall expect to experience two hailstorms per year with the likelihood of these storms occurring in April or May. Injuries and deaths are possible during any hail event.

Citizens caught outside during a hail storm are at risk of being injured or killed more than those who find shelter during such an event. Due to the fact that hailstorms are a city-wide hazard, new development shall too be subject to damage. Roofing materials may evolve over time to counter the damage caused by hailstones falling on roofs.

10.6 HAILSTORM MITIGATION ACTIONS

Action H-1: Update, review, and enforce Nacogdoches City ordinances, as appropriate, related to building materials and continue adopting current construction codes.

Related Goals and Objectives: Save lives, Reduce injury; protect property and structures

Estimated Cost: $5,000 annually

Benefits: Using more hail resistant roofing and glass shall likely decrease personal injuries and property injuries in future hail storms. Roofs and windows will last longer, which shall save homeowners, building owners, and insurance companies money on repairs.

Priority: High

Responsible Department/Organization: Nacogdoches Inspection Services; Code Compliance

Implementation Schedule: October 2014.

Potential Funding Sources: General Fund

Action H-2: Expand and conduct a Hail Storm Safety Education Program that includes a community campaign to reduce losses during hail events.

Related Goals and Objectives: Save lives, Reduce injury; protect property and structures

Estimated Cost: $1000 per year

Benefits: This item compliments and expands upon the "Are You Ready" program to deliver a consistent message through various forms of media.

Priority: Medium

Responsible Department/Organization: Emergency Management

Implementation Schedule: October 2014

Potential Funding Sources: evapotranspiration grants, FEMA, General Fund

Action H-3: Build and/or secure shelters for City of Nacogdoches Police and Fire Emergency response vehicles and trailers by constructing additional bays and covered parking areas for fleet vehicles at fire stations, City Hall and the Police Station.

Related Goals and Objectives: Save lives, Reduce injury; protect property and Vehicles

Estimated Cost: $350,000

Benefits: Securing shelters for the emergency vehicles will help protect the vehicles from hail damage, thus keeping more of the fleet in running condition post disaster. The shelters will reduce the city's insurance claims for hail damage. Depending on the locations, the shelters may also reduce down time involved in moving vehicles to and from the covered areas.

Priority: High

Responsible Department/Organization: Police & Fire Departments

Implementation Schedule: Again scheduled for each year of this HMAP based on the availability of funds.

Potential Funding Sources: general funds; grants; public/private partnerships

SECTION 11. DROUGHT

11.1 DESCRIPTION OF DROUGHT

Drought in Texas is defined as an abnormally long period of insufficient rainfall. Drought cannot be defined in terms of inches of rainfall or number of days without rain, since it is determined by such variable factors as the distribution in time and area of precipitation during and before the dry period. Since ancient times droughts have had far-reaching effects on humankind by causing the failure of crops, decreasing natural vegetation, and depleting water supplies.

11.2 HISTORY OF DROUGHT IN NACOGDOCHES

There have been 13 droughts affecting City of Nacogdoches on record with the National Oceanic and Atmospheric Administration (NOAA) since 1950. All events were multicounty events affecting broad regions across the state, resulting in a total of $154M worth of crop damage in 21 counties. Accordingly, the impacts of these regional droughts are generally countywide, without specific locations or geographic boundaries.

Drought typically occurs mid to late summer (June through September), however the most recent drought occurred beginning in December of 2010 continued affect most of eastern Texas throughout 2013.

Regarding the extent of drought events and conditions, the Palmer Drought Severity Index (PDSI) rated Region 4 (East Texas including City of Nacogdoches) as the worst drought conditions in Texas in 2013. The PDSI is primarily an index of meteorological drought, but also includes hydrological factors such as precipitation, evaporation and soil moisture.

Tracking drought is challenging due to the numerous definitions and measurement protocols. The online website *Drought Monitor;* a partnership between Federal agencies and the National Drought Mitigation Center at the University of Nebraska-Lincoln has been tracking drought conditions across the country and provides drought information maps illustrated down to the county and even city level.

The Drought Monitor is an attempt to synthesize multiple drought related indices and impacts which represents a consensus of federal and academic scientists.

Some of those indices include: the Palmer Drought Severity Index (based on regional moister depletion), the Climate Prediction Center's Soil Moisture Model, the USGS weekly stream flow map (based on an average of daily stream flow), the National Climatic Data Center's Standardized Precipitation Index and the NOAA/NESDIC Vegetation Heath Index.

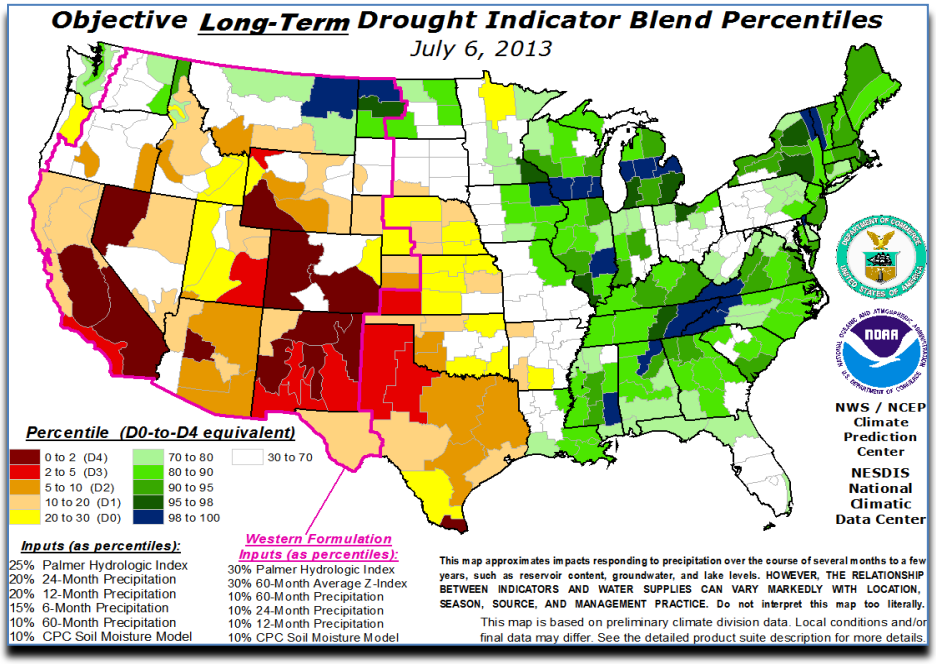
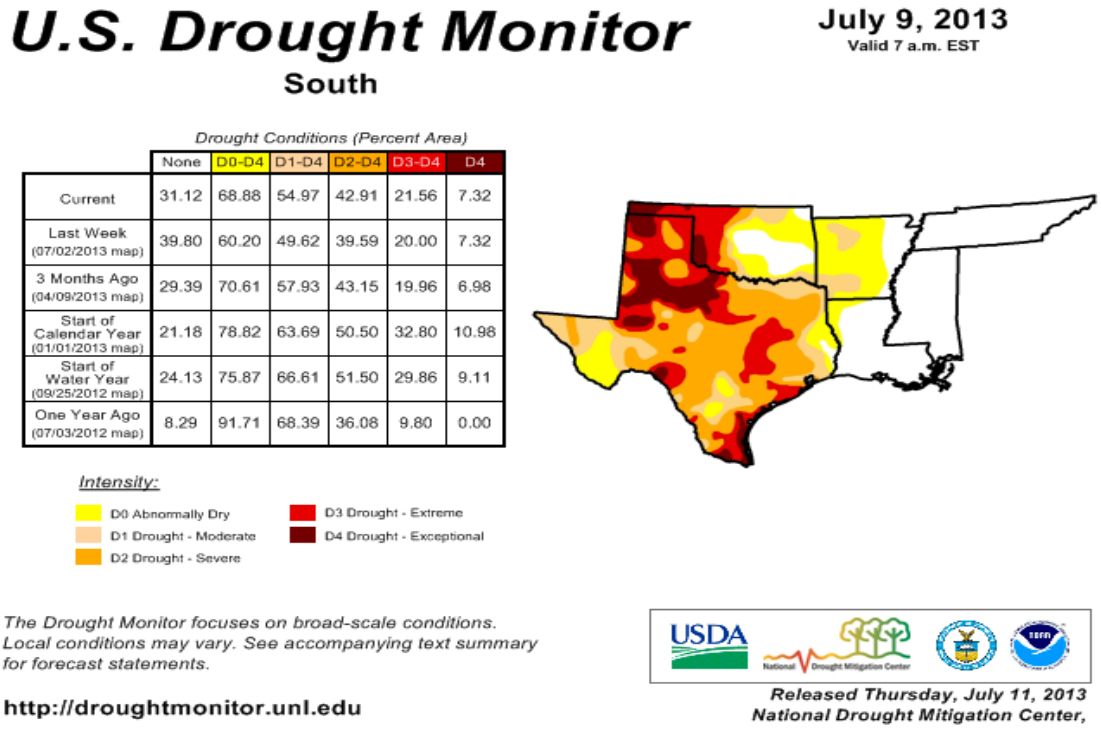


FIGURE 11-1 LONG-TERM DROUGHT INDICATOR



	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	31.12	68.88	54.97	42.91	21.56	7.32
Last Week (07/02/2013 map)	39.80	60.20	49.62	39.59	20.00	7.32
3 Months Ago (04/09/2013 map)	29.39	70.61	57.93	43.15	19.96	6.98
Start of Calendar Year (01/01/2013 map)	21.18	78.82	63.69	50.50	32.80	10.98
Start of Water Year (09/25/2012 map)	24.13	75.87	66.61	51.50	29.86	9.11
One Year Ago (07/03/2012 map)	8.29	91.71	68.39	36.08	9.80	0.00

FIGURE 11-2

Source: Drought Monitor can be found at http://www.ncdc.noaa.gov/stormevents/

An additional data source that measures drought conditions is the Palmer Drought Severity Index. The Palmer Drought Severity Index (PDSI) is a commonly used measure for moisture depletion or abundance on a regional scale.

According to the Climate Prediction Center and the Palmer Drought Severity Index, City of Nacogdoches has experienced 16 days of drought conditions between January 2009 and July 2013. Drought conditions have ranged from Moderate to Extreme Drought conditions.

TABLE 11-1 SUMMARY OF STORM EVENTS - DROUGHT

16 event(s) were reported between 01/01/2009 and 07/01/2013 (1643 days)
Summary Info:

Number of County/Zone areas affected:	1
Number of Days with Event:	16
Number of Days with Event and Death:	0
Number of Days with Event and Death or Injury:	0
Number of Days with Event and Property Damage:	0
Number of Days with Event and Crop Damage:	0
Number of Event Types reported:	1

11.3 WHO IS AT RISK?

The main vulnerable asset in City of Nacogdoches from drought events is commercial and private, although livestock, humans and wildlife are also impacted. To this degree the incorporated limits of the City of Nacogdoches are at less of a risk by virtue of having less cropland, though the economic benefit impacts rural and urban areas alike. Since droughts are somewhat unpredictable, crops that are not drought resistant have a high degree of vulnerability each year from these events.

Other than fire hazards, generally public safety is not significantly threatened by drought conditions, and buildings and infrastructure are

similarly immune to the primary affects of prolonged drought.

An example of the severity of drought in City of Nacogdoches is provided by this NCDC description of the 2005 event.

> "High fire danger continued across all of Northeast and East Central Texas throughout the month of December. The month was a continuation to a devastating drought that impacted much of the eastern half of the state throughout 2005. Many lakes and reservoirs remained near or set all time record lows levels and a series of dry cold fronts that blew through the region during the month did not help the already dry conditions. Several small fires broke out across the region during the month but the resulting damage was minimal. Burn bans continue for many counties across Northeast Texas as most of the region experienced rainfall deficits of some 15 to 20 inches for the year."

11.4 POTENTIAL DAMAGES AND LOSSES

In an effort to conserve water for the citizens, the City of Nacogdoches adopted a Water Conservation and Drought Contingency Plan. This plan was developed according to the requirements and recommendations of the Texas Commission on Environmental Quality (TCEQ).

This plan discusses water conservation methods including metering, water use records, control of unaccounted water, leak detection and repair, public education, and various other water conservation measures. In relation to drought conditions, the plan implements a drought contingency and water emergency response plan that defines different drought stages for the City. The stages are structured to be initiated in reaction to drought conditions and to limit the methods of water use that are allowed for residents and businesses of Nacogdoches.

Water shortages caused by droughts are typically viewed as an economic impact to the community. It is difficult to define a dollar amount to the potential losses that could be caused by a drought. As Nacogdoches initiates different phases of its drought contingency plan, the City will experience a decrease in water sales. The exact amount that the Town will suffer is not known and cannot be estimated at this time.

There is insufficient data to establish an exact potential dollar loss figure from drought events for City of Nacogdoches. The 6-1-1998 drought and the

associated $150 million in crop damages, was the total for a 21 NE Texas county region. Therefore, City of Nacogdoches dollar losses that resulted from this drought can be very roughly estimated by dividing the total number of counties by the total losses, equaling $7.14 million. Information estimating dollar losses from the other drought events is not available, but clearly there were undocumented economic impacts associated with this event as well. It is expected that the availability of data for dollar losses will improve in the future as attention is focused on drought mitigation and improved monitoring. A mitigation action item has been added to collect this data during future updates of the plan.

11.5 IMPLEMENTATION OF DROUGHT MITIGATION ACTIONS

The Water Conservation Plan and Drought Contingency Plan has completed many of its goals such as; reduce unaccounted-for water from 14% to 10%, Install meters at all city facilities and perform education and information activities. In order to continue water conservation efforts, the City has established 5-10 year goals for reduction in municipal use.

The City staff drafted and put into effect a policy adopting the use of plants native to Nacogdoches.

Native landscaping is an inspiration and path to earth wise plant choices for Nacogdoches. Native plants are naturally drought tolerant and resistant to pests and diseases. The less watering, fertilizing, and chemical control required at city facilities and city parks, the more the city contributes to the conservation and preservation of precious water resources - our streams, lakes, and aquifers.

Native plants thrive with minimal care and provide habitat for local wildlife. Some non-natives are also use, for special situations, like shady areas, poorly drained soils or for their deer resistance.

By choosing native and adapted plants, the city of Nacogdoches staff and citizens become more knowledgeable about, more aware of, and more connected to the land of East Texas.

11.6 DROUGHT MITIGATION ACTION ITEMS

Action D-1: Study the effectiveness, develop and implement regional water conservation campaigns. Identify areas for improvement and implement indentified projects.

Related Goals and Objectives: Complete study within one year

Estimated Cost: $10,000 staff time for each full year study

Benefits: Improved water conservation strategies.

Priority: High

Responsible Department/Organization: Engineering

Implementation Schedule: October 2014. This is a new Mitigation Action Item that was not part of previous HMAP

Potential Funding Sources: Operating budget, Water Utility Funds, TCEQ, FEMA, PDM, HMGP

Action D-2: Continue to monitor, update, implement and enforce the City's water conservation and drought contingency plans.

Related Goals and Objectives: To maintain an updated drought contingency plan

Estimated Cost: $2000 per year

Benefits: By continuing to implement water conservation measures, the City will be prepared to continue to provide water during times of drought.

Priority: High

Responsible Department/Organization: Planning and Engineering

Potential Funding Sources: Operating budget, Water Utility Funds, TCEQ, FEMA, PDM, HMGP

Implementation Schedule: 6 months. This is a new Mitigation Action Item that was not part of previous HMAP

Action D-3: Implement city program to promote conservation of landscaping to low water usage landscaping through public education and demonstration programs at City facilities and the local Master Gardener Park.

Related Goals and Objectives: Utilize Drought Resistant Native Plants that require less water and are better able to survive drought this reduces waste of water

Estimated Cost: $60,000 for 10 demonstration sites and $5,000 per year for public education.

Benefits: By leading by example, this will encourage residents to install low water usage landscaping, reducing the City's overall water needs.

Priority: High

Responsible Department/Organization: Planning and Parks Department

Implementation Schedule: October 2013

Potential Funding Sources: Operating budget, Water Utility Funds, TCEQ, FEMA, PDM, HMGP

Action D-4: Implement public education campaign regarding drought contingency stages and develop a system to effectively communicate drought contingency stages and water use limitations.

Related Goals and Objectives: To protect public health and to have a drought education plan developed. Purchase portable signs and banners to serve as notification of water restrictions and place notices and flyers in utility bills.

Estimated Cost: $10,000

Benefits: More organized and improved drought public awareness more efficient uses of water resources during periods of droughts

Priority: High

Responsible Department/Organization: Planning Department, Engineering Department

Implementation Schedule: Every year of this plan. This item was part of the last HMAP and has been actively used every year since 2004.

Potential Funding Sources: Operating budget, Water Utility Funds, TCEQ, FEMA, PDM, HMGP

Action D-5: Clean, reclaim and drill water wells to improve access to water.

Related Goals and Objectives: To protect public health and safety by drilling additional water wells and improving the existing ground water infrastructure.

Estimated Cost: $500,000 **Benefits:** Reduced dependence on surface water and increased ability to provide water necessary for fire suppression, drinking, public health and irrigation.

Priority: High

Responsible Department/Organization: Planning Department, Engineering Department

Implementation Schedule: Ongoing. This item was part of the last HMAP and has been actively used every year since 2004.

Potential Funding Sources: Operating budget, Water Utility Funds, TCEQ, FEMA, PDM, HMGP

Action D-6: Continue working toward development of Lake Columbia as an alternative water source and develop a plan for capturing water from Lake Naconiche.

Related Goals and Objectives: To protect public health and safety by increasing surface water capacity and, long-term, decreasing dependence on ground water and the aquifer.

Estimated Cost: $2,500,000

Benefits: Reduced dependence on surface water and increased ability to provide water necessary for fire suppression, drinking, public health and irrigation.

Priority: High

Responsible Department/Organization: Planning Department, Engineering Department

Implementation Schedule: Ongoing. This item was part of the last HMAP and has been actively used every year since 2004.

Potential Funding Sources: Operating budget, Water Utility Funds, TCEQ, FEMA, PDM, HMGP

APPENDIX A: REFERENCES

- City of Nacogdoches 2004 Hazard Mitigation Action Plan
- Citizen input
- Water Conservation and Drought Contingency Plan
- City of Nacogdoches historical records.
- HMAP Steering Committee.
- Nacogdoches County
- Nacogdoches Memorial Hospital
- Stephen F. Austin State University
- Nacogdoches Independent School District
- National Weather Service
- Texas Department of Public Safety
- Texas Department of Transportation
- Texas Forest Service
- Federal Emergency Management Agency
- Department of Homeland Security
- The County of Nacogdoches Mitigation Plan

APPENDIX B: ACRONYMS AND GLOSSARY

ARC	American Red Cross
CAV	Community Assistance Visit Report
CRS	Community Rating System
COE	Corps of Engineers
TDEM	Texas Division of Emergency Management
DETCOG	Deep East Texas Council of Governments
EAS	Emergency Alert System
EMS	Emergency Medical Services
FEMA	Federal Emergency Management Agency
FRI	Forest Resources Institute
GIS	Geospatial Information Services
HMST	Hazard Mitigation Steering Team
ISD	Independent School District
LWP	Local Warning Point
MAP	Mitigation Action Plan
NFIP	National Flood Insurance Program
NOAA	National Oceanic and Atmospheric Administration
NWS	National Weather Service
TFS	Texas Forest Service
TXDOT	Texas Department of Transportation
SBA	Small Business Administration
UWI	Urban Wildland Interface
VFD	Volunteer Fire Department
PSAP	Public Safety Answering Point
Firm	Flood Rate Insurance Map
WSC	Water Supply Corporation

APPENDIX C: PUBLIC MEETINGS

Meeting	Date
Work Group Meeting	February 22, 2011
Work Group Meeting	November 17, 2011
Work Group Meeting	December 12, 2011
Work Group Meeting	January 3, 2012
Work Group Meeting	January 17, 2012
Public Meeting	January 31, 2012
Public Hearing	September 2, 2014
Council Adoption	September 16, 2014

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NOTICE OF MEETING AND AGENDA
Hazard Mitigation Work Group
February 22, 2011 – 10:00 a.m.
City Hall - 2nd Floor – Conference Room
202 E Pilar Street, Nacogdoches, TX

1. Call to Order
2. Discussion and possible action for preparing Hazard Mitigation Action Plan Update.
3. Adjourn

This agenda is posted to comply with G.C. Section 551.041. For more information or a copy of the Open Meetings Act, please contact the Attorney General of Texas at 1-800-252-8011; the City Secretary at 936-559-2504 or visit the City of Nacogdoches website at www.ci.nacogdoches.tx.us.

CERTIFICATION

I certify that the above notice of meeting was posted in the directory outside City Hall, 202 E. Pilar Street, Nacogdoches, TX on February 18, 2011 at 8:00 a.m.

Lila Fuller
Lila Fuller, City Secretary

I certify that the attached notice and agenda was removed by me from the directory outside of City Hall on the 22 day of February, 2011.

BY: Lila Fuller Title: City Secretary

Nacogdoches HMAP Meeting Notes 1

February 22, 2011, 2012 at 10:00 a.m., EMC Tommy Wheeler was appointed Committee Chair, Lila Fuller was appointed secretary. The committee members committed and the Steering committee was officially formed. Chair Tommy Wheeler opened discussion on how to prepare the HMSP. The opening was followed with a presentation by Planner Philpot. Steering Committee members discussed HMAP Risk Assessment and analysis process. Hazard Profiles Risk Assessment surveys for each council ward was passed out to be completed by committee members before next meeting. Next Meeting set for November 17, 2011, 10 a.m. This should give ample time to complete all Risk Assessment Sheets for each council Ward. Meeting adjourned at 11:47 a.m.

Steering committee members Present:

Lila Fuller	City Secretary
Steve Bartlett	City Engineer
Stacy Corley	Grants Coordinator
Keith Kiplinger	Fire Chief
Sarah O'Brien	Communications Director
Larissa Philpot	City Planner, EM Planning Section Chief
Jim Sevey	Police Chief
Wayne Shepherd	Public Works Director
Tommy Wheeler	Emergency Management Coordinator
	Building Official

Guest Present:

County Judge- Joe English,

Special Project Manager- Tara Tirana

County Commissioner – Jim Elder

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NOTICE OF MEETING AND AGENDA
Hazard Mitigation Work Group
November 17, 2011 – 10:00 a.m.
City Hall - 2nd Floor – Conference Room
202 E Pilar Street, Nacogdoches, TX

1. Call to Order
2. Discussion and possible action for preparing Hazard Mitigation Action Plan Update.
3. Adjourn

This agenda is posted to comply with G.C. Section 551.041. For more information or a copy of the Open Meetings Act, please contact the Attorney General of Texas at 1-800-252-8011; the City Secretary at 936-559-2504 or visit the City of Nacogdoches website at www.ci.nacogdoches.tx.us.

CERTIFICATION

I certify that the above notice of meeting was posted in the directory outside City Hall, 202 E. Pilar Street, Nacogdoches, TX on November 11, 2011 at 5:00 p.m.

Lila Fuller
Lila Fuller, City Secretary

I certify that the attached notice and agenda was removed by me from the directory outside of City Hall on the 21 day of November, 2011.

BY: Lila Fuller Title: City Secretary

Nacogdoches City HMAP Meeting Notes 2

November 17, 2011 at 10:00 a.m., Tommy Wheeler chaired the meeting. Steering Committee members discussed more on basic compiling the plan. Hazard Profiles Risk Assessment surveys that were passed out at last meeting were collected by Secretary. The team discussed hazards to be analyzed for discussion at next meeting. Each completed survey was discussed and approved by a show of hands. Meeting closed at 11:15 a.m. Next meeting set for December 12, 2011, 10 a.m.

Steering committee members Present:

Steve Bartlett	City Engineer
Stacy Corley	Grants Coordinator
Keith Kiplinger	Fire Chief
Lila Fuller	City Secretary
Sarah O'Brien	Communications Director
Larissa Philpot	City Planner, EM Planning Section Chief
Wayne Shepherd	Public Works Director
Tommy Wheeler	Emergency Management Coordinator
	Building Official

Guest Present:

Nacogdoches Fire Protection Officer- Robert Food

Special Project Manager- Tara Tirana

ARC Director- Glenna Hartness

Nacogdoches Police PIO- Greg Sowell

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NOTICE OF MEETING AND AGENDA
Hazard Mitigation Work Group
December 12, 2011 – 10:00 a.m.
City Hall - 2nd Floor – Conference Room
202 E Pilar Street, Nacogdoches, TX

1. Call to Order
2. Discuss completed Risk Analysis for Hazard Mitigation Action Plan Update.
3. Set date, time and place for meeting with other agencies.
4. Adjourn

This agenda is posted to comply with G.C. Section 551.041. For more information or a copy of the Open Meetings Act, please contact the Attorney General of Texas at 1-800-252-8011; the City Secretary at 936-559-2504 or visit the City of Nacogdoches website at www.ci.nacogdoches.tx.us.

CERTIFICATION

I certify that the above notice of meeting was posted in the directory outside City Hall, 202 E. Pilar Street, Nacogdoches, TX on December 7, 2011 at 5:00 p.m.

Lila Fuller
Lila Fuller, City Secretary

I certify that the attached notice and agenda was removed by me from the directory outside of City Hall on the 12 day of December, 2011.

BY: Lila Fuller Title: Lila Fuller

Nacogdoches HMAP Meeting Notes 3

December 12, 2011, 10 a.m. EMC Tommy Wheeler Chaired the Meeting. The steering Committee members met to discuss the HMAP along with update of mitigation items assigned and discussed at last meeting. The team collected Hazards Analysis. Meeting closed at 10:44 a.m. Next Meeting set for January 3, 2012, 10 a.m.

Steering committee members Present:

Steve Bartlett	City Engineer
Lila Fuller	City Secretary
Sarah O'Brien	Communications Director
Larissa Philpot	City Planner, EM Planning Section Chief
Jim Sevey	Police Chief
Wayne Shepherd	Public Works Director
Tommy Wheeler	Emergency Management Coordinator
	Building Official

Guest Present:

County Judge- Joe English,

Special Project Manager- Tara Tirana

Nacogdoches County Memorial Hospital EMC – G.W Jones

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NOTICE OF MEETING AND AGENDA
Hazard Mitigation Work Group
January 3, 2012 – 10:00 a.m.
City Hall – City Council Chambers
202 E Pilar Street, Nacogdoches, TX

1. Call to Order

2. Discuss completed Risk Analysis for Hazard Mitigation Action Plan Update with Other Agencies and discuss top three (3) priorities for each hazard.

3. Adjourn

This agenda is posted to comply with G.C. Section 551.041. For more information or a copy of the Open Meetings Act, please contact the Attorney General of Texas at 1-800-252-8011; the City Secretary at 936-559-2504 or visit the City of Nacogdoches website at www.ci.nacogdoches.tx.us.

CERTIFICATION

I certify that the above notice of meeting was posted in the directory outside City Hall, 202 E. Pilar Street, Nacogdoches, TX on December 27, 2011 at 5:00 p.m.

Lila Fuller
Lila Fuller, City Secretary

I certify that the attached notice and agenda was removed by me from the directory outside of City Hall on the 10TH day of February, 2012.

BY: Lila Fuller Title: City Secretary

Nacogdoches HMAP Meeting Notes 4

January 3, 2012, 10 a.m.., Tommy Wheeler chaired the committee. Stacy Corley took notes. Lila Fuller was not in attendance. Steering Committee members discussed HMAP Risk Assessment and analysis process. Hazard Profiles Risk Assessment surveys passed at last meeting were collected. Team discussed priorities for each hazard. Team voted on priorities with a show of hands. Meeting closed at 11:31. Next Meeting set for January 17, 2012, 10 a.m.

Steering committee members Present:

Steve Bartlett	City Engineer
Stacy Corley	Grants Coordinator
Keith Kiplinger	Fire Chief
Sarah O'Brien	Communications Director
Larissa Philpot	City Planner, EM Planning Section Chief
Jim Sevey	Police Chief
Wayne Shepherd	Public Works Director
Tommy Wheeler	Emergency Management Coordinator
	Building Official

Guest Present:

Special Project Manager- Tara Tirana

Nacogdoches City GIS Manager- Tredd Riggs

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NOTICE OF MEETING AND AGENDA
Hazard Mitigation Work Group
January 17, 2012 – 10:00 a.m.
2nd Floor Conference Room – City Hall
202 E Pilar Street, Nacogdoches, TX

1. Call to Order
2. Discuss final Hazard Mitigation Action Plan Update.
3. Set date, time and location for meeting with other agencies to discuss final plan.
4. Adjourn

This agenda is posted to comply with G.C. Section 551:041. For more information or a copy of the Open Meetings Act, please contact the Attorney General of Texas at 1-800-252-8011; the City Secretary at 936-559-2504 or visit the City of Nacogdoches website at www.ci.nacogdoches.tx.us.

CERTIFICATION

I certify that the above notice of meeting was posted in the directory outside City Hall, 202 E. Pilar Street, Nacogdoches, TX on January 12, 2012 at 5:00 p.m.

Lila Fuller
Lila Fuller, City Secretary

I certify that the attached notice and agenda was removed by me from the directory outside of City Hall on the 10th day of February, 2012.

BY: Lila Fuller Title: City Secretary

Nacogdoches HMAP Meeting Notes 5

January 17, 2012, 10 a.m.., Tommy Wheeler chaired the committee. Steering Committee members again discussed HMAP Risk Assessment and analysis processes from last meeting. Hazard Profiles Risk Assessment surveys passed at last meeting were collected. Team discussed priorities for each hazard. Team voted on priorities with a show of hands. Meeting closed at 11:31. Next Meeting set for January 31, 2012, 10 a.m.

Steering committee members Present:

Steve Bartlett	City Engineer
Lila	Fuller
Stacy Corley	Grants Coordinator
Keith Kiplinger	Fire Chief
Sarah O'Brien	Communications Director
Larissa Philpot	City Planner, EM Planning Section Chief
Jim Sevey	Police Chief
Wayne Shepherd	Public Works Director
Tommy Wheeler	Emergency Management Coordinator
	Building Official

Guest Present:

Special Project Manager- Tara Tirana

Nacogdoches Memorial Hospital EMC- G W Jones

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NOTICE OF MEETING AND AGENDA
Hazard Mitigation Work Group
January 31, 2012 – 5:00 p.m.
City Council Chambers – City Hall
202 E Pilar Street, Nacogdoches, TX

1. Call to Order

2. PUBLIC MEETING: To receive public comment for the City of Nacogdoches Hazard Mitigation Action Plan Update.

3. Adjourn

This agenda is posted to comply with G.C. Section 551.041. For more information or a copy of the Open Meetings Act, please contact the Attorney General of Texas at 1-800-252-8011; the City Secretary at 936-559-2504 or visit the City of Nacogdoches website at www.ci.nacogdoches.tx.us.

CERTIFICATION

I certify that the above notice of meeting was posted in the directory outside City Hall, 202 E. Pilar Street, Nacogdoches, TX on January 26, 2012 at 5:00 p.m.

Lila Fuller
Lila Fuller, City Secretary

I certify that the attached notice and agenda was removed by me from the directory outside of City Hall on the 2 day of February, 2012.

BY: Lila Fuller Title: City Secretary

Nacogdoches HMAP Meeting Notes 6

January 31, 2012, 10 a.m., Tommy Wheeler chaired the committee. Steering Committee members discussed with attendees the HMAP Risk Assessment analysis process, Hazard Profiles Risk Assessment surveys, and summarized the final HMAP. Meeting was open for public comments. Team discussed priorities for each hazard. Team voted to approve the final Draft. A show of hand was taken. All members voted to approve final Copy Meeting closed at 12: 24 pm. Steering committee members Present:

Steve Bartlett	City Engineer
Stacy Corley	Grants Coordinator
Keith Kiplinger	Fire Chief
Sarah O'Brien	Communications Director
Larissa Philpot	City Planner, EM Planning Section Chief
Jim Sevey	Police Chief
Wayne Shepherd	Public Works Director
Tommy Wheeler	Emergency Management Coordinator
	Building Official

Guest Present:

Nacogdoches Fire Protection Officer- Robert Food

Special Project Manager- Tara Tirana

ARC Director- Glenna Hartness

Nacogdoches City GIS Manager- Tredd Riggs.

County Judge- Joe English,

Nacogdoches County Memorial Hospital EMC – G.W Jones

County Commissioner – Jim Elder

Nacogdoches Police Department PIO- Greg Sowell

Stephen F. Austin State University Department of Forestry Director- Dr. Darrell MC Donald

Participants who worked on this Plan

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Official and Nacogdoches
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Thomas Kerss
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CITY SECRETARY/GRANTS

NOTICE OF PUBLIC MEETING

CITY OF NACOGDOCHES
HAZARD MITIGATION ACTION PLAN UPDATE

The City of Nacogdoches will hold a public meeting to receive citizen input regarding the City's updated Hazard Mitigation Action Plan that has been approved by the Texas Division of Emergency Management and the Federal Emergency Management Agency. The purpose of the Hazard Mitigation Action Plan (HMAP) is to implement and sustain actions that reduce vulnerability and risk from hazards, or reduce the severity of the effects of hazards on people and property. The meeting will be held in the City Council Chambers at City Hall, 202 E. Pilar Street as follows:

Tuesday, September 2, 2014 – 5:30 p.m.

The updated Hazard Mitigation Action Plan is available for review in the Office of the City Secretary at City Hall, 202 E. Pilar Street, Room 315 during regular business hours, as well as the City's website at www.ci.nacogdoches.tx.us. A copy will be available at the public meeting.

For questions, please contact Keith Kiplinger, Emergency Management Coordinator at 936.559.2541 or by email at kiplingerk@ci.nacogdoches.tx.us

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For questions, please contact Keith Kiplinger, Emergency Management Coordinator at 936.559.2541 or by email at kiplingerk@ci.nacogdoches.tx.us

The Daily Sentinel

4920 COLONIAL DRIVE- PO BOX 630068- NACOGDOCHES, TEXAS 75963-0068- (936) 564-8361
Robin land Editor & Publisher

HMAP Public Hearing Aug. 22

THE STATE OF TEXAS
COUNTY OF Nacogdoches

BEFORE ME, the undersigned, a Notary Public, this day personally came **Robin Land**, who after being sworn according to law that he is the PUBLISHER FOR ***THE DAILY SENTINEL.***

THE PUBLISHERS, of **The DAILY SENTINEL**, a daily newspaper of general circulation published in Nacogdoches, Texas, in Nacogdoches County and said State, attest that the attached printed material was published in said newspaper August 10 2014.

Robin Land
Publisher

SUBSCRIBED AND SWORN TO BEFORE ME THIS THE 11th **day of** August 2014.

Brenda Jo Skinner
Notary Public, State of Texas

Brenda Jo Skinner
Notary's Printed Name

BRENDA JO SKINNER
Notary Public, State of Texas
My Commission Expires
November 05, 2017

Advertising Receipt

LUF DAILY / NAC SENTINEL
936-632-6631 Lufkin
936-564-8361 Nacogdoches

CITY OF NACOGDOCHES: MISC.
LILA FULLER
P. O. BOX 635070
NACOGDOCHES , TX 75963-0648

Acct #: 00000692
Ad #: 00083495
Phone: (936)559-2512
Date: 08/07/2014
Ad taker: 2509 **Salesperson:** 2509

Classification: 0270

Description	Start	Stop	Ins.	Cost/Day	Extras	Total
NOTICE OF PUBLIC MEETING CIT	08/10/2014	08/10/2014	2	42.11	0.00	84.22

Ad Text:

NOTICE OF PUBLIC MEETING

CITY OF NACOGDOCHES
HAZARD MITIGATION ACTION PLAN UPDATE

The City of Nacogdoches will hold a public meeting to receive citizen input regarding the City's updated Hazard Mitigation Action Plan that has been approved by the Texas Division of Emergency Management and the Federal Emergency Management Agency. The purpose of the Hazard Mitigation Action Plan (HMAP) is to implement and sustain actions that reduce vulnerability and risk from hazards, or reduce the severity of the effects of hazards on people and property. The meeting will be held in the City Council Chambers at City Hall, 202 E. Pilar Street as follows:

Payment Reference:

Total:	84.22
Tax:	0.00
Net:	84.22
Prepaid:	0.00
Total Due	84.22

MOBILE HOME 050

/E $5000 18 X 80 4BR
BA, Spacious Living
ea. 1 IN STOCK Call
)-200-1068 RBI00073

UNFURNISHED HOUSES 140

2/1 Newer Brick, near FA. All appli., $800mo, $800dep, 2612 Park St, unit C, Call Andrew 936-558-8711

2100 SF Brick 4/2/2 on NE side. $1200mo 936-645-1189

2BA 1BA Southside. $550mo+$350Dep. 936-615-3774

2BR 1BA +Storage Bldg W&D. $500+Dep. 936-645-5434

2BR 1BA 1/4 mile from Woden School. New flooring, Appli, W&D hookups. HUD ok. $475mo + $400dep. 936-585-5709 318-200-9933

2BR 1BA Duplex, 1105-A Lock, **Quiet Area**, Oak floors, CHA, W/D, Fridge, Stove. No Pets. $575MO 936-554-5569

2BR 2BA Townhouse. Close to NHS. $900mo + Dep. 936-554-4027

2BR/2BA CHA. 3mi from Walmart. $600mo+Dep 936-569-0377

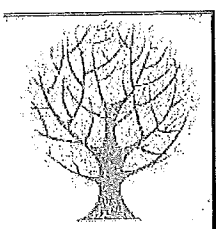
2BR/2BTH Duplex lawn care provided Students Welcome. $795 2630 Canyon St. 936-675-4099

3/1 CHA, appli., clean, quiet. No pets/HUD. $675 Ref's req. 936-560-5232

3/2 Frig, Stove, W/D conn., 3400 Durst St, $650mo $650dep, Refs No HUD 936-371-9819

303 Ridgecrest, 3BR/2BA, $1000mo 936-564-6704 after 5pm

324 E. Seale. 2BR 1BA CHA, lrg fenced back yrd. Carport $700mo, $700 dep 936- 326-8716



Northeast Hills
APARTMENTS
NOW LEASING

1 Bedrooms starting at $430/month.

Quiet Location with pool on site.

Pets Ok.

UNFURNISHED HOUSES 140

3BR 1BA w/garage, wood flooring, appliances, window unit A/C, gas heat. W/D conn. & fenced yard. Pets OK, $625mo + $625dep and 1yr lease. 936-569-4779 Broker, Charles Pool Real Estate, Inc

3BR1BA Nice Brick Home w/2 car attached carport 7mi North of Nac, on Appleby Sand Rd., No Pets, No HUD. Water & trash paid. $775mo, $500 dep. 903-724-3430

4BR 2BA. 921 Shumard Oak.CHA,fenced yard, $950mo+$500dep, 1st and last months down, Aug free, 936-569-9777

821 Oakview 3BR 2BA Double garage. $1200mo +$1000 dep. Call 936-569-0742or554-1899

Arbor Oaks House $975mo + $975 . 3BR 2 BA. Includes Lawncare. 936-371-1883

Barham Properties: Apartments/ Homes for Rent from $450-$1,200. Call for more information. **View Rentals Barhamproperties.com (936)559-7304**

CHISD Beautifully Restored & Very unique 1930's home. 3/2/2 . 2K sf, hrdwd floors & Tile. New Deck, windows, fixtures & appli. Fireplace & Claw-foot Tub. $1200+$1200d. 936-585-3431

CHISD. 3 or 4BR/office. 2BA. CH/A, WBFP, Storage bldg, Workshop, Barn & Corral. No inside pets or smoking. Credit ref. & background check. $1650mo+$1000dep. 936-569-0559 615-7167

DUPLEX W Main, Nac; 2BR 1BA +1 car garage. Cntrl AC/Heat. $500mo+$500 dep. NO NHA 936-645-0989 371-0430

University Club
APARTMENTS

$500 off your 12 Month Lease for 2 Bedroom

- $99 Deposit Special
- $50 Student Special Deposit
- FREE Cable & HBO
- FREE Internet Service
- 24 Hour Fitness Center
- 1BR, 2BR, 3BR & Townhomes

UNFURNISHED HOUSES 140

Large 3BR 2 BA w/Frig., W/D hookups, Water Pd, 1 yr lease. Ref. Req. No HUD 2635 E. St. Hwy 7 936-564-1577

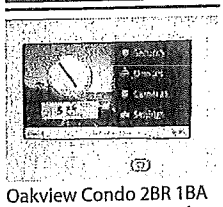
Town Homes 2BR 2.5BA Covered parking In the Tangelwood Residential area off University DR *$750mo, 1 yr lease req.* **936-560-4768**

Duplex 2BR 1B cov'd parking, 4328 Old Lufkin Rd $600mo, $500 dep 936-569-8353, 552-4264

Gazebo, 3BR 3BA appli includ, $795mo + $600dep. 936-615-3774

Nice Townhome in University Park, appli. wbfp. 564-9609/569-3576

NICE 2BR 2BA. Appli, FP, $625-$725 mo. No HUD 903-690-9271



Oakview Condo 2BR 1BA W&D,Newly renovated, Security monitored $650mo. 832-617-0244

Townhouse for rent. 2BR 2BA, Washer/Dryer. $700mo. 3211 Pearl St. CALL 281-772-3386.

Walk to SFA: 2/1 in Gazebo#1, Appls,$550mo 936-564-9609 569-3576

FURNISHED APARTMENTS 170

Don't Miss This!! Apartment for Rent 12 month Lease Take Over at The Grove. Close to Campus. All Amenities Fully Furnished. **$100mo discount,paid upfront ($1,200).** Will pay all lease take over charges.Call 214-980-0143

Garrison,TX. 1BR 1BA furn apt. Elect.water.trash pd. Stall for horse furn/arena use. No pet/smoker. $550 mo$200 dep. 936-254-4402

Lease Take-Over in a 3BR Apt. Must be Female All Amenities & Fully Furnished. Willing to pay

FURNISHED APARTMENTS 170

NEW! Newly re-modeled All bills pd. No Pets. 936-564-8266 After Hours-936-554-6346

★★★★★★★★★★★★

Banita Creek Mgt. Banita Creek Apartments MOVE-IN SPECIAL 1 BR SPECIAL $505/Mo w/1yr lease for existing vacancies only. NEW 2BR Specials. 1/2 month free with NEW leases 2 BR 2BA $675/Mo 2 blocks from SFA 327 W. College

★★★★★★★★★★★★

936-560-4768

Capri Apartments 1 Bedroom *Newly remodeled. *Washeteria. **936-564-8266**

DOGWOOD VILLAGE APARTMENTS Patio Style Ground Floor 2Bed 1Bath 936-553-2044 www.dogwoodvillapts.com

NEW Luxury Loft. Dtwn Nac. 2BR 1BA. $1300mo Avail. Sept. 1 936-371-9101

Northview Condos **1BR 1BA** @ $585mo **2BR 2BA Remodeled Flats** @ $699mo **2BR 2BA Townhouse** @ $675mo **Includes:** *Water/Trash & W/D Hookups* On North St Between SFA & Wal-Mart $10 application fee **CALL NOW!! 936-250-2667**

STONE FORT APTS Efficiencies: Largest 1BR & 2BR Townhomes in Town! $299 MOVE IN SPECIAL Call for Specials 936-564-0629 133 Old Line Dr.

WHISPER OAKS Spacious Apartments 1 & 2BR Apts Starting at $575 & $675 Full-size W/D 4721 University Dr. **936-560-2080**

ROOMS 200

Private Room. Close to SFA. Electric & water pd. Bathroom, kitchen & living room shared

MOBILE HOME RENTALS 210

1.5BR 1BA. W&D Douglass area Call White Fence Ind. 936-564-9076.

2/2 MH CHISD w/CHA &appl. No smoking. $500mo 936-275-7003

Small Community in Timpson. $700mo. $700dep NO SMOKING! Tile Floors, Stove, Frig, DW, Microwave. City Utilities. Contact: Ms. Joey 281-827-2009

NICE FURNISHED 2BR 2BA MH on 7acres. 3miles from Lake Nac. $450mo 936-569-6363

COMMERCIAL PROPERTY 230

Commercial Office Spaces. Overlook Dtwn Nac. Internet provided. 203 E. Main. Call for appt. 936-462-3679

OFFICE SPACE 240

1500 sq ft Office Building. 111 W Pilar. Across from Courthouse, 936-564-2333

3600 sqft bldg for lease Office or Retail .1336 N Univ. Dr. 936-564-2307

Dtwn Hist. Office-1400 sq.ft. **Newly remoldeled.** $1100mo 936-371-9101

Office Space. 403 E.Hospital St. 1,200+ sq.ft. $1000MO, $1000Dep. 936-554-4922 554-6034

STORAGE FACILITY 260

10x10 Storage units for rent in Douglass area. $35/mo. 936-564-9076

Action Storage. Cardinal St., near SFA Liebrum Realty,564-8180

LEGAL NOTICES 270

NOTICE OF MEETING The Nacogdoches County Local Emergency Planning Committee will convene in a meeting on Thursday August 14 at 10:30 A.M. at the Nacogdoches County Emergency Operations Center located, 727 FM 3314.

INVITATION FOR BIDS (IFB) WATER PARK TRACT

The City of Nacogdoches, Texas is offering for sale

LEGAL NOTICES 270

plus vacant land to the highest qualified bidder. The minimum bid considered will be $500,000.00 and be subject to conditions and terms in the IFB. The [illegible] (936) 559-2505.

NOTICE OF PUBLIC MEETING

CITY OF NACOGDOCHES HAZARD MITIGATION ACTION PLAN UPDATE

The City of Nacogdoches will hold a public meeting to receive citizen input regarding the City's updated Hazard Mitigation Action Plan that has been approved by the Texas Division of Emergency Management and the Federal Emergency Management Agency. The purpose of the Hazard Mitigation Action Plan (HMAP) is to implement and sustain actions that reduce vulnerability and risk from hazards, or reduce the severity of the effects of hazards on people and property. The meeting will be held in the City Council Chambers at City Hall, 202 E. Pilar Street as follows:

Tuesday, September 2, 2014 - 5:30 p.m.

The updated Hazard Mitigation Action Plan is available for review in the Office of the City Secretary at City Hall, 202 E. Pilar Street, Room 315 during regular business hours, as well as the City's website at www.ci.nacogdoches.tx.us. A copy will be available at the public meeting.

For questions, please contact Keith Kiplinger, Emergency Management Coordinator at 936.559.2541 or by email at kiplingerk@ci.nacogdoches.tx.us

PUBLIC HEARING NACOGDOCHES COUNTY COMMISSIONERS COURT NACOGDOCHES, COUNTY, TEXAS

THE NACOGDOCHES COUNTY COMMISSIONERS COURT will hold a **PUBLIC HEARING** on **Friday, August 22, 2014 at 9:00 a.m.** on the proposed tax increase for fiscal year 2014-2015 in the Commissioners Courtroom, Suite 170, on the 1st floor of the South Wing of the Nacogdoches

LEGAL NOTICES

NOTICE OF PUBLI

The furniture and ment ("collateral" Fredonia Hotel sold at a public sale auction. The or redemption the collateral u provisions of 26 7425 (b) for a 120 days from th such sale or the lowable for rec under local law ever is longer, d eral tax liens of r

Persons interest ding for the lo quest an invent property to be tential bidders f may also reques portunity to in property to be contacting Keith gen at Texas St 1601 South Street, Lufkin 75901. Telephc 634-8877 for vc 639-6475 for email: kswearin asstatebank.net

LOST & FOUND

FOUND: Mayb Collie puppy (F collar. On 59 N pleby. 936-56

Have y your Contac Nacogdoches Shelter at 936-560-501 to see if your p is there.

CLERICAL/ ADMINISTRATIVE

Positions Avai Clerical | Industria **APPLY N** 210 C S. Timb Lufkin, TX • 936 or 829 N Unive Nacogdoch ★★ 936-560-1

EDUCATION/ TRAINING

St. Cypri Episcopal S is looking **Spanish Te** For informat

APPENDIX D: 2003 PLAN PROGRESS

SLOW PROGRESS	NO PROGRESS	COMPLETE	REMOVED

ITEM #	DESCRIPTION	STATUS	IN 2013 MAP?	NO Progress or Slow Progress, Why
ST-AI#1	Incorporate goals and action items into existing policies	Complete; Continuing to review and revise	Yes	
ST-AI#2	Adopt appropriate policies and procedures for the committee to continue implementation and monitoring	Complete; Continuing to review and revise	Yes	
ST-AI#3	Develop sub-committees and programs to focus on important areas and discourage hazardous activity	Slow Progress	No	Limited staff
ST-AI#4	Develop public and private partnerships for the coordination of programs	Complete	Yes	
ST-AI#5	Develop partnership with SFASU to address hazard mitigation and needs.	Complete	Yes	
ST-AI#6	Maintain an inventory of at-risk buildings and prioritize mitigation projects.	Slow Progress/Ongoing Limited Staff	Yes	
ST-AI#7	Identify funding opportunities available in development of goals and strategies.	Slow Progress/Ongoing Limited Staff	Yes	
LT-AI#1	Incorporate Nacogdoches MAP into current emergency plans.	Complete	No	
LT-AI#2	Implement educational programs aimed at reducing mitigation risks.	Slow Progress/Ongoing Limited Staff	Yes	
LT-AI#3	Develop partnerships to mitigate hazards affecting natural systems.	Slow Progress/Ongoing Limited Staff	No	
ST-FL#1	Analyze flood-prone properties and identify mitigation options.	Phase I Complete Continue to	Yes	
ST-FL#2	Review all City codes and ordinances pertaining to floodplain management to achieve cohesion.	Complete: Continue	Yes	
ST-FL#3	Improve local flood warning systems.	No Progress	No	Limited staff

ITEM #	DESCRIPTION	STATUS	IN 2013 MAP?	If No Progress State, Why
LT-FL#1	Enhance data for floodplain within the City, and flood-prone areas outside of floodplains.	Complete: Continue	Yes	
LT-FL#2	Implement recommended activities from the 1996 Flood Control Study.	Some progress/Ongoing	Yes	
LT-FL#3	Implement strategies to preserve open space for flood mitigation and wildlife habitats.	Limited progress as funds permit/Ongoing	Yes	
LT-FL#4	Identify and eliminate surface water drainage obstructions within the City of Nacogdoches	Complete; Ongoing	Yes	
ST-TO#1	Improve early warning system	No Progress	Yes	Not Funded
ST-TO#2	Identify places for citizens to seek shelter if a tornado warning is issued.	Complete; Ongoing	Yes	
ST-TO#3	Educate the public on what to do in the event of a tornado.	No Progress	Yes	Limited Staff
ST-TO#4	Compile a list of tornado resistant products for citizens who obtain building permits.	Slow Progress/Ongoing	No	
LT-TO#1	Develop incentives for individuals who use tornado resistant products in the development of their property.	No Progress	No	Limited staff
ST-HI#1	Develop reporting requirements to monitor hazardous materials being transported by railways	No Progress	No	Limited staff
ST-HI#2	Enforce use of Loop 224 for transport of all hazardous materials	Partial Complete/Ongoing	No	Limited staff
ST-SM#1	Compile a list of wind-resistant products and building techniques to distribute to citizens obtaining building permits.	Complete	No	
ST-SM#2	Promote safety campaigns to educate the public on what to do during a storm	No Progress	Yes	Limited Staff
ST-SM#3	Improve early warning system	Slow Progress	Yes	Limited Funds
STUI#1	Develop brochure outlining Urban Interface Wildfire threats and safety precautions	Slow Progress: Continue	Yes	Limited Staff
ST-UI#2	Compile a list of fire-retardant building materials and distribute to citizens obtaining building permits	Complete	No	
LT-UI#1	Consider revisions to Landscaping Ordinance to include plantings more resistant to fire	Complete	Yes	
LT-UI#2	Develop a Fire Prevention	No Progress	Yes	Limited Staff

	Inspection service for residential property owners			
LT-UI#3	Identify existing urban interface neighborhoods	Complete	Yes	

APPENDIX E: 2013 PLAN PRIORITIES

ITEM #	DESCRIPTION	PRIORITY
FLOOD MITIGATION ACTIONS		
Action F-1	Analyze and identify flood-prone properties and options for repetitive loss structure. Establish a priority system ranking repetitive loss structures and remove them from the floodplain.	High
Action F-2	Implement new flood control study including channelization, detention, retention, etc.	Medium
Action F-3	Eliminate surface water draining obstructions by implementing a program to replace roadway bridges.	Medium
Action F-4	Review all City codes and ordinances pertaining to floodplain management to ensure their compliance and achieve cohesion.	High
Action F-5	Develop and promote an education program regarding flood hazards, NFIP, and flood plain regulations.	High
Action F-6	Implementation of storm water draining utility system fee for funding of flood infrastructure projects.	Medium
WILDLAND FIRE		
Action W-1	Develop information program regarding Urban Interface Wildfire threats and safety precautions to distribute.	High
Action W-2	Enhance wildland firefighting capabilities to ensure resources by funding the equipment replacement schedule for fire apparatus and purchasing a tanker truck and Type III Engine.	High
Action W-3	Enhance wildland firefighting capabilities to ensure resources in remote environments through the purchase of 4 wheel drive and utility vehicles.	High
Action W-4	Consider revisions to Landscaping Ordinance to include plantings more resistant to fire and adopt a "Fire Wise" landscaping ordinance.	High
Action W-5	Develop a Fire Prevention inspection service for residential property including wildland inspections.	High
Action W-6	Identify existing urban interface neighborhoods and conduct fuels reduction projects.	High
Action W-7	Fire wise fuel reduction projects that would require a contractor to reduce 1 hour fuels, specifically those fuels left from the drought and Severe Winds.	High
TORNADOES, SEVERE WINDS, THUNDERSTORMS		

Action WT-1	Improve early warning system through an emergency notification system	High
Action WT-2	International Building Code provides the framework for constructing structures that will most effectively withstand high winds. As the IBC is periodically updated, the City will update and enforce the code to require all structures within the City Limits to be built to these standards.	High
Action WT-3	Promote safety campaigns to educate the public on the dangers of tornadoes and high winds.	High
Action WT-4	Promote public safety campaign and create local "safe places" for use as tornado shelter.	High
Action WT-5	Educate the public on use of NacWise Alert and enroll more citizens in the program, providing them with real-time updates of storm conditions and emergency shelter availability.	High
Action WT-6	Conduct Thunderstorn/Lightning Awareness Programs to promote awareness of lightning dangers.	High

WINTER STORM

Action IW-1	Expand the City's de-icing program through the purchase of addition equipment, materials, and treatment of the roadway.	High
Action IW-2	Expand and improve community resiliency by working with internal and external customers/partners to identify ways to reduce emergency risks from natural events. Purchase and install a Weather Bug Tracking Station, Streamer and Motion Camera for the Emergency Operations Center. Data will be available to local media outlets and citizens via mobile apps and the internet.	High
Action IW-3	Expand and improve community resiliency by working with internal and external customer/partners to identify ways to reduce emergency risks from natural events with real-time reporting of dangerous conditions .	Medium
Action IW-4	Develop a public awareness program related to ice and winter storms.	Medium
Action IW-5	Develop a program to bury existing utilities, substantially reducing risk of wide spread power outages, in the event of a natural disaster.	Medium

HAILSTORM

Action I H-1	Update, review, and enforce the City ordinances, in relation to building materials.	High
Action I H-2	Develop Hail Storm education program to reduce losses.	Medium
Action I H-3	Provide shelter for Police and Fire response vehicles and trailers by the construction of additional bays and covered parking.	High

DROUGHT

Action D-1	Study the effectiveness of regional water conservation campaigns, and identify areas for improvement.	High
Action D-2	Continue to monitor, update and implement the City's water conservation and drought contingency plans.	High

Action D-3	Encourage conversions of city landscaping to low water usage landscaping through education and demonstration programs.	High
Action D-4	Implement public education regarding drought contingency stages and develop a system to effectively communicate drought contingency stages and water use limitations.	High
Action D-5	Clean, reclaim and drill water wells to improve access to water.	High
Action D-6	Continue the development of Lake Columbia as an alternative water sources and a plan for capturing water from Lake Naconiche.	High

APPENDIX F: HAZARD PROFILES RISK ASSESSMENT RESULTS

Risk Assessment Values are calculated as large, medium and small damages.

The following FEMA hazard analysis worksheets were used to perform a preliminary study of potential hazard for the City of Nacogdoches. The hazard analysis worksheets profile each hazard based upon:

- Area of the City
- Potential severity of the impact: large, major, minor, or limited
- Probably of occurrence: highly likely, likely, occasional, or unlikely
- Seasonal pattern, if any
- Probably duration
- Warning time: minimal, 3-6 hours warning, 6-12 hours warning, more than 12 hours warning
- Cascading potential

Inventory Assets Northwest Ward

What will be affected by the hazard event?

Task A. Determine the proportion of buildings, the value of buildings, and the population in your community of state that are located in hazards areas.

Hazard: Flood Scale: 100 Year Flood Plain

Type of Structure (Occupancy Class)	Number of Structures			Value of Structures		Number of People		
	# In Community	# In Hazard Area	% In Hazard Area	$ In Community	S In Hazard Area	# In Community	# In Hazard Area	% In Hazard Area
Residential	920	18	2.0%	$76,559,634	$1,497,906	4540	54	1.2%
Commercial	158	17	10.8%	$44,889,398	$4,829,872			
Industrial	54	5	9.3%	$5,696,621	$527,465			
Agricultural	3	0	0.0%	$51,710	$0			
Religious / Non-	12	0	0.0%	$600,000	$0			
Government	5	0	0.0%	$575,000	$0			
Education	2	0	0.0%	$500,000	$0			
Utilities	2	0	0.0%	$275,000	$0			
Total	856	40	3.5%	$129,147,363	$6,855,243	4540	54	1.2%

Task B. Determine whether (and where) you want to collect additional inventory data.

1. Do you know where your greatest damages may occur in your hazard areas? **Yes**
2. Do you know whether your critical facilities will be operational after a hazard event? **Yes**
3. Is there enough data to determine which assets are subject to the greatest potential damages? **Yes**
4. Is there enough data to determine whether significant elements of the community are vulnerable to potential hazards? **Yes**
5. Is there enough data to determine whether certain areas of historic, environmental, political, or cultural significance are vulnerable to potential hazards? **Yes**
6. Is there concern about a particular hazard because of its severity, repetitiveness, or likelihood of occurrence? **Yes**
7. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives? **No**

What will be affected by the hazard event?

Task A. Determine the proportion of buildings, the value of buildings, and the population in your community of state that are located in hazards areas.

Hazard: Drought Scale: Large

Type of Structure (Occupancy Class)	Number of Structures			Value of Structures		Number of People		
	# In Community	# In Hazard Area	% In Hazard Area	$ In Community	S In Hazard Area	# In Community	# In Hazard Area	% In Hazard Area
Residential	920	920	100.00%	$76,559,634	$76,559,634	4540	4540	100.0%
Commercial	158	158	100.00%	$44,889,398	$44,889,398			
Industrial	54	54	100.00%	$5,696,621	$5,696,621			
Agricultural	3	3	100.00%	$51,710	$51,710			
Religious / Non-	12	12	100.00%	$600,000	$600,000			
Government	5	5	100.00%	$575,000	$575,000			
Education	2	2	100.00%	$500,000	$500,000			
Utilities	2	2	100.00%	$275,000	$275,000			
Total	856	856	100.00%	$129,147,363	$129,147,363	4540	4540	100.0%

Task B. Determine whether (and where) you want to collect additional inventory data.

1. Do you know where your greatest damages may occur in your hazard areas? **Yes**
2. Do you know whether your critical facilities will be operational after a hazard event? **Yes**
3. Is there enough data to determine which assets are subject to the greatest potential damages? **Yes**
4. Is there enough data to determine whether significant elements of the community are vulnerable to potential hazards? **Yes**
5. Is there enough data to determine whether certain areas of historic, environmental, political, or cultural significance are vulnerable to potential hazards? **Yes**
6. Is there concern about a particular hazard because of its severity, repetitiveness, or likelihood of occurrence? **Yes**
7. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives? **No**

What will be affected by the hazard event?

Task A. Determine the proportion of buildings, the value of buildings, and the population in your community of state that are located in hazards areas.

Hazard: Drought Scale: Medium

Type of Structure (Occupancy Class)	Number of Structures			Value of Structures		Number of People		
	# In Community	# In Hazard Area	% In Hazard Area	$ In Community	S In Hazard Area	# In Community	# In Hazard Area	% In Hazard Area
Residential	920	460	50.00%	$76,559,634	$38,279,817	4540	2270	50.0%
Commercial	158	79	50.00%	$44,889,398	$22,444,699			
Industrial	54	27	50.00%	$5,696,621	$2,848,38			
Agricultural	3	2	50.00%	$51,710	$25,855			
Religious / Non-	12	6	50.00%	$600,000	$300,000			
Government	5	3	50.00%	$575,000	$287,000			
Education	2	1	50.00%	$500,000	$250,000			
Utilities	2	1	50.00%	$275,000	$137,500			
Total	856	578	50.00%	$129,147,363	$64,573,682	4540	2270	50.0%

Task B. Determine whether (and where) you want to collect additional inventory data.

1. Do you know where your greatest damages may occur in your hazard areas? **Yes**
2. Do you know whether your critical facilities will be operational after a hazard event? **Yes**
3. Is there enough data to determine which assets are subject to the greatest potential damages? **Yes**
4. Is there enough data to determine whether significant elements of the community are vulnerable to potential hazards? **Yes**
5. Is there enough data to determine whether certain areas of historic, environmental, political, or cultural significance are vulnerable to potential hazards? **Yes**
6. Is there concern about a particular hazard because of its severity, repetitiveness, or likelihood of occurrence? **Yes**
7. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives? **No**

What will be affected by the hazard event?

Task A. Determine the proportion of buildings, the value of buildings, and the population in your community of state that are located in hazards areas.

Hazard: Drought Scale: Small

Type of Structure (Occupancy Class)	Number of Structures			Value of Structures		Number of People		
	# In Community	# In Hazard Area	% In Hazard Area	$ In Community	S In Hazard Area	# In Community	# In Hazard Area	% In Hazard Area
Residential	920	92	10.00%	$76,559,634	$7,655,963	4540	454	10.0%
Commercial	158	16	10.00%	$44,889,398	$4,488,940			
Industrial	54	5	10.00%	$5,696,621	$569,662			
Agricultural	3	0	10.00%	$51,710	$5,171			
Religious / Non-	12	1	10.00%	$600,000	$60,000			
Government	5	1	10.00%	$575,000	$57,500			
Education	2	0	10.00%	$500,000	$50,000			
Utilities	2	0	10.00%	$275,000	$27,500			
Total	856	86	10.00%	$129,147,363	$12,914,736	4540	454	10.0%

Task B. Determine whether (and where) you want to collect additional inventory data.

1. Do you know where your greatest damages may occur in your hazard areas? **Yes**
2. Do you know whether your critical facilities will be operational after a hazard event? **Yes**
3. Is there enough data to determine which assets are subject to the greatest potential damages? **Yes**
4. Is there enough data to determine whether significant elements of the community are vulnerable to potential hazards? **Yes**
5. Is there enough data to determine whether certain areas of historic, environmental, political, or cultural significance are vulnerable to potential hazards? **Yes**
6. Is there concern about a particular hazard because of its severity, repetitiveness, or likelihood of occurrence? **Yes**
7. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives? **No**

Inventory Assets Northwest Ward

What will be affected by the hazard event?

Task A. Determine the proportion of buildings, the value of buildings, and the population in your community of state that are located in hazards areas.

Hazard: Winter Storm Scale: Large

Type of Structure (Occupancy Class)	Number of Structures			Value of Structures		Number of People		
	# In Community	# In Hazard Area	% In Hazard Area	$ In Community	S In Hazard Area	# In Community	# In Hazard Area	% In Hazard Area
Residential	920	920	100.00%	$76,559,634	$76,559,634	4540	4540	100.0%
Commercial	158	158	100.00%	$44,889,398	$44,889,398			
Industrial	54	54	100.00%	$5,696,621	$5,696,621			
Agricultural	3	3	100.00%	$51,710	$51,710			
Religious / Non-	12	12	100.00%	$600,000	$600,000			
Government	5	5	100.00%	$575,000	$575,000			
Education	2	2	100.00%	$500,000	$500,000			
Utilities	2	2	100.00%	$275,000	$275,000			
Total	856	856	100.00%	$129,147,363	$129,147,363	4540	4540	100.0%

Task B. Determine whether (and where) you want to collect additional inventory data.

1. Do you know where your greatest damages may occur in your hazard areas? **Yes**
2. Do you know whether your critical facilities will be operational after a hazard event? **Yes**
3. Is there enough data to determine which assets are subject to the greatest potential damages? **Yes**
4. Is there enough data to determine whether significant elements of the community are vulnerable to potential hazards? **Yes**
5. Is there enough data to determine whether certain areas of historic, environmental, political, or cultural significance are vulnerable to potential hazards? **Yes**
6. Is there concern about a particular hazard because of its severity, repetitiveness, or likelihood of occurrence? **Yes**
7. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives? **No**

Inventory Assets Northwest Ward

What will be affected by the hazard event?

Task A. Determine the proportion of buildings, the value of buildings, and the population in your community of state that are located in hazards areas.

Hazard: Winter Storm Scale: Medium

Type of Structure (Occupancy Class)	Number of Structures			Value of Structures		Number of People		
	# In Community	# In Hazard Area	% In Hazard Area	$ In Community	S In Hazard Area	# In Community	# In Hazard Area	% In Hazard Area
Residential	920	460	50.0%	$76,559,634	$38,279,817	4540	4540	100.0%
Commercial	158	79	50.0%	$44,889,398	$22,444,699			
Industrial	54	27	50.0%	$5,696,621	$2,848,38			
Agricultural	3	2	50.0%	$51,710	$25,855			
Religious / Non-	12	6	50.0%	$600,000	$300,000			
Government	5	3	50.0%	$575,000	$287,500			
Education	2	1	50.0%	$500,000	$250,000			
Utilities	2	1	50.0%	$275,000	$137,500			
Total	856	578	50.0%	$129,147,363	$64,573,682	4540	4540	100.0%

Task B. Determine whether (and where) you want to collect additional inventory data.

1. Do you know where your greatest damages may occur in your hazard areas? **Yes**
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6. Is there concern about a particular hazard because of its severity, repetitiveness, or likelihood of occurrence? **Yes**
7. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives? **No**

What will be affected by the hazard event?

Task A. Determine the proportion of buildings, the value of buildings, and the population in your community of state that are located in hazards areas.

Hazard: Winter Storm Scale: Small

Type of Structure (Occupancy Class)	Number of Structures			Value of Structures		Number of People		
	# In Community	# In Hazard Area	% In Hazard Area	$ In Community	S In Hazard Area	# In Community	# In Hazard Area	% In Hazard Area
Residential	920	92	10.00%	$76,559,634	$7,655,963	4540	454	10.0%
Commercial	158	16	10.00%	$44,889,398	$4,488,940			
Industrial	54	5	10.00%	$5,696,621	$569,662			
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Education	2	0	10.00%	$500,000	$50,000			
Utilities	2	0	10.00%	$275,000	$27,500			
Total	856	86	10.00%	$129,147,363	$12,914,736	4540	454	10.0%

Task B. Determine whether (and where) you want to collect additional inventory data.

1. Do you know where your greatest damages may occur in your hazard areas? **Yes**
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6. Is there concern about a particular hazard because of its severity, repetitiveness, or likelihood of occurrence? **Yes**
7. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives? **No**

What will be affected by the hazard event?

Task A. Determine the proportion of buildings, the value of buildings, and the population in your community of state that are located in hazards areas.

Hazard: Tornado Scale: Large

Type of Structure (Occupancy Class)	Number of Structures			Value of Structures		Number of People		
	# In Community	# In Hazard Area	% In Hazard Area	$ In Community	S In Hazard Area	# In Community	# In Hazard Area	% In Hazard Area
Residential	920	920	100.00%	$76,559,634	$76,559,634	4540	4540	100.0%
Commercial	158	158	100.00%	$44,889,398	$44,889,398			
Industrial	54	54	100.00%	$5,696,621	$5,696,621			
Agricultural	3	3	100.00%	$51,710	$51,710			
Religious / Non-	12	12	100.00%	$600,000	$600,000			
Government	5	5	100.00%	$575,000	$575,000			
Education	2	2	100.00%	$500,000	$500,000			
Utilities	2	2	100.00%	$275,000	$275,000			
Total	856	856	100.00%	$129,147,363	$129,147,363	4540	4540	100.0%

Task B. Determine whether (and where) you want to collect additional inventory data.

1. Do you know where your greatest damages may occur in your hazard areas? **Yes**
2. Do you know whether your critical facilities will be operational after a hazard event? **Yes**
3. Is there enough data to determine which assets are subject to the greatest potential damages? **Yes**
4. Is there enough data to determine whether significant elements of the community are vulnerable to potential hazards? **Yes**
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6. Is there concern about a particular hazard because of its severity, repetitiveness, or likelihood of occurrence? **Yes**
7. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives? **No**

What will be affected by the hazard event?

Task A. Determine the proportion of buildings, the value of buildings, and the population in your community of state that are located in hazards areas.

Hazard: Tornado Scale: Medium

Type of Structure (Occupancy Class)	Number of Structures			Value of Structures		Number of People		
	# In Community	# In Hazard Area	% In Hazard Area	$ In Community	S In Hazard Area	# In Community	# In Hazard Area	% In Hazard Area
Residential	920	460	50.0%	$76,559,634	$38,279,817	4540	4540	100.0%
Commercial	158	79	50.0%	$44,889,398	$22,444,699			
Industrial	54	27	50.0%	$5,696,621	$2,848,38			
Agricultural	3	2	50.0%	$51,710	$25,855			
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7. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives? **No**

Inventory Assets Northwest Ward

What will be affected by the hazard event?

Task A. Determine the proportion of buildings, the value of buildings, and the population in your community of state that are located in hazards areas.

Hazard: Tornado Scale: Small

Type of Structure (Occupancy Class)	Number of Structures			Value of Structures		Number of People		
	# In Community	# In Hazard Area	% In Hazard Area	$ In Community	S In Hazard Area	# In Community	# In Hazard Area	% In Hazard Area
Residential	920	92	10.00%	$76,559,634	$7,655,963	4540	454	10.0%
Commercial	158	16	10.00%	$44,889,398	$4,488,940			
Industrial	54	5	10.00%	$5,696,621	$569,662			
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Education	2	0	10.00%	$500,000	$50,000			
Utilities	2	0	10.00%	$275,000	$27,500			
Total	856	86	10.00%	$129,147,363	$12,914,736	4540	454	10.0%

Task B. Determine whether (and where) you want to collect additional inventory data.

1. Do you know where your greatest damages may occur in your hazard areas? **Yes**
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What will be affected by the hazard event?

Task A. Determine the proportion of buildings, the value of buildings, and the population in your community of state that are located in hazards areas.

Hazard: Hail Storm Scale: Large

Type of Structure (Occupancy Class)	Number of Structures			Value of Structures		Number of People		
	# In Community	# In Hazard Area	% In Hazard Area	$ In Community	S In Hazard Area	# In Community	# In Hazard Area	% In Hazard Area
Residential	920	920	100.00%	$76,559,634	$76,559,634	4540	4540	100.0%
Commercial	158	158	100.00%	$44,889,398	$44,889,398			
Industrial	54	54	100.00%	$5,696,621	$5,696,621			
Agricultural	3	3	100.00%	$51,710	$51,710			
Religious / Non-	12	12	100.00%	$600,000	$600,000			
Government	5	5	100.00%	$575,000	$575,000			
Education	2	2	100.00%	$500,000	$500,000			
Utilities	2	2	100.00%	$275,000	$275,000			
Total	856	856	100.00%	$129,147,363	$129,147,363	4540	4540	100.0%

Task B. Determine whether (and where) you want to collect additional inventory data.

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2. Do you know whether your critical facilities will be operational after a hazard event? **Yes**
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5. Is there enough data to determine whether certain areas of historic, environmental, political, or cultural significance are vulnerable to potential hazards? **Yes**
6. Is there concern about a particular hazard because of its severity, repetitiveness, or likelihood of occurrence? **Yes**
7. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives? **No**

Inventory Assets Northwest Ward

What will be affected by the hazard event?

Task A. Determine the proportion of buildings, the value of buildings, and the population in your community of state that are located in hazards areas.

Hazard: Hail Storm Scale: Medium

Type of Structure (Occupancy Class)	Number of Structures			Value of Structures		Number of People		
	# In Community	# In Hazard Area	% In Hazard Area	$ In Community	S In Hazard Area	# In Community	# In Hazard Area	% In Hazard Area
Residential	920	460	50.0%	$76,559,634	$38,279,817	4540	4540	100.0%
Commercial	158	79	50.0%	$44,889,398	$22,444,699			
Industrial	54	27	50.0%	$5,696,621	$2,848,38			
Agricultural	3	2	50.0%	$51,710	$25,855			
Religious / Non-	12	6	50.0%	$600,000	$300,000			
Government	5	3	50.0%	$575,000	$287,500			
Education	2	1	50.0%	$500,000	$250,000			
Utilities	2	1	50.0%	$275,000	$137,500			
Total	856	578	50.0%	$129,147,363	$64,573,682	4540	4540	100.0%

Task B. Determine whether (and where) you want to collect additional inventory data.

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2. Do you know whether your critical facilities will be operational after a hazard event? **Yes**
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5. Is there enough data to determine whether certain areas of historic, environmental, political, or cultural significance are vulnerable to potential hazards? **Yes**
6. Is there concern about a particular hazard because of its severity, repetitiveness, or likelihood of occurrence? **Yes**
7. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives? **No**

Task A. Determine the proportion of buildings, the value of buildings, and the population in your community of state that are located in hazards areas.

Hazard: Hail Storm Scale: Small

Type of Structure (Occupancy Class)	Number of Structures			Value of Structures		Number of People		
	# In Community	# In Hazard Area	% In Hazard Area	$ In Community	S In Hazard Area	# In Community	# In Hazard Area	% In Hazard Area
Residential	920	92	10.00%	$76,559,634	$7,655,963	4540	454	10.0%
Commercial	158	16	10.00%	$44,889,398	$4,488,940			
Industrial	54	5	10.00%	$5,696,621	$569,662			
Agricultural	3	0	10.00%	$51,710	$5,171			
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Government	5	1	10.00%	$575,000	$57,500			
Education	2	0	10.00%	$500,000	$50,000			
Utilities	2	0	10.00%	$275,000	$27,500			
Total	856	86	10.00%	$129,147,363	$12,914,736	4540	454	10.0%

Task B. Determine whether (and where) you want to collect additional inventory data.

1. Do you know where your greatest damages may occur in your hazard areas? **Yes**
2. Do you know whether your critical facilities will be operational after a hazard event? **Yes**
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6. Is there concern about a particular hazard because of its severity, repetitiveness, or likelihood of occurrence? **Yes**
7. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives? **No**

What will be affected by the hazard event?

Task A. Determine the proportion of buildings, the value of buildings, and the population in your community of state that are located in hazards areas.

Hazard: Wildfire Scale: Large

Type of Structure (Occupancy Class)	Number of Structures			Value of Structures		Number of People		
	# In Community	# In Hazard Area	% In Hazard Area	$ In Community	S In Hazard Area	# In Community	# In Hazard Area	% In Hazard Area
Residential	920	920	100.00%	$76,559,634	$76,559,634	4540	4540	100.0%
Commercial	158	158	100.00%	$44,889,398	$44,889,398			
Industrial	54	54	100.00%	$5,696,621	$5,696,621			
Agricultural	3	3	100.00%	$51,710	$51,710			
Religious / Non-	12	12	100.00%	$600,000	$600,000			
Government	5	5	100.00%	$575,000	$575,000			
Education	2	2	100.00%	$500,000	$500,000			
Utilities	2	2	100.00%	$275,000	$275,000			
Total	856	856	100.00%	$129,147,363	$129,147,363	4540	4540	100.0%

Task B. Determine whether (and where) you want to collect additional inventory data.

1. Do you know where your greatest damages may occur in your hazard areas? **Yes**
2. Do you know whether your critical facilities will be operational after a hazard event? **Yes**
3. Is there enough data to determine which assets are subject to the greatest potential damages? **Yes**
4. Is there enough data to determine whether significant elements of the community are vulnerable to potential hazards? **Yes**
5. Is there enough data to determine whether certain areas of historic, environmental, political, or cultural significance are vulnerable to potential hazards? **Yes**
6. Is there concern about a particular hazard because of its severity, repetitiveness, or likelihood of occurrence? **Yes**
7. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives? **No**

What will be affected by the hazard event?

Task A. Determine the proportion of buildings, the value of buildings, and the population in your community of state that are located in hazards areas.

Hazard: Wildfire Scale: Medium

Type of Structure (Occupancy Class)	Number of Structures			Value of Structures		Number of People		
	# In Community	# In Hazard Area	% In Hazard Area	$ In Community	S In Hazard Area	# In Community	# In Hazard Area	% In Hazard Area
Residential	920	460	50.0%	$76,559,634	$38,279,817	4540	4540	100.0%
Commercial	158	79	50.0%	$44,889,398	$22,444,699			
Industrial	54	27	50.0%	$5,696,621	$2,848,38			
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Government	5	3	50.0%	$575,000	$287,500			
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Total	856	578	50.0%	$129,147,363	$64,573,682	4540	4540	100.0%

Task B. Determine whether (and where) you want to collect additional inventory data.

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6. Is there concern about a particular hazard because of its severity, repetitiveness, or likelihood of occurrence? **Yes**
7. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives? **No**

What will be affected by the hazard event?

Task A. Determine the proportion of buildings, the value of buildings, and the population in your community of state that are located in hazards areas.

Hazard: Wildfire Scale: Small

Type of Structure (Occupancy Class)	Number of Structures			Value of Structures		Number of People		
	# In Community	# In Hazard Area	% In Hazard Area	$ In Community	S In Hazard Area	# In Community	# In Hazard Area	% In Hazard Area
Residential	920	92	10.00%	$76,559,634	$7,655,963	4540	454	10.0%
Commercial	158	16	10.00%	$44,889,398	$4,488,940			
Industrial	54	5	10.00%	$5,696,621	$569,662			
Agricultural	3	0	10.00%	$51,710	$5,171			
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Government	5	1	10.00%	$575,000	$57,500			
Education	2	0	10.00%	$500,000	$50,000			
Utilities	2	0	10.00%	$275,000	$27,500			
Total	856	86	10.00%	$129,147,363	$12,914,736	4540	454	10.0%

Task B. Determine whether (and where) you want to collect additional inventory data.

1. Do you know where your greatest damages may occur in your hazard areas? **Yes**
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5. Is there enough data to determine whether certain areas of historic, environmental, political, or cultural significance are vulnerable to potential hazards? **Yes**
6. Is there concern about a particular hazard because of its severity, repetitiveness, or likelihood of occurrence? **Yes**
7. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives? **No**

Task A. Determine the proportion of buildings, the value of buildings, and the population in your community of state that are located in hazards areas.

Hazard: Flood 100 Year Flood Plain

Type of Structure (Occupancy Class)	Number of Structures			Value of Structures		Number of People		
	# In Community	# In Hazard Area	% In Hazard Area	$ In Community	S In Hazard Area	# In Community	# In Hazard Area	% In Hazard Area
Residential	881	20	1.7%	$98,279,270	$1,664,340	7421	60	0.8%
Commercial	75	8	14.7%	$21,308,259	$3,125,28			
Industrial	0	0	0.0%	$0	$0			
Agricultural	0	0	0.0%	$0	$0			
Religious / Non-	15	0	0.0%	$750,000	$0			
Government	2	0	0.0%	$150,000	$0			
Education	3	1	33.3%	$1,075,000	$358,333			
Utilities	2	0	0.0%	$275,000	$0			
Total	1278	32	2.5%	$121,837,529	$5,147,885	7421	60	0.8%

Task B. Determine whether (and where) you want to collect additional inventory data.

1. Do you know where your greatest damages may occur in your hazard areas? **Yes**
2. Do you know whether your critical facilities will be operational after a hazard event? **Yes**
3. Is there enough data to determine which assets are subject to the greatest potential damages? **Yes**
4. Is there enough data to determine whether significant elements of the community are vulnerable to potential hazards? **Yes**
5. Is there enough data to determine whether certain areas of historic, environmental, political, or cultural significance are vulnerable to potential hazards? **Yes**
6. Is there concern about a particular hazard because of its severity, repetitiveness, or likelihood of occurrence? **Yes**
7. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives? **No**

Inventory Assets Southeast Ward

What will be affected by the hazard event?

Task A. Determine the proportion of buildings, the value of buildings, and the population in your community of state that are located in hazards areas.

Hazard: Winter Storm Scale: Large

Type of Structure (Occupancy Class)	Number of Structures			Value of Structures		Number of People		
	# In Community	# In Hazard Area	% In Hazard Area	$ In Community	S In Hazard Area	# In Community	# In Hazard Area	% In Hazard Area
Residential	881	920	100.00%	$98,279,270	$98,279,270	7421	7421	100.0%
Commercial	75	75	100.00%	$21,308,259	$21,308,259			
Industrial	0	0	0.0%	$0	$0			
Agricultural	0	0	0.0%	$0	$0			
Religious / Non-	15	15	100.00%	$750,000	$750,000			
Government	2	2	100.00%	$150,000	$150,000			
Education	3	3	100.00%	$1,075,000	$1,075,000			
Utilities	2	2	100.00%	$275,000	$275,000			
Total	1278	1278	100.00%	$121,837,529	$121,837,529	7421	7421	100.0%

Task B. Determine whether (and where) you want to collect additional inventory data.

1. Do you know where your greatest damages may occur in your hazard areas? **Yes**
2. Do you know whether your critical facilities will be operational after a hazard event? **Yes**
3. Is there enough data to determine which assets are subject to the greatest potential damages? **Yes**
4. Is there enough data to determine whether significant elements of the community are vulnerable to potential hazards? **Yes**
5. Is there enough data to determine whether certain areas of historic, environmental, political, or cultural significance are vulnerable to potential hazards? **Yes**
6. Is there concern about a particular hazard because of its severity, repetitiveness, or likelihood of occurrence? **Yes**
7. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives? **No**

Inventory Assets Southeast Ward

What will be affected by the hazard event?

Task A. Determine the proportion of buildings, the value of buildings, and the population in your community of state that are located in hazards areas.

Hazard: Winter Storm Scale: Medium

Type of Structure (Occupancy Class)	Number of Structures			Value of Structures		Number of People		
	# In Community	# In Hazard Area	% In Hazard Area	$ In Community	S In Hazard Area	# In Community	# In Hazard Area	% In Hazard Area
Residential	881	591	50.0%	$98,279,270	$49,139,635	7421	378	50.0%
Commercial	75	38	50.0%	$21,308,259	$10,654,130			
Industrial	0	0	0%	$0	$0			
Agricultural	0	0	0%	$0	$0			
Religious / Non-	15	8	50.0%	$750,000	$375,000			
Government	2	1	50.0%	$150,000	$75,000			
Education	3	2	50.0%	$1,075,000	$537,500			
Utilities	2	1	50.0%	$275,000	$137,500			
Total	1278	639	50.0%	$121,837,529	$60,918,765	7421	378	50.0%

Task B. Determine whether (and where) you want to collect additional inventory data.

1. Do you know where your greatest damages may occur in your hazard areas? **Yes**
2. Do you know whether your critical facilities will be operational after a hazard event? **Yes**
3. Is there enough data to determine which assets are subject to the greatest potential damages? **Yes**
4. Is there enough data to determine whether significant elements of the community are vulnerable to potential hazards? **Yes**
5. Is there enough data to determine whether certain areas of historic, environmental, political, or cultural significance are vulnerable to potential hazards? **Yes**
6. Is there concern about a particular hazard because of its severity, repetitiveness, or likelihood of occurrence? **Yes**
7. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives? **No**

What will be affected by the hazard event?

Task A. Determine the proportion of buildings, the value of buildings, and the population in your community of state that are located in hazards areas.

Hazard: Winter Storm Scale: Small

Type of Structure (Occupancy Class)	Number of Structures			Value of Structures		Number of People		
	# In Community	# In Hazard Area	% In Hazard Area	$ In Community	S In Hazard Area	# In Community	# In Hazard Area	% In Hazard Area
Residential	881	88	10.00%	$98,279,270	$9,827,927	7421	742	10.0%
Commercial	75	8	10.00%	$21,308,259	$2,130,826			
Industrial	0	0	0%	$0	$0			
Agricultural	0	0	0%	$0	$0			
Religious / Non-	15	2	10.00%	$750,000	$75,000			
Government	2	0	10.00%	$150,000	$15,000			
Education	3	0	10.00%	$1,075,000	$107,500			
Utilities	2	0	10.00%	$275,000	$27,500			
Total	1278	128	10.00%	$121,837,529	$12,183,753	7421	742	10.0%

Task B. Determine whether (and where) you want to collect additional inventory data.

1. Do you know where your greatest damages may occur in your hazard areas? **Yes**
2. Do you know whether your critical facilities will be operational after a hazard event? **Yes**
3. Is there enough data to determine which assets are subject to the greatest potential damages? **Yes**
4. Is there enough data to determine whether significant elements of the community are vulnerable to potential hazards? **Yes**
5. Is there enough data to determine whether certain areas of historic, environmental, political, or cultural significance are vulnerable to potential hazards? **Yes**
6. Is there concern about a particular hazard because of its severity, repetitiveness, or likelihood of occurrence? **Yes**
7. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives? **No**

What will be affected by the hazard event?

Task A. Determine the proportion of buildings, the value of buildings, and the population in your community of state that are located in hazards areas.

Hazard: Hail Storm Scale: Large

Type of Structure (Occupancy Class)	Number of Structures			Value of Structures		Number of People		
	# In Community	# In Hazard Area	% In Hazard Area	$ In Community	S In Hazard Area	# In Community	# In Hazard Area	% In Hazard Area
Residential	881	920	100.00%	$98,279,270	$98,279,270	7421	7421	100.0%
Commercial	75	75	100.00%	$21,308,259	$21,308,259			
Industrial	0	0	0.0%	$0	$0			
Agricultural	0	0	0.0%	$0	$0			
Religious / Non-	15	15	100.00%	$750,000	$750,000			
Government	2	2	100.00%	$150,000	$150,000			
Education	3	3	100.00%	$1,075,000	$1,075,000			
Utilities	2	2	100.00%	$275,000	$275,000			
Total	1278	1278	100.00%	$121,837,529	$121,837,529	7421	7421	100.0%

Task B. Determine whether (and where) you want to collect additional inventory data.

1. Do you know where your greatest damages may occur in your hazard areas? **Yes**
2. Do you know whether your critical facilities will be operational after a hazard event? **Yes**
3. Is there enough data to determine which assets are subject to the greatest potential damages? **Yes**
4. Is there enough data to determine whether significant elements of the community are vulnerable to potential hazards? **Yes**
5. Is there enough data to determine whether certain areas of historic, environmental, political, or cultural significance are vulnerable to potential hazards? **Yes**
6. Is there concern about a particular hazard because of its severity, repetitiveness, or likelihood of occurrence? **Yes**
7. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives? **No**

Inventory Assets Southeast Ward

What will be affected by the hazard event?

Task A. Determine the proportion of buildings, the value of buildings, and the population in your community of state that are located in hazards areas.

Hazard: Hail Storm Scale: Medium

Type of Structure (Occupancy Class)	Number of Structures			Value of Structures		Number of People		
	# In Community	# In Hazard Area	% In Hazard Area	$ In Community	S In Hazard Area	# In Community	# In Hazard Area	% In Hazard Area
Residential	881	591	50.0%	$98,279,270	$49,139,635	7421	378	50.0%
Commercial	75	38	50.0%	$21,308,259	$10,654,130			
Industrial	0	0	0%	$0	$0			
Agricultural	0	0	0%	$0	$0			
Religious / Non-	15	8	50.0%	$750,000	$375,000			
Government	2	1	50.0%	$150,000	$75,000			
Education	3	2	50.0%	$1,075,000	$537,500			
Utilities	2	1	50.0%	$275,000	$137,500			
Total	1278	639	50.0%	$121,837,529	$60,918,765	7421	378	50.0%

Task B. Determine whether (and where) you want to collect additional inventory data.

1. Do you know where your greatest damages may occur in your hazard areas? **Yes**
2. Do you know whether your critical facilities will be operational after a hazard event? **Yes**
3. Is there enough data to determine which assets are subject to the greatest potential damages? **Yes**
4. Is there enough data to determine whether significant elements of the community are vulnerable to potential hazards? **Yes**
5. Is there enough data to determine whether certain areas of historic, environmental, political, or cultural significance are vulnerable to potential hazards? **Yes**
6. Is there concern about a particular hazard because of its severity, repetitiveness, or likelihood of occurrence? **Yes**
7. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives? **No**

What will be affected by the hazard event?

Task A. Determine the proportion of buildings, the value of buildings, and the population in your community of state that are located in hazards areas.

Hazard: Hail Storm Scale: Small

Type of Structure (Occupancy Class)	Number of Structures			Value of Structures		Number of People		
	# In Community	# In Hazard Area	% In Hazard Area	$ In Community	S In Hazard Area	# In Community	# In Hazard Area	% In Hazard Area
Residential	881	88	10.00%	$98,279,270	$9,827,927	7421	742	10.0%
Commercial	75	8	10.00%	$21,308,259	$2,130,826			
Industrial	0	0	0%	$0	$0			
Agricultural	0	0	0%	$0	$0			
Religious / Non-	15	2	10.00%	$750,000	$75,000			
Government	2	0	10.00%	$150,000	$15,000			
Education	3	0	10.00%	$1,075,000	$107,500			
Utilities	2	0	10.00%	$275,000	$27,500			
Total	1278	128	10.00%	$121,837,529	$12,183,753	7421	742	10.0%

Task B. Determine whether (and where) you want to collect additional inventory data.

1. Do you know where your greatest damages may occur in your hazard areas? **Yes**
2. Do you know whether your critical facilities will be operational after a hazard event? **Yes**
3. Is there enough data to determine which assets are subject to the greatest potential damages? **Yes**
4. Is there enough data to determine whether significant elements of the community are vulnerable to potential hazards? **Yes**
5. Is there enough data to determine whether certain areas of historic, environmental, political, or cultural significance are vulnerable to potential hazards? **Yes**
6. Is there concern about a particular hazard because of its severity, repetitiveness, or likelihood of occurrence? **Yes**
7. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives? **No**

Task A. Determine the proportion of buildings, the value of buildings, and the population in your community of state that are located in hazards areas.

Hazard: Tornado Scale: Large

Type of Structure (Occupancy Class)	Number of Structures			Value of Structures		Number of People		
	# In Community	# In Hazard Area	% In Hazard Area	$ In Community	S In Hazard Area	# In Community	# In Hazard Area	% In Hazard Area
Residential	881	920	100.00%	$98,279,270	$98,279,270	7421	7421	100.0%
Commercial	75	75	100.00%	$21,308,259	$21,308,259			
Industrial	0	0	0.0%	$0	$0			
Agricultural	0	0	0.0%	$0	$0			
Religious / Non-	15	15	100.00%	$750,000	$750,000			
Government	2	2	100.00%	$150,000	$150,000			
Education	3	3	100.00%	$1,075,000	$1,075,000			
Utilities	2	2	100.00%	$275,000	$275,000			
Total	1278	1278	100.00%	$121,837,529	$121,837,529	7421	7421	100.0%

Task B. Determine whether (and where) you want to collect additional inventory data.

1. Do you know where your greatest damages may occur in your hazard areas? **Yes**
2. Do you know whether your critical facilities will be operational after a hazard event? **Yes**
3. Is there enough data to determine which assets are subject to the greatest potential damages? **Yes**
4. Is there enough data to determine whether significant elements of the community are vulnerable to potential hazards? **Yes**
5. Is there enough data to determine whether certain areas of historic, environmental, political, or cultural significance are vulnerable to potential hazards? **Yes**
6. Is there concern about a particular hazard because of its severity, repetitiveness, or likelihood of occurrence? **Yes**
7. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives? **No**

What will be affected by the hazard event?

Task A. Determine the proportion of buildings, the value of buildings, and the population in your community of state that are located in hazards areas.

Hazard: Tornado Scale: Medium

Type of Structure (Occupancy Class)	Number of Structures			Value of Structures		Number of People		
	# In Community	# In Hazard Area	% In Hazard Area	$ In Community	S In Hazard Area	# In Community	# In Hazard Area	% In Hazard Area
Residential	881	591	50.0%	$98,279,270	$49,139,635	7421	378	50.0%
Commercial	75	38	50.0%	$21,308,259	$10,654,130			
Industrial	0	0	0%	$0	$0			
Agricultural	0	0	0%	$0	$0			
Religious / Non-	15	8	50.0%	$750,000	$375,000			
Government	2	1	50.0%	$150,000	$75,000			
Education	3	2	50.0%	$1,075,000	$537,500			
Utilities	2	1	50.0%	$275,000	$137,500			
Total	1278	639	50.0%	$121,837,529	$60,918,765	7421	378	50.0%

Task B. Determine whether (and where) you want to collect additional inventory data.

1. Do you know where your greatest damages may occur in your hazard areas? **Yes**
2. Do you know whether your critical facilities will be operational after a hazard event? **Yes**
3. Is there enough data to determine which assets are subject to the greatest potential damages? **Yes**
4. Is there enough data to determine whether significant elements of the community are vulnerable to potential hazards? **Yes**
5. Is there enough data to determine whether certain areas of historic, environmental, political, or cultural significance are vulnerable to potential hazards? **Yes**
6. Is there concern about a particular hazard because of its severity, repetitiveness, or likelihood of occurrence? **Yes**
7. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives? **No**

What will be affected by the hazard event?

Task A. Determine the proportion of buildings, the value of buildings, and the population in your community of state that are located in hazards areas.

Hazard: Tornado Scale: Small

Type of Structure (Occupancy Class)	Number of Structures			Value of Structures		Number of People		
	# In Community	# In Hazard Area	% In Hazard Area	$ In Community	S In Hazard Area	# In Community	# In Hazard Area	% In Hazard Area
Residential	881	88	10.00%	$98,279,270	$9,827,927	7421	742	10.0%
Commercial	75	8	10.00%	$21,308,259	$2,130,826			
Industrial	0	0	0%	$0	$0			
Agricultural	0	0	0%	$0	$0			
Religious / Non-	15	2	10.00%	$750,000	$75,000			
Government	2	0	10.00%	$150,000	$15,000			
Education	3	0	10.00%	$1,075,000	$107,500			
Utilities	2	0	10.00%	$275,000	$27,500			
Total	1278	128	10.00%	$121,837,529	$12,183,753	7421	742	10.0%

Task B. Determine whether (and where) you want to collect additional inventory data.

1. Do you know where your greatest damages may occur in your hazard areas? **Yes**
2. Do you know whether your critical facilities will be operational after a hazard event? **Yes**
3. Is there enough data to determine which assets are subject to the greatest potential damages? **Yes**
4. Is there enough data to determine whether significant elements of the community are vulnerable to potential hazards? **Yes**
5. Is there enough data to determine whether certain areas of historic, environmental, political, or cultural significance are vulnerable to potential hazards? **Yes**
6. Is there concern about a particular hazard because of its severity, repetitiveness, or likelihood of occurrence? **Yes**
7. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives? **No**

Task A. Determine the proportion of buildings, the value of buildings, and the population in your community of state that are located in hazards areas.

Hazard: Wildfire Scale: Large

Type of Structure (Occupancy Class)	Number of Structures			Value of Structures		Number of People		
	# In Community	# In Hazard Area	% In Hazard Area	$ In Community	S In Hazard Area	# In Community	# In Hazard Area	% In Hazard Area
Residential	881	920	100.00%	$98,279,270	$98,279,270	7421	7421	100.0%
Commercial	75	75	100.00%	$21,308,259	$21,308,259			
Industrial	0	0	0.0%	$0	$0			
Agricultural	0	0	0.0%	$0	$0			
Religious / Non-	15	15	100.00%	$750,000	$750,000			
Government	2	2	100.00%	$150,000	$150,000			
Education	3	3	100.00%	$1,075,000	$1,075,000			
Utilities	2	2	100.00%	$275,000	$275,000			
Total	1278	1278	100.00%	$121,837,529	$121,837,529	7421	7421	100.0%

Task B. Determine whether (and where) you want to collect additional inventory data.

1. Do you know where your greatest damages may occur in your hazard areas? **Yes**
2. Do you know whether your critical facilities will be operational after a hazard event? **Yes**
3. Is there enough data to determine which assets are subject to the greatest potential damages? **Yes**
4. Is there enough data to determine whether significant elements of the community are vulnerable to potential hazards? **Yes**
5. Is there enough data to determine whether certain areas of historic, environmental, political, or cultural significance are vulnerable to potential hazards? **Yes**
6. Is there concern about a particular hazard because of its severity, repetitiveness, or likelihood of occurrence? **Yes**
7. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives? **No**

What will be affected by the hazard event?

Task A. Determine the proportion of buildings, the value of buildings, and the population in your community of state that are located in hazards areas.

Hazard: Wildfire Scale: Medium

Type of Structure (Occupancy Class)	Number of Structures			Value of Structures		Number of People		
	# In Community	# In Hazard Area	% In Hazard Area	$ In Community	S In Hazard Area	# In Community	# In Hazard Area	% In Hazard Area
Residential	881	591	50.0%	$98,279,270	$49,139,635	7421	378	50.0%
Commercial	75	38	50.0%	$21,308,259	$10,654,130			
Industrial	0	0	0%	$0	$0			
Agricultural	0	0	0%	$0	$0			
Religious / Non-	15	8	50.0%	$750,000	$375,000			
Government	2	1	50.0%	$150,000	$75,000			
Education	3	2	50.0%	$1,075,000	$537,500			
Utilities	2	1	50.0%	$275,000	$137,500			
Total	1278	639	50.0%	$121,837,529	$60,918,765	7421	378	50.0%

Task B. Determine whether (and where) you want to collect additional inventory data.

1. Do you know where your greatest damages may occur in your hazard areas? **Yes**
2. Do you know whether your critical facilities will be operational after a hazard event? **Yes**
3. Is there enough data to determine which assets are subject to the greatest potential damages? **Yes**
4. Is there enough data to determine whether significant elements of the community are vulnerable to potential hazards? **Yes**
5. Is there enough data to determine whether certain areas of historic, environmental, political, or cultural significance are vulnerable to potential hazards? **Yes**
6. Is there concern about a particular hazard because of its severity, repetitiveness, or likelihood of occurrence? **Yes**
7. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives? **No**

What will be affected by the hazard event?

Task A. Determine the proportion of buildings, the value of buildings, and the population in your community of state that are located in hazards areas.

Hazard: Wildfire Scale: Small

Type of Structure (Occupancy Class)	Number of Structures			Value of Structures		Number of People		
	# In Community	# In Hazard Area	% In Hazard Area	$ In Community	S In Hazard Area	# In Community	# In Hazard Area	% In Hazard Area
Residential	881	88	10.00%	$98,279,270	$9,827,927	7421	742	10.0%
Commercial	75	8	10.00%	$21,308,259	$2,130,826			
Industrial	0	0	0%	$0	$0			
Agricultural	0	0	0%	$0	$0			
Religious / Non-	15	2	10.00%	$750,000	$75,000			
Government	2	0	10.00%	$150,000	$15,000			
Education	3	0	10.00%	$1,075,000	$107,500			
Utilities	2	0	10.00%	$275,000	$27,500			
Total	1278	128	10.00%	$121,837,529	$12,183,753	7421	742	10.0%

Task B. Determine whether (and where) you want to collect additional inventory data.

1. Do you know where your greatest damages may occur in your hazard areas? **Yes**
2. Do you know whether your critical facilities will be operational after a hazard event? **Yes**
3. Is there enough data to determine which assets are subject to the greatest potential damages? **Yes**
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6. Is there concern about a particular hazard because of its severity, repetitiveness, or likelihood of occurrence? **Yes**
7. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives? **No**

What will be affected by the hazard event?

Task A. Determine the proportion of buildings, the value of buildings, and the population in your community of state that are located in hazards areas.

Hazard: Drought Scale: Large

Type of Structure (Occupancy Class)	Number of Structures			Value of Structures		Number of People		
	# In Community	# In Hazard Area	% In Hazard Area	$ In Community	S In Hazard Area	# In Community	# In Hazard Area	% In Hazard Area
Residential	881	920	100.00%	$98,279,270	$98,279,270	7421	7421	100.0%
Commercial	75	75	100.00%	$21,308,259	$21,308,259			
Industrial	0	0	0.0%	$0	$0			
Agricultural	0	0	0.0%	$0	$0			
Religious / Non-	15	15	100.00%	$750,000	$750,000			
Government	2	2	100.00%	$150,000	$150,000			
Education	3	3	100.00%	$1,075,000	$1,075,000			
Utilities	2	2	100.00%	$275,000	$275,000			
Total	1278	1278	100.00%	$121,837,529	$121,837,529	7421	7421	100.0%

Task B. Determine whether (and where) you want to collect additional inventory data.

1. Do you know where your greatest damages may occur in your hazard areas? **Yes**
2. Do you know whether your critical facilities will be operational after a hazard event? **Yes**
3. Is there enough data to determine which assets are subject to the greatest potential damages? **Yes**
4. Is there enough data to determine whether significant elements of the community are vulnerable to potential hazards? **Yes**
5. Is there enough data to determine whether certain areas of historic, environmental, political, or cultural significance are vulnerable to potential hazards? **Yes**
6. Is there concern about a particular hazard because of its severity, repetitiveness, or likelihood of occurrence? **Yes**
7. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives? **No**

What will be affected by the hazard event?

Task A. Determine the proportion of buildings, the value of buildings, and the population in your community of state that are located in hazards areas.

Hazard: Drought Scale: Medium

Type of Structure (Occupancy Class)	Number of Structures			Value of Structures		Number of People		
	# In Community	# In Hazard Area	% In Hazard Area	$ In Community	S In Hazard Area	# In Community	# In Hazard Area	% In Hazard Area
Residential	881	591	50.0%	$98,279,270	$49,139,635	7421	378	50.0%
Commercial	75	38	50.0%	$21,308,259	$10,654,130			
Industrial	0	0	0%	$0	$0			
Agricultural	0	0	0%	$0	$0			
Religious / Non-	15	8	50.0%	$750,000	$375,000			
Government	2	1	50.0%	$150,000	$75,000			
Education	3	2	50.0%	$1,075,000	$537,500			
Utilities	2	1	50.0%	$275,000	$137,500			
Total	1278	639	50.0%	$121,837,529	$60,918,765	7421	378	50.0%

Task B. Determine whether (and where) you want to collect additional inventory data.

1. Do you know where your greatest damages may occur in your hazard areas? **Yes**
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6. Is there concern about a particular hazard because of its severity, repetitiveness, or likelihood of occurrence? **Yes**
7. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives? **No**

What will be affected by the hazard event?

Task A. Determine the proportion of buildings, the value of buildings, and the population in your community of state that are located in hazards areas.

Hazard: Drought Scale: Small

Type of Structure (Occupancy Class)	Number of Structures			Value of Structures		Number of People		
	# In Community	# In Hazard Area	% In Hazard Area	$ In Community	S In Hazard Area	# In Community	# In Hazard Area	% In Hazard Area
Residential	881	88	10.00%	$98,279,270	$9,827,927	7421	742	10.0%
Commercial	75	8	10.00%	$21,308,259	$2,130,826			
Industrial	0	0	0%	$0	$0			
Agricultural	0	0	0%	$0	$0			
Religious / Non-	15	2	10.00%	$750,000	$75,000			
Government	2	0	10.00%	$150,000	$15,000			
Education	3	0	10.00%	$1,075,000	$107,500			
Utilities	2	0	10.00%	$275,000	$27,500			
Total	1278	128	10.00%	$121,837,529	$12,183,753	7421	742	10.0%

Task B. Determine whether (and where) you want to collect additional inventory data.

1. Do you know where your greatest damages may occur in your hazard areas? **Yes**
2. Do you know whether your critical facilities will be operational after a hazard event? **Yes**
3. Is there enough data to determine which assets are subject to the greatest potential damages? **Yes**
4. Is there enough data to determine whether significant elements of the community are vulnerable to potential hazards? **Yes**
5. Is there enough data to determine whether certain areas of historic, environmental, political, or cultural significance are vulnerable to potential hazards? **Yes**
6. Is there concern about a particular hazard because of its severity, repetitiveness, or likelihood of occurrence? **Yes**
7. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives? **No**

What will be affected by the hazard event?

Task A. Determine the proportion of buildings, the value of buildings, and the population in your community of state that are located in hazards areas.

Hazard: Flood Scale: 100 Year Flood Plain

Type of Structure (Occupancy Class)	Number of Structures			Value of Structures		Number of People		
	# In Community	# In Hazard Area	% In Hazard Area	$ In Community	S In Hazard Area	# In Community	# In Hazard Area	% In Hazard Area
Residential	1002	61	6.1%	$83,383,428	$5,076,237	3366	183	5.4%
Commercial	67	8	16.4%	$2,889,374	$474,375			
Industrial	147	8	5.4%	$15,507,469	$843,944			
Agricultural	0	0	0.0%	$0	$0			
Religious / Non-	13	0	0.0%	$650,000	$0			
Government	7	4	57.1%	$1,809,890	$1,034,223			
Education	9	0	0.00%	$400,000	$0			
Utilities	1	0	0.00%	$150,000	$0			
Total	1246	84	6.7%	$104,790,161	$7,428,778	3366	183	5.4%

Task B. Determine whether (and where) you want to collect additional inventory data.

1. Do you know where your greatest damages may occur in your hazard areas? **Yes**
2. Do you know whether your critical facilities will be operational after a hazard event? **Yes**
3. Is there enough data to determine which assets are subject to the greatest potential damages? **Yes**
4. Is there enough data to determine whether significant elements of the community are vulnerable to potential hazards? **Yes**
5. Is there enough data to determine whether certain areas of historic, environmental, political, or cultural significance are vulnerable to potential hazards? **Yes**
6. Is there concern about a particular hazard because of its severity, repetitiveness, or likelihood of occurrence? **Yes**
7. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives? **No**

Inventory Assets Southeast Ward

What will be affected by the hazard event?

Task A. Determine the proportion of buildings, the value of buildings, and the population in your community of state that are located in hazards areas.

Hazard: Winter Storm Scale: Large

Type of Structure (Occupancy Class)	Number of Structures			Value of Structures		Number of People		
	# In Community	# In Hazard Area	% In Hazard Area	$ In Community	S In Hazard Area	# In Community	# In Hazard Area	% In Hazard Area
Residential	1002	1002	100.00%	$83,383,428	$83,383,428	3366	3366	100.0%
Commercial	67	67	100.00%	$2,889,374	$2,889,374			
Industrial	147	147	100.0%	$15,507,469	$15,507,469			
Agricultural	0	0	100.0%	$0	$0			
Religious / Non-	13	13	100.00%	$650,000	$650,000			
Government	7	7	100.00%	$1,809,890	$1,809,890			
Education	9	9	100.00%	$400,000	$400,000			
Utilities	1	1	100.00%	$150,000	$150,000			
Total	1246	1246	100.00%	$104,790,161	$104,790,161	3366	3366	100.0%

Task B. Determine whether (and where) you want to collect additional inventory data.

1. Do you know where your greatest damages may occur in your hazard areas? **Yes**
2. Do you know whether your critical facilities will be operational after a hazard event? **Yes**
3. Is there enough data to determine which assets are subject to the greatest potential damages? **Yes**
4. Is there enough data to determine whether significant elements of the community are vulnerable to potential hazards? **Yes**
5. Is there enough data to determine whether certain areas of historic, environmental, political, or cultural significance are vulnerable to potential hazards? **Yes**
6. Is there concern about a particular hazard because of its severity, repetitiveness, or likelihood of occurrence? **Yes**
7. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives? **No**

Inventory Assets Southeast Ward

What will be affected by the hazard event?

Task A. Determine the proportion of buildings, the value of buildings, and the population in your community of state that are located in hazards areas.

Hazard: Winter Storm Scale: Medium

Type of Structure (Occupancy Class)	Number of Structures			Value of Structures		Number of People		
	# In Community	# In Hazard Area	% In Hazard Area	$ In Community	S In Hazard Area	# In Community	# In Hazard Area	% In Hazard Area
Residential	1002	501	50.0%	$83,383,428	$41,691,714	3366	1683	50.0%
Commercial	67	34	50.0%	$2,889,374	$1,444,687			
Industrial	147	74	50.0%	$15,507,469	$7,753,735			
Agricultural	0	0	50.0%	$0	$0			
Religious / Non-	13	7	50.0%	$650,000	$325,000			
Government	7	4	50.0%	$1,809,890	$904,945			
Education	9	5	50.0%	$400,000	$200,000			
Utilities	1	1	50.0%	$150,000	$75,000			
Total	1246	623	50.0%	$104,790,161	$52,395,081	3366	1683	50.0%

Task B. Determine whether (and where) you want to collect additional inventory data.

1. Do you know where your greatest damages may occur in your hazard areas? **Yes**
2. Do you know whether your critical facilities will be operational after a hazard event? **Yes**
3. Is there enough data to determine which assets are subject to the greatest potential damages? **Yes**
4. Is there enough data to determine whether significant elements of the community are vulnerable to potential hazards? **Yes**
5. Is there enough data to determine whether certain areas of historic, environmental, political, or cultural significance are vulnerable to potential hazards? **Yes**
6. Is there concern about a particular hazard because of its severity, repetitiveness, or likelihood of occurrence? **Yes**
7. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives? **No**

What will be affected by the hazard event?

Task A. Determine the proportion of buildings, the value of buildings, and the population in your community of state that are located in hazards areas.

Hazard: Winter Storm Scale: Small

Type of Structure (Occupancy Class)	Number of Structures			Value of Structures		Number of People		
	# In Community	# In Hazard Area	% In Hazard Area	$ In Community	S In Hazard Area	# In Community	# In Hazard Area	% In Hazard Area
Residential	1002	100	10.00%	$83,383,428	$8,338,343	3366	337	10.0%
Commercial	67	7	10.00%	$2,889,374	$288,937			
Industrial	147	15	10.00%	$15,507,469	$1,550,747			
Agricultural	0	0	10.00%	$0	$0			
Religious / Non-	13	1	10.00%	$650,000	$65,000			
Government	7	1	10.00%	$1,809,890	$180,989			
Education	9	1	10.00%	$400,000	$40,000			
Utilities	1	0	10.00%	$150,000	$15,000			
Total	1246	125	10.00%	$104,790,161	$10,479,016	3366	337	10.0%

Task B. Determine whether (and where) you want to collect additional inventory data.

1. Do you know where your greatest damages may occur in your hazard areas? **Yes**
2. Do you know whether your critical facilities will be operational after a hazard event? **Yes**
3. Is there enough data to determine which assets are subject to the greatest potential damages? **Yes**
4. Is there enough data to determine whether significant elements of the community are vulnerable to potential hazards? **Yes**
5. Is there enough data to determine whether certain areas of historic, environmental, political, or cultural significance are vulnerable to potential hazards? **Yes**
6. Is there concern about a particular hazard because of its severity, repetitiveness, or likelihood of occurrence? **Yes**
7. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives? **No**

What will be affected by the hazard event?

Task A. Determine the proportion of buildings, the value of buildings, and the population in your community of state that are located in hazards areas.

Hazard: Tornado Scale: Large

Type of Structure (Occupancy Class)	Number of Structures			Value of Structures		Number of People		
	# In Community	# In Hazard Area	% In Hazard Area	$ In Community	S In Hazard Area	# In Community	# In Hazard Area	% In Hazard Area
Residential	1002	1002	100.00%	$83,383,428	$83,383,428	3366	3366	100.0%
Commercial	67	67	100.00%	$2,889,374	$2,889,374			
Industrial	147	147	100.00%	$15,507,469	$15,507,469			
Agricultural	0	0	100.00%	$0	$0			
Religious / Non-	13	13	100.00%	$650,000	$650,000			
Government	7	7	100.00%	$1,809,890	$1,809,890			
Education	9	9	100.00%	$400,000	$400,000			
Utilities	1	1	100.00%	$150,000	$150,000			
Total	1246	1246	100.00%	$104,790,161	$104,790,161	3366	3366	100.0%

Task B. Determine whether (and where) you want to collect additional inventory data.

1. Do you know where your greatest damages may occur in your hazard areas? **Yes**
2. Do you know whether your critical facilities will be operational after a hazard event? **Yes**
3. Is there enough data to determine which assets are subject to the greatest potential damages? **Yes**
4. Is there enough data to determine whether significant elements of the community are vulnerable to potential hazards? **Yes**
5. Is there enough data to determine whether certain areas of historic, environmental, political, or cultural significance are vulnerable to potential hazards? **Yes**
6. Is there concern about a particular hazard because of its severity, repetitiveness, or likelihood of occurrence? **Yes**
7. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives? **No**

What will be affected by the hazard event?

Task A. Determine the proportion of buildings, the value of buildings, and the population in your community of state that are located in hazards areas.

Hazard: Tornado Scale: Medium

Type of Structure (Occupancy Class)	Number of Structures			Value of Structures		Number of People		
	# In Community	# In Hazard Area	% In Hazard Area	$ In Community	S In Hazard Area	# In Community	# In Hazard Area	% In Hazard Area
Residential	1002	501	50.0%	$83,383,428	$41,691,714	3366	1683	50.0%
Commercial	67	34	50.0%	$2,889,374	$1,444,687			
Industrial	147	74	50.0%	$15,507,469	$7,753,735			
Agricultural	0	0	50.0%	$0	$0			
Religious / Non-	13	7	50.0%	$650,000	$325,000			
Government	7	4	50.0%	$1,809,890	$904,945			
Education	9	5	50.0%	$400,000	$200,000			
Utilities	1	1	50.0%	$150,000	$75,000			
Total	1246	623	50.0%	$104,790,161	$52,395,081	3366	1683	50.0%

Task B. Determine whether (and where) you want to collect additional inventory data.

1. Do you know where your greatest damages may occur in your hazard areas? **Yes**
2. Do you know whether your critical facilities will be operational after a hazard event? **Yes**
3. Is there enough data to determine which assets are subject to the greatest potential damages? **Yes**
4. Is there enough data to determine whether significant elements of the community are vulnerable to potential hazards? **Yes**
5. Is there enough data to determine whether certain areas of historic, environmental, political, or cultural significance are vulnerable to potential hazards? **Yes**
6. Is there concern about a particular hazard because of its severity, repetitiveness, or likelihood of occurrence? **Yes**
7. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives? **No**

What will be affected by the hazard event?

Task A. Determine the proportion of buildings, the value of buildings, and the population in your community of state that are located in hazards areas.

Hazard: Tornado Scale: Small

Type of Structure (Occupancy Class)	Number of Structures			Value of Structures		Number of People		
	# In Community	# In Hazard Area	% In Hazard Area	$ In Community	S In Hazard Area	# In Community	# In Hazard Area	% In Hazard Area
Residential	1002	100	10.00%	$83,383,428	$8,338,343	3366	337	10.0%
Commercial	67	7	10.00%	$2,889,374	$288,937			
Industrial	147	15	10.00%	$15,507,469	$1,550,747			
Agricultural	0	0	10.00%	$0	$0			
Religious / Non-	13	1	10.00%	$650,000	$65,000			
Government	7	1	10.00%	$1,809,890	$180,989			
Education	9	1	10.00%	$400,000	$40,000			
Utilities	1	0	10.00%	$150,000	$15,000			
Total	1246	125	10.00%	$104,790,161	$10,479,016	3366	337	10.0%

Task B. Determine whether (and where) you want to collect additional inventory data.

1. Do you know where your greatest damages may occur in your hazard areas? **Yes**
2. Do you know whether your critical facilities will be operational after a hazard event? **Yes**
3. Is there enough data to determine which assets are subject to the greatest potential damages? **Yes**
4. Is there enough data to determine whether significant elements of the community are vulnerable to potential hazards? **Yes**
5. Is there enough data to determine whether certain areas of historic, environmental, political, or cultural significance are vulnerable to potential hazards? **Yes**
6. Is there concern about a particular hazard because of its severity, repetitiveness, or likelihood of occurrence? **Yes**
7. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives? **No**

What will be affected by the hazard event?

Task A. Determine the proportion of buildings, the value of buildings, and the population in your community of state that are located in hazards areas.

Hazard: Wildfire Scale: Large

Type of Structure (Occupancy Class)	Number of Structures			Value of Structures		Number of People		
	# In Community	# In Hazard Area	% In Hazard Area	$ In Community	S In Hazard Area	# In Community	# In Hazard Area	% In Hazard Area
Residential	1002	1002	100.00%	$83,383,428	$83,383,428	3366	3366	100.0%
Commercial	67	67	100.00%	$2,889,374	$2,889,374			
Industrial	147	147	100.00%	$15,507,469	$15,507,469			
Agricultural	0	0	100.00%	$0	$0			
Religious / Non-	13	13	100.00%	$650,000	$650,000			
Government	7	7	100.00%	$1,809,890	$1,809,890			
Education	9	9	100.00%	$400,000	$400,000			
Utilities	1	1	100.00%	$150,000	$150,000			
Total	1246	1246	100.00%	$104,790,161	$104,790,161	3366	3366	100.0%

Task B. Determine whether (and where) you want to collect additional inventory data.

1. Do you know where your greatest damages may occur in your hazard areas? **Yes**
2. Do you know whether your critical facilities will be operational after a hazard event? **Yes**
3. Is there enough data to determine which assets are subject to the greatest potential damages? **Yes**
4. Is there enough data to determine whether significant elements of the community are vulnerable to potential hazards? **Yes**
5. Is there enough data to determine whether certain areas of historic, environmental, political, or cultural significance are vulnerable to potential hazards? **Yes**
6. Is there concern about a particular hazard because of its severity, repetitiveness, or likelihood of occurrence? **Yes**
7. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives? **No**

What will be affected by the hazard event?

Task A. Determine the proportion of buildings, the value of buildings, and the population in your community of state that are located in hazards areas.

Hazard: Wildfire Scale: Medium

Type of Structure (Occupancy Class)	Number of Structures			Value of Structures		Number of People		
	# In Community	# In Hazard Area	% In Hazard Area	$ In Community	S In Hazard Area	# In Community	# In Hazard Area	% In Hazard Area
Residential	1002	501	50.0%	$83,383,428	$41,691,714	3366	1683	50.0%
Commercial	67	34	50.0%	$2,889,374	$1,444,687			
Industrial	147	74	50.0%	$15,507,469	$7,753,735			
Agricultural	0	0	50.0%	$0	$0			
Religious / Non-	13	7	50.0%	$650,000	$325,000			
Government	7	4	50.0%	$1,809,890	$904,945			
Education	9	5	50.0%	$400,000	$200,000			
Utilities	1	1	50.0%	$150,000	$75,000			
Total	1246	623	50.0%	$104,790,161	$52,395,081	3366	1683	50.0%

Task B. Determine whether (and where) you want to collect additional inventory data.

1. Do you know where your greatest damages may occur in your hazard areas? **Yes**
2. Do you know whether your critical facilities will be operational after a hazard event? **Yes**
3. Is there enough data to determine which assets are subject to the greatest potential damages? **Yes**
4. Is there enough data to determine whether significant elements of the community are vulnerable to potential hazards? **Yes**
5. Is there enough data to determine whether certain areas of historic, environmental, political, or cultural significance are vulnerable to potential hazards? **Yes**
6. Is there concern about a particular hazard because of its severity, repetitiveness, or likelihood of occurrence? **Yes**
7. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives? **No**

What will be affected by the hazard event?

Task A. Determine the proportion of buildings, the value of buildings, and the population in your community of state that are located in hazards areas.

Hazard: Wildfire Scale: Small

Type of Structure (Occupancy Class)	Number of Structures			Value of Structures		Number of People		
	# In Community	# In Hazard Area	% In Hazard Area	$ In Community	S In Hazard Area	# In Community	# In Hazard Area	% In Hazard Area
Residential	1002	100	10.00%	$83,383,428	$8,338,343	3366	337	10.0%
Commercial	67	7	10.00%	$2,889,374	$288,937			
Industrial	147	15	10.00%	$15,507,469	$1,550,747			
Agricultural	0	0	10.00%	$0	$0			
Religious / Non-	13	1	10.00%	$650,000	$65,000			
Government	7	1	10.00%	$1,809,890	$180,989			
Education	9	1	10.00%	$400,000	$40,000			
Utilities	1	0	10.00%	$150,000	$15,000			
Total	1246	125	10.00%	$104,790,161	$10,479,016	3366	337	10.0%

Task B. Determine whether (and where) you want to collect additional inventory data.

1. Do you know where your greatest damages may occur in your hazard areas? **Yes**
2. Do you know whether your critical facilities will be operational after a hazard event? **Yes**
3. Is there enough data to determine which assets are subject to the greatest potential damages? **Yes**
4. Is there enough data to determine whether significant elements of the community are vulnerable to potential hazards? **Yes**
5. Is there enough data to determine whether certain areas of historic, environmental, political, or cultural significance are vulnerable to potential hazards? **Yes**
6. Is there concern about a particular hazard because of its severity, repetitiveness, or likelihood of occurrence? **Yes**
7. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives? **No**

What will be affected by the hazard event?

Task A. Determine the proportion of buildings, the value of buildings, and the population in your community of state that are located in hazards areas.

Hazard: Drought Scale: Large

Type of Structure (Occupancy Class)	Number of Structures			Value of Structures		Number of People		
	# In Community	# In Hazard Area	% In Hazard Area	$ In Community	S In Hazard Area	# In Community	# In Hazard Area	% In Hazard Area
Residential	1002	1002	100.00%	$83,383,428	$83,383,428	3366	3366	100.0%
Commercial	67	67	100.00%	$2,889,374	$2,889,374			
Industrial	147	147	100.00%	$15,507,469	$15,507,469			
Agricultural	0	0	100.00%	$0	$0			
Religious / Non-	13	13	100.00%	$650,000	$650,000			
Government	7	7	100.00%	$1,809,890	$1,809,890			
Education	9	9	100.00%	$400,000	$400,000			
Utilities	1	1	100.00%	$150,000	$150,000			
Total	1246	1246	100.00%	$104,790,161	$104,790,161	3366	3366	100.0%

Task B. Determine whether (and where) you want to collect additional inventory data.

1. Do you know where your greatest damages may occur in your hazard areas? **Yes**
2. Do you know whether your critical facilities will be operational after a hazard event? **Yes**
3. Is there enough data to determine which assets are subject to the greatest potential damages? **Yes**
4. Is there enough data to determine whether significant elements of the community are vulnerable to potential hazards? **Yes**
5. Is there enough data to determine whether certain areas of historic, environmental, political, or cultural significance are vulnerable to potential hazards? **Yes**
6. Is there concern about a particular hazard because of its severity, repetitiveness, or likelihood of occurrence? **Yes**
7. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives? **No**

What will be affected by the hazard event?

Task A. Determine the proportion of buildings, the value of buildings, and the population in your community of state that are located in hazards areas.

Hazard: Drought Scale: Medium

Type of Structure (Occupancy Class)	Number of Structures			Value of Structures		Number of People		
	# In Community	# In Hazard Area	% In Hazard Area	$ In Community	S In Hazard Area	# In Community	# In Hazard Area	% In Hazard Area
Residential	1002	501	50.0%	$83,383,428	$41,691,714	3366	1683	50.0%
Commercial	67	34	50.0%	$2,889,374	$1,444,687			
Industrial	147	74	50.0%	$15,507,469	$7,753,735			
Agricultural	0	0	50.0%	$0	$0			
Religious / Non-	13	7	50.0%	$650,000	$325,000			
Government	7	4	50.0%	$1,809,890	$904,945			
Education	9	5	50.0%	$400,000	$200,000			
Utilities	1	1	50.0%	$150,000	$75,000			
Total	1246	623	50.0%	$104,790,161	$52,395,081	3366	1683	50.0%

Task B. Determine whether (and where) you want to collect additional inventory data.

1. Do you know where your greatest damages may occur in your hazard areas? **Yes**
2. Do you know whether your critical facilities will be operational after a hazard event? **Yes**
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6. Is there concern about a particular hazard because of its severity, repetitiveness, or likelihood of occurrence? **Yes**
7. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives? **No**

What will be affected by the hazard event?

Task A. Determine the proportion of buildings, the value of buildings, and the population in your community of state that are located in hazards areas.

Hazard: Drought Scale: Small

Type of Structure (Occupancy Class)	Number of Structures			Value of Structures		Number of People		
	# In Community	# In Hazard Area	% In Hazard Area	$ In Community	S In Hazard Area	# In Community	# In Hazard Area	% In Hazard Area
Residential	1002	100	10.00%	$83,383,428	$8,338,343	3366	337	10.0%
Commercial	67	7	10.00%	$2,889,374	$288,937			
Industrial	147	15	10.00%	$15,507,469	$1,550,747			
Agricultural	0	0	10.00%	$0	$0			
Religious / Non-	13	1	10.00%	$650,000	$65,000			
Government	7	1	10.00%	$1,809,890	$180,989			
Education	9	1	10.00%	$400,000	$40,000			
Utilities	1	0	10.00%	$150,000	$15,000			
Total	1246	125	10.00%	$104,790,161	$10,479,016	3366	337	10.0%

Task B. Determine whether (and where) you want to collect additional inventory data.

1. Do you know where your greatest damages may occur in your hazard areas? **Yes**
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6. Is there concern about a particular hazard because of its severity, repetitiveness, or likelihood of occurrence? **Yes**
7. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives? **No**

Task A. Determine the proportion of buildings, the value of buildings, and the population in your community of state that are located in hazards areas.

Hazard: Hail Scale: Large

Type of Structure (Occupancy Class)	Number of Structures			Value of Structures		Number of People		
	# In Community	# In Hazard Area	% In Hazard Area	$ In Community	S In Hazard Area	# In Community	# In Hazard Area	% In Hazard Area
Residential	1002	1002	100.00%	$83,383,428	$83,383,428	3366	3366	100.0%
Commercial	67	67	100.00%	$2,889,374	$2,889,374			
Industrial	147	147	100.00%	$15,507,469	$15,507,469			
Agricultural	0	0	100.00%	$0	$0			
Religious / Non-	13	13	100.00%	$650,000	$650,000			
Government	7	7	100.00%	$1,809,890	$1,809,890			
Education	9	9	100.00%	$400,000	$400,000			
Utilities	1	1	100.00%	$150,000	$150,000			
Total	1246	1246	100.00%	$104,790,161	$104,790,161	3366	3366	100.0%

Task B. Determine whether (and where) you want to collect additional inventory data.

1. Do you know where your greatest damages may occur in your hazard areas? **Yes**
2. Do you know whether your critical facilities will be operational after a hazard event? **Yes**
3. Is there enough data to determine which assets are subject to the greatest potential damages? **Yes**
4. Is there enough data to determine whether significant elements of the community are vulnerable to potential hazards? **Yes**
5. Is there enough data to determine whether certain areas of historic, environmental, political, or cultural significance are vulnerable to potential hazards? **Yes**
6. Is there concern about a particular hazard because of its severity, repetitiveness, or likelihood of occurrence? **Yes**
7. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives? **No**

What will be affected by the hazard event?

Task A. Determine the proportion of buildings, the value of buildings, and the population in your community of state that are located in hazards areas.

Hazard: Hail Scale: Medium

Type of Structure (Occupancy Class)	Number of Structures			Value of Structures		Number of People		
	# In Community	# In Hazard Area	% In Hazard Area	$ In Community	S In Hazard Area	# In Community	# In Hazard Area	% In Hazard Area
Residential	1002	501	50.0%	$83,383,428	$41,691,714	3366	1683	50.0%
Commercial	67	34	50.0%	$2,889,374	$1,444,687			
Industrial	147	74	50.0%	$15,507,469	$7,753,735			
Agricultural	0	0	50.0%	$0	$0			
Religious / Non-	13	7	50.0%	$650,000	$325,000			
Government	7	4	50.0%	$1,809,890	$904,945			
Education	9	5	50.0%	$400,000	$200,000			
Utilities	1	1	50.0%	$150,000	$75,000			
Total	1246	623	50.0%	$104,790,161	$52,395,081	3366	1683	50.0%

Task B. Determine whether (and where) you want to collect additional inventory data.

1. Do you know where your greatest damages may occur in your hazard areas? **Yes**
2. Do you know whether your critical facilities will be operational after a hazard event? **Yes**
3. Is there enough data to determine which assets are subject to the greatest potential damages? **Yes**
4. Is there enough data to determine whether significant elements of the community are vulnerable to potential hazards? **Yes**
5. Is there enough data to determine whether certain areas of historic, environmental, political, or cultural significance are vulnerable to potential hazards? **Yes**
6. Is there concern about a particular hazard because of its severity, repetitiveness, or likelihood of occurrence? **Yes**
7. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives? **No**

What will be affected by the hazard event?

Task A. Determine the proportion of buildings, the value of buildings, and the population in your community of state that are located in hazards areas.

Hazard: Hail Scale: Small

Type of Structure (Occupancy Class)	Number of Structures			Value of Structures		Number of People		
	# In Community	# In Hazard Area	% In Hazard Area	$ In Community	S In Hazard Area	# In Community	# In Hazard Area	% In Hazard Area
Residential	1002	100	10.00%	$83,383,428	$8,338,343	3366	337	10.0%
Commercial	67	7	10.00%	$2,889,374	$288,937			
Industrial	147	15	10.00%	$15,507,469	$1,550,747			
Agricultural	0	0	10.00%	$0	$0			
Religious / Non-	13	1	10.00%	$650,000	$65,000			
Government	7	1	10.00%	$1,809,890	$180,989			
Education	9	1	10.00%	$400,000	$40,000			
Utilities	1	0	10.00%	$150,000	$15,000			
Total	1246	125	10.00%	$104,790,161	$10,479,016	3366	337	10.0%

Task B. Determine whether (and where) you want to collect additional inventory data.

1. Do you know where your greatest damages may occur in your hazard areas? **Yes**
2. Do you know whether your critical facilities will be operational after a hazard event? **Yes**
3. Is there enough data to determine which assets are subject to the greatest potential damages? **Yes**
4. Is there enough data to determine whether significant elements of the community are vulnerable to potential hazards? **Yes**
5. Is there enough data to determine whether certain areas of historic, environmental, political, or cultural significance are vulnerable to potential hazards? **Yes**
6. Is there concern about a particular hazard because of its severity, repetitiveness, or likelihood of occurrence? **Yes**
7. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives? **No**

Task A. Determine the proportion of buildings, the value of buildings, and the population in your community of state that are located in hazards areas.

Hazard: Flood Scale: 100 Year Flood Plain

Type of Structure (Occupancy Class)	Number of Structures			Value of Structures		Number of People		
	# In Community	# In Hazard Area	% In Hazard Area	$ In Community	S In Hazard Area	# In Community	# In Hazard Area	% In Hazard Area
Residential	781	70	9.0%	$64,992,472	$5,825,190	3727	210	5.6%
Commercial	148	15	10.1%	$42,048,297	$4,261,652			
Industrial	10	5	50.0%	$1,054,930	$527,465			
Agricultural	3	0	0.0%	$0	$0			
Religious / Non-	21	0	0.0%	$1,050,000	$0			
Government	5	3	60.0%	$1,201,590	$720,954			
Education	1	0	0.0%	$2,000,000	$0			
Utilities	2	0	0.0%	$275,000	$0			
Total	971	93	9.6%	$82,622,289	$8,335,260	3727	210	5.6%

Task B. Determine whether (and where) you want to collect additional inventory data.

1. Do you know where your greatest damages may occur in your hazard areas? **Yes**
2. Do you know whether your critical facilities will be operational after a hazard event? **Yes**
3. Is there enough data to determine which assets are subject to the greatest potential damages? **Yes**
4. Is there enough data to determine whether significant elements of the community are vulnerable to potential hazards? **Yes**
5. Is there enough data to determine whether certain areas of historic, environmental, political, or cultural significance are vulnerable to potential hazards? **Yes**
6. Is there concern about a particular hazard because of its severity, repetitiveness, or likelihood of occurrence? **Yes**
7. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives? **No**

What will be affected by the hazard event?

Task A. Determine the proportion of buildings, the value of buildings, and the population in your community of state that are located in hazards areas.

Hazard: Winter Storm Scale: Large

Type of Structure (Occupancy Class)	Number of Structures			Value of Structures		Number of People		
	# In Community	# In Hazard Area	% In Hazard Area	$ In Community	S In Hazard Area	# In Community	# In Hazard Area	% In Hazard Area
Residential	781	781	100.0%	$64,992,472	$64,992,472	3727	3727	100.0%
Commercial	148	148	100.0%	$42,048,297	$42,048,297			
Industrial	10	10	100.0%	$1,054,930	$1,054,930			
Agricultural	3	3	0.0%	$0	$0			
Religious / Non-	21	21	100.0%	$1,050,000	$1,050,000			
Government	5	5	100.0%	$1,201,590	$1,201,590			
Education	1	1	100.0%	$2,000,000	$2,000,000			
Utilities	2	2	100.0%	$275,000	$275,000			
Total	971	971	100.0%	$82,622,289	$82,622,289	3727	3727	100.0%

Task B. Determine whether (and where) you want to collect additional inventory data.

1. Do you know where your greatest damages may occur in your hazard areas? **Yes**
2. Do you know whether your critical facilities will be operational after a hazard event? **Yes**
3. Is there enough data to determine which assets are subject to the greatest potential damages? **Yes**
4. Is there enough data to determine whether significant elements of the community are vulnerable to potential hazards? **Yes**
5. Is there enough data to determine whether certain areas of historic, environmental, political, or cultural significance are vulnerable to potential hazards? **Yes**
6. Is there concern about a particular hazard because of its severity, repetitiveness, or likelihood of occurrence? **Yes**
7. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives? **No**

What will be affected by the hazard event?

Task A. Determine the proportion of buildings, the value of buildings, and the population in your community of state that are located in hazards areas.

Hazard: Winter Storm Scale: Medium

Type of Structure (Occupancy Class)	Number of Structures			Value of Structures		Number of People		
	# In Community	# In Hazard Area	% In Hazard Area	$ In Community	S In Hazard Area	# In Community	# In Hazard Area	% In Hazard Area
Residential	781	391	50.0%	$64,992,472	$32,496,236	3727	1864	50.0%
Commercial	148	74	50.0%	$42,048,297	$21,024,149			
Industrial	10	5	50.0%	$1,054,930	$527,465			
Agricultural	3	2	0.0%	$0	$0			
Religious / Non-	21	8	50.0%	$1,050,000	$525,000			
Government	5	3	50.0%	$1,201,590	$600,795			
Education	781	1	50.0%	$2,000,000	$1,000,000			
Utilities	2	1	50.0%	$275,000	$137,500			
Total	971	486	50.0%	$82,622,289	$41,311,144	3727	1864	50.0%

Task B. Determine whether (and where) you want to collect additional inventory data.

1. Do you know where your greatest damages may occur in your hazard areas? **Yes**
2. Do you know whether your critical facilities will be operational after a hazard event? **Yes**
3. Is there enough data to determine which assets are subject to the greatest potential damages? **Yes**
4. Is there enough data to determine whether significant elements of the community are vulnerable to potential hazards? **Yes**
5. Is there enough data to determine whether certain areas of historic, environmental, political, or cultural significance are vulnerable to potential hazards? **Yes**
6. Is there concern about a particular hazard because of its severity, repetitiveness, or likelihood of occurrence? **Yes**
7. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives? **No**

What will be affected by the hazard event?

Task A. Determine the proportion of buildings, the value of buildings, and the population in your community of state that are located in hazards areas.

Hazard: Winter Storm Scale: Small

Type of Structure (Occupancy Class)	Number of Structures			Value of Structures		Number of People		
	# In Community	# In Hazard Area	% In Hazard Area	$ In Community	S In Hazard Area	# In Community	# In Hazard Area	% In Hazard Area
Residential	781	78	10.0%	$64,992,472	$6,499,247	3727	373	10.0%
Commercial	148	15	10.0%	$42,048,297	$4,204,830			
Industrial	10	1	10.0%	$1,054,930	$105,493			
Agricultural	3	0	10.0%	$0	$0			
Religious / Non-	21	2	10.0%	$1,050,000	$105,000			
Government	5	1	10.0%	$1,201,590	$120,159			
Education	1	0	10.0%	$2,000,000	$200,000			
Utilities	2	0	10.0%	$275,000	$27,500			
Total	971	97	10.0%	$82,622,289	$8,262,229	3727	373	10.0%

Task B. Determine whether (and where) you want to collect additional inventory data.

1. Do you know where your greatest damages may occur in your hazard areas? **Yes**
2. Do you know whether your critical facilities will be operational after a hazard event? **Yes**
3. Is there enough data to determine which assets are subject to the greatest potential damages? **Yes**
4. Is there enough data to determine whether significant elements of the community are vulnerable to potential hazards? **Yes**
5. Is there enough data to determine whether certain areas of historic, environmental, political, or cultural significance are vulnerable to potential hazards? **Yes**
6. Is there concern about a particular hazard because of its severity, repetitiveness, or likelihood of occurrence? **Yes**
7. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives? **No**

What will be affected by the hazard event?

Task A. Determine the proportion of buildings, the value of buildings, and the population in your community of state that are located in hazards areas.

Hazard: Tornado Scale: Large

Type of Structure (Occupancy Class)	Number of Structures			Value of Structures		Number of People		
	# In Community	# In Hazard Area	% In Hazard Area	$ In Community	S In Hazard Area	# In Community	# In Hazard Area	% In Hazard Area
Residential	781	781	100.0%	$64,992,472	$64,992,472	3727	3727	100.0%
Commercial	148	148	100.0%	$42,048,297	$42,048,297			
Industrial	10	10	100.0%	$1,054,930	$1,054,930			
Agricultural	3	3	100.0%	$0	$0			
Religious / Non-	21	21	100.0%	$1,050,000	$1,050,000			
Government	5	5	100.0%	$1,201,590	$1,201,590			
Education	1	1	100.0%	$2,000,000	$2,000,000			
Utilities	2	2	100.0%	$275,000	$275,000			
Total	971	971	100.0%	$82,622,289	$82,622,289	3727	3727	100.0%

Task B. Determine whether (and where) you want to collect additional inventory data.

1. Do you know where your greatest damages may occur in your hazard areas? **Yes**
2. Do you know whether your critical facilities will be operational after a hazard event? **Yes**
3. Is there enough data to determine which assets are subject to the greatest potential damages? **Yes**
4. Is there enough data to determine whether significant elements of the community are vulnerable to potential hazards? **Yes**
5. Is there enough data to determine whether certain areas of historic, environmental, political, or cultural significance are vulnerable to potential hazards? **Yes**
6. Is there concern about a particular hazard because of its severity, repetitiveness, or likelihood of occurrence? **Yes**
7. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives? **No**

What will be affected by the hazard event?

Task A. Determine the proportion of buildings, the value of buildings, and the population in your community of state that are located in hazards areas.

Hazard: Tornado Scale: Medium

Type of Structure (Occupancy Class)	Number of Structures			Value of Structures		Number of People		
	# In Community	# In Hazard Area	% In Hazard Area	$ In Community	S In Hazard Area	# In Community	# In Hazard Area	% In Hazard Area
Residential	781	391	50.0%	$64,992,472	$32,496,236	3727	1864	50.0%
Commercial	148	74	50.0%	$42,048,297	$21,024,149			
Industrial	10	5	50.0%	$1,054,930	$527,465			
Agricultural	3	2	50.0%	$0	$0			
Religious / Non-	21	8	50.0%	$1,050,000	$525,000			
Government	5	3	50.0%	$1,201,590	$600,795			
Education	781	1	50.0%	$2,000,000	$1,000,000			
Utilities	2	1	50.0%	$275,000	$137,500			
Total	971	486	50.0%	$82,622,289	$41,311,144	3727	1864	50.0%

Task B. Determine whether (and where) you want to collect additional inventory data.

1. Do you know where your greatest damages may occur in your hazard areas? **Yes**
2. Do you know whether your critical facilities will be operational after a hazard event? **Yes**
3. Is there enough data to determine which assets are subject to the greatest potential damages? **Yes**
4. Is there enough data to determine whether significant elements of the community are vulnerable to potential hazards? **Yes**
5. Is there enough data to determine whether certain areas of historic, environmental, political, or cultural significance are vulnerable to potential hazards? **Yes**
6. Is there concern about a particular hazard because of its severity, repetitiveness, or likelihood of occurrence? **Yes**
7. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives? **No**

Task A. Determine the proportion of buildings, the value of buildings, and the population in your community of state that are located in hazards areas.

Hazard: Tornado Scale: Small

Type of Structure (Occupancy Class)	Number of Structures			Value of Structures		Number of People		
	# In Community	# In Hazard Area	% In Hazard Area	$ In Community	S In Hazard Area	# In Community	# In Hazard Area	% In Hazard Area
Residential	781	78	10.0%	$64,992,472	$6,499,247	3727	373	10.0%
Commercial	148	15	10.0%	$42,048,297	$4,204,830			
Industrial	10	1	10.0%	$1,054,930	$105,493			
Agricultural	3	0	10.0%	$0	$0			
Religious / Non-	21	2	10.0%	$1,050,000	$105,000			
Government	5	1	10.0%	$1,201,590	$120,159			
Education	1	0	10.0%	$2,000,000	$200,000			
Utilities	2	0	10.0%	$275,000	$27,500			
Total	971	97	10.0%	$82,622,289	$8,262,229	3727	373	10.0%

Task B. Determine whether (and where) you want to collect additional inventory data.

1. Do you know where your greatest damages may occur in your hazard areas? **Yes**
2. Do you know whether your critical facilities will be operational after a hazard event? **Yes**
3. Is there enough data to determine which assets are subject to the greatest potential damages? **Yes**
4. Is there enough data to determine whether significant elements of the community are vulnerable to potential hazards? **Yes**
5. Is there enough data to determine whether certain areas of historic, environmental, political, or cultural significance are vulnerable to potential hazards? **Yes**
6. Is there concern about a particular hazard because of its severity, repetitiveness, or likelihood of occurrence? **Yes**
7. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives? **No**

What will be affected by the hazard event?

Task A. Determine the proportion of buildings, the value of buildings, and the population in your community of state that are located in hazards areas.

Hazard: Wildfire Scale: Large

Type of Structure (Occupancy Class)	Number of Structures			Value of Structures		Number of People		
	# In Community	# In Hazard Area	% In Hazard Area	$ In Community	S In Hazard Area	# In Community	# In Hazard Area	% In Hazard Area
Residential	781	781	100.0%	$64,992,472	$64,992,472	3727	3727	100.0%
Commercial	148	148	100.0%	$42,048,297	$42,048,297			
Industrial	10	10	100.0%	$1,054,930	$1,054,930			
Agricultural	3	3	100.0%	$0	$0			
Religious / Non-	21	21	100.0%	$1,050,000	$1,050,000			
Government	5	5	100.0%	$1,201,590	$1,201,590			
Education	1	1	100.0%	$2,000,000	$2,000,000			
Utilities	2	2	100.0%	$275,000	$275,000			
Total	971	971	100.0%	$82,622,289	$82,622,289	3727	3727	100.0%

Task B. Determine whether (and where) you want to collect additional inventory data.

1. Do you know where your greatest damages may occur in your hazard areas? **Yes**
2. Do you know whether your critical facilities will be operational after a hazard event? **Yes**
3. Is there enough data to determine which assets are subject to the greatest potential damages? **Yes**
4. Is there enough data to determine whether significant elements of the community are vulnerable to potential hazards? **Yes**
5. Is there enough data to determine whether certain areas of historic, environmental, political, or cultural significance are vulnerable to potential hazards? **Yes**
6. Is there concern about a particular hazard because of its severity, repetitiveness, or likelihood of occurrence? **Yes**
7. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives? **No**

What will be affected by the hazard event?

Task A. Determine the proportion of buildings, the value of buildings, and the population in your community of state that are located in hazards areas.

Hazard: Wildfire Scale: Medium

Type of Structure (Occupancy Class)	Number of Structures			Value of Structures		Number of People		
	# In Community	# In Hazard Area	% In Hazard Area	$ In Community	S In Hazard Area	# In Community	# In Hazard Area	% In Hazard Area
Residential	781	391	50.0%	$64,992,472	$32,496,236	3727	1864	50.0%
Commercial	148	74	50.0%	$42,048,297	$21,024,149			
Industrial	10	5	50.0%	$1,054,930	$527,465			
Agricultural	3	2	50.0%	$0	$0			
Religious / Non-	21	8	50.0%	$1,050,000	$525,000			
Government	5	3	50.0%	$1,201,590	$600,795			
Education	781	1	50.0%	$2,000,000	$1,000,000			
Utilities	2	1	50.0%	$275,000	$137,500			
Total	971	486	50.0%	$82,622,289	$41,311,144	3727	1864	50.0%

Task B. Determine whether (and where) you want to collect additional inventory data.

1. Do you know where your greatest damages may occur in your hazard areas? **Yes**
2. Do you know whether your critical facilities will be operational after a hazard event? **Yes**
3. Is there enough data to determine which assets are subject to the greatest potential damages? **Yes**
4. Is there enough data to determine whether significant elements of the community are vulnerable to potential hazards? **Yes**
5. Is there enough data to determine whether certain areas of historic, environmental, political, or cultural significance are vulnerable to potential hazards? **Yes**
6. Is there concern about a particular hazard because of its severity, repetitiveness, or likelihood of occurrence? **Yes**
7. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives? **No**

Inventory Assets Southwest Ward

What will be affected by the hazard event?

Task A. Determine the proportion of buildings, the value of buildings, and the population in your community of state that are located in hazards areas.

Hazard: Wildfire Scale: Small

Type of Structure (Occupancy Class)	Number of Structures			Value of Structures		Number of People		
	# In Community	# In Hazard Area	% In Hazard Area	$ In Community	S In Hazard Area	# In Community	# In Hazard Area	% In Hazard Area
Residential	781	78	10.0%	$64,992,472	$6,499,247	3727	373	10.0%
Commercial	148	15	10.0%	$42,048,297	$4,204,830			
Industrial	10	1	10.0%	$1,054,930	$105,493			
Agricultural	3	0	10.0%	$0	$0			
Religious / Non-	21	2	10.0%	$1,050,000	$105,000			
Government	5	1	10.0%	$1,201,590	$120,159			
Education	1	0	10.0%	$2,000,000	$200,000			
Utilities	2	0	10.0%	$275,000	$27,500			
Total	971	97	10.0%	$82,622,289	$8,262,229	3727	373	10.0%

Task B. Determine whether (and where) you want to collect additional inventory data.

1. Do you know where your greatest damages may occur in your hazard areas? **Yes**
2. Do you know whether your critical facilities will be operational after a hazard event? **Yes**
3. Is there enough data to determine which assets are subject to the greatest potential damages? **Yes**
4. Is there enough data to determine whether significant elements of the community are vulnerable to potential hazards? **Yes**
5. Is there enough data to determine whether certain areas of historic, environmental, political, or cultural significance are vulnerable to potential hazards? **Yes**
6. Is there concern about a particular hazard because of its severity, repetitiveness, or likelihood of occurrence? **Yes**
7. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives? **No**

Task A. Determine the proportion of buildings, the value of buildings, and the population in your community of state that are located in hazards areas.

Hazard: Drought Scale: Large

Type of Structure (Occupancy Class)	Number of Structures			Value of Structures		Number of People		
	# In Community	# In Hazard Area	% In Hazard Area	$ In Community	S In Hazard Area	# In Community	# In Hazard Area	% In Hazard Area
Residential	781	781	100.0%	$64,992,472	$64,992,472	3727	3727	100.0%
Commercial	148	148	100.0%	$42,048,297	$42,048,297			
Industrial	10	10	100.0%	$1,054,930	$1,054,930			
Agricultural	3	3	100.0%	$0	$0			
Religious / Non-	21	21	100.0%	$1,050,000	$1,050,000			
Government	5	5	100.0%	$1,201,590	$1,201,590			
Education	1	1	100.0%	$2,000,000	$2,000,000			
Utilities	2	2	100.0%	$275,000	$275,000			
Total	971	971	100.0%	$82,622,289	$82,622,289	3727	3727	100.0%

Task B. Determine whether (and where) you want to collect additional inventory data.

1. Do you know where your greatest damages may occur in your hazard areas? **Yes**
2. Do you know whether your critical facilities will be operational after a hazard event? **Yes**
3. Is there enough data to determine which assets are subject to the greatest potential damages? **Yes**
4. Is there enough data to determine whether significant elements of the community are vulnerable to potential hazards? **Yes**
5. Is there enough data to determine whether certain areas of historic, environmental, political, or cultural significance are vulnerable to potential hazards? **Yes**
6. Is there concern about a particular hazard because of its severity, repetitiveness, or likelihood of occurrence? **Yes**
7. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives? **No**

What will be affected by the hazard event?

Task A. Determine the proportion of buildings, the value of buildings, and the population in your community of state that are located in hazards areas.

Hazard: Drought Scale: Medium

Type of Structure (Occupancy Class)	Number of Structures			Value of Structures		Number of People		
	# In Community	# In Hazard Area	% In Hazard Area	$ In Community	S In Hazard Area	# In Community	# In Hazard Area	% In Hazard Area
Residential	781	391	50.0%	$64,992,472	$32,496,236	3727	1864	50.0%
Commercial	148	74	50.0%	$42,048,297	$21,024,149			
Industrial	10	5	50.0%	$1,054,930	$527,465			
Agricultural	3	2	50.0%	$0	$0			
Religious / Non-	21	8	50.0%	$1,050,000	$525,000			
Government	5	3	50.0%	$1,201,590	$600,795			
Education	781	1	50.0%	$2,000,000	$1,000,000			
Utilities	2	1	50.0%	$275,000	$137,500			
Total	971	486	50.0%	$82,622,289	$41,311,144	3727	1864	50.0%

Task B. Determine whether (and where) you want to collect additional inventory data.

1. Do you know where your greatest damages may occur in your hazard areas? **Yes**
2. Do you know whether your critical facilities will be operational after a hazard event? **Yes**
3. Is there enough data to determine which assets are subject to the greatest potential damages? **Yes**
4. Is there enough data to determine whether significant elements of the community are vulnerable to potential hazards? **Yes**
5. Is there enough data to determine whether certain areas of historic, environmental, political, or cultural significance are vulnerable to potential hazards? **Yes**
6. Is there concern about a particular hazard because of its severity, repetitiveness, or likelihood of occurrence? **Yes**
7. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives? **No**

What will be affected by the hazard event?

Task A. Determine the proportion of buildings, the value of buildings, and the population in your community of state that are located in hazards areas.

Hazard: Drought Scale: Small

Type of Structure (Occupancy Class)	Number of Structures			Value of Structures		Number of People		
	# In Community	# In Hazard Area	% In Hazard Area	$ In Community	S In Hazard Area	# In Community	# In Hazard Area	% In Hazard Area
Residential	781	78	10.0%	$64,992,472	$6,499,247	3727	373	10.0%
Commercial	148	15	10.0%	$42,048,297	$4,204,830			
Industrial	10	1	10.0%	$1,054,930	$105,493			
Agricultural	3	0	10.0%	$0	$0			
Religious / Non-	21	2	10.0%	$1,050,000	$105,000			
Government	5	1	10.0%	$1,201,590	$120,159			
Education	1	0	10.0%	$2,000,000	$200,000			
Utilities	2	0	10.0%	$275,000	$27,500			
Total	971	97	10.0%	$82,622,289	$8,262,229	3727	373	10.0%

Task B. Determine whether (and where) you want to collect additional inventory data.

1. Do you know where your greatest damages may occur in your hazard areas? **Yes**
2. Do you know whether your critical facilities will be operational after a hazard event? **Yes**
3. Is there enough data to determine which assets are subject to the greatest potential damages? **Yes**
4. Is there enough data to determine whether significant elements of the community are vulnerable to potential hazards? **Yes**
5. Is there enough data to determine whether certain areas of historic, environmental, political, or cultural significance are vulnerable to potential hazards? **Yes**
6. Is there concern about a particular hazard because of its severity, repetitiveness, or likelihood of occurrence? **Yes**
7. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives? **No**

What will be affected by the hazard event?

Task A. Determine the proportion of buildings, the value of buildings, and the population in your community of state that are located in hazards areas.

Hazard: Hail Scale: Large

Type of Structure (Occupancy Class)	Number of Structures			Value of Structures		Number of People		
	# In Community	# In Hazard Area	% In Hazard Area	$ In Community	S In Hazard Area	# In Community	# In Hazard Area	% In Hazard Area
Residential	781	781	100.0%	$64,992,472	$64,992,472	3727	3727	100.0%
Commercial	148	148	100.0%	$42,048,297	$42,048,297			
Industrial	10	10	100.0%	$1,054,930	$1,054,930			
Agricultural	3	3	100.0%	$0	$0			
Religious / Non-	21	21	100.0%	$1,050,000	$1,050,000			
Government	5	5	100.0%	$1,201,590	$1,201,590			
Education	1	1	100.0%	$2,000,000	$2,000,000			
Utilities	2	2	100.0%	$275,000	$275,000			
Total	971	971	100.0%	$82,622,289	$82,622,289	3727	3727	100.0%

Task B. Determine whether (and where) you want to collect additional inventory data.

1. Do you know where your greatest damages may occur in your hazard areas? **Yes**
2. Do you know whether your critical facilities will be operational after a hazard event? **Yes**
3. Is there enough data to determine which assets are subject to the greatest potential damages? **Yes**
4. Is there enough data to determine whether significant elements of the community are vulnerable to potential hazards? **Yes**
5. Is there enough data to determine whether certain areas of historic, environmental, political, or cultural significance are vulnerable to potential hazards? **Yes**
6. Is there concern about a particular hazard because of its severity, repetitiveness, or likelihood of occurrence? **Yes**
7. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives? **No**

What will be affected by the hazard event?

Task A. Determine the proportion of buildings, the value of buildings, and the population in your community of state that are located in hazards areas.

Hazard: Hail Scale: Medium

Type of Structure (Occupancy Class)	Number of Structures			Value of Structures		Number of People		
	# In Community	# In Hazard Area	% In Hazard Area	$ In Community	S In Hazard Area	# In Community	# In Hazard Area	% In Hazard Area
Residential	781	391	50.0%	$64,992,472	$32,496,236	3727	1864	50.0%
Commercial	148	74	50.0%	$42,048,297	$21,024,149			
Industrial	10	5	50.0%	$1,054,930	$527,465			
Agricultural	3	2	50.0%	$0	$0			
Religious / Non-	21	8	50.0%	$1,050,000	$525,000			
Government	5	3	50.0%	$1,201,590	$600,795			
Education	781	1	50.0%	$2,000,000	$1,000,000			
Utilities	2	1	50.0%	$275,000	$137,500			
Total	971	486	50.0%	$82,622,289	$41,311,144	3727	1864	50.0%

Task B. Determine whether (and where) you want to collect additional inventory data.

1. Do you know where your greatest damages may occur in your hazard areas? **Yes**
2. Do you know whether your critical facilities will be operational after a hazard event? **Yes**
3. Is there enough data to determine which assets are subject to the greatest potential damages? **Yes**
4. Is there enough data to determine whether significant elements of the community are vulnerable to potential hazards? **Yes**
5. Is there enough data to determine whether certain areas of historic, environmental, political, or cultural significance are vulnerable to potential hazards? **Yes**
6. Is there concern about a particular hazard because of its severity, repetitiveness, or likelihood of occurrence? **Yes**
7. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives? **No**

What will be affected by the hazard event?

Task A. Determine the proportion of buildings, the value of buildings, and the population in your community of state that are located in hazards areas.

Hazard: Hail Scale: Small

Type of Structure (Occupancy Class)	Number of Structures			Value of Structures		Number of People		
	# In Community	# In Hazard Area	% In Hazard Area	$ In Community	S In Hazard Area	# In Community	# In Hazard Area	% In Hazard Area
Residential	781	78	10.0%	$64,992,472	$6,499,247	3727	373	10.0%
Commercial	148	15	10.0%	$42,048,297	$4,204,830			
Industrial	10	1	10.0%	$1,054,930	$105,493			
Agricultural	3	0	10.0%	$0	$0			
Religious / Non-	21	2	10.0%	$1,050,000	$105,000			
Government	5	1	10.0%	$1,201,590	$120,159			
Education	1	0	10.0%	$2,000,000	$200,000			
Utilities	2	0	10.0%	$275,000	$27,500			
Total	971	97	10.0%	$82,622,289	$8,262,229	3727	373	10.0%

Task B. Determine whether (and where) you want to collect additional inventory data.

8. Do you know where your greatest damages may occur in your hazard areas? **Yes**
9. Do you know whether your critical facilities will be operational after a hazard event? **Yes**
10. Is there enough data to determine which assets are subject to the greatest potential damages? **Yes**
11. Is there enough data to determine whether significant elements of the community are vulnerable to potential hazards? **Yes**
12. Is there enough data to determine whether certain areas of historic, environmental, political, or cultural significance are vulnerable to potential hazards? **Yes**
13. Is there concern about a particular hazard because of its severity, repetitiveness, or likelihood of occurrence? **Yes**
14. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives? **No**

Inventory Assets Northeast Ward

What will be affected by the hazard event?

Task A. Determine the proportion of buildings, the value of buildings, and the population in your community of state that are located in hazards areas.

Hazard: Flood Scale: 100 Year Flood Plain

Type of Structure (Occupancy Class)	Number of Structures			Value of Structures		Number of People		
	# In Community	# In Hazard Area	% In Hazard Area	$ In Community	S In Hazard Area	# In Community	# In Hazard Area	% In Hazard Area
Residential	1344	78	5.8%	$463,934,740	$26,924,784	4974	234	4.7%
Commercial	106	17	16.0%	$30,085,672	$4,829,872			
Industrial	40	0	0.0%	$4,219,720	$0			
Agricultural	0	0	0.0%	$0	$0			
Religious / Non-	20	0	0.0%	$1,000,000	$0			
Government	3	3	100.0%	$180,000	$180,000			
Education	2	0	0.0%	$1,250,000	$0			
Utilities	0	0	0.0%	$0	$0			
Total	1515	98	6.5%	$500,700,132	$31,934,656	4974	234	4.7%

Task B. Determine whether (and where) you want to collect additional inventory data.

8. Do you know where your greatest damages may occur in your hazard areas? **Yes**
9. Do you know whether your critical facilities will be operational after a hazard event? **Yes**
10. Is there enough data to determine which assets are subject to the greatest potential damages? **Yes**
11. Is there enough data to determine whether significant elements of the community are vulnerable to potential hazards? **Yes**
12. Is there enough data to determine whether certain areas of historic, environmental, political, or cultural significance are vulnerable to potential hazards? **Yes**
13. Is there concern about a particular hazard because of its severity, repetitiveness, or likelihood of occurrence? **Yes**
14. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives? **No**

Task A. Determine the proportion of buildings, the value of buildings, and the population in your community of state that are located in hazards areas.

Hazard: Hail Storm Scale: Large

Type of Structure (Occupancy Class)	Number of Structures			Value of Structures		Number of People		
	# In Community	# In Hazard Area	% In Hazard Area	$ In Community	S In Hazard Area	# In Community	# In Hazard Area	% In Hazard Area
Residential	1344	1344	100.0%	$463,934,740	$463,934,740	4974	4974	100.0%
Commercial	106	106	100.0%	$30,115,672	$30,085,672			
Industrial	40	40	100.0%	$4,219,720	$4,219,720			
Agricultural	0	0	0.0%	$0	$0			
Religious / Non-	20	20	100.0%	$1,000,000	$1,000,000			
Government	3	3	100.0%	$180,000	$180,000			
Education	2	2	100.0%	$1,250,000	$1,250,000			
Utilities	0	0	0.0%	$0	$0			
Total	1515	1515	100.0%	$500,700,132	$500,700,132	4974	4974	100.0%

Task B. Determine whether (and where) you want to collect additional inventory data.

8. Do you know where your greatest damages may occur in your hazard areas? **Yes**
9. Do you know whether your critical facilities will be operational after a hazard event? **Yes**
10. Is there enough data to determine which assets are subject to the greatest potential damages? **Yes**
11. Is there enough data to determine whether significant elements of the community are vulnerable to potential hazards? **Yes**
12. Is there enough data to determine whether certain areas of historic, environmental, political, or cultural significance are vulnerable to potential hazards? **Yes**
13. Is there concern about a particular hazard because of its severity, repetitiveness, or likelihood of occurrence? **Yes**
14. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives? **No**

What will be affected by the hazard event?

Task A. Determine the proportion of buildings, the value of buildings, and the population in your community of state that are located in hazards areas.

Hazard: Hail Storm Scale: Medium

Type of Structure (Occupancy Class)	Number of Structures			Value of Structures		Number of People		
	# In Community	# In Hazard Area	% In Hazard Area	$ In Community	S In Hazard Area	# In Community	# In Hazard Area	% In Hazard Area
Residential	1344	672	50.0%	$463,934,740	$32,496,236	4974	2487	50.0%
Commercial	106	53	50.0%	$30,115,672	$15,057,836			
Industrial	40	20	50.0%	$4,219,720	$2,109,860			
Agricultural	0	0	0.0%	$0	$0			
Religious / Non-	20	10	50.0%	$1,000,000	$500,000			
Government	3	2	50.0%	$180,000	$90,000			
Education	2	1	50.0%	$1,250,000	$625,000			
Utilities	0	0	0.0%	$0	$0			
Total	1515	758	50.0%	$500,700,132	$250,350,066	4974	2487	50.0%

Task B. Determine whether (and where) you want to collect additional inventory data.

15. Do you know where your greatest damages may occur in your hazard areas? **Yes**
16. Do you know whether your critical facilities will be operational after a hazard event? **Yes**
17. Is there enough data to determine which assets are subject to the greatest potential damages? **Yes**
18. Is there enough data to determine whether significant elements of the community are vulnerable to potential hazards? **Yes**
19. Is there enough data to determine whether certain areas of historic, environmental, political, or cultural significance are vulnerable to potential hazards? **Yes**
20. Is there concern about a particular hazard because of its severity, repetitiveness, or likelihood of occurrence? **Yes**
21. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives? **No**

What will be affected by the hazard event?

Task A. Determine the proportion of buildings, the value of buildings, and the population in your community of state that are located in hazards areas.

Hazard: Hail Storm Scale: Small

Type of Structure (Occupancy Class)	Number of Structures			Value of Structures		Number of People		
	# In Community	# In Hazard Area	% In Hazard Area	$ In Community	S In Hazard Area	# In Community	# In Hazard Area	% In Hazard Area
Residential	1344	134	10.0%	$463,934,740	$46,393,474	4974	497	10.0%
Commercial	106	8	10.0%	$30,115,672	$3,085,672			
Industrial	40	4	10.0%	$4,219,720	$421,972			
Agricultural	0	0	0.0%	$0	$0			
Religious / Non-	20	2	10.0%	$1,000,000	$100,000			
Government	3	0	10.0%	$180,000	$18,000			
Education	2	0	10.0%	$1,250,000	$125,000			
Utilities	0	0	0.0%	$0	$0			
Total	1515	152	10.0%	$500,700,132	$50,070,013	4974	497	10.0%

Task B. Determine whether (and where) you want to collect additional inventory data.

15. Do you know where your greatest damages may occur in your hazard areas? **Yes**
16. Do you know whether your critical facilities will be operational after a hazard event? **Yes**
17. Is there enough data to determine which assets are subject to the greatest potential damages? **Yes**
18. Is there enough data to determine whether significant elements of the community are vulnerable to potential hazards? **Yes**
19. Is there enough data to determine whether certain areas of historic, environmental, political, or cultural significance are vulnerable to potential hazards? **Yes**
20. Is there concern about a particular hazard because of its severity, repetitiveness, or likelihood of occurrence? **Yes**
21. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives? **No**

What will be affected by the hazard event?

Task A. Determine the proportion of buildings, the value of buildings, and the population in your community of state that are located in hazards areas.

Hazard: Tornado Scale: Large

Type of Structure (Occupancy Class)	Number of Structures			Value of Structures		Number of People		
	# In Community	# In Hazard Area	% In Hazard Area	$ In Community	S In Hazard Area	# In Community	# In Hazard Area	% In Hazard Area
Residential	1344	1344	100.0%	$463,934,740	$463,934,740	4974	4974	100.0%
Commercial	106	106	100.0%	$30,115,672	$30,085,672			
Industrial	40	40	100.0%	$4,219,720	$4,219,720			
Agricultural	0	0	0.0%	$0	$0			
Religious / Non-	20	20	100.0%	$1,000,000	$1,000,000			
Government	3	3	100.0%	$180,000	$180,000			
Education	2	2	100.0%	$1,250,000	$1,250,000			
Utilities	0	0	0.0%	$0	$0			
Total	1515	1515	100.0%	$500,700,132	$500,700,132	4974	4974	100.0%

Task B. Determine whether (and where) you want to collect additional inventory data.

15. Do you know where your greatest damages may occur in your hazard areas? **Yes**
16. Do you know whether your critical facilities will be operational after a hazard event? **Yes**
17. Is there enough data to determine which assets are subject to the greatest potential damages? **Yes**
18. Is there enough data to determine whether significant elements of the community are vulnerable to potential hazards? **Yes**
19. Is there enough data to determine whether certain areas of historic, environmental, political, or cultural significance are vulnerable to potential hazards? **Yes**
20. Is there concern about a particular hazard because of its severity, repetitiveness, or likelihood of occurrence? **Yes**
21. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives? **No**

What will be affected by the hazard event?

Task A. Determine the proportion of buildings, the value of buildings, and the population in your community of state that are located in hazards areas.

Hazard: Tornado Scale: Medium

Type of Structure (Occupancy Class)	Number of Structures			Value of Structures		Number of People		
	# In Community	# In Hazard Area	% In Hazard Area	$ In Community	S In Hazard Area	# In Community	# In Hazard Area	% In Hazard Area
Residential	1344	672	50.0%	$463,934,740	$32,496,236	4974	2487	50.0%
Commercial	106	53	50.0%	$30,115,672	$15,057,836			
Industrial	40	20	50.0%	$4,219,720	$2,109,860			
Agricultural	0	0	0.0%	$0	$0			
Religious / Non-	20	10	50.0%	$1,000,000	$500,000			
Government	3	2	50.0%	$180,000	$90,000			
Education	2	1	50.0%	$1,250,000	$625,000			
Utilities	0	0	0.0%	$0	$0			
Total	1515	758	50.0%	$500,700,132	$250,350,066	4974	2487	50.0%

Task B. Determine whether (and where) you want to collect additional inventory data.

22. Do you know where your greatest damages may occur in your hazard areas? **Yes**
23. Do you know whether your critical facilities will be operational after a hazard event? **Yes**
24. Is there enough data to determine which assets are subject to the greatest potential damages? **Yes**
25. Is there enough data to determine whether significant elements of the community are vulnerable to potential hazards? **Yes**
26. Is there enough data to determine whether certain areas of historic, environmental, political, or cultural significance are vulnerable to potential hazards? **Yes**
27. Is there concern about a particular hazard because of its severity, repetitiveness, or likelihood of occurrence? **Yes**
28. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives? **No**

Task A. Determine the proportion of buildings, the value of buildings, and the population in your community of state that are located in hazards areas.

Hazard: Tornado Scale: Small

Type of Structure (Occupancy Class)	Number of Structures			Value of Structures		Number of People		
	# In Community	# In Hazard Area	% In Hazard Area	$ In Community	S In Hazard Area	# In Community	# In Hazard Area	% In Hazard Area
Residential	1344	134	10.0%	$463,934,740	$46,393,474	4974	497	10.0%
Commercial	106	8	10.0%	$30,115,672	$3,085,672			
Industrial	40	4	10.0%	$4,219,720	$421,972			
Agricultural	0	0	0.0%	$0	$0			
Religious / Non-	20	2	10.0%	$1,000,000	$100,000			
Government	3	0	10.0%	$180,000	$18,000			
Education	2	0	10.0%	$1,250,000	$125,000			
Utilities	0	0	0.0%	$0	$0			
Total	1515	152	10.0%	$500,700,132	$50,070,013	4974	497	10.0%

Task B. Determine whether (and where) you want to collect additional inventory data.

22. Do you know where your greatest damages may occur in your hazard areas? **Yes**
23. Do you know whether your critical facilities will be operational after a hazard event? **Yes**
24. Is there enough data to determine which assets are subject to the greatest potential damages? **Yes**
25. Is there enough data to determine whether significant elements of the community are vulnerable to potential hazards? **Yes**
26. Is there enough data to determine whether certain areas of historic, environmental, political, or cultural significance are vulnerable to potential hazards? **Yes**
27. Is there concern about a particular hazard because of its severity, repetitiveness, or likelihood of occurrence? **Yes**
28. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives? **No**

What will be affected by the hazard event?

Task A. Determine the proportion of buildings, the value of buildings, and the population in your community of state that are located in hazards areas.

Hazard: Wildfire Scale: Large

Type of Structure (Occupancy Class)	Number of Structures			Value of Structures		Number of People		
	# In Community	# In Hazard Area	% In Hazard Area	$ In Community	S In Hazard Area	# In Community	# In Hazard Area	% In Hazard Area
Residential	1344	1344	100.0%	$463,934,740	$463,934,740	4974	4974	100.0%
Commercial	106	106	100.0%	$30,115,672	$30,085,672			
Industrial	40	40	100.0%	$4,219,720	$4,219,720			
Agricultural	0	0	100.0%	$0	$0			
Religious / Non-	20	20	100.0%	$1,000,000	$1,000,000			
Government	3	3	100.0%	$180,000	$180,000			
Education	2	2	100.0%	$1,250,000	$1,250,000			
Utilities	0	0	100.0%	$0	$0			
Total	1515	1515	100.0%	$500,700,132	$500,700,132	4974	4974	100.0%

Task B. Determine whether (and where) you want to collect additional inventory data.

22. Do you know where your greatest damages may occur in your hazard areas? **Yes**
23. Do you know whether your critical facilities will be operational after a hazard event? **Yes**
24. Is there enough data to determine which assets are subject to the greatest potential damages? **Yes**
25. Is there enough data to determine whether significant elements of the community are vulnerable to potential hazards? **Yes**
26. Is there enough data to determine whether certain areas of historic, environmental, political, or cultural significance are vulnerable to potential hazards? **Yes**
27. Is there concern about a particular hazard because of its severity, repetitiveness, or likelihood of occurrence? **Yes**
28. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives? **No**

What will be affected by the hazard event?

Task A. Determine the proportion of buildings, the value of buildings, and the population in your community of state that are located in hazards areas.

Hazard: Wildfire Scale: Medium

Type of Structure (Occupancy Class)	Number of Structures			Value of Structures		Number of People		
	# In Community	# In Hazard Area	% In Hazard Area	$ In Community	S In Hazard Area	# In Community	# In Hazard Area	% In Hazard Area
Residential	1344	672	50.0%	$463,934,740	$32,496,236	4974	2487	50.0%
Commercial	106	53	50.0%	$30,115,672	$15,057,836			
Industrial	40	20	50.0%	$4,219,720	$2,109,860			
Agricultural	0	0	50.0%	$0	$0			
Religious / Non-	20	10	50.0%	$1,000,000	$500,000			
Government	3	2	50.0%	$180,000	$90,000			
Education	2	1	50.0%	$1,250,000	$625,000			
Utilities	0	0	50.0%	$0	$0			
Total	1515	758	50.0%	$500,700,132	$250,350,066	4974	2487	50.0%

Task B. Determine whether (and where) you want to collect additional inventory data.

29. Do you know where your greatest damages may occur in your hazard areas? **Yes**
30. Do you know whether your critical facilities will be operational after a hazard event? **Yes**
31. Is there enough data to determine which assets are subject to the greatest potential damages? **Yes**
32. Is there enough data to determine whether significant elements of the community are vulnerable to potential hazards? **Yes**
33. Is there enough data to determine whether certain areas of historic, environmental, political, or cultural significance are vulnerable to potential hazards? **Yes**
34. Is there concern about a particular hazard because of its severity, repetitiveness, or likelihood of occurrence? **Yes**
35. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives? **No**

Inventory Assets Northeast Ward

What will be affected by the hazard event?

Task A. Determine the proportion of buildings, the value of buildings, and the population in your community of state that are located in hazards areas.

Hazard: Wildfire Scale: Small

Type of Structure (Occupancy Class)	Number of Structures			Value of Structures		Number of People		
	# In Community	# In Hazard Area	% In Hazard Area	$ In Community	S In Hazard Area	# In Community	# In Hazard Area	% In Hazard Area
Residential	1344	134	10.0%	$463,934,740	$46,393,474	4974	497	10.0%
Commercial	106	8	10.0%	$30,115,672	$3,085,672			
Industrial	40	4	10.0%	$4,219,720	$421,972			
Agricultural	0	0	10.0%	$0	$0			
Religious / Non-	20	2	10.0%	$1,000,000	$100,000			
Government	3	0	10.0%	$180,000	$18,000			
Education	2	0	10.0%	$1,250,000	$125,000			
Utilities	0	0	10.0%	$0	$0			
Total	1515	152	10.0%	$500,700,132	$50,070,013	4974	497	10.0%

Task B. Determine whether (and where) you want to collect additional inventory data.

29. Do you know where your greatest damages may occur in your hazard areas? **Yes**
30. Do you know whether your critical facilities will be operational after a hazard event? **Yes**
31. Is there enough data to determine which assets are subject to the greatest potential damages? **Yes**
32. Is there enough data to determine whether significant elements of the community are vulnerable to potential hazards? **Yes**
33. Is there enough data to determine whether certain areas of historic, environmental, political, or cultural significance are vulnerable to potential hazards? **Yes**
34. Is there concern about a particular hazard because of its severity, repetitiveness, or likelihood of occurrence? **Yes**
35. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives? **No**

Inventory Assets Northeast Ward

What will be affected by the hazard event?

Task A. Determine the proportion of buildings, the value of buildings, and the population in your community of state that are located in hazards areas.

Hazard: Winter Storm Scale: Large

Type of Structure (Occupancy Class)	Number of Structures			Value of Structures		Number of People		
	# In Community	# In Hazard Area	% In Hazard Area	$ In Community	S In Hazard Area	# In Community	# In Hazard Area	% In Hazard Area
Residential	1344	1344	100.0%	$463,934,740	$463,934,740	4974	4974	100.0%
Commercial	106	106	100.0%	$30,115,672	$30,085,672			
Industrial	40	40	100.0%	$4,219,720	$4,219,720			
Agricultural	0	0	100.0%	$0	$0			
Religious / Non-	20	20	100.0%	$1,000,000	$1,000,000			
Government	3	3	100.0%	$180,000	$180,000			
Education	2	2	100.0%	$1,250,000	$1,250,000			
Utilities	0	0	100.0%	$0	$0			
Total	1515	1515	100.0%	$500,700,132	$500,700,132	4974	4974	100.0%

Task B. Determine whether (and where) you want to collect additional inventory data.

29. Do you know where your greatest damages may occur in your hazard areas? **Yes**
30. Do you know whether your critical facilities will be operational after a hazard event? **Yes**
31. Is there enough data to determine which assets are subject to the greatest potential damages? **Yes**
32. Is there enough data to determine whether significant elements of the community are vulnerable to potential hazards? **Yes**
33. Is there enough data to determine whether certain areas of historic, environmental, political, or cultural significance are vulnerable to potential hazards? **Yes**
34. Is there concern about a particular hazard because of its severity, repetitiveness, or likelihood of occurrence? **Yes**
35. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives? **No**

What will be affected by the hazard event?

Task A. Determine the proportion of buildings, the value of buildings, and the population in your community of state that are located in hazards areas.

Hazard: Winter Storm Scale: Medium

Type of Structure (Occupancy Class)	Number of Structures			Value of Structures		Number of People		
	# In Community	# In Hazard Area	% In Hazard Area	$ In Community	S In Hazard Area	# In Community	# In Hazard Area	% In Hazard Area
Residential	1344	672	50.0%	$463,934,740	$32,496,236	4974	2487	50.0%
Commercial	106	53	50.0%	$30,115,672	$15,057,836			
Industrial	40	20	50.0%	$4,219,720	$2,109,860			
Agricultural	0	0	50.0%	$0	$0			
Religious / Non-	20	10	50.0%	$1,000,000	$500,000			
Government	3	2	50.0%	$180,000	$90,000			
Education	2	1	50.0%	$1,250,000	$625,000			
Utilities	0	0	50.0%	$0	$0			
Total	1515	758	50.0%	$500,700,132	$250,350,066	4974	2487	50.0%

Task B. Determine whether (and where) you want to collect additional inventory data.

36. Do you know where your greatest damages may occur in your hazard areas? **Yes**
37. Do you know whether your critical facilities will be operational after a hazard event? **Yes**
38. Is there enough data to determine which assets are subject to the greatest potential damages? **Yes**
39. Is there enough data to determine whether significant elements of the community are vulnerable to potential hazards? **Yes**
40. Is there enough data to determine whether certain areas of historic, environmental, political, or cultural significance are vulnerable to potential hazards? **Yes**
41. Is there concern about a particular hazard because of its severity, repetitiveness, or likelihood of occurrence? **Yes**
42. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives? **No**

Task A. Determine the proportion of buildings, the value of buildings, and the population in your community of state that are located in hazards areas.

Hazard: Winter Storm Scale: Small

Type of Structure (Occupancy Class)	Number of Structures			Value of Structures		Number of People		
	# In Community	# In Hazard Area	% In Hazard Area	$ In Community	S In Hazard Area	# In Community	# In Hazard Area	% In Hazard Area
Residential	1344	134	10.0%	$463,934,740	$46,393,474	4974	497	10.0%
Commercial	106	8	10.0%	$30,115,672	$3,085,672			
Industrial	40	4	10.0%	$4,219,720	$421,972			
Agricultural	0	0	10.0%	$0	$0			
Religious / Non-	20	2	10.0%	$1,000,000	$100,000			
Government	3	0	10.0%	$180,000	$18,000			
Education	2	0	10.0%	$1,250,000	$125,000			
Utilities	0	0	10.0%	$0	$0			
Total	1515	152	10.0%	$500,700,132	$50,070,013	4974	497	10.0%

Task B. Determine whether (and where) you want to collect additional inventory data.

36. Do you know where your greatest damages may occur in your hazard areas? **Yes**
37. Do you know whether your critical facilities will be operational after a hazard event? **Yes**
38. Is there enough data to determine which assets are subject to the greatest potential damages? **Yes**
39. Is there enough data to determine whether significant elements of the community are vulnerable to potential hazards? **Yes**
40. Is there enough data to determine whether certain areas of historic, environmental, political, or cultural significance are vulnerable to potential hazards? **Yes**
41. Is there concern about a particular hazard because of its severity, repetitiveness, or likelihood of occurrence? **Yes**
42. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives? **No**

What will be affected by the hazard event?

Task A. Determine the proportion of buildings, the value of buildings, and the population in your community of state that are located in hazards areas.

Hazard: Drought Scale: Large

Type of Structure (Occupancy Class)	Number of Structures			Value of Structures		Number of People		
	# In Community	# In Hazard Area	% In Hazard Area	$ In Community	S In Hazard Area	# In Community	# In Hazard Area	% In Hazard Area
Residential	1344	1344	100.0%	$463,934,740	$463,934,740	4974	4974	100.0%
Commercial	106	106	100.0%	$30,115,672	$30,085,672			
Industrial	40	40	100.0%	$4,219,720	$4,219,720			
Agricultural	0	0	100.0%	$0	$0			
Religious / Non-	20	20	100.0%	$1,000,000	$1,000,000			
Government	3	3	100.0%	$180,000	$180,000			
Education	2	2	100.0%	$1,250,000	$1,250,000			
Utilities	0	0	100.0%	$0	$0			
Total	1515	1515	100.0%	$500,700,132	$500,700,132	4974	4974	100.0%

Task B. Determine whether (and where) you want to collect additional inventory data.

36. Do you know where your greatest damages may occur in your hazard areas? **Yes**
37. Do you know whether your critical facilities will be operational after a hazard event? **Yes**
38. Is there enough data to determine which assets are subject to the greatest potential damages? **Yes**
39. Is there enough data to determine whether significant elements of the community are vulnerable to potential hazards? **Yes**
40. Is there enough data to determine whether certain areas of historic, environmental, political, or cultural significance are vulnerable to potential hazards? **Yes**
41. Is there concern about a particular hazard because of its severity, repetitiveness, or likelihood of occurrence? **Yes**
42. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives? **No**

Task A. Determine the proportion of buildings, the value of buildings, and the population in your community of state that are located in hazards areas.

Hazard: Drought Scale: Medium

Type of Structure (Occupancy Class)	Number of Structures			Value of Structures		Number of People		
	# In Community	# In Hazard Area	% In Hazard Area	$ In Community	S In Hazard Area	# In Community	# In Hazard Area	% In Hazard Area
Residential	1344	672	50.0%	$463,934,740	$32,496,236	4974	2487	50.0%
Commercial	106	53	50.0%	$30,115,672	$15,057,836			
Industrial	40	20	50.0%	$4,219,720	$2,109,860			
Agricultural	0	0	50.0%	$0	$0			
Religious / Non-	20	10	50.0%	$1,000,000	$500,000			
Government	3	2	50.0%	$180,000	$90,000			
Education	2	1	50.0%	$1,250,000	$625,000			
Utilities	0	0	50.0%	$0	$0			
Total	1515	758	50.0%	$500,700,132	$250,350,066	4974	2487	50.0%

Task B. Determine whether (and where) you want to collect additional inventory data.

43. Do you know where your greatest damages may occur in your hazard areas? **Yes**
44. Do you know whether your critical facilities will be operational after a hazard event? **Yes**
45. Is there enough data to determine which assets are subject to the greatest potential damages? **Yes**
46. Is there enough data to determine whether significant elements of the community are vulnerable to potential hazards? **Yes**
47. Is there enough data to determine whether certain areas of historic, environmental, political, or cultural significance are vulnerable to potential hazards? **Yes**
48. Is there concern about a particular hazard because of its severity, repetitiveness, or likelihood of occurrence? **Yes**
49. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives? **No**

What will be affected by the hazard event?

Task A. Determine the proportion of buildings, the value of buildings, and the population in your community of state that are located in hazards areas.

Hazard: Drought Scale: Small

Type of Structure (Occupancy Class)	Number of Structures			Value of Structures		Number of People		
	# In Community	# In Hazard Area	% In Hazard Area	$ In Community	S In Hazard Area	# In Community	# In Hazard Area	% In Hazard Area
Residential	1344	134	10.0%	$463,934,740	$46,393,474	4974	497	10.0%
Commercial	106	8	10.0%	$30,115,672	$3,085,672			
Industrial	40	4	10.0%	$4,219,720	$421,972			
Agricultural	0	0	10.0%	$0	$0			
Religious / Non-	20	2	10.0%	$1,000,000	$100,000			
Government	3	0	10.0%	$180,000	$18,000			
Education	2	0	10.0%	$1,250,000	$125,000			
Utilities	0	0	10.0%	$0	$0			
Total	1515	152	10.0%	$500,700,132	$50,070,013	4974	497	10.0%

Task B. Determine whether (and where) you want to collect additional inventory data.

43. Do you know where your greatest damages may occur in your hazard areas? **Yes**
44. Do you know whether your critical facilities will be operational after a hazard event? **Yes**
45. Is there enough data to determine which assets are subject to the greatest potential damages? **Yes**
46. Is there enough data to determine whether significant elements of the community are vulnerable to potential hazards? **Yes**
47. Is there enough data to determine whether certain areas of historic, environmental, political, or cultural significance are vulnerable to potential hazards? **Yes**
48. Is there concern about a particular hazard because of its severity, repetitiveness, or likelihood of occurrence? **Yes**
49. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives? **No**

APPENDIX G: LOCAL MITIGATION PLAN CHECKLIST

LOCAL MITIGATION PLAN REVIEW TOOL

The *Local Mitigation Plan Review Tool* demonstrates how the Local Mitigation Plan meets the regulation in 44 CFR §201.6 and offers States and FEMA Mitigation Planners an opportunity to provide feedback to the community.

- The Regulation Checklist provides a summary of FEMA's evaluation of whether the Plan has addressed all requirements.
- The Plan Assessment identifies the plan's strengths as well as documents areas for future improvement.
- The Multi-jurisdiction Summary Sheet is an optional worksheet that can be used to document how each jurisdiction met the requirements of the each Element of the Plan (Planning Process; Hazard Identification and Risk Assessment; Mitigation Strategy; Plan Review, Evaluation, and Implementation; and Plan Adoption).

The FEMA Mitigation Planner must reference this *Local Mitigation Plan Review Guide* when completing the *Local Mitigation Plan Review Tool*.

Jurisdiction: City of Nacogdoches	**Title of Plan:** City of Nacogdoches Hazard Mitigation Action Plan	**Date of Plan:** 02/01/2013
Local Point of Contact: Tommy Wheeler	**Address:** City of Nacogdoches P.O. Box 635030 Nacogdoches, Texas 75963	
Title: Emergency Management Coordinator		
Agency: City of Nacogdoches		
Phone Number: 936-559-2556	**E-Mail:** wheelert@ci.nacogdoches.tx.us	

State Reviewer: L. Denay Webb	**Title:** Mitigation Program Specialist	**Date:** 08/15/2013

FEMA Reviewer: Barbara A. Spaulding Mary Lover	**Title:** Hazard Mitigation Community Planner HM Community Planner	**Date:** 05/15/2014 07/29/2014
Date Received in FEMA Region 6	03/12/2014	
Plan Not Approved		
Plan Approvable Pending Adoption	07/29/2014	
Plan Approved		

SECTION 1:
REGULATION CHECKLIST

INSTRUCTIONS: The Regulation Checklist must be completed by FEMA. The purpose of the Checklist is to identify the location of relevant or applicable content in the Plan by Element/sub-element and to determine if each requirement has been 'Met' or 'Not Met.' The 'Required Revisions' summary at the bottom of each Element must be completed by FEMA to provide a clear explanation of the revisions that are required for plan approval. Required revisions must be explained for each plan sub-element that is 'Not Met.' Sub-elements should be referenced in each summary by using the appropriate numbers (A1, B3, etc.), where applicable. Requirements for each Element and sub-element are described in detail in this *Plan Review Guide* in Section 4, Regulation Checklist.

1. REGULATION CHECKLIST **Regulation** (44 CFR 201.6 Local Mitigation Plans)	**Location in Plan** (section and/or page number)	**Met**	**Not Met**
ELEMENT A. PLANNING PROCESS			
A1. Does the Plan document the planning process, including how it was prepared and who was involved in the process for each jurisdiction? (Requirement §201.6(c)(1))	P 8-23; Appendix 107-112	**X**	
A2. Does the Plan document an opportunity for neighboring communities, local and regional agencies involved in hazard mitigation activities, agencies that have the authority to regulate development as well as other interests to be involved in the planning process? (Requirement §201.6(b)(2))	P 8, 18; Appendix C (p. 107-112),	**X**	
A3. Does the Plan document how the public was involved in the planning process during the drafting stage? (Requirement §201.6(b)(1))	P 14; 18-19; Appendix C	**X**	
A4. Does the Plan describe the review and incorporation of existing plans, studies, reports, and technical information? (Requirement §201.6(b)(3))	P 16-17	**X**	
A5. Is there discussion of how the community(ies) will continue public participation in the plan maintenance process? (Requirement §201.6(c)(4)(iii))	P 20-21	**X**	
A6. Is there a description of the method and schedule for keeping the plan current (monitoring, evaluating and updating the mitigation plan within a 5-year cycle)? (Requirement §201.6(c)(4)(i))	P 21-22	**X**	
ELEMENT A: REQUIRED REVISIONS			

1. REGULATION CHECKLIST **Regulation** (44 CFR 201.6 Local Mitigation Plans)	**Location in Plan** (section and/or page number)	**Met**	**Not Met**
ELEMENT B. HAZARD IDENTIFICATION AND RISK ASSESSMENT			
B1. Does the Plan include a description of the type, location, and extent of all natural hazards that can affect each jurisdiction(s)? (Requirement §201.6(c)(2)(i))	P49-109 Flood: 58 Wildfire: 63-65; 68-69 Tornados/High Winds/ Thunderstorms: 76-83 Winter Storms: 91-93 Hailstorm: 97-99 Drought: 102-104 Land Subsidence: 44 Earthquake: 30; 44 Erosion: 44	X	
B2. Does the Plan include information on previous occurrences of hazard events and on the probability of future hazard events for each jurisdiction? (Requirement §201.6(c)(2)(i))	Flood: 53-54 Wildfire: 66; 72 Tornados/High Winds/ Thunderstorms: 80-81; 88-89 Winter Storms: 93 Hailstorm: 98-99 Drought: 102-103 Land Subsidence: 44 Earthquake: 44 Erosion: 44	X	
B3. Is there a description of each identified hazard's impact on the community as well as an overall summary of the community's vulnerability for each jurisdiction? (Requirement §201.6(c)(2)(ii))	Flood: 118; 150; 166; 182 Wildfire: 131-133; 157-159; 173-175; 189-191 Tornados/High Winds/ Thunderstorms: 88; 125-127; 154-156; 170-172; 186-188 Winter Storms: 94; 122-124; 151-153; 167-169; 192-194 Hailstorm: 128-130; 163-165; 179-181; 183-185 Drought: 119-121; 160-162; 176-175; 195-197 Land Subsidence: 44 Earthquake: 44 Erosion: 44	X	
B4. Does the Plan address NFIP insured structures within the jurisdiction that have been repetitively damaged by floods? (Requirement §201.6(c)(2)(ii))	P55-56	X	

1. REGULATION CHECKLIST **Regulation** (44 CFR 201.6 Local Mitigation Plans)	Location in Plan (section and/or page number)	Met	Not Met
ELEMENT B: REQUIRED REVISIONS			
ELEMENT C. MITIGATION STRATEGY			
C1. Does the plan document each jurisdiction's existing authorities, policies, programs and resources and its ability to expand on and improve these existing policies and programs? (Requirement §201.6(c)(3))	P23; 34-36; 38-39; 43-48; 59; 70-72; 83-87	X	
C2. Does the Plan address each jurisdiction's participation in the NFIP and continued compliance with NFIP requirements, as appropriate? (Requirement §201.6(c)(3)(ii))	P54; 59-60	X	
C3. Does the Plan include goals to reduce/avoid long-term vulnerabilities to the identified hazards? (Requirement §201.6(c)(3)(i))	P10-12	X	
C4. Does the Plan identify and analyze a comprehensive range of specific mitigation actions and projects for each jurisdiction being considered to reduce the effects of hazards, with emphasis on new and existing buildings and infrastructure? (Requirement §201.6(c)(3)(ii))	Flood: 60-63; Wildfire: 73-75; Tornados/High Winds/ Thunderstorms:90-91; Winter Storms: 95-97; Hailstorm: 100-101; Drought: 107-109; Land Subsidence: Earthquake: Erosion:	X	
C5. Does the Plan contain an action plan that describes how the actions identified will be prioritized (including cost benefit review), implemented, and administered by each jurisdiction? (Requirement §201.6(c)(3)(iv)); (Requirement §201.6(c)(3)(iii))	P14; 60-63; 73-75; 90-91; 95-97; 100-101; 107-109;	X	
C6. Does the Plan describe a process by which local governments will integrate the requirements of the mitigation plan into other planning mechanisms, such as comprehensive or capital improvement plans, when appropriate? (Requirement §201.6(c)(4)(ii))	P21	X	
ELEMENT C: REQUIRED REVISIONS			

1. REGULATION CHECKLIST **Regulation** (44 CFR 201.6 Local Mitigation Plans)	**Location in Plan** (section and/or page number)	**Met**	**Not Met**
ELEMENT D. PLAN REVIEW, EVALUATION, AND IMPLEMENTATION (applicable to plan updates only)			
D1. Was the plan revised to reflect changes in development? (Requirement §201.6(d)(3))	Pp. 38-39	x	
D2. Was the plan revised to reflect progress in local mitigation efforts? (Requirement §201.6(d)(3))	Pp. 21-22, Appendix D (pp. 113-116)	x	
D3. Was the plan revised to reflect changes in priorities? (Requirement §201.6(d)(3))	Pp. 21-22, Appendix D (pp. 113-116)	x	
ELEMENT D: REQUIRED REVISIONS			
ELEMENT E. PLAN ADOPTION			
E1. Does the Plan include documentation that the plan has been formally adopted by the governing body of the jurisdiction requesting approval? (Requirement §201.6(c)(5))		X	
E2. For multi-jurisdictional plans, has each jurisdiction requesting approval of the plan documented formal plan adoption? (Requirement §201.6(c)(5))	N/A		
ELEMENT E: REQUIRED REVISIONS The plan must be adopted by all participating jurisdictions. Documentation must be submitted to FEMA for final approval. FEMA Region 6 suggests adopting the plan after receiving "Approvable Pending Adoption" status from FEMA.			
ELEMENT F. ADDITIONAL STATE REQUIREMENTS (OPTIONAL FOR STATE REVIEWERS ONLY; NOT TO BE COMPLETED BY FEMA)			
F1.			
F2.			
ELEMENT F: REQUIRED REVISIONS			

SECTION 2:
PLAN ASSESSMENT

General Comments:

The introduction is succinct, with adequate information to fulfill plan requirements without unnecessarily repeating or elaborating on basics. This keeps the text focused and allows the reviewer to quickly identify salient responses to the list of items required for inclusion in the plan. While there is sufficient information to address plan requirements, the Hazard section is heavy on the hazard definition and description, with less data on historical events, location, extent, probability of occurrence, scope and impact of each hazard.

Under Organization of the Plan (pp. 8-9), the 2013 plan lists specific positions from various government entities lending personnel to the HM planning effort. This is perfectly acceptable, although the format of the 2004 plan with planning committee members listed on p. 2, is more informative. This information is provided in Appendix C of the update, which includes HMPC meeting minutes with a list of planning committee members plus their titles, but there is no reference in the text to the fact this information is listed in the appendix. A recommendation for the update would be to include either the list of names in the text, or to mention in the text at the beginning of the document that the fact that an appendix includes this information.

The steering committee refers on p. 9 to members who are "Contractors, Environmental Consultants." Appendix C includes the names of persons who could be considered environmental consultants. These individuals are primarily from SFA University, which is resourceful way to secure the involvement of the local major institution of higher learning.

The plan states that vital, timely information is included on the City web site (p. 44). It also states (p. 19) that draft sections of the plan were placed on the web site, along with contact information for the public to mail or email information. The completed plan is now on the web site. Given that there are several references to the City web site, and a sub-section is titled Official Website, it is recommended that a web page hyperlink be included with each mention of the site.

There is a great deal of emphasis on updates of various documents, including the International Building Code (2009) (p.24) and the International Fire Code (2009). The latest figure for code enforcement of lots overgrown with weeds is from September 30, 2009 (p. 35). The latest figure for building permits issues is from 2010, three years before plan submittal. On p. 71, the plan states "The most recent project grant awards discussed (EOC and a shelter – pp. 44-45) are from the year 2009. No date has been listed for the figures in Table 3-10 (p.37) showing the city's top ten employers. For any one piece of information to seem outdated is not as great a concern as a pattern of creating a document based on outdated information, on which mitigation strategy will be based. It is recommended that the most current sources of information be used in future updates.

The plan includes dates that make it hard to follow plan history. The date at the bottom of each page is February 1, 2013. On p. 55, the plan includes floodplain data through April 2013. On p. 104, drought conditions through July 2013 are discussed. If work continued on the plan after February 1, 2013, change the submittal date.

A. Plan Strengths and Opportunities for Improvement

This section provides a discussion of the strengths of the plan document and identifies areas where these could be improved beyond minimum requirements.

Element A: Planning Process

The community includes a good cross-section of public and private representatives in the planning process. Involvement at the county level ensures that the incorporated and unincorporated areas of Nacogdoches other than the City of Nacogdoches are represented in the plan. Involvement of several departments from Stephen F. Austin University is a good way to secure technical expertise from readily available resources.

The planning process, including public involvement, is documented with meeting notices and meeting minutes included in Appendix C.

Element B: Hazard Identification and Risk Assessment

The plan presents clear, specific documentation and a proactive approach to mitigation and emergency management in a number of sections. One of these includes the discussion of the economic effects of coastal evacuation to Nacogdoches from coastal communities during Hurricanes Katrina, Rita and Gustav (p. 42). Specific dollar values are given for the amount spent by the City to house and care for evacuees, versus the amount of money FEMA reimbursed the community. While detailed information is presented for each event, table formatting of the numbers discussed would allow the City to better showcase the outstanding role it played as a "good neighbor," while also showing the extent to which it was not fully compensated for its efforts. Approximately 10% of the money spent so support evacuees was not reimbursed.

Figures indicate that the City spent over $3.6 million on disaster costs, while being reimbursed for just over 90% of expenses (or $3,329,649/$3,669,939 = 0.907276388 ~ 91%), showing that neighbors help each other in a pitch, regardless of the expense.

Another commendable update is the 2009 effort (p. 44) of The City of Nacogdoches and Nacogdoches County to secure FEMA funding to construct a joint EOC. Another discussion mentions that the facility will include a combined dispatch center and training facility for first responders. Since the award was made in 2009, it would be informative to include an update on how construction of this facility has progressed; whether it has been completed; and whether the proposed joint training and dispatch centers have been included as planned. Cooperative efforts such as this document the interest of both the City and County government to be streamlined both economically and as community responders.

It might be easier for the City to profile hazards -- and for reviewers to understand the profiles – if, where possible, a consistent research methodology and hazard descriptions are applied across the board. Table 3.12 (p. 43) lists Presidential Disaster Declarations in a table for easy understanding of major historic natural hazard event. Likewise, the list shown in

Section 8.3 (pp. 80-81) of tornado incidences given in table format facilitates at-a-glance review (and comprehension) of hazard occurrences, frequency intervals, extent of damage, and related information.

It is recommended that the City be more descriptive in identifying flood control projects, outlined mentioned on p. 53. The plan states that "Various flood control projects such as stream channelization and drainage improvements have been made since….However, there are still some homes and businesses located within the floodplain, and even the floodway…" A map showing the location of improvements and remaining areas of concern would bring home the successes and remaining challenges in this area.

The plan contains a good discussion of repetitive loss and severe repetitive loss properties.

Previous Occurrence:
Wildfire – pg. 66 states that the largest fire recorded occurred in 2000, the Chicken Coop Fire, which burned 20,000 (not sure if that's acres). Then on pg. 72, it states that the largest loss was the Angelina River Bottom Fire in 2008, which burned 7,000.

Impact:
Drought – The plan discusses impact in regards to agriculture and economics. However, it does not mention anything about how it could affect the community's water supply as a whole to its residents and commercial property owners. Droughts are a long-term issue and are becoming more and more significant each year. There should be a discussion as to how this will impact the community as a whole and not just on agriculture and economics. Droughts will affect water supplies for drinking, hygiene, as well as landscaping.

Element C: Mitigation Strategy

C4:
Drought, pg. 106, states that there is a mitigation action to address the dollar losses. However there is no action for this. While there are sufficient actions to pass this element, if stating a data deficiency, make sure that an action to correct the deficiency by the next plan update will be included in the plan.

Element D: Plan Update, Evaluation, and Implementation (*Plan Updates Only*)

Appendix D provides updates on the 2004 mitigation strategy. It explains which actions have been deleted from the plan update and why, and gives a progress report on other actions. http://www.adobe.com/products/photoshop.htmlMost deleted actions have been removed from the plan because of limited staff or funding. The appendix is referred to on p. 13 as part of a list of all appendices. Beyond this, strategic actions from the previous plan are not mentioned. Pp. 16-17 includes information about how updates in the HMAP are

included in other documents as they are updated (EM, Drought Contingency, Drainage), and how updates from other plans are incorporated in the HMAP.

B. Resources for Implementing Your Approved Plan

The jurisdiction appears to be familiar with DHS/FEMA grants as options for project funding. Information about Hazard Mitigation grants available to eligible applicants may be found at http://www.fema.gov/hazard-mitigation-grant-program. Search http://www.grants.gov/ for additional federal resources for implementing mitigation actions.

SECTION 3:
MULTI-JURISDICTION SUMMARY SHEET (OPTIONAL)

INSTRUCTIONS: For multi-jurisdictional plans, a Multi-jurisdiction Summary Spreadsheet may be completed by listing each participating jurisdiction, which required Elements for each jurisdiction were 'Met' or 'Not Met,' and when the adoption resolutions were received. This Summary Sheet does not imply that a mini-plan be developed for each jurisdiction; it should be used as an optional worksheet to ensure that each jurisdiction participating in the Plan has been documented and has met the requirements for those Elements (A through E).

MULTI-JURISDICTION SUMMARY SHEET												
#	Jurisdiction Name	Jurisdiction Type (city/borough/ township/ village, etc.)	Plan POC	Mailing Address	Email	Phone	Requirements Met (Y/N)					
							A. Planning Process	B. Hazard Identification & Risk Assessment	C. Mitigation Strategy	D. Plan Review, Evaluation & Implementation	E. Plan Adoption	F. State Require-ments
1												
2												
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APPENDIX H: COPY OF CITY ORDINANCE

The city ordinance can be viewed at http://www.ci.nacogdoches.tx.us/

APPENDIX I: DETAIL CAPABILITY ASSESSMENT REPORT

Detailed Capability Assessment Report

For Official Use Only

1. Assessment Details

Name of Assessment: City of Nacogdoches
Description of Assessment:
Status:
Created By: Tommy Wheeler
Created Date: 3/17/10
Submitted By: Tommy Wheeler
Submitted Date: 3/17/10

2. Assessment Responses

This section contains the answers provided during the self-assessment portion of this capability assessment.

Target Capability: (1) Planning

Activity: Conduct Strategic Planning
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Regional and State/local strategic plans include, but are not limited to, the national mission areas of prevent, protect against, respond to, and recover from man-made and natural disasters and acts of terrorism	Yes/No	
The strategic plan defines the vision, mission, goals, and objectives of the jurisdiction	Yes/No	
Strategic plan addresses protection against, response to, and recovery from natural and manmade disasters as well as acts of terrorism	Yes/No	
Planners are trained and equipped	Yes/No	
Frequency with which plans are reviewed and updated in accordance with Federal, State, and local regulations and policies	Every 12 months	
Improvement actions from after action reports (AARs) and lessons learned are implemented according to the scale of disaster(s) and/or through defined Federal mandate for schedule for completion	Yes/No	

Activity: Develop/Revise Operational Plans
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Continuity of Operation (COOP) plans describe how personnel, equipment, and other resources support sustained response/survivability and recovery for all sectors	Yes/No	
Continuity of Government (COG) plans describe the continued functioning of constitutional government under all circumstances	Yes/No	
Emergency response plans are consistent with the National Response Plan (NRP) and National Incident Management System (NIMS)	Yes/No	

Mutual aid assistance agreements are in place with contiguous jurisdictions	Yes/No	
Preparedness plans are consistent with NRP and NIMS	Yes/No	
Aid assistance agreements or contracts with private organizations are in place	Yes/No	
Pre-identified mechanisms to request assistance from counties, the State, or the Federal Government are in place	Yes/No	
Emergency response plans address substantial loss of public safety response capabilities during catastrophic events (to include special needs populations and people with disabilities)	Yes/No	
Frequency with which plans are reviewed and updated to ensure compliance with governmental regulations and policies (Review requirements are intended to apply only when no pre-existing review cycle has been established in Federal, State, or local requirements)	Every 12 months	

Activity: Validate Plans
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Plans are exercised and/or evaluated according to Homeland Security Exercise and Evaluation Program (HSEEP) requirements	Yes/No	
Record of deficiencies is generated from plan review process within consensual or mandated predetermined days for review	Yes/No	
Time in which improvement plans to address deficiencies are generated	Within 30 days from development of record of deficiencies	Yes
Frequency with which improvement plan actions are monitored for implementation	Every 3 months	Yes

General Target Capability Questions: 1) Planning:

Question: Please select the statement below that best describes what limits your overall Level of Preparedness for this target capability:

Answer Options:

- ☐ Fully achieving the elements of this Capability is not essential due to local conditions/risks
- ☑ There are insufficient resources (personnel, funding) for fully achieving the elements of this Capability
- ☐ Local governance and/or legal issues limit our ability to fully achieve the elements of this Capability
- ☐ Other, please provide a brief description

Comments:

Question: Please estimate to what extent this Capability has improved during FY2009 (October 2008 to September 2009) as a direct result of Federal financial assistance of any kind and from any fiscal year:

Answer Options:

- [ ] None of the improvement was due to Federal funding
- [x] Some of the improvement was due to Federal funding
- [ ] About half of the improvement was due to Federal funding
- [ ] Most of the improvement was due to Federal funding
- [ ] All of the improvement was due to Federal funding

Question: Please describe the sufficiency of this capability, jurisdiction-wide, with respect to special needs populations, as defined in the National Response Framework:

Answer Options:

- [ ] Does not identify Special Needs Populations
- [x] Identifies Special Needs Populations, but is insufficient in meeting their needs
- [ ] In Progress to identify Special Needs Populations and meet their basic needs
- [ ] Identifies Special Needs Populations and can meet their basic needs
- [ ] Identifies Special Needs Populations and can meet the majority of their needs
- [ ] Identifies Special Needs Populations and can meet all of their needs

Notes/References:

Target Capability: 2) Communications

Activity: Develop and Maintain Plans, Procedures, Programs, and Systems

Level of Preparedness: 1 2 3 (4) 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Operable communications systems that are supported by redundancy and diversity, that provide service across jurisdictions, and that meet everyday internal agency requirements, are in place	Yes/(No)	
Communication systems support on-demand, real-time interoperable voice and data communication	Yes/(No)	
Plans and procedures are in place to ensure appropriate levels of planning and building public safety communication systems prior to an incident	Yes/No	
Plans and procedures are in place to ensure appropriate levels of upgrading/enhancing public safety communication systems and equipment prior to an incident	(Yes)/No	
Plans and procedures are in place to ensure appropriate levels of replacing public safety communication systems and equipment prior to an incident	(Yes)/No	

Plans and procedures are in place to ensure appropriate levels of maintaining public safety communication systems and equipment prior to an incident	Yes/No	
Plans and procedures are in place to ensure appropriate levels of managing public safety communication projects prior to an incident	Yes/No	
Assessment of standard communication capabilities for Public Safety Answering Points (PSAP)/Public Safety Communication Centers and Emergency Operations Centers (EOC) to ensure appropriate Continuity of Operations Plan (COOP) for public safety and service agencies' communications has been completed	Yes/No	
Communications Continuity of Operations Plan (COOP) that outlines back-up systems available at State and local levels, including protocols for use of systems, is in place	Yes/No	
Communications standard operating procedures (SOPs) that conform to NIMS are in place and are used in routine multiple jurisdictional responses	Yes/No	
A multi-agency and multi-jurisdictional governance structure to improve communications interoperability planning and coordination has been established	Yes/No	to improve
Formal interoperable communications agreements have been established through the governance structure	Yes/No	
Interoperability communications plans have been developed through governance structure and include all relevant agencies for data and voice communications	Yes/No	
Interoperability policies and procedures to allow information sharing between levels of government and Federal installations involved in incident, as necessary and as possible, are in place	Yes/No	
Redundant and diverse interoperable communication systems are available	Yes/No	
Plans to coordinate the procurement of communications assets to ensure interoperability are in place	Yes/No	
Plans to acquire and influence sustained interoperability and systems maintenance funding have been developed	Yes/No	Cy working on
Plans include a procedure to return communications back to normal operations after each significant incident	Yes/No	

Activity: Develop and Maintain Training and Exercise Programs

Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Communications-specific tabletop exercises are conducted with multi-jurisdictional and multi-agency operations, technical, and dispatch participants	Yes/No	
Communications-specific operational exercises with multi-jurisdictional and multi-agency participants are conducted	Yes/No	
Operational exercises include an observer specifically to monitor the communications piece to ensure there is adequate information to provide in the After Action Report (AAR) to correct any communication problems that occurred for the future	Yes/No	
Frequency with which plans, procedures, and use of all operable communications systems are tested and/or exercised in large and complex exercises	Every 12 months	yes
All personnel including non traditional stakeholders have been trained to operate communications systems according to their incident role	Yes/No	
Frequency with plans, procedures, and use of all interoperable communications equipment are reviewed tested and/or exercised	Every 12 months	no
Interoperability systems are used in pertinent everyday activities and emergency	Yes/No	

incidents to ensure familiarity with system and cooperation

Activity: Alert and Dispatch
Level of Preparedness: 1 2 3 4 5 6 (7) 8 9 10

Measure		Metric	Notes (ENTIRELY OPTIONAL)
Time in which immediate dispatch information is provided to primary first responders during regular operations	Y	Within 60 seconds from call classification by dispatch	
Time in which Emergency Operations Centers (EOCs), first responders, and special resources acknowledge receipt and understanding of radio communications	Y	Within 30 seconds from the end of transmission	
Percent of communications sent and received that are completely understood without ambiguity by the sender or the intended receiver	Y	90%	
Frequency with which communications back-up is provided (per COOP and/or incident plan process) during emergencies when the conventional mode of communications fail or become overloaded to assure continued service amidst incident	Y	Continuous	
Time in which alternate communications and/or dispatch center are staffed in the event of a catastrophic loss of the primary site		Within 1 hour from the loss of primary site	
COOP is activated based upon nature and disruption of new failure		(Yes)/No	
Recovery time per classification of failure is realistic and alternative recovery processes are in place for incident support		(Yes)/No	
Percent (above normal peak traffic) of technical surge and back-up capabilities within communications and/or dispatch centers to process incoming calls effectively with the loss of any one communication or dispatch centers (assumes surge staffing will be available in 30 minutes)		200%	
COOP allows for maximum response per incident type and duration		(Yes)/No	

Activity: Provide Incident Command/First Responder/First Receiver/Interoperable Communications
Level of Preparedness: 1 2 3 4 (5) 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Frequency with which local first responders are provided with tactical communications with approved local delivery process specified to incident	Continuous ✓	
Frequency with which tactical communications are provided between local disciplines (i.e., law enforcement, fire, and EMS) and among local fire units operating in the disaster site with approved delivery process specific to incident	Continuous ✓	
Percent of communications sent and received that are completely understood without ambiguity by the sender or the intended receiver	90% ✓	
Frequency with which communications back-up is provided during emergencies when the conventional mode of communications fail or become overloaded	Continuous ✓	
COOP and/or Incident Action Plan process assures continued service amidst incident	Yes/No ✓	
Time in which tactical communications are provided for regional first responders responding to the disaster site is within parameters of interoperability plans, as approved by governance structure/body	Yes/(No) ?	
Percent of mobile communications coverage provided in rural areas affected by disaster	95% ?	
Percent of street-level hand-held communications coverage provided in urban/suburban areas affected by disaster	95% ?	

Percent of in-building hand-held communications coverage provided in central areas affected by disaster	95%	
Tactical communications are provided for large regional "task forces" providing recovery assistance to disasters and other emergencies within parameters of interoperability plan, as approved by the governance structure/body	Yes/No	

Activity: Provide Emergency Operations Center Communications Support
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Percent of communications sent and received that are completely understood without ambiguity by the sender or the intended receiver	90%	
Frequency with which communications back-up is provided during emergencies when the conventional mode of communications fail or become overloaded	Continuous	
COOP and/or Incident Action Plan process to assure continued service amidst incident is in place	Yes/No	
Key officials are notified in the event of an incident using relevant tools and technologies (e.g., call down lists, SMS messages, etc.)	Yes/No	

Activity: Provide Federal Facilities, Task Force, and Recovery Assistance Interoperable Communications
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Tactical communications are provided for large regional "task forces" providing recovery assistance to disasters and other emergencies within the parameters of interoperability plans, as approved by governance structure/body	Yes/No	
Frequency with which communications back-up is provided during emergencies when the conventional modes of communication fail or become overloaded	Continuous	
COOP and/or Incident Action Plan process assures continued service amidst incident	Yes/No	
Percent of communications sent and received that are completely understood without ambiguity by the sender or the intended receiver	90% ?	
Communications policies and procedures are followed	Yes/No	

Activity: Return to Normal Operations
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Percent of communications sent and received that are completely understood without ambiguity by the sender or the intended receiver	90%	

General Target Capability Questions: 2) Communications

Question: Please select the statement below that best describes what limits your overall Level of Preparedness for this target capability:

Answer Options:

- ☐ Fully achieving the elements of this Capability is not essential due to local conditions/risks
- ☑ There are insufficient resources (personnel, funding) for fully achieving the elements of this Capability
- ☐ Local governance and/or legal issues limit our ability to fully achieve the elements of this Capability
- ☐ Other, please provide a brief description

Comments:

Question: Please estimate to what extent this Capability has improved during FY2009 (October 2008 to September 2009) as a direct result of Federal financial assistance of any kind and from any fiscal year:

Answer Options:

- ☐ None of the improvement was due to Federal funding
- ☑ Some of the improvement was due to Federal funding
- ☐ About half of the improvement was due to Federal funding
- ☐ Most of the improvement was due to Federal funding
- ☐ All of the improvement was due to Federal funding

Notes/References:

Target Capability: 3) Risk Management

Activity: Develop Risk Framework

Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
An actionable risk management strategy that includes short, medium, and long term objectives is in place	Yes/No	
Risk analysis and risk management plans are in place	Yes/No	
A strategy to mitigate current risk profile has been implemented	Yes/No	
Schedule and capability for updating risk analysis and risk management plans is in place	Yes/No	
State, local, and private entities have been trained to conduct risk analysis	Yes/No	

Monitoring program to detect changes in risk is in place	? Yes/No	
Program to assess program/security measures implementation is in place	? Yes/No	

Activity: Assess Risks
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Criticality results were used to identify potential targets	Yes/No	
Threat, vulnerability, and consequence results were used to assess risk for potential targets	Yes/No	
A comprehensive risk assessment has been completed for potential targets identified	Yes/No	
Risk assessment plans and procedures were implemented	Yes/No	

Activity: Prioritize Risks
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Risk and risk reduction results were used to prioritize risk-reduction strategies	Yes/No	
Integration of a schedule and strategy to implement risk reduction strategies, including milestones, funding strategies, and opportunity costs where possible has been completed	Yes/No	
Integration of a schedule and strategy for reducing the greatest risk posed to the respective stakeholder has been completed	Yes/No	

Activity: Develop Business Case
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Funding priorities reflect risk assessment and prioritization of risk-reduction strategies	Yes/No 3	
Solutions were selected and resources allocated	Yes/No	
Resources were allocated and measures established to shift to a new risk reduction target	Yes/No	

Activity: Manage Risk
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Selected solutions have been verified as successfully implemented	Yes/No	
Selected solutions were effective in reducing risk	Yes/No ?	

Activity: Conduct Risk Communication
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Risk management strategy is communicated regularly with stakeholders (monthly or quarterly reporting)	Yes/No	

General Target Capability Questions: 3) Risk Management

Question: Please select the statement below that best describes what limits your overall Level of Preparedness for this target capability:

Answer Options:

- ☐ Fully achieving the elements of this Capability is not essential due to local conditions/risks
- ☑ There are insufficient resources (personnel, funding) for fully achieving the elements of this Capability
- ☐ Local governance and/or legal issues limit our ability to fully achieve the elements of this Capability
- ☐ Other, please provide a brief description

Comments:

Notes/References:

Target Capability: 4) Community Preparedness and Participation

Activity: Establish Collaborative Structure and Process for Government and Non-Governmental Entities at All Levels

Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Number of local Citizen Corps Councils nationwide	2500 ?	
Percent of total U.S. population served by a Citizen Corps Council	99% ?	
Membership of Citizen Corps Council includes representatives from government, emergency management officials, civic organizations, faith-based organizations, special needs advocacy groups, private sector, critical infrastructure, education, and neighborhood associations	Yes/No	
Strategic plan to engage all residents in preparedness, training, drills/exercises, and volunteer support is in place	Yes/No	
Local Citizen Corps Councils coordinate with State level Citizen Corps Councils	Yes/No ?	

Activity: Integrate Public Outreach and Non-Governmental Resources into Emergency Operations Plans and Exercises
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Percent of State and UASI Jurisdictions' EOPs that address citizen preparedness and participation, establish volunteer support for ESFs, and plan for use of non-governmental resources	100%	
Percent of exercises that engage non-governmental entities, volunteers and the general public	100%	
Frequency with which non-governmental entities and citizens (i.e., non-emergency responders) participate in planning, implementing, and reviewing community emergency exercises	Every 24 months	
Plans include MOUs specific to non-governmental entities (e.g., personnel and resources)	Yes/No	

Activity: Provide Education and Training for the Public in All Mission Areas
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Percent of annual increase in number of citizens educated and trained in UNIVERSAL all hazards capabilities until 80% of population is educated and trained	5%	
Percent of annual increase in number of citizens who are aware of heightened jurisdictional threat levels and aware of jurisdiction alerts and warnings, until 80% of citizens maintain awareness	5%	
Percent of annual increase in number of citizens within the jurisdiction who are alert to unusual behavior in others that might indicate potential terrorist activity and understand appropriate reporting procedures, until 80% of citizens maintain knowledge	5%	
Percent of annual increase in number of privately held critical infrastructure computer owners who implement appropriate virus protections and act on virus alerts, until 80% of owners achieve implementation	5%	
Percent of annual increase in number of households that conduct pre-incident preparation - to include maintaining a communication plan, disasters supplies, and a practicing evacuation/shelter-in-place, and maintaining skills until 80% of households maintain pre incident preparation	5%	
Percent of annual increase in number of citizens prepared to evacuate or relocate to designated shelter (to include citizens with special needs), until 80% of population is prepared	5%	
Percent of annual increase in jurisdiction's population that is knowledgeable of workplace, school, and community emergency plans, until 80% of population maintains knowledge	5%	
Percent of annual increase in number of citizens prepared to shelter-in-place and have emergency supplies on hand as advised by local authorities, until 80% of population prepared to shelter in place	5%	
Percent of annual increase in number of citizens trained in basic first aid, until 80% of population maintains skills	5%	
Percent of annual increase in number of citizens educated and trained in RISK-BASED capabilities for high-threat incidents in their area, to include natural hazards, technological hazards, and terrorism, until 72% of population (80% of those living in high-threat area) are educated and trained per appropriate hazard	5%	

Percent of annual increase in number of citizens who know the appropriate detailed response for specific high-threat incidents in their area, to include multiple incidents where appropriate, until 72% of population (80% of those living in high-threat area) have specialized awareness	5%	
Percent of annual increase in number of population trained in CBRNE and decontamination procedures, until 46% of population (80% of those living in urban areas) maintain skills	5%	
Percent of annual increase in number of population with risk-based life-saving skills, until 72%of population (80% of those living in high-threat area) maintain specialized skills.	5%	
Percent of annual increase in number of households, businesses, and schools that have implemented mitigation measures to protect property from specific high-threat, until 72% households, businesses, and schools (80% of those in high-risk areas) have implemented mitigation measures	5%	

Activity: Provide Volunteer Opportunities, year round and in surge operations
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Percent of annual increase in number of trained citizens providing volunteer support to local emergency responder disciplines (law enforcement, fire, emergency medical and public health services), until 10% population volunteers an average of 20 hours per year = 560 million hours/year	2%	
Percent of surge capacity of pre-trained and credentialed citizens prepared to augment and supplement official government emergency response with manpower and private sector in-kind resources for ESFs and annexes for any given emergency response function	20%	

Activity: Incident Response
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Percent of population responding to official instructions and providing self care and bystander care	100%	
Percent of citizens with disabilities or special needs (requiring 24-hour care and/or equipment) who had access to life-sustaining resources during emergency situations	100%	
Public communications were provided without electrical dependence and were accessible to all citizens in the jurisdiction, including people with disabilities and non-English speaking populations	Yes/No	
Evacuation assistance was provided for those who cannot evacuate on their own	Yes/No	
Percent of pre-identified shelters that accommodated companion and service animals and people with disabilities	100%	
Volunteers provided surge capacity for ESFs and annexes, including Transportation, Communications, Mass Care, Resources Management, Public Health and Medical Services, Search and Rescue, Public Safety and Security, Long-Term Community Recovery and Mitigation, External Affairs, Volunteers and Donations Management	Yes/No	
Non-governmental resources were quickly deployed using stand-by contracts, MOUs and MOAs	Yes/No	
Jurisdictions outside of the incident impact area provided volunteer and donations support through pre-established mechanisms.	Yes/No	

Jurisdictions outside of the incident impact area provided mass care to evacuees, as needed — Yes/No

General Target Capability Questions: 4) Community Preparedness and Participation

Question: Please select the statement below that best describes what limits your overall Level of Preparedness for this target capability:

Answer Options:

- ☐ Fully achieving the elements of this Capability is not essential due to local conditions/risks
- ☑ There are insufficient resources (personnel, funding) for fully achieving the elements of this Capability
- ☐ Local governance and/or legal issues limit our ability to fully achieve the elements of this Capability
- ☐ Other, please provide a brief description

Comments:

Question: Please estimate to what extent this Capability has improved during FY2009 (October 2008 to September 2009) as a direct result of Federal financial assistance of any kind and from any fiscal year:

Answer Options:

- ☐ None of the improvement was due to Federal funding
- ☑ Some of the improvement was due to Federal funding
- ☐ About half of the improvement was due to Federal funding
- ☐ Most of the improvement was due to Federal funding
- ☐ All of the improvement was due to Federal funding

Question: Please describe the sufficiency of this capability, jurisdiction-wide, with respect to special needs populations, as defined in the National Response Framework:

Answer Options:

- ☐ Does not identify Special Needs Populations
- ☑ Identifies Special Needs Populations, but is insufficient in meeting their needs
- ☐ In Progress to identify Special Needs Populations and meet their basic needs
- ☐ Identifies Special Needs Populations and can meet their basic needs
- ☐ Identifies Special Needs Populations and can meet the majority of their needs
- ☐ Identifies Special Needs Populations and can meet all of their needs

Notes/References:

Target Capability: 5) Intelligence and Information Sharing and Dissemination

Activity: Develop and Maintain Plans, Procedures, Programs, and Systems
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Frequency with which informational distribution lists with points of contact are updated	Every Month	
Relevant Federal, State, regional, local, and tribal authorities have been identified as necessary participants in the information sharing process	Yes/No	
Relevant Federal, State, regional, local, and tribal authorities have access to the necessary information sharing systems	Yes/No	
Memoranda of understanding (MOU) or similar agreements between appropriate entities are in place	Yes/No	
Federal agencies have a process in place to declassify or provide tear lines for relevant information and/or intelligence	Yes/No ?	
The number of law enforcement and other governmental personnel identified to receive security clearances meets jurisdictional requirements/needs	Yes/No	
Appropriate Federal, State, regional, local, and tribal law enforcement and other governmental personnel receive security clearances at an appropriate level of classification	Yes/No	
Regulatory, statutory, and/or privacy policies are in place	Yes/No	
Federal, State, regional, local, and tribal law enforcement entities have a clearly defined, implemented, and audited process for preventing, reporting, and addressing the inappropriate disclosure of information and/or intelligence	Yes/No	
Clearly defined and documented mechanisms/processes (reduced to a single pipeline wherever possible and prudent) for sharing information/intelligence among Federal, State, regional, local, and tribal sources are in place	Yes/No ?	
Mechanisms/processes for sharing information/intelligence among Federal, State, regional, local, and tribal sources are technologically proficient for the entities involved	Yes/No ?	
Alternative, supplemental, and back-up mechanisms for routing information and/or intelligence to the necessary agencies are available and routinely evaluated	Yes/No HAM	
Mechanisms within the information sharing network to provide feedback and/or follow-up information as needed are in place	Yes/No HAM	
Local agencies have an established procedure/protocol for providing intelligence products or relevant information to street-level law enforcement personnel	Yes/No	
Fusion Centers/processes ensure the participation of appropriate private-sector entities	Yes/No ?	
The Department of Homeland Security (DHS) Information Sharing and Analysis Center (ISAC) program ensures the participation of appropriate private-sector entities	Yes/No	
Joint Terrorism Task Forces have a process for sharing relevant information with the private sector in a timely manner	Yes/No	
Access to early detection/alert programs and networks and all-source information is available (e.g., Public Health Information Network, Bio Sense, Homeland Security Information Network, Information Sharing and Analysis Centers, etc.) as appropriate	Yes/No	

Activity: Develop and Maintain Training and Exercise Programs
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
There are adequate numbers of trained personnel at all levels (especially at dispatch or communications centers) to process and disseminate information	Yes/No	
Personnel are aware of and trained to adhere to pre-defined security clearances and need to-know parameters	Yes/No	
Appropriate personnel are trained in processing and disseminating information and intelligence	Yes/No	
Personnel are trained in the process for preventing, reporting, and addressing the inappropriate disclosure of information and/or intelligence	Yes/No	
Exercises test the process for preventing, reporting, and addressing the inappropriate disclosure of information and/or intelligence	Yes/No	
All appropriate law enforcement personnel have received the Criminal Intelligence Coordinating Council (CICC) Outreach Package	Yes/No	
All appropriate law enforcement personnel promote the concept of intelligence-led policing as outlined in the CICC Outreach Package	Yes/No	
Training and exercise programs include interaction with the private sector operators of critical infrastructure	Yes/No	
Exercises test alternative, supplemental, and back-up mechanisms for routing information and/or intelligence to the necessary agencies	Yes/No	

Activity: Incorporate All Stakeholders in Information Flow
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Compliance with regulatory, statutory, privacy-related, and other issues that govern the sharing of information is audited on a regular basis	Yes/No	
Percent of inappropriate disclosures of information and/or intelligence for which records are maintained	100%	
Percent of inappropriate disclosures of information and/or intelligence that are reported and resolved according to established processes	100%	

Activity: Vertically Flow Information
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Time in which relevant information received from the fusion center is disseminated to street-level personnel	? Within 12 hours from receipt at the fusion center	
Percent of law enforcement intelligence/information passed to local authorities that is deemed useful or actionable	100%	

Activity: Horizontally Flow Information
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)

A clearly defined process or procedure is used to disseminate information and products	Yes/No	
Intelligence and/or information is shared across disciplines in a timely manner	Yes/No	

General Target Capability Questions: 5) Intelligence and Information Sharing and Dissemination

Question: Please select the statement below that best describes what limits your overall Level of Preparedness for this target capability:

Answer Options:

- ☐ Fully achieving the elements of this Capability is not essential due to local conditions/risks
- ☑ There are insufficient resources (personnel, funding) for fully achieving the elements of this Capability
- ☐ Local governance and/or legal issues limit our ability to fully achieve the elements of this Capability
- ☐ Other, please provide a brief description

Comments:

Question: Please estimate to what extent this Capability has improved during FY2009 (October 2008 to September 2009) as a direct result of Federal financial assistance of any kind and from any fiscal year:

Answer Options:

- ☐ None of the improvement was due to Federal funding
- ☑ Some of the improvement was due to Federal funding
- ☐ About half of the improvement was due to Federal funding
- ☐ Most of the improvement was due to Federal funding
- ☐ All of the improvement was due to Federal funding

Notes/References:

Target Capability: 6) Information Gathering and Recognition of Indicators and Warnings

Activity: Develop and Maintain Plans, Procedures, Programs and Systems

Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
State, tribal, and local areas have a clearly defined, implemented, and audited process in their jurisdiction for requesting information from the Federal community, generally through their State's designated senior official	Yes/No	

Key stakeholders in the Federal community have developed clear and concise information needs based on the threat environment.	Yes/No	
The Federal community has delivered its information needs to each State's designated senior officials using a clearly defined process	Yes/No	
Each State's designated senior officials can verify receipt of information needs from the Federal community (or demonstrate and understanding of information needs)	Yes/No	
Frequency with which Federal community updates its information needs	Every 12 months	
Information needs products contain a feedback mechanism	Yes/No	
Processes by which State, tribal, and/or local authorities request information from the Federal community is in place	Yes/No	
Process by which the State uniformly and consistently communicates information needs to the local level is in place	Yes/No	
Regulatory, statutory, and/or privacy policies that govern the gathering of information are in place	Yes/No	
A clearly defined process for passing information gathered by law enforcement and other agencies during routine day-to-day activities into the information-sharing network is in place	Yes/No	
Feedback is provided to those responsible for gathering information during routine day-to-day activities	Yes/No	
The process for passing information gathered by law enforcement and other agencies has been audited	Yes/No	
Law enforcement and appropriate agencies have audited plans, processes, and technology in place that enable them to do the following: (1) identify items and materials used by criminal and/or terrorist organizations and report suspicious activities related to them (2) gather information on critical infrastructure and other potentially high-risk locations and assets (3) increase information gathering activities regarding critical infrastructure and other potentially high-risk location and assets, during an elevated threat level (4) coordinate information gathering operations across jurisdictions (5) process gathered information (6) provide all operational personnel with the most recent indicators and warnings to report	Yes/No for each	
Percent of jurisdictions that have an established system for public reporting of suspicious activity (e.g., 911, tip lines)	100%	
Appropriate governmental entities operate or participate in public education programs to raise public awareness of suspicious activities and how to report them	Yes/No	
Content and template standards for reported information are in place	Yes/No	
Processes, protocols, and technical capabilities to allow extraction of information from public, private, and law enforcement databases are in place	Yes/No	

Activity: Develop and Maintain Training and Exercise Programs
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Law enforcement and public safety personnel who shall be trained in information gathering and recognition of indicators and warnings have been identified.	Yes/No	
The following training has been provided to identified personnel:- Training in recognizing criminal and/or terrorism indicators and warnings- Refresher training in indicators and warnings- Training in critical infrastructure (CI) surveillance- Advanced training programs	Yes/No for each	

Federally developed training in recognizing and reporting indicators and warnings at identified businesses (via a train-the-trainer program) is conducted	Yes/No	
Businesses in each jurisdiction that should be targeted for training in indications and warnings have been identified	Yes/No	
Frequency with which government training entities review and update training materials	✓ Every 12 months	
Government training entities conduct Federally developed training in recognizing indicators and warnings to appropriate State, tribal, and local entities	Yes/No	

Activity: Gather Information
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Information was organized, linked, searchable, and easily retrievable	Yes/No	
Information provided by all sources met predefined standards for accuracy, completeness and consistency	Yes/No	
The process for passing information gathered during routing activities was implemented	Yes/No	
Information was passed to appropriate authorities using a clearly defined process, utilizing predefined network channels	Yes/No	
The effectiveness of this process was assessed by appropriate agencies	Yes/No	
Feedback was provided to those responsible for gathering information	Yes/No	

Activity: Identify Suspicious Circumstances
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Law enforcement personnel followed-up with a reporting organization if more information was necessary	Yes/No	
Law enforcement personnel acted on authenticated information	Yes/No	
Law enforcement personnel used approved response protocols to dispatch the appropriate public or private sector personnel to the potential threat	Yes/No	
Upon examination at the incident scene, law enforcement or related personnel were able to differentiate suspicious behaviors and activities from illegal or potentially threatening actions	Yes/No	
Key private-sector businesses used an established communication avenue to report suspicious activities to appropriate Federal, State, local, or tribal law enforcement entities	Yes/No	
The general public has been advised how to recognize suspicious activity (e.g., 911, tip lines, etc.)	Yes/No	
The general public was familiar with and used a predefined notification process to advise law enforcement of suspicious activity	Yes/No	

Activity: Screen Information
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Relevant personnel had access to systems or technology in order to enter gathered information	Yes/No	
Database systems were linked and compatible allowing for rapid transmission and processing of pertinent information	Yes/No	
Gathered information was processed using clearly defined procedures	Yes/No	
Information was traceable, allowing for easy communication between disseminator and analyst	Yes/No	
Procedures for tracking information were audited	Yes/No	
All pertinent information was cataloged and databased to enable timely retrieval	Yes/No	
Intelligence related to high risk infrastructure or an acute threat was prioritized and reported as soon as it was observed	Yes/No	
Information provided by all sources was corroborated	Yes/No	
Information was catalogued and files are maintained in accordance with standards in the Fusion Center Guidelines	Yes/No	
Information was extracted in accordance with approved processes, protocols, and technical capabilities	Yes/No	

General Target Capability Questions: 6) Information Gathering and Recognition of Indicators and Warnings

Question: Please select the statement below that best describes what limits your overall Level of Preparedness for this target capability:

Answer Options:

- ☐ Fully achieving the elements of this Capability is not essential due to local conditions/risks
- ☑ There are insufficient resources (personnel, funding) for fully achieving the elements of this Capability
- ☐ Local governance and/or legal issues limit our ability to fully achieve the elements of this Capability
- ☐ Other, please provide a brief description

Comments:

Notes/References:

Target Capability: 7) Intelligence Analysis and Production

Activity: Develop and Maintain Plans, Procedures, Programs, and Systems
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
A State fusion center strategy is in place that:- Conforms to Fusion Center Guidelines- Provides for a coordinated interface to the Federal Government	Yes/No to each	
Fusion center/process participants ensure that analysts understand the tailoring for the different audiences to which they provide information/intelligence	Yes/No	
Memorandums of understanding define processes and responsibilities for information sharing and ensure de-confliction with other fusion centers/processes	Yes/No	
Appropriate State and local entities provide personnel to the fusion center/process as required	Yes/No	
Analysts are granted appropriate clearances by the Department of Homeland Security (DHS)	Yes/No	
Job descriptions reflect the region's applicable risks, threats, and critical infrastructure	Yes/No	
Federal standards to pre-qualify the fusion center/process in physical and clearance requirements to receive, store, and control secret/secure information are in place	Yes/No	
State and local entities adhere to Federal standards for the fusion center/process in physical and clearance requirements to receive, store, and control secret/secure information	Yes/No	
All State, local, and tribal law enforcement information/intelligence databases comply with national standards and are completely compatible for data transmission between pertinent agencies	Yes/No	
A clearly defined process to establish threat at the management level, consistent with established intelligence community standards, is in place	Yes/No	
A clearly defined process for developing an unclassified briefing is in place	Yes/No	
Frequency with which a standardized classified-to-unclassified information review process (including ratio) is conducted	Every 12 months	
Unclassified briefings, reports, and alerts are used whenever possible to provide credible information that allows public safety, private-sector, and non-law enforcement agencies to develop intelligence- and information-driven prevention plans without compromising sources or collection methods	Yes/No	
Analysts are able to understand and identify links between terrorism-related intelligence and information related to traditional criminal activity so they can identify activities that are indicative of an imminent or potential threat	Yes/No	
All personnel demonstrate necessary knowledge of the operating systems and intelligence processes required to perform intelligence functions	Yes/No	
Participating agencies have been provided a glossary of terms, updated every 12 months, to the center/process	Yes/No	

Activity: Develop and Maintain Training and Exercise Programs
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Each analyst has met a minimum standard for hours of training	Yes/No	

Training has met International Association Law Enforcement Analytic Standards from Global Intelligence Working Group and International Association of Law Enforcement Intelligence Analysts (GIWG/IALEIA) based standards (basic, intermediate, advanced)	Yes/No	
Percent of personnel trained in the intelligence cycle	100%	
Basic and advanced intelligence analysis training is provided for intelligence operations personnel (e.g., commanders/supervisors, officers, analysts)	Yes/No	
Percent of fusion center/process staff who receive annual awareness training on relevant privacy and security rules, and regulations (28 CFR and any other relevant State statutes and regulations)	100%	
Analysts at relevant agencies and centers/processes are trained to identify precursors and links between crime and terrorism	Yes/No	
Analytic staff are properly trained and/or experienced in relevant analytical methods and practices	Yes/No	
Percent of analysts at relevant agencies and centers/processes who are trained in the use of analytic methods and tools	100%	
Participants have established procedures per the International Association of Law Enforcement Analytic Standards (GIWG/IALEIA) to benchmark analysts' capabilities	Yes/No	
Percent of personnel who demonstrate necessary knowledge of the operating systems and intelligence processes required to perform intelligence functions	100%	
Analytic staff are knowledgeable in the region's applicable risks, threats, and critical infrastructure	Yes/No	
Permanent and assigned analytical staff are trained to meet their responsibilities	Yes/No	

Activity: Establish Fusion Center
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Key leaders have established and maintained a fusion center/process using the national guidelines and standards per the Global Justice Information Sharing Initiative—Fusion Center Guidelines and Homeland Security Advisory Council (HSAC) recommendations, (Fusion Center Resource CD)	Yes/No	
Percent of fusion center staff who have the requisite training and expertise to handle the receipt, analysis, and dissemination of intelligence	100%	
The fusion center is appropriately staffed during all operational hours	Yes/No	
Information is effectively shared and received using the fusion center technology	Yes/No	
The center makes use of the relevant networks, classified and unclassified (e.g., Regional Information Sharing Systems/Law Enforcement Online (RISS/LEO), Homeland Security Information Network (HSIN), and various public health networks)	Yes/No	
Access to and from the fusion center/process by those responsible for gathering information is done in accordance with established procedures	Yes/No	
Efficient connectivity exists with the Joint Terrorism Task Force (JTTF) and Field Intelligence Guide (FIG)	Yes/No	
Staffing of analysts is conducted in accordance with national standards outlined in the Law Enforcement Analytic Standards produced by the Global Intelligence Working Group and International Association of Law Enforcement Intelligence Analysts (GIWG/IALEIA)	Yes/No	

The fusion center/process is assigned personnel with diverse subject matter expertise from key departments, organizations, agencies or offices on a permanent, or liaison basis	Yes/No ?	
The fusion center/process received, stored, and controlled secret/secure information	Yes/No	
The center/process uses an accessible repository for analytic methods/tools/techniques	Yes/No ?	
A clearly defined process or procedure is used to disseminate information and products	Yes/No ?	

Activity: Access Information
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Secret/secure information is received, stored, and controlled in accordance with Federal standards established to prequalify the fusion center/process in physical and clearance requirements	Yes/No ?	
Percent of State, tribal, and local law enforcement databases that are Global Justice XML Data Model (JDXM)-compliant	100% ?	
Unclassified briefings are established using the established process	Yes/No ?	
The standardized classified to unclassified information review process (including ratio) is used	Yes/No	
Feedback procedures are followed	Yes/No	

Activity: Analyze Information/Intelligence
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Audit standards are used to review work products	Yes/No ?	
Analysts' capabilities are assessed using procedures per the International Association of Law Enforcement Analytic Standards (GIWG/IALEIA)	Yes/No ?	
Percent of participants who have and use a national template for analytic products provided by Federal authorities	100% ?	
The volume of transactions using information networks are recorded	Yes/No ?	
Actions taken in light of transactions using information networks are tracked	Yes/No ?	

Activity: Develop Analytic Products
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Consumer satisfaction with the analytic product is monitored using an established producer-to-consumer feedback cycle	Yes/No ?	
Analysts tailor requirements for the different audiences to which they provide information/intelligence	Yes/No ?	
The fusion center/process consults the National Criminal Intelligence Sharing Plan and other relevant Federal guidelines for guidance on use of tear-line reports	Yes/No ?	

Percent of products vetted prior to distribution using center/process procedures/mechanisms	100% ?	
Intelligence files are maintained using the standards in the Fusion Center Guidelines	Yes/No ?	
The center/process has an information and intelligence archive	Yes/No ?	
The process used follows the national analytic template in the International Association of Law Enforcement Analytic Standards (GIWG/IALEIA)	Yes/No ?	

General Target Capability Questions: 7) Intelligence Analysis and Production

Question: Please select the statement below that best describes what limits your overall Level of Preparedness for this target capability:

Answer Options:

- ☐ Fully achieving the elements of this Capability is not essential due to local conditions/risks
- ☑ There are insufficient resources (personnel, funding) for fully achieving the elements of this Capability
- ☐ Local governance and/or legal issues limit our ability to fully achieve the elements of this Capability
- ☐ Other, please provide a brief description

Comments:

Notes/References:

Target Capability: 8) Counter-Terror Investigation and Law Enforcement

Activity: Develop and Maintain Plans, Procedures, Programs, and Systems
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

8

Measure	Metric	Notes (ENTIRELY OPTIONAL)
All Federal, State, local, and tribal law enforcement entities have established connections with appropriate Joint Terrorism Task Force (JTTF) field offices to establish routine and appropriate communications for all personnel	Yes/No	
Larger jurisdictions or entities have identified a designated liaison with the JTTF	Yes/No	
Smaller jurisdictions have a procedure in place to communicate with the JTTF, as needed	Yes/No	
All Federal and tribal entities have established appropriate relationships (e.g., designated liaison, part-time liaison) with all JTTF offices	Yes/No	
State and local law enforcement know how to contact the JTTF for any potential	Yes/No	

terrorism threat or activity				
Processes and procedures for law enforcement at all levels to identify and respond to suspicious activities and persons through the appropriate channels are in place		Yes/No		
Processes and procedures for law enforcement at all levels to identify individuals planning and coordinating terrorist-related activities are in place		Yes/No		
Processes and procedures for law enforcement at all levels to apprehend and interdict terrorist suspects are in place		Yes/No		
Processes and procedures for law enforcement at all levels to gather, catalogue, and preserve evidence for prosecutorial purposes and attribution are in place		Yes/No		
Federal entities have established standard procedures and processes for conducting terrorism-related investigations		Yes/No	N.	
Law enforcement at all levels use memoranda of understanding (MOU) to facilitate the conduct of an ongoing investigation		Yes/No		
Investigative policies, procedures, and processes are reviewed on a periodic basis		Yes/No		
The U.S. Department of Homeland Security (DHS) and Department of Justice/Federal Bureau of Investigation (DOJ/FBI) provide a comprehensive list of Federal, State, local, and tribal resources available to all law enforcement entities and provide updates as appropriate		Yes/No		
An investigative liaison or mechanism to communicate targeted information needs/requirements to information collectors is in place		Yes/No		
Notification processes and procedures to share information to/from Federal, State, local, and tribal officials regarding an on-going investigation are in place		Yes/No		
A mechanism for tracking leads from Federal, State, local, and tribal officials has been developed and is maintained so that all entities can view where the information is being taken for action	Y	Yes/No		
State, local, and tribal plans have been revised to include all required changes from the National Incident Management System (NIMS) and National Response Plan (NRP)	Y	Yes/No		
Investigative personnel are familiar with the Terrorist Incident Annex to the NRP	Y	Yes/No		
Plans and protocols for sharing incident-specific information from Federal partners with State, local, and tribal authorities, Emergency Operations Centers (EOCs), and other pertinent entities are in place	Y	Yes/No		
A mechanism for conveying among entities the prevention efforts taken by Federal, State, local, and tribal officials is in place	Y	Yes/No		
State, local, and tribal law enforcement either possess or have access to special operations teams (e.g., SWAT teams)	Y	Yes/No		
Standard policies and procedures for deploying special operations teams are in place	Y	Yes/No		
Sufficient specialized units or personnel exist within the State, local, and/or tribal jurisdictions to ensure coverage of at least two simultaneous contingencies	Y	Yes/No		
State, local, and/or tribal jurisdictions develop and maintain formal MOUs, policies, or procedures for accessing specialized units or personnel in an emergency	Y	Yes/No		
Formal MOUs, policies, or procedures that clearly define the duties and responsibilities of Federal specialized units/personnel are in place s/o	Y	Yes/No	s/o	
Appropriate agencies conduct background investigations on individuals applying for sensitive positions in government, law enforcement, and the private sector	Y	Yes/No		
A mechanism for State, local, and tribal law enforcement entities to request/authorize that specific Federal specialized units or personnel be assigned to conduct joint	Y	Yes/No		

operations is in place			
DHS/DOJ/DOD develop and maintain a U.S. Government (USG) plan to attain and maintain USG counterterrorism capabilities in a maritime environment		Yes/No	N/A
DHS/DOJ/DOD identify and implement common doctrine and equipment for the maritime environment		Yes/No	N/A
Designated personnel have an identified source for and access to basic personal protection equipment (e.g., Chem/Bio protective mask, protective over-garments)	Y	Yes/No	
Appropriate processes, procedures, and plans for notifying proper authorities in the event of chemical, biological, radiological, nuclear, and explosive (CBRNE) hazards/threats are in place	Y	Yes/No	
Procedures/protocols are in place for relaying CBRNE-related lab analysis (e.g., type, quantity, lethality) to FBI laboratory entities are in place		Yes/No	N/A
Information flow plans/process for onsite personnel and detection capabilities are developed for rapidly relaying investigative information		Yes/No	

Activity: Develop and Maintain Training and Exercise Programs
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

8

Measure		Metric	Notes (ENTIRELY OPTIONAL)
Federal entities identify and/or develop training and education courses that they will make available for all State, local, and tribal entities in the areas of interviewing techniques and cultural awareness training	Y	Yes/No	
Appropriate law enforcement personnel are trained in the FBI 12-step process of evidence collection/preservation	Y	Yes/No	
State, local, and tribal personnel are trained and educated regarding the Federal assets that are available to them	Y	Yes/No	
State, local, and tribal personnel are trained in appropriate Federal responsibilities in prevention and investigation matters	Y	Yes/No	
Training is tailored to address regional trends/issues by State, local, and tribal officials	Y	Yes/No	
Training is repeated/updated at least on a periodic basis	Y	Yes/No	
Appropriate personnel are trained in cultural awareness as it relates to terrorism	Y	Yes/No	
Appropriate personnel were trained to recognize criminal activity (e.g., money laundering) that could be exploited by terrorists and/or related to terrorism investigations	Y	Yes/No	
Appropriate personnel are trained in source recruitment and development	Y	Yes/No	
All law enforcement personnel are educated and trained to recognize terrorist techniques and procedures, including suspicious criminal and non-criminal activity and indicators	Y	Yes/No	
Designated personnel are trained to recognize indicators of a hazardous or contaminated environment	Y	Yes/No	
Designated personnel are trained in the proper use of personal protective equipment (PPE)	Y	Yes/No	
All relevant personnel receive safety awareness training from appropriate agencies or units (e.g., hazmat, bomb squad, military EOD unit)	Y	Yes/No	
Appropriate personnel are trained and educated on the NIMS	Y	Yes/No	

Communication mechanisms are routinely tested via discussion-based and operations based exercises, tabletop exercises (TTX), and functional exercises (FX) to ensure they are operating effectively	Y	Yes/No	
DHS/DOJ/DOD develop and test interoperability capabilities through joint training and exercises	Y	Yes/No	
Training plans are developed independently or in cooperation with other jurisdictions, per Federally defined guidelines	Y	Yes/No	
All jurisdictional training plans designate a centralized training facility and/or lead agency responsible for joint training programs	Y	Yes/No	
All jurisdictional training plans establish a mechanism for notifying/updating participating agencies of training opportunities and scheduling	Y	Yes/No	
Federally sponsored training programs utilize train-the-trainer methods as appropriate to enable the broadest possible reach to all levels of government	Y	Yes/No	
Federally developed awareness training programs relating to legal responsibilities and limitations, preservation of potential or suspected crime scenes, and control/custody of evidence (videotapes, documents, etc.) are offered to non-law enforcement (public safety, code enforcement, public health, and private sector security)	Y	Yes/No	
Agencies adhere to established policies regarding training intervals and requirements	Y	Yes/No	
All State, local, and tribal jurisdictions provide DHS with a list of their cultural awareness training needs, in order of priority	Y	Yes/No	

Activity: Conduct Investigations
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

10

Measure		Metric	Notes (ENTIRELY OPTIONAL)
Intelligence related to high-risk infrastructure or an acute threat is prioritized and reported as soon as it is observed during the course of an investigation	Y	Yes/No	
Percent of law enforcement investigators who are able to recognize and address onsite CBRNE hazards encountered during the course of an investigation	Y	100%	
FBI Hazardous Materials Response Unit (HMRU) collects evidence, processes material/evidence, and identifies the source or precursors of CBRNE	Y	Yes/No	
Law enforcement notifies industry/facilities of the process to identify and report suspicious material, activity, or personnel related to the ongoing investigation	Y	Yes/No	
Law enforcement personnel coordinate with critical resource infrastructure, key resource, and private-sector officials to facilitate an investigation	Y	Yes/No	
Law enforcement personnel follow-up with a reporting organization if more information is necessary	Y	Yes/No	
Law enforcement investigators receive timely threat and intelligence information	Y	Yes/No	
Law enforcement contacts the local Joint Terrorism Task Force (JTTF) when a connection to terrorism is discovered during a criminal investigation	Y	Yes/No	
Law enforcement uses investigative information to identify potential vulnerabilities/target lists	Y	Yes/No	
Law enforcement notifies Federal, State, local, and tribal governments how to identify and report suspicious material, activity, or personnel related to the ongoing investigation	Y	Yes/No	
All appropriate entities ensure that sources and methods remain confidential throughout the investigative process	Y	Yes/No	

Activity: Share Information Related to Investigations
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

10

Measure		Metric	Notes (ENTIRELY OPTIONAL)
Information provided by all sources is delivered through pre-established channels appropriate for the originating source	Y	Yes/No	
Information provided by all sources meets predefined standards for accuracy, completeness, and consistency	Y	Yes/No	
All appropriate entities follow legal protocols on handling and disseminating information related to an ongoing investigation	Y	Yes/No	

Activity: Deploy Specially Trained Personnel
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

8

Measure		Metric	Notes (ENTIRELY OPTIONAL)
Percent of personnel who demonstrate basic knowledge of minimum safe distances and how to establish adequate perimeter, containment and decontamination procedures	100%	100%	
State, local, and tribal law enforcement deploy special operations teams	Y	Yes/No	
Law enforcement agencies access personnel with advanced foreign language capabilities	Y	Yes/No	

General Target Capability Questions: 8) Counter-Terror Investigation and Law Enforcement

Question: Please select the statement below that best describes what limits your overall Level of Preparedness for this target capability:

Answer Options:

- ☐ Fully achieving the elements of this Capability is not essential due to local conditions/risks
- ☑ There are insufficient resources (personnel, funding) for fully achieving the elements of this Capability
- ☐ Local governance and/or legal issues limit our ability to fully achieve the elements of this Capability
- ☐ Other, please provide a brief description

Comments:

Limited Personnel -
Budget limitations

Question: Please estimate to what extent this Capability has improved during FY2009 (October 2008 to September 2009) as a direct result of Federal financial assistance of any kind and from any fiscal year:

Answer Options:

- ☐ None of the improvement was due to Federal funding
- ☐ Some of the improvement was due to Federal funding
- ☐ About half of the improvement was due to Federal funding
- ☐ Most of the improvement was due to Federal funding
- ☐ All of the improvement was due to Federal funding

Notes/References:

Some of the improvement LLETP

Target Capability: 9) CBRNE Detection

Activity: Develop and Maintain Plans, Procedures, Programs, and Systems

Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Technological shortfalls in detection for each CBRNE agent have been identified Yes	Yes/No	
A research and development program to address the detection technological shortfalls for each CBRNE agent is in place NO	Yes/No	
A program for the timely development of standards for emerging technology is in place NO	Yes/No	
A process to identify, acquire, and integrate appropriate technology in operational environments is in place NO	Yes/No	
Technical support for each CBRNE agent is available (on-site or through "reach back") NO	Yes/No	
A standard list of threats of concern for each CBRNE agent is in place YES	Yes/No	
Appropriate levels of detection sensitivity for each CBRNE agent have been selected for the identified threats of concern NO	Yes/No	
Detection sensitivity thresholds for each CBRNE agent comply with appropriate international, national, State, and local standards NO	Yes/No	
A regional detection plan for each CBRNE agent has been developed and coordinated COG ?	Yes/No	
Protocols have been developed and incorporated in plans to communicate CBRNE detection activities, locations, anomalies and their resolution to appropriate personnel (e.g., intelligence, law enforcement, hazardous materials (HazMat), and public health personnel) YES	Yes/No	
Protocols for notifying officials include agency specific call-down lists YES	Yes/No	

Frequency with which CBRNE detection plans are updated to reflect current critical infrastructure/key resources (CI/KR) assessments	5 year	Every 12 months	
Appropriate procedures exist for CBRNE detection at critical infrastructure/key resources (CI/KR) for specific threat conditions	Y TRUE	Yes/No	
Integrated detection architectures for each of the CBRNE agents exist for all levels of government (Federal, State, local, tribal)	N	Yes/No	
Gaps in detection capability for each of the CBRNE agents are identified	YES	Yes/No	
A process to acquire and allocate resources and fill CBRNE detection gaps is in place	NO	Yes/No	

Activity: Develop and Maintain Training and Exercise Programs
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

3

Measure		Metric	Notes (ENTIRELY OPTIONAL)
First responders and CI/KR personnel have received awareness level training for each of the CBRNE agents	Y	Yes/No	
Frequency with which detection protocols for each of the CBRNE agents are exercised and evaluated	N	Every 12 months	36 MO.
Training for detection operators, laboratory staff, and critical infrastructure personnel has been conducted	N	Yes/No	
A process for analyzing exercise results and incorporating lessons learned is in place	Y	Yes/No	
Detection training materials have been developed and validated for each CBRNE agent	Y	Yes/No	
Percent of required personnel trained to meet jurisdictional CBRNE detection requirements	Y	100%	
Public education campaigns exist for CBRNE detection	N	Yes/No	
The CBRNE detection exercise program is in compliance with Homeland Security Exercise and Evaluation Program (HSEEP) guidance	Y	Yes/No	
Frequency with which CBRNE detection notification plan is exercised	N	Every 3 months	
A program to test and evaluate new CBRNE technology in the appropriate operational environment is in place	N	Yes/No	
Appropriate personnel have been identified for CBRNE detection training (e.g., law enforcement, transit police and security, fire department, hazardous materials (HazMat), public health, private sector security, and critical infrastructure personnel)	Y	Yes/No	

Activity: Detect CBRNE
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure		Metric	Notes (ENTIRELY OPTIONAL)
Illicit chemical, biological, radiological, or explosive material are detected at borders, inspection points, or during routine law enforcement investigations	Y	Yes/No	
Surveillance systems provide early detection of a chemical, biological, or radiological release that would facilitate limiting the spread and effect of that release	N	Yes/No	
Checked baggage and cargo entering/boarding events, aircraft, mass transit, or other potential targets are screened for CBRNE materials	N	Yes/No	

Passengers and event attendees entering/boarding events, aircraft, mass transit, or other potential targets are screened for CBRNE materials	Yes/No	
CBRNE detection efforts are informed by intelligence, public safety, and public health information	Yes/No	
Venues are inspected for potential CBRNE threats prior to major events	Yes/No	
Ad hoc CBRNE surveillance capabilities are deployed in response to potential threats	Yes/No	
Accurate records are kept of all suspect issues or alarms and their resolution	Yes/No	

Activity: Identify and/or Characterize CBRNE material
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Suspicious material is analyzed (either on-site or via laboratory support)	Yes/No	
Percent of CBRNE alarms, or suspect material discoveries, at interdiction points that are resolved	100%	
Percent of CBRNE materials that are correctly identified as either a threat or not a threat	100%	
Percent of detected CBRNE materials that are properly identified	100%	

Activity: Communicate CBRNE Detection Incidents
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Disseminated information in event of CBRNE detection follows established protocol	Yes/No	
CBRNE detection notification is completed in accordance with relevant plans and protocols	Yes/No	

General Target Capability Questions: 9) CBRNE Detection

Question: Please select the statement below that best describes what limits your overall Level of Preparedness for this target capability:

Answer Options:

- ☐ Fully achieving the elements of this Capability is not essential due to local conditions/risks
- ☒ There are insufficient resources (personnel, funding) for fully achieving the elements of this Capability
- ☐ Local governance and/or legal issues limit our ability to fully achieve the elements of this Capability
- ☐ Other, please provide a brief description

Comments:

Question: Please estimate to what extent this Capability has improved during FY2009 (October 2008 to September 2009) as a direct result of Federal financial assistance of any kind and from any fiscal year:

Answer Options:

- ☐ None of the improvement was due to Federal funding
- ☑ Some of the improvement was due to Federal funding
- ☐ About half of the improvement was due to Federal funding
- ☐ Most of the improvement was due to Federal funding
- ☐ All of the improvement was due to Federal funding

Notes/References:

Target Capability: 10) Critical Infrastructure Protection

Activity: Develop and Maintain Plans, Procedures, Programs, and Systems

Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
NIPP and SSPs are in place	Yes/No	
State and/or regional CIP Plans are developed and in place	Yes/No	
Appropriate risk methodology (i.e., one that takes into account the threats, consequences, and vulnerabilities) has been developed and approved by the Federal Government for CI/KR protection	Yes/No	
Vulnerability assessment tool has been developed	Yes/No	
GCCs have been established for each sector	Yes/No	
SSPs have been reviewed by appropriate GCC	Yes/No	
SCCs have been established for each sector	Yes/No	
SSPs have been reviewed by appropriate SCC	Yes/No	
A mechanism for coordinating CIP efforts has been established for Federal and State authorities (e.g., State, Local, and Tribal Government Coordinating Council)	Yes/No	
National CIP Research and Development Plan has been established	Yes/No	
CIP information-sharing mechanism has been established	Yes/No	
Sector security goals have been established for each sector in partnership with security partners	Yes/No	

Sector security goals support the goal of the NIPP	Yes/No	
Sector security goals yield specific, measurable outcomes that allow security partners to allocate security resources and to track progress	Yes/No	

Activity: Develop and Maintain Training and Exercise Programs
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Frequency with which exercises are conducted to test the effectiveness of protective measures	Every 12 months	
Vulnerability assessment training program is developed and implemented	Yes/No	
Risk assessment training program is developed and implemented	Yes/No	
System to "Red Team" CIP measures and technology is in place	Yes/No	

Activity: Coordinate and Manage Critical Infrastructure Protection
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Time in which GCC concurrence with respect to CIP is signed by all relevant parties	Within 12 months from official TCL publication	
GCC concurrence includes coordination/cooperation with SCCs	Yes/No	

Activity: Identify CI/KR
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Sector-specific agencies have identified assets of potential national-, regional-, or sector level importance	Yes/No ?	
Data have been collected on assets, systems, networks, and functions and are relevant to risk assessment efforts	Yes/No ?	
Data have been collected on assets, systems, networks, and functions and address dependencies and interdependencies that affect functionality and performance	Yes/No ?	
Data have been verified for accuracy	Yes/No ?	
Frequency with which data are updated and provided to DHS	? Every 12 months	

Activity: Assess Risks
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Procedures for analyzing threats, vulnerabilities, consequences, and risks were implemented	Yes/No	
Consequence or "top-screen" analysis was performed	Yes/No	

Potential threats to assets, systems, networks, and functions were identified	Yes/No	
Potential threats to high-consequence assets, systems, networks, and functions were identified	Yes/No	
Percent of high-consequence assets, systems, networks, and functions that have completed vulnerability assessments	100%	
Percent of high-consequence assets, systems, networks, and functions that have completed a risk assessment	100%	
Risk analysis results were disseminated to the proper authorities	Yes/No	

Activity: Prioritize
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
CI/KR and high-consequence assets, systems, networks, and functions were normalized and prioritized for consideration of protective programs	Yes/No	

Activity: Protect
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Percent of high-risk assets, systems, networks, and functions for which protective programs and/or mitigation strategies have been developed	100%	
Percent of high-risk assets, systems, networks, and functions for which protective programs and/or mitigation strategies have been implemented	100%	
Percent of high-risk assets, systems, networks, and functions that have active protective programs to measurably reduce risk	100%	
Percent of high-risk assets, systems, networks, and functions for which risk has been measurably reduced	100%	
Percent of high-risk assets, systems, networks, and functions for which plans for surge capacity during a crisis have been developed	100%	
Percent of high-risk assets, systems, networks, and functions for which continuity of operations plans have been developed	100%	

Activity: Measure Effectiveness
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Frequency with which national metrics data are collected and reported	Every 12 months	
Frequency with which sector-specific metrics data are collected and reported	Every 12 months	

General Target Capability Questions: 10) Critical Infrastructure Protection

Question: Please select the statement below that best describes what limits your overall Level of Preparedness for this target capability:

Answer Options:

- ☐ Fully achieving the elements of this Capability is not essential due to local conditions/risks
- ☑ There are insufficient resources (personnel, funding) for fully achieving the elements of this Capability
- ☐ Local governance and/or legal issues limit our ability to fully achieve the elements of this Capability
- ☐ Other, please provide a brief description

Comments:

Notes/References:

Target Capability: 11) Food and Agriculture Safety and Defense

Activity: Develop and Maintain Plans, Procedures, Programs, and Systems

Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Procedures are in place for:- Food and agriculture surveillance activities (e.g., active searches, interviews, medical record review, compilation of data)- Sample collection- Maintaining chain of custody of laboratory samples- After hours receipt of samples- Triaging samples dependent on priority- Trace back/trace forward investigations- Rapidly informing the public once the contaminated food has been identified- Coordinating public communications between government, academia, and the private sector- Controlling contaminated products (i.e., seizure, product quarantine, recall, embargo, condemnation, administrative detention)- Appropriate disposal of affected food and/or agricultural products- Appropriate decontamination of affected food facilities- Quick recall of affected food or agricultural products from the marketplace- Verifying effectiveness and timeliness of food and agricultural product recalls	Yes/No for each	
Plans and procedures for responding to a food /agricultural event identify the proper food and agricultural authorities	Yes/No	
Communication plans and procedures for responding to a food/agricultural event provide for dissemination of accurate, timely, and accessible information to the public, media, and support agencies	Yes/No	
Emergency response plans include all food operations (e.g., retail, food service, mass feeding, food processing facilities)	Yes/No	
Memoranda of agreements (MOAs) to facilitate response are in place	Yes/No	
Field staff or other designated first responders are appropriately qualified	Yes/No	

Redundant emergency communication capabilities are in place	Yes/No	

Activity: Develop and Maintain Training and Exercise Programs
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Field staff or other designated first responders have:- Hazard awareness training- NIMS Training	Yes/No for each	
HSEEP-compliant exercises to evaluate food and agricultural safety and defense are routinely conducted	Yes/No	

Activity: Direct Food and Agriculture Safety and Defense Operations
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Appropriate numbers of trained personnel have been identified to respond to the State or local EOC and possibly the Joint Operations Center	Yes/No	
Boilerplate consumer messages have been developed	Yes/No	
Assets for decontamination procedures have been identified	Yes/No	
Decontamination is conducted in accordance with local protocol for all contaminated personnel, equipment, and animals	Yes/No	
Return of food products is monitored	Yes/No	
Protective gear is available for field staff or other designated first responders	Yes/No	

Activity: Conduct Surveillance
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Time in which a surveillance plan is implemented upon determination of a specific food product associated with illness or the presence of a diseased crop	Within 24 hours from confirmed food product association or crop disease	
Time in which individual or joint USDA/FDA/DOJ investigation into source of contamination of identified food product or diseased crop is initiated	Within 24 hours from confirmed food product association or crop disease	
Frequency and quality of inspection for surveillance of food products at manufacturing, distribution, retail, or food service facilities is conducted in accordance with Federal and State protocol	Yes/No	
Federal/State authorities had access to laboratories with validated methods for detection/identification of pathogens, chemical, biological, and radiological contaminants	Yes/No	

Activity: Trace Suspect Products
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)

Time in which trace back investigation is initiated following notification of contaminated food product involvement	N	Within 1 hour from notification	
Time in which trace forward investigation was initiated following notification of contaminated food product involvement	N	Within 1 hour from notification	
Time in which epidemiological investigation was initiated following report to health department	V	Within 3 hours from report	
Time in which epidemiological investigation was completed following report to health department	V	Within 36 hours from report	
Time in which analysis of samples was conducted after samples reach the lab		Within 1 hour from receipt at lab	
Laboratory samples were analyzed within time period appropriate for type of contaminant and whether screening and/or confirmatory analysis was conducted	N/A	Yes/No	
Percent of potentially affected food facilities identified		100%	
Time in which FBI was notified for an event that appeared to be due to intentional contamination	N/A	Within 6 to 12 hours after determination	

Activity: Implement Control Measures for Contaminated Food Products or Diseased Crops
Level of Preparedness: 1 2 3 4 5 (6) 7 8 9 10

Measure		Metric	Notes (ENTIRELY OPTIONAL)
Food recall was issued	N/A	Yes/No	
Recalls were announced to the public	N/A	(Yes/No)	
Percent of potentially affected locations secured to prevent spread of contamination		100%	

Activity: Conduct Product Disposal and Surface and Food Facility Decontamination
Level of Preparedness: 1 2 3 4 (5) 6 7 8 9 10

Measure		Metric	Notes (ENTIRELY OPTIONAL)
Hazardous Material Disposal Plan was implemented	N	(Yes/No)	

General Target Capability Questions: 11) Food and Agriculture Safety and Defense

Question: Please select the statement below that best describes what limits your overall Level of Preparedness for this target capability:

Answer Options:

- ☐ Fully achieving the elements of this Capability is not essential due to local conditions/risks
- ☒ There are insufficient resources (personnel, funding) for fully achieving the elements of this Capability
- ☐ Local governance and/or legal issues limit our ability to fully achieve the elements of this Capability
- ☐ Other, please provide a brief description

Comments:

Notes/References:

Target Capability: 12) Epidemiological Surveillance and Investigation

Activity: Develop and Maintain Plans, Procedures, Programs, and Systems
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

All State Tyler

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Epidemiological and laboratory emergency plans are in place	Yes/No	
Epidemiological plans identify the conditions (e.g., trigger points) for initiating the investigation	Yes/No	
Epidemiological emergency response plans delineate the epidemiological investigation steps for identifying the population at risk	Yes/No	
Epidemiological emergency response plans address surveillance - ongoing and event-specific collection of health data	Yes/No	
Epidemiological emergency response plans include steps for comparison of cases to the baseline and confirmation of diagnosis	Yes/No	
Epidemiological emergency response plans include steps for case finding - actively searching for cases	Yes/No	
Epidemiological emergency response plans include steps for managing data that warrants public health attention (e.g., detect through pattern recognition and compile, analyze, and report surveillance data)	Yes/No	
Epidemiological emergency response plans include steps for contact tracing	Yes/No	
Epidemiological emergency response plans identifying/developing information systems to support the epidemiological investigation that comply with PHIN functional requirements for Outbreak Management and Countermeasure and Response Administration including a protocol for management/flow of data	Yes/No	
Epidemiological emergency response plans include steps for development of descriptions of cases through interviews, medical record review and other mechanisms (person, place and time)	Yes/No	
Epidemiological emergency response plans include steps for generating possible associations of transmission, exposure and source	Yes/No	
Epidemiological emergency response plans include steps for coordinating with environmental investigation	Yes/No	
Epidemiological emergency response plans include steps for performing and analyzing definitive studies	Yes/No	
Epidemiological emergency response plans include steps for sharing with and reporting appropriate information to key Federal, State, and local public health partners	Yes/No	
Epidemiological emergency response plans address monitoring the containment of diseases (e.g., outbreak course and population characteristics, effectiveness of	Yes/No	

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mitigation steps, status of those exposed from identification through disposition, etc.)		
Epidemiological emergency response plans include steps for evaluating therapeutic outcome	Yes/No	
Epidemiological emergency response plans include steps for monitoring adverse reactions to public health interventions	Yes/No	
Epidemiological emergency response plans include communication requirements (e.g., dissemination of accurate, timely, and accessible information to the public, media, and support agencies)	Yes/No	
Chain of evidence and chain of custody protocols are followed according to SOP - zero loss of evidence or specimens	Yes/No	
Information tracking systems (e.g., registries of exposed or potentially exposed persons, systems to support investigating, describing, understanding events)	Yes/No	
State notifiable conditions list distinguishes between select conditions that require immediate reporting to the public health agency (at a minimum, Cat A agents), and conditions for which a delay in reporting is acceptable	Yes/No	

Activity: Develop and Maintain Training and Exercise Programs
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Staff are trained on activities required to conduct epidemiological surveillance and detection including exposure and disease detection, surveillance, analysis, reporting, and use of equipment	Yes/No	
HSEEP-compliant exercises to evaluate epidemiological surveillance and detection are routinely conducted	Yes/No	

Activity: Direct Epidemiological Surveillance and Investigation Operations
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Time in which State informed local or local informed State of receipt of notice of a case with a high index of suspicion of an immediately notifiable condition	Within 1 hour from receipt	
Time in which information was issued to the public that acknowledged the event, provided status, and committed to continued communication	Within 1 hour from implementation of response plan	
Time in which case finding and public health instruction was disseminated to all hospitals in jurisdiction through the Health Alert Network (HAN) whose supporting information systems comply with the PHIN functional requirements for Partner Communications and Alerting.	Within 12 hours from case definition	
Percent of public health epidemiological staff with sufficient equipment (e.g., PPE, IT, communication, clinical sampling equipment, specimen collection material) to conduct investigation	100%	
Time in which knowledgeable public health professional answered a call of urgent public health consequence 24/7/365	Within 15 minutes from call	
Time in which message was approved and authorized for distribution of public health and medical information to clinicians and other responders	Within 1 hour from finalization of message	

Activity: Surveillance and Detection
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Data warranting public health attention were received, reviewed, and analyzed	Yes/No	
Time in which epidemiological investigation was initiated following report to health department	Within 3 hours from report	
Time in which epidemiological investigation was completed following report to health department	Within 36 hours from report	

Activity: Conduct Epidemiological Investigation
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10 N/A

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Time in which public health epidemiologist initiated initial investigation	Within 3 hours from initial notification	
Time in which recommendation for public health intervention was provided	Within 6 hours from first identification of agent	
Time in which suspect case was sent to key Federal, State, and local public health partners (e.g., CDC, FBI, law enforcement, State, and local)	Within 3 hours from identification	
Time in which case definitions were created	Within 12 hours from confirmation of index case	
Time in which a health alert that describes the initial report of an indexed case along with known cases, possible risk factors, and initial public health interventions to be distributed via multiple means such as: Epi-X, Health Alert Network (HAN), fax, and e-mail was developed	Within 12 hours from initiation of case investigation	
Time in which active case findings in all affected States was initiated	Within 24 hours from established working case definition.	
Time in which law enforcement was notified of initial laboratory confirmation of high priority diseases or events with suspicion of terrorism	Within 1 hour from laboratory confirmation.	
Time in which clinical diagnostic specimens/samples were received at the laboratory response network (LRN) after epidemiologist acquisition	Within 6 hours from acquisition	
Time in which 75% of known suspected cases (or proxies) were contacted/interviewed for more detailed epidemiologic follow-up	Within 48 hours from identification of the index case	
Time in which an initial report describing all suspected cases by person, place, and time was produced	Within 60 hours from identification of the index case	

Activity: Monitor Containment
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10 N/A

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Percent of known cases and exposed successfully tracked from identification through disposition to enable follow-up	100%	

General Target Capability Questions: 12) Epidemiological Surveillance and Investigation

Question: Please select the statement below that best describes what limits your overall Level of Preparedness for this target capability:

Answer Options:

- [ ] Fully achieving the elements of this Capability is not essential due to local conditions/risks
- [x] There are insufficient resources (personnel, funding) for fully achieving the elements of this Capability
- [ ] Local governance and/or legal issues limit our ability to fully achieve the elements of this Capability
- [ ] Other, please provide a brief description

Comments:

Notes/References:

Target Capability 13) Laboratory Testing

Activity: Develop and Maintain Plans, Procedures, Programs, and Systems

Level of Preparedness: 1 2 3 4 5 6 (7) 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Laboratory plans and procedures address linkages to Federal lab networks and member labs within the jurisdiction (e.g., Food Emergency Response Network, National Animal Health Laboratory Network, EPA)	(Yes)/No	
Laboratory plans and procedures address collaborative linkages with other state laboratories(e.g., environmental, agriculture, veterinary, university)	(Yes)/No	
Laboratory plans and procedures address sharing information with key Federal, State, and local public health partners (e.g., FBI, first responders, hazmat teams, LRN Sentinel and Chemical labs)	(Yes)/No	
Laboratory plans and procedures address dissemination of accurate, timely, accessible information to public, media, support agencies	(Yes)/No	
Laboratory plans and procedures address investigation and follow-up lab support (e.g., analytical and investigative assistance to epidemiologist, law enforcement, and environmental health)	(Yes)/No	
Laboratory plans and procedures address information tracking systems (e.g., database of contact information and capability at all LRN labs, database of inventory of reagents and supplies at their respective labs)	(Yes)/No	
The Public Health Laboratory has or has access to information systems that comply with the PHIN Functional Area Connecting Laboratory Systems to send and receive laboratory test orders and results	(Yes)/No	
LRN reference laboratory has a system to maintain an inventory of reagents and supplies to support LRN testing	(Yes)/No	

CDC (BPRP) produces and/or acquires sufficient reagents to maintain LRN reference testing of biological threat agents	Yes/No	
Percent of Health Resources & Services Administration (HRSA) funded hospitals that have PHIN-compliant IT systems that are interoperable with their jurisdictional public health agency and that transmit clinical and/or hospital utilization data in near real-time to a PHIN-compliant early-event detection information systems. (Responsibility aligns with Health Resources and Services Administration and interface with Interoperable Communications, Epidemiology and Medical Surge Capabilities) (Reference National Bioterrorism Hospital Preparedness Program FY2005 Continuation Guidance Health Resources and Services Administration Announcement number 5-U3R-05-001)	100% ✓	
Frequency with which tests are conducted of select LRN Sentinel laboratories laboratory to reach a knowledgeable public health laboratory professional at the jurisdictional confirmatory LRN Reference and LRN Chemical laboratories 24/7/365 by landline phone	✓ Every 12 months	
Time in which public health laboratory professionals are reached by landline phone	✓ Within 15 minutes	
Percent of LRN Sentinel laboratories within the LRN jurisdiction that successfully acknowledge receipt of health alerts. Note: Reference PHIN Preparedness Functional Area Partner Communication and Alerting	✓ 100%	
Frequency with which acknowledgement of receipt of health alerts that includes at least one priority category (e.g., alert, advisory, update, etc.) is tested	✓ Every 12 months	
The laboratory has a primary system that ensures delivery of specimens/samples 24/7/365	✓ Yes/No	
The laboratory has a secondary courier (e.g.,State patrol helicopter) system that ensures rapid delivery in an emergency situation	Yes/No	
At least one operational Biosafety Level Three (BSL-3) facility is available within jurisdiction for testing for biological agents, or if not immediately possible, BSL-3 practices, as outlined in the CDC-NIH publication "Biosafety in Microbiological and Biomedical Laboratories, 4th Edition" (BMBL), used (see www.cdc.gov/od/ohs) or formal arrangements (i.e., MOU) established with a neighboring jurisdiction to provide this capability	Yes/No No Local Lab	
At least one laboratory exists within jurisdiction for testing of chemical agents or formal arrangements (i.e., MOU) established with a neighboring jurisdiction to provide this capability	Yes/No	
Laboratory registration, operations, safety, and security are consistent with both the minimum requirements set forth in Select Agent Regulation (42 CFR 73) and the USA PATRIOT ACT of 2001 (P.L. 107-56) and subsequent updates	Yes/No	
Laboratory plans address developing and maintaining a public health laboratory information website	Yes/No	
Public health laboratory website includes information about protocol updates for rule-out testing	Yes/No	
Public health laboratory website includes information about Department of Transportation (DOT)-compliant packaging and shipping	Yes/No	
Public health laboratory website includes chain-of-custody guidelines	Yes/No	
Public health laboratory website includes CDC endorsed material on referral of clinical human and Veterinary specimens	Yes/No	
Public health laboratory website includes information about environmental samples	Yes/No	
Public health laboratory website includes information about suspect bioterrorism (BT) isolates	Yes/No	

Public health laboratory website includes information about bacterial and viral food borne pathogens	Yes/No	
The LRN reference laboratories maintains a ready supply of the reagents, not supplied by CDC, required for rapid testing of biological threat agents at the reference level	Yes/No	
Adequate amounts of required test reagents and materials are maintained by and immediately available to LRN Reference and LRN Chemical laboratories during an emergency event	Yes/No	
Materials for chemical methods are available through commercial vendors and stocked by chemical laboratories for use in an emergency	Yes/No	
Laboratory system to receive and triage specimens and samples is in place	Yes/No	
Laboratory plans and procedures address compiling an all hazards team to address laboratory testing	Yes/No	
All-hazards team includes chemical terrorism (CT) laboratory coordinator (chemist or medical technologist)	Yes/No	
All-hazards team includes assistant CT laboratory coordinator	Yes/No	
All-hazards team includes bioterrorism laboratory coordinator	Yes/No	
All-hazards team includes biologic sentinel network liaison who is available 24/7/365 to advise public health agencies, hospitals, private laboratories, first responders, hazmat teams, local, State, and Federal law enforcement, the Army National Guard (WMD-CST), and poison control	Yes/No	
All-hazards team is capable of proper triage screening	Yes/No	
All-hazards team is capable of collection, packaging, labeling, and shipping of biological/environmental sample	Yes/No	
All-hazards team is capable of collection, packaging, labeling, and shipping of biological/clinical specimen	Yes/No	
All-hazards team is capable of collection, packaging, labeling, and shipping of biological/food sample	Yes/No	
All-hazards team is capable of collection, packaging, labeling, and shipping of chemical/environmental sample	Yes/No	
All-hazards team is capable of collection, packaging, labeling, and shipping of chemical/clinical specimen	Yes/No	
All-hazards team is capable of collection, packaging, labeling, and shipping of chemical/food sample	Yes/No	
All-hazards team is capable of collection, packaging, labeling, and shipping of radiological/environmental sample	Yes/No	
All-hazards team is capable of collection, packaging, labeling, and shipping of radiological/clinical specimen	Yes/No	
All-hazards team is capable of collection, packaging, labeling, and shipping of radiological/food sample	Yes/No	

Activity: Develop and Maintain Training and Exercise Programs

Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)

LRN Reference and LRN Chemical laboratories have internal competency training program for LRN methods	Yes/No	
Laboratory training includes CDC lab proficiencies, use of appropriate safety and security equipment, biological agent rule-out protocols, specimens, or isolate referral responsibilities and notification algorithms	Yes/No	
Frequency with which LRN Reference laboratory offers training to LRN Sentinel laboratories	Every 12 months	
Percent of participating LRN Reference laboratories and Level-1 and Level-2 LRN chemical laboratories that pass their proficiency tests according to CDC criteria	100%	
Percent of LRN Sentinel and LRN Clinical Chemistry laboratories that participate in State-developed training programs, i.e., by LRN Reference laboratories (responsibility aligns with Health Resources and Services Administration)	100%	
Percent of participating LRN Level 1, 2, or 3 chemical laboratories that successfully complete packaging and shipping exercises	100%	
Frequency with which tests are conducted of select LRN Sentinel and LRN Clinical Chemistry laboratory to reach a knowledgeable public health laboratory professional at the jurisdictional confirmatory LRN Reference and LRN Chemical laboratories 24/7/365 by landline phone	Every 12 months	
Frequency with which tests are conducted of select LRN sentinel and LRN clinical chemistry laboratory to reach a knowledgeable public health laboratory professional at jurisdictional confirmatory LRN laboratory 24/7/365 by redundant means not dependent on electricity, cellular/landline phone service, internet (e.g., radio/satellite phone)	Every 12 months	
Percent of LRN Sentinel laboratories within the LRN jurisdiction that successfully acknowledge receipt of health alerts. Note: Reference PHIN Preparedness Functional Area Partner Communication and Alerting	100%	
Frequency with which acknowledgement of receipt of health alerts that includes at least one priority category (e.g., alert, advisory, update, etc.) is tested	Every 12 months	
LRN Sentinel and LRN Clinical Chemistry laboratory staff are trained in the use of standardized procedures for collecting and shipping clinical specimens.	Yes/No	
Training includes International Air Transport Association (IATA), and US Department of Transportation (DOT) packaging and shipping of infectious agents regulations	Yes/No	

Activity: Direct Laboratory Testing
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Percent of calls/inquiries received by the CDC LRN Coordinating Office for which a response is initiated within 2 hours during an emergency	100%	
Percent of calls/inquiries received by the CDC LRN Coordinating Office that require a response for which a response is initiated within 24 hours on a routine basis	100%	
Time is which public health department and other State and Federal partners are notified of a high-level threat credibility assessment of suspicious agent	Within 2 hours from credibility assessment	
Time in which key Federal , State, and local health partners (e.g., CDC, FBI) are notified of presumptive identification of potential bioterrorism agent or communication that signals a high index of suspicion	Within 3 hours of presumptive identification	

Activity: Sample and Specimen Management
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Time in which designated State LRN-1 Level 1 Chemical Laboratories to accept clinical specimens begins analysis	Within 24 hours from receiving the call for assistance from CDC	
Time in which laboratory health alert detailing laboratory related information (including specimen collection, packaging, and shipping guidelines) is distributed after health alert by agency epidemiologist, environmental health, or relevant partner is distributed via HAN	Within 12 hours from initial distribution	
Time in which samples are shipped to an LRN reference laboratory with relevant confirmatory capabilities	Within 2 hours from presumptive identification	
Time in which LRN reference laboratory (appropriate confirmatory capabilities)confirms identification of agent	Within 48 hours of receipt	
Percent of LRN reference laboratories that provide technical assistance to submitters on errors within 3 business days of receipt of mislabeled, mis-packaged, and misshipped packages	100%	

Activity: Provide Surveillance Support
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Percent of isolates for which pulse-field gel electrophoresis (PFGE) testing and analysis of data is completed within 3 working days of receipt in the laboratory (or within 3 working days of organism isolated in pure culture, if lab processes clinical specimen) E. coli O157:H7Listeria monocytogenes (# of isolates that have PFGE patterns analyzed within 3 working days of identification/denominator = # of isolates identified in lab)Start time: Date and time isolate identified in lab Stop time: Date and time PFGE sub-typing pattern analysis is complete	100%	
Percent of PFGE patterns submitted to the National PulseNet Server (or the PulseNet Database Team at CDC) that are designated with an official PulseNet pattern name within 3 working days of submission. E. coli O157:H7Listeria monocytogenes # of isolate patterns in the National PulseNet database that are given an official PulseNet pattern name within 3 working days of submission/# of isolate patterns submitted to the National PulseNetServer/database team Start time: Date and time PFGE isolate pattern submitted to National PulseNet Server/database team Stop time: Date and time official PulseNet name is assigned to the submitted isolate pattern	100%	
Percent of PFGE patterns and associated data submitted to the National PulseNet Server (or the PulseNet Database Team at CDC) within one (1) working day of PFGE pattern analysis. E. coli O157:H7Listeria monocytogenes (numerator = # of patterns submitted to PulseNet within 1 working day) (denominator = # of isolates PFGE pattern-analyzed) Start time: Date and time PFGE sub-type/pattern analysis complete Stop time: Date and time PFGE sub-type/pattern is submitted to PulseNet server/team	100%	

Activity: Detection Testing and Analysis
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Time in which specimen/sample is received at the public health laboratory following high-level threat credibility assessment of suspicious agent to	Within 6 hours from identifying a suspicious agent	
Time LRN Reference Laboratory makes presumptive identification of agent by rapid biological assays	Within 8 hours from sample receipt	

Time in which CDC Chemical laboratory conducts Rapid Toxic Screen on initial 20-40 specimens analyzed for 150 chemical agents (including nerve agents)	Within 36 hours from receipt of specimens (surge)	

Activity: Confirm Testing
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Time in which sample is shipped to an LRN Reference Laboratory with relevant confirmatory capabilities from the presumptive notification	Within 2 hours	
Time from presumptive identification to confirmatory identification by LRN reference laboratory	Within 48 hours	

Activity: Support Public Health Epidemiological Investigations
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
N/A	N/A	

Activity: Report Results
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Time in which appropriate Federal, State, and local officials, also including the specimen/sample submitter, are notified of identification (positive or negative)	Within 1 hour from confirmatory identification	
Laboratory Response Network (LRN) reference laboratory has a Public Health Information Network (PHIN)-compliant Laboratory Information Management System (LIMS)	Yes/No	

General Target Capability Questions: 13) Laboratory Testing

Question: Please select the statement below that best describes what limits your overall Level of Preparedness for this target capability:

Answer Options:

- ☐ Fully achieving the elements of this Capability is not essential due to local conditions/risks
- ☒ There are insufficient resources (personnel, funding) for fully achieving the elements of this Capability
- ☐ Local governance and/or legal issues limit our ability to fully achieve the elements of this Capability
- ☐ Other, please provide a brief description

Comments:

Notes/References:

Target Capability: 14) On-Site Incident Management

Activity: Develop and Maintain Plans, Procedures, Programs, and Systems
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Emergency management plans and SOPs include a formal process for activating onsite incident management for large and complex events	Yes/No	
Emergency management plans and SOPs include are based on a formal assessment of risks and vulnerabilities	Yes/No	
Emergency management plans and SOPs address establishing incident command (e.g., IC posts, staging areas, command and general staff)	Yes/No	
Emergency management plans and SOPs address the process for developing an incident action plan (e.g., to establish priorities, procedures, actions to meet incident objectives)	Yes/No	
Emergency management plans and SOPs address command management (e.g., transitioning from Incident Command to Unified Command, interface with agency administrators like municipal executives)	Yes/No	
Emergency management plans and SOPs address communication requirements (e.g., maintaining communications with responding units, dispatching centers, EOC)	Yes/No	
Emergency management plans and SOPs address demobilization of onsite incident management (e.g., transition from IC to recovery management, incident resources are returned to normal service)	Yes/No	
Incident Command Post is equipped with processes and/or technologies to maintain accountability of deployed resources and personnel	Yes/No	
Incident Command Post is equipped with ability to display real-time video feed of incident site (large cities only)	Yes/No	
Standard Operating Procedure (SOP) is in place to provide Incident Commander with observation trips for aerial view or satellite imaging of incident (large cities only)	Yes/No	
Plans and SOPs are NIMS-compliant and support multi-agency response operations	Yes/No	
Electronic personnel tracking system is in place with ability to transmit personnel information to Department Operations Center (large cities only)	Yes/No	
Command Post is equipped with ability to receive information from Command and General Staff and participating agencies and transmit IAPs and other documentation	Yes/No	
A records management system is in place (or is accessible) to order, track, and assign incident resources and to identify personnel who need training	Yes/No	
Emergency management plans and procedures include processes for ensuring the safety, security, structural integrity, and self-sufficiency of facilities used for onsite incident management facilities	Yes/No	

Percent of capability staff and elected officials trained and exercised on their roles and responsibilities for implementing National Incident Management System (NIMS) during an incident	100%	
Percent of command staff (police, fire, EMS, public health) with training on how ICS will be applied locally	90%	
Percent of personnel trained and exercised on incident command and management protocols and procedures in compliance with NIMS	100%	
Personnel have had experience (e.g., through exercises) in activating and implementing onsite incident command operations	Yes/No	

Activity: Direct On-Site Incident Management
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Time in which additional resources are requested following initial scene assessment	Within 5 minutes from completion of assessment	
Frequency with which resources are tracked and managed from arrival on scene or at staging area until release	Continuous	
Time in which communication is established with appropriate local, State, and Federal response entities	Within 30 minutes from arrival	

Activity: Implement On-Site Incident Management
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Frequency with which resources are tracked and managed from arrival on scene or at staging area until release	Continuous	
Frequency with which communication is established with appropriate local, tribal, regional, State, and Federal response entities	Continuous	
Time in which initial incident conditions are reported to responding units	Within 2 minutes from arrival of first unit on scene	

Activity: Establish Full On-Site Incident Command
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Time in which on-site incident command is established	Within 5 minutes from arrival of the first unit on scene	
Time in which the Incident Commander designates command and general staff, dependent upon complexity and scope of incident	Within 30 minutes from establishment of command	
Command is successfully transferred to incident command organization able to manage the level of complexity and achieve the incident objectives	Yes/No	

Activity: Conduct Resource Management
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Percent of resources tracked throughout incident	100%	

Activity: Develop Incident Action Plan (IAP)
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Initial incident priorities and objectives are effectively communicated	Yes/No	
Time in which Incident Action Plan (IAP) is developed and approved	Within 12 hours from designation of command and general staff	
Incident Action Plan (IAP) incorporates Incident Command System (ICS)management structures in accordance with the National Incident Management System (NIMS)	Yes/No	
IAP clearly states measurable incident objectives and communicates strategies and tactics required to fulfill the incident objectives throughout the entire operational period	Yes/No	

Activity: Execute Plan
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Time in which IAP is shared with other agencies and organizations at each operations briefing	Within 30 minutes from IAP approval	
Formal operational briefings are conducted at the start of each operational period	Yes/No	
Incident objectives are accomplished through strategic and tactical actions	Yes/No	
Potentially impacted areas are considered	Yes/No	
IAP is re-assessed, revised, distributed, and briefed at least at the start of each new operational period	Yes/No	
All on-site management activities are coordinated through the Incident Command System (ICS)	Yes/No	

Activity: Demobilize On-Site Incident Management
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Demobilization is implemented in accordance with demobilization plan	Yes/No	
Effective transition is made from the on-site Incident Commander to recovery manager	Yes/No	
Incident resources are returned to normal service when no longer needed	Yes/No	

General Target Capability Questions: 14) On-Site Incident Management

Question: Please select the statement below that best describes what limits your overall Level of Preparedness for this target capability:

Answer Options:

- ☐ Fully achieving the elements of this Capability is not essential due to local conditions/risks
- ☑ There are insufficient resources (personnel, funding) for fully achieving the elements of this Capability
- ☐ Local governance and/or legal issues limit our ability to fully achieve the elements of this Capability
- ☐ Other, please provide a brief description

Comments:

Notes/References:

Target Capability: 15) Emergency Operations Center Management

Activity: Develop and Maintain Plans, Procedures, Programs, and Systems

Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
A national security policy to identify classified information handling requirements has been developed for Federal, State, and local EOC/MACC/IOFs	Yes/No	
Standard operating procedures (SOPs) for activation, operation, and deactivation of EOC/MACC/IOFs are in place	Yes/No	
Standard operating procedure (SOP) sections related to the role of each entity in the management of EOC/MACC/IOFs have been reviewed	Yes/No	
EOC plans and SOPs address continuity of operations (e.g., central and backup EOCs, primary and secondary communications services)	Yes/No	
EOC Plans and SOPs address resource and personnel use limitations (e.g., work/rest, maintenance restrictions)	Yes/No	
EOC Plans and SOPs address dissemination of accurate, timely, accessible information to public, media, support agencies)	Yes/No	
A system is in place (or is accessible) for mapping, modeling, and forecasting potential hazards	Yes/No	
EOC plans and SOPs address the demobilization of Emergency Operations Center (e.g., reassess and implement EOC deactivation plan, re-supply EOC entity to return to a state of readiness)	Yes/No	
EOC plans and procedures include processes for ensuring the safety, security, structural integrity, and self-sufficiency of EOC facilities	Yes/No	

Communications plans to exchange data and voice in real time are in place	Yes/No	
Frequency with which critical communication links/circuits/systems are identified and tested	Every 3 months	
Redundant and diverse links in case of single point of failure for all critical communications are in place	Yes/No	
Design, construction, and repair reports identify and resolve any single failure point	Yes/No	
Critical circuits are identified and telecommunication service priority contracted with provider	Yes/No	
Alternate processes for sharing public information have been created, tested and deployed	Yes/No	
Policy/procedure, appropriate equipment, and capability to relocate safely, without loss of operational integrity, is established and tested	Yes/No	
Primary and secondary means to establish and maintain communication services through the event timeline so that services can be activated promptly and have the capacity to continue to operate at acceptable levels are in place	Yes/No	
Effective process for assessing the status of any/all public safety communication centers throughout the lifetime of event are in place	Yes/No	

Activity: Develop and Maintain Training and Exercise Programs
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Appropriate personnel have completed FEMA Independent Study Program for IS 700-NIMS, An Introduction	Yes/No	
Appropriate personnel have completed FEMA Independent Study Program for IS 800-NationalResponse Plan, An Introduction	Yes/No	
Appropriate personnel have completed FEMA Independent Study Program for IS 275-EOC Management and Operations	Yes/No	
Appropriate personnel have completed FEMA Independent Study Program for IS 100-Introduction to Incident Command System	Yes/No	
Appropriate personnel have completed FEMA Independent Study Program for IS 200-ICS for Single Resources and Initial Action Incidents	Yes/No	
Chief executive and other key officials of the jurisdiction are briefed in the jurisdiction's command and control plans for large-scale emergencies	Yes/No	
HSEEP-compliant exercises are conducted to test EOC management plans and procedures (e.g., secure EOC, track incidents, deliver resources)	Yes/No	
Chief executive and other key officials of the jurisdiction participate in annual command and control training and exercises for large-scale emergencies	Yes/No	
Exercises include private sector participation	Yes/No	
EOC/MACC/IOF personnel (primary and backup) are trained to perform EOC/MACC/IOF tasks and on their assigned roles and responsibilities as part of the EOC/MACC/IOF team	Yes/No	

Activity: Direct Emergency Operation Center's Tactical Operations
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
The emergency operations center (EOC) is activated upon notification of the incident	Yes/No	
The emergency operations center (EOC/MACC/IOF) was activated upon notification of the incident	Yes/No	
EOC/MACC/IOF is appropriately staffed to meet incident demands	Yes/No	

Activity: Activate EOC/MACC/IOF
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Time in which the EOC/MACC/IOF is fully staffed	Within 2 hours from activation	
Time in which the EOC/MACC/IOF commences operations	Within 2 hours from activation	
Time in which incoming staff are appropriately briefed and assigned	Within 15 minutes from staff arrival	
Time in which DHS designates a Principal Federal Official (PFO)	Within 1 hour from start of the incident	
Time in which PFO assembles a support staff and deploys to the affected area	Within 1 hour from start of the incident	

Activity: Gather and Provide Information
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Process for assessing the status of any/all public safety communication centers throughout the event has been established	Yes/No	
Time in which connectivity is established with all participating public safety related Communication Centers, serving the EOC/MACC/IOF directly or indirectly	Within 30 minutes from EOC/MACC/IOF becoming operational	
Connectivity has been verified with all participating public safety-related Communication Centers, serving the EOC/MACC/IOF directly or indirectly	Yes/No	
Time in which the availability and functionality status of all plan supporting teams and resources, including identification of deficiencies or limiting factors, are reported to the NRCC	Within 12 hours from the incident	
Time in which the jurisdiction produces an incident action plan (IAP) defining a schedule and setting the operational period	Within 2 hours from the EOC/MACC/IOF entity becoming operational	
Time in which the jurisdiction produces and distributes a situation report	Within 2 hours from the EOC/MACC/IOF entity becoming operational	
The jurisdiction provides situation reports at least once per operational period	Yes/No	

Activity: Identify and Address Issues
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Issues are tracked until they are resolved	Yes/No	
Time in which appropriate decision-makers are consulted to facilitate resolution of issues	Within 30 minutes from recognizing need to consult decision-makers	

Activity: Provide EOC/MACC/IOF Connectivity
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
EOC/MACC/IOF recognizes the need to implement mutual aid agreements (MAAs)	Yes/No	
Mutual aid, State and/or Federal resources are requested during an incident based on availability of resources and mutual aid	Yes/No	
EOC/MACC/IOF consults appropriate decision-makers and facilitates resolution of needs/issues in a timely manner	Yes/No	
Resource staging areas, Logistical Bases, and Logistical Staging Areas (LSAs) have been designated	Yes/No	
Activation of pre-positioned resources has been requested	Yes/No	
Time in which establishment of a Joint Field Office (JFO), National Response Coordination Center (NRCC), and Regional Response Coordination Center (RRCC) is initiated/expedited	Within 4 hours from the incident	
Time in which of continuity of operations (COOP) plans and continuity of government(COG) plans are successfully implemented	Within 2 hours from the incident	
Time in which Federal staging areas are designated inside incident area (forward of Federal Mobilization Center)	Within 1 hour from the incident	
Time in which pre-positioned Equipment Program Teams are activated	Within 2 hours from the incident	
Time in which pre-positioned Equipment Program Teams are deployed	Within 2 hours from the incident	
Time in which field survey support team and remote sensing aircraft are deployed to the incident area	Within 4 hours from the incident	

Activity: Support and Coordinate Response
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Time in which the jurisdiction recognizes the need to implement mutual aid agreements and request private sector resources	Within 2 hours from EOC/MAC operations beginning	
Time in which mutual aid and State and/or Federal resources are requested, as needed, during an incident	Within 2 hours from recognizing need for mutual aid, State and/or Federal resources	
Time in which private sector resources are requested, as needed, during an incident.	Within 2 hours from recognizing need for mutual aid, State and/or Federal resources	

Process to ensure direction, information, and/or support provided to field is established	Yes/No	_____
Status of resource requests are provided at least once per operational period	Yes/No	_____

Activity: Demobilize Emergency Operations Center Management
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Time in which criteria for demobilization of EOC are established	Within 2 hours from receipt of first demobilization request	_____
Time in which EOC/MAC entity is deactivated/demobilized	Within 24 hours from decision to deactivate	_____

General Target Capability Questions: 15) Emergency Operations Center Management

Question: Please select the statement below that best describes what limits your overall Level of Preparedness for this target capability:

Answer Options:

- ☐ Fully achieving the elements of this Capability is not essential due to local conditions/risks
- ☐ There are insufficient resources (personnel, funding) for fully achieving the elements of this Capability
- ☐ Local governance and/or legal issues limit our ability to fully achieve the elements of this Capability
- ☐ Other, please provide a brief description

Comments:

Notes/References:

Target Capability: 16) Critical Resource Logistics and Distribution

Activity: Develop and Maintain Plans, Procedures, Programs, and Systems
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Plans and procedures address activation of the resource management system	Yes/No	_____
Plans and procedures address management of supplies (e.g., secure and appropriate storage, transportation through restricted areas, etc.)	Yes/No	_____

Plans and procedures include communications requirements (e.g., jurisdiction requests are monitored to track inventory, transportation vendors can maintain contact during distribution)	Yes/No	
Tracking and recording systems for resources are developed and tested	Yes/No	
Resource and vendor lists are in place	Yes/No	
Resource lists are updated as required or every 12 months	Yes/No	
Critical resource management plans are supported by standing contracts and/or emergency purchase mechanisms such as credit cards or debit cards (e.g., rapid purchasing mechanisms are in place for specialized resources such as GIS and cell providers)	Yes/No	
Pre-negotiated vendor contracts for critical resources and essential services are in place and maintained	Yes/No	
Plans, procedures, and systems to pre-position resources in order to efficiently and effectively respond to an event are in place	Yes/No	
Processes and procedures to ensure that resource providers are reimbursed in a timely manner are in place	Yes/No	
Plans and procedures address unused resources and disposal of waste materials generated by logistics operations	Yes/No	

Activity: Develop and Maintain Training and Exercise Programs
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Training in emergency logistics that incorporates linkages among damage/needs assessment, logistics management, and volunteer/donations management has been developed according to established standards for logisticians	Yes/No	
Frequency with which personnel testing and training on tracking and recording systems is verified (including as required or necessary)	Every ~~18~~ 12 months	
Frequency with which resource and logistic tracking and recording systems are exercised (including during other exercises)	Every 12 months	

Activity: Direct Critical Resource Logistics and Distribution Operations
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Time in which the multi-agency coordination system is activated following the request for critical resources needed for the incident	Within 2 hours of request	
Time in which it is determined that there is a need to supplement internal resources by implementing critical resource logistics and distribution operations	Within 8 hours of incident	
Time in which requests for critical resources are processed and approved	Within 1 hour of receipt of request	
Determination is made regarding whether assistance from outside jurisdictions (i.e., mutual aid, Emergency Management Assistance Compact (EMAC)) is needed	Yes/No	
Assistance from outside jurisdictions is tracked to certify performance	Yes/No	

Activity: Activate Critical Resource Logistics and Distribution
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Time in which logistics staging area (LSA) is opened	Within 8 hours of incident	
Critical resources are accurately tracked and recorded	Yes/No	

Activity: Respond to Needs Assessment and Inventory
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Time in which logistics staging area (LSA) responds to EOC tasking for resource support	Within 1 hour from request	

Activity: Acquire Resources
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Percent of resource movement tracked/recorded	100%	
Time in which the resource is available for deployment	Within 2 hours from arrival	
Time in which critical resources from the State (within the State) are delivered	Within 12 hours from approval of request	
Time in which critical resources from the State (State-to-State)/EMA Care delivered	Within 24 hours from approval of request	
Time in which Federal critical resources are delivered	Within 24 hours from approval of request	
Time in which private sector is tasked to inventory and identify available assets	Within 2 hours from determination of need for private sector involvement	
Time in which all large-space facility structures within 250 miles of the incident venue(s) that could be made available for use as needed are inventoried and identified to ESF-7	Within 6 hours from request	
EOCs and Incident Management Teams follow standard interagency mobilization guides at the national, regional, State, tribal, and local levels	Yes/No	

Activity: Transport, Track, and Manage Resources
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Private sector linkages are activated to inventory and identify available transportation assets, potential mass shelters facilities and medical facilities, personnel, equipment, and supplies	Yes/No	
Sufficient transportation assets are established to transport critical human and material resources throughout incident management phases	Yes/No	
Time in which resources received at logistics staging area (LSA) are available to support response and recovery operations	Within 8 hours from receipt at LSA	

Critical resources are managed and inventoried to ensure sustained operations	Yes/No	
All required procedures for acquiring and managing resources, including reconciliation, accounting, auditing, and inventorying, are followed	Yes/No	
Percent of approved resource requests met and filled accurately during the incident	100%	
Time in which actions to deploy Pre-Positioned Disaster Supply (PPDS) containers are initiated	Within 24 hours from identification of need	
Time in which actions to deploy additional Pre-Positioned Disaster Supply (PPDS) containers are initiated	Within 48 hours from identification of need	
Time in which backfill of Pre-Positioned Disaster Supplies (PPDS) containers is initiated	Within 72 hours	
Resource status changes are recorded and reported as they occur	Yes/No	

Activity: Maintain and Recover Resources
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Resources and personnel are cycled per the IAP	Yes/No	
The recovery and disposition of resources is tracked and documented	Yes/No	
Resources are returned to original provider	Yes/No	

Activity: Demobilize Critical Resource Logistics and Distribution
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Time in which demobilization plan is fully implemented	Within 8 hours from decision to demobilize	
Time in which deployed resources are recovered following the end of response/recovery operations	Within 72 hours from end of operations	
Percent of requests for State and Federal reimbursement processed	100%	
Percent of non-expendable resources fully accounted for at the incident site	100%	
Percent of non-expendable resources fully accounted for upon return to the unit that issued them	100%	

General Target Capability Questions: 16) Critical Resource Logistics and Distribution

Question: Please select the statement below that best describes what limits your overall Level of Preparedness for this target capability:

Answer Options:

- ☐ Fully achieving the elements of this Capability is not essential due to local conditions/risks
- ☑ There are insufficient resources (personnel, funding) for fully achieving the elements of this Capability
- ☐ Local governance and/or legal issues limit our ability to fully achieve the elements of this Capability
- ☐ Other, please provide a brief description

Comments:

Notes/References:

Target Capability: 17) Volunteer Management and Donations

Activity: Develop and Maintain Plans, Procedures, Programs, and Systems

Level of Preparedness: 1 2 3 4 5 6 7 8 (9) 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
A Volunteer Management and Donations plan that defines needs for and utilization of volunteers is in place	(Yes)/No	
Plans specify the criteria for activating the Volunteer Management and Donations Emergency operations, including establishing a volunteer and donation coordination center (VDCC)	(Yes)/No	
Volunteer Management and Donations plan address the management of material and cash donations (e.g., maintenance of appropriate documentation, referral of undesignated cash donations)	(Yes)/No	
Volunteer Management and Donations plan includes communications requirements (e.g., provide information via website and toll free number for use at call center, advertise points of contact for receiving equipment and technical solutions)	(Yes)/No	
Volunteer Management and Donations plan addresses the management of unaffiliated volunteers (e.g., identify potential volunteer opportunities, determine priority roles and needs for all hazards, research existing liability issues)	(Yes)/No	
Volunteer Management and Donations plan addresses long-term recovery (e.g., allocate donations, assess need for volunteers, brief major donors on re-direction of donations)	(Yes)/No	
Volunteer Management and Donations plan addresses facility management (e.g., identify, staff, operate multi-agency warehouses, volunteer and donations coordination centers, volunteer reception centers, emergency distribution centers)	(Yes)/No	

Volunteer Management and Donations plan addresses the safety, security, and self sufficiency of facilities and materials	Yes/No	
National and State Volunteer Organizations Active In Disaster (VOAD) are established and coordinated with during disaster planning	Yes/No	
Cooperative agreements and memoranda of understanding (MOUs) with volunteer management organizations are developed as appropriate	Yes/No	
Norms and standards set regarding appropriate, fair and equal allocation of all donated recourses to ensure 501(c)(3) or other determined qualifiers are used	Yes/No	
Points of contact for donations are shared with outside jurisdictions, the private sector, non-government organizations, and the media, as appropriate	Yes/No	
A database is in place to track the status of resources (e.g., when supplies are requested, where supplies will be delivered, constant inventory updates)	Yes/No	

Activity: Develop and Maintain Training and Exercise Programs
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Plans to coordinate exercise and training with local/State/tribal/Federal government and nongovernmental organizations are in place	Yes/No	
Frequency with which volunteers and donations management plan is exercised	Every 12 months	
External awareness training is provided for government and nongovernmental partners	Yes/No	
Internal awareness training is provided for staff	Yes/No	
Percent of personnel trained to manage required systems, materials and technology per their roles and responsibilities	100%	
Percent of donation management team and warehouse personnel trained on distribution plan and procedures	100%	

Activity: Coordinate Volunteer Management Operations and the Establishment of Warehouses and Materials Handling Equipment
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Time in which volunteer and donations coordination center is activated	Within 12 hours from incident	
Time in which the media and other agencies are provided precise information about volunteer and donation needs and give guidance on appropriate ways to help	Within 24 hours from the end of a disaster or incident	

Activity: Activate Volunteer Management and Donations Emergency Plan
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Time in which volunteer/donations coordinators are deployed	Within 6 hours from the end of a disaster or incident	
Time in which pre-assigned toll-free numbers are activated	Within 12 hours from incident	
Points of contact for donations are advertised to outside jurisdictions, the private sector, non-governmental organizations, and the media	Yes/No	

Senior leadership and elected officials are briefed	✓	Within 12 hours from incident	

Activity: Organize Volunteers and Assign Them to Disaster Relief Efforts
Level of Preparedness: 1 2 3 4 5 6 7 8 (9) 10

Measure		Metric	Notes (ENTIRELY OPTIONAL)
Time in which ability is in place to: receive, register and provide information to volunteers (via phone bank, web site virtual call center, etc.)	✓	Within 24 hours from incident	
Percent of volunteers who receive briefing	✓	100%	
Percent of volunteers who are briefed prior to start of assignment	✓	100%	
Percent of volunteers who are matched with assignments per their capabilities and the tactical plan	✓	100%	
Percent of volunteers who are referred	✓	100%	

Activity: Collect and Manage Material Donations
Level of Preparedness: 1 2 3 4 5 6 7 8 (9) 10

Measure		Metric	Notes (ENTIRELY OPTIONAL)
Time in which a volunteer and donations staging area, including information management technology and communications equipment is established and operational	✓	Within 48 hours from an incident	
Time in which a strategic facility management plan is implemented	✓	Within 24 hours from notification of a disaster or impending disaster	
Time in which an operational donations management warehouse(s) with professional and volunteer staff is established	✓	Within 24 hours from the establishment of the location of a warehouse	

Activity: Collect and Manage Cash Donations
Level of Preparedness: 1 2 3 4 5 6 7 8 (9) 10

Measure		Metric	Notes (ENTIRELY OPTIONAL)
Accuracy in accountability records is established and maintained		Yes/No	
Percent of personnel following policies and procedures concerning undesignated cash donations	✓	100%	
Percent of personnel following policies and procedures concerning referral of cash donations to appropriate voluntary agencies	✓	100%	

Activity: Coordinate Distribution of Donations
Level of Preparedness: 1 2 3 4 5 6 7 8 (9) 10

Measure		Metric	Notes (ENTIRELY OPTIONAL)
Percent of donated goods that are inventoried	✓	100%	
Percent of unneeded and unusable donated goods managed according to developed plans	✓	100%	

Activity: Transition to Long-Term Recovery
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Inventory of donations has been completed	Yes/No	
Percent of donations re-designated/re-assigned in accordance with donors' intent and/or the donation management plan	100%	
Needs and requirements for volunteers and donations for long-term recovery are assessed	Yes/No	
Transition is accomplished between the Volunteer/Donations Coordination Center and mass care, EOC management and other agencies/organizations/businesses	Yes/No	

Activity: Deactivate Volunteer Management and Donations
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Percent of donations re-designated/re-assigned in accordance with donors' intent and/or the donation management plan	100%	
Percent of appropriate personnel debriefed	100%	
Stakeholders are provided with information from lessons learned to improve future events	Yes/No	

General Target Capability Questions 17) Volunteer Management and Donations

Question: Please select the statement below that best describes what limits your overall Level of Preparedness for this target capability:

Answer Options:

- ☐ Fully achieving the elements of this Capability is not essential due to local conditions/risks
- ☑ There are insufficient resources (personnel, funding) for fully achieving the elements of this Capability
- ☐ Local governance and/or legal issues limit our ability to fully achieve the elements of this Capability
- ☐ Other, please provide a brief description

Comments:

Notes/References:

Target Capability: (18) Responder Safety and Health

Activity: Develop and Maintain Plans, Procedures, Programs, and Systems
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

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Measure		Metric	Notes (ENTIRELY OPTIONAL)
Safety and health program that includes a personal protective equipment (PPE) component that adequately addresses respiratory protection and exposure protection for initial response is in place	Y	Yes/No	
Safety and health program addresses acquisition of additional respiratory protection items for reinforced response or long term incidents	Y	Yes/No	
Safety and health program that ensures initial responders are equipped with properly maintained PPE in adequate supply is in place	Y	Yes/No	
Safety and health program ensures access to backup/cache equipment, when necessary for reinforced on long term incidents	Y	Yes/No	
An agency/jurisdiction safety and health program(s) is in place which includes procedures to identify and assess hazards	Y	Yes/No	
An agency/jurisdiction safety and health program(s) is in place which includes detection/exposure monitoring	Y	Yes/No	
An agency/jurisdiction safety and health program(s) is in place which includes selection/distribution of PPE	Y	Yes/No	
An agency/jurisdiction safety and health program(s) is in place which includes health and safety planning	Y	Yes/No	
An agency/jurisdiction safety and health program(s) is in place which includes risk management practices	Y	Yes/No	
An agency/jurisdiction safety and health program(s) is in place which includes medical care	Y	Yes/No	
An agency/jurisdiction safety and health program(s) is in place which includes decontamination procedures	Y	Yes/No	
An agency/jurisdiction safety and health program(s) is in place which includes infection control	Y	Yes/No	
An agency/jurisdiction safety and health program(s) is in place which includes vaccinations for preventable diseases	Y	Yes/No	
An agency/jurisdiction safety and health program(s) is in place which includes adequate work-schedule relief	Y	Yes/No	
An agency/jurisdiction safety and health program(s) is in place which includes psychological support DPS -	Y	Yes/No	Limited
An agency/jurisdiction safety and health program(s) is in place which includes medical follow-up assessments	Y	Yes/No	

Activity: Develop and Maintain Training and Exercise Programs
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

5

Measure		Metric	Notes (ENTIRELY OPTIONAL)
Percent of responders trained to respond to anticipated emergencies (e.g., 15 planning scenarios)	Y	100%	

Safety Officer(s) have the training and experience necessary to manage hazards associated with all 15 planning scenarios	N	Yes/No	
Percent of responders capable of using PPE (e.g., responders are fitted and medically cleared to use necessary PPE) so that they have the necessary health and safety training to perform their anticipated tasks (e.g., awareness level, technician level, etc.) in response to an incident	N	100%	
The pre-incident safety and health training program is evaluated through emergency response exercises (e.g., did each responder have the necessary health and safety training to perform his or her task in the exercise?)	Y	Yes/No	
An Incident Specific Health and Safety Plan is developed during exercises as a way to measure responder safety and health readiness. [These plans can include identifying and assessing hazards, detection/exposure monitoring, selection/distribution of PPE, communication of hazards/protection among response organization, maximum exposure limits, applied engineering controls, incident specific training, medical surveillance/monitoring (including psychological first aid), etc.]	W	Yes/No	

Activity: Direct Responder Safety and Health Tactical Operations
Level of Preparedness: 1 2 3 4 5 6 (7) 8 9 10

Measure		Metric	Notes (ENTIRELY OPTIONAL)
Percent of responders injured or falling ill in response to the incident	3/6	0%	

Activity: Activate Responder Safety and Health
Level of Preparedness: 1 2 3 4 5 6 (7) 8 9 10

7

Measure		Metric	Notes (ENTIRELY OPTIONAL)
Time in which Safety Officer is designated within the ICS structure (separate from IC, who may hold this role for a period of time)	Y	Within 1 hour from arrival of responders	
Time in which deployment actions are initiated for Assistant Safety Officers or Safety SMEs to provide technical assistance to incident safety official	Y	Within 1-3 hours from arrival of responders	

Activity: Identify Safety/PPE Needs and Distribute PPE
Level of Preparedness: 1 2 3 4 5 6 (7) 8 9 10

7

Measure		Metric	Notes (ENTIRELY OPTIONAL)
Percent of hazards detected/identified and characterized	Y	100%	
Time in which an initial incident safety analysis is completed	Y	Within 1 hour from responder arrival	

Activity: Site/Incident Specific Safety and Health Training
Level of Preparedness: 1 2 3 4 5 6 7 (8) 9 10

8-9

Measure		Metric	Notes (ENTIRELY OPTIONAL)
Percent of emergency workers responding to an incident who are provided on-site training prior to assignment to work at incident	Y	100%	

Activity: Ongoing Monitoring of Responder Safety and Health
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Time in which the medical unit is opened and operating within an ICS structure	Within 30 minutes from initial responder's arrival on-site	
Percent of personnel wearing the required PPE for site entry and work	100%	
Percent of workers who have their representative exposure to hazardous substances quantified and recorded	100%	
Percent of personnel who have been decontaminated	100%	
Percent of affected personnel treated for injuries and illnesses through a medical unit	100%	

Activity: Demobilize Responder Safety and Health
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Percent of emergency workers who develop physical symptoms or illness secondary to the incident	0%	
Percent of workers with mental health or stress-related symptoms secondary to the incident who are treated	100%	
Percent of behavioral hazards identified and mitigated (e.g., human/animal remains are covered)	100%	

General Target Capability Questions: 18) Responder Safety and Health

Question: Please select the statement below that best describes what limits your overall Level of Preparedness for this target capability:

Answer Options:

- ☐ Fully achieving the elements of this Capability is not essential due to local conditions/risks
- ☑ There are insufficient resources (personnel, funding) for fully achieving the elements of this Capability
- ☐ Local governance and/or legal issues limit our ability to fully achieve the elements of this Capability
- ☐ Other, please provide a brief description

Comments:

Notes/References:

Target Capability: 19) Emergency Public Safety and Security Response

Activity: Plan for Public Safety and Security Response During Large-Scale, All-Hazards Events
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Multi-disciplinary law enforcement and public safety agency planning teams have been established, per NIMS compliance.	Yes/No	
Interoperable communications plans with all necessary parties are in place	Yes/No	
Plans for providing security for the public and properties on and around an incident site are in place	Yes/No	
Plans incorporate the anticipated security demands of government, non-government, and private sector stakeholders	Yes/No	
Plans for supporting public safety in and around an incident site are in place	Yes/No	
Plans include establishment of staging areas for law enforcement prior to entering site	Yes/No	
Systems are in place or available to maintain accountability of personnel, track hot zone locations, and track resources	Yes/No	
Plans for sheltering, housing, and feeding law enforcement personnel are in place	Yes/No	
Plans for the post-incident provision of temporary prisoner holding facilities and arrest processing documentation are in place	Yes/No	
Plans identify and provide for the resources necessary to maintain operations in an "all hazards" environment (e.g., electrical generators, personal protective equipment, communications equipment, etc.)	Yes/No	
Plans address demobilization of public safety operations (replenishing supplies, re-assigning personnel)	Yes/No	

Activity: Determine appropriate training and exercises necessary to address gaps
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure		Metric	Notes (ENTIRELY OPTIONAL)
Percent of public safety and security personnel trained at the awareness level	✓	100%	
Percent of public safety and security personnel identified in the training strategy as requiring training at the operational level are trained	✓	100%	
Frequency with which exercises to test public safety and security operations are conducted	✓	Every 12 months	

Activity: Command and Control Public Safety and Security Response Operations
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure		Metric	Notes (ENTIRELY OPTIONAL)
Time in which safety and security plans and procedures are implemented	✓	Within 1 hour from incident	
Percent of first responders at the incident receiving communication about the site safety plan	✓	100%	
Time in which sufficient relief personnel are deployed to maintain public safety throughout a long-term incident (relief needed is estimated at 50 percent of total uniformed (patrol) staffing of a jurisdiction having primary responsibility for the	✓	Within 12 to 15 hours from initial deployment	

incident)

Accountability is maintained, hot zone locations are track, and resources are tracked	Yes/No	

Activity: Activate Public Safety and Security Response
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Time in which sufficient personnel to perform public safety and security duties are deployed Small local incidents: use on-duty and mutual aid personnel Large-scale incidents: Target should be equal to 50 percent of total uniformed (patrol) staffing of jurisdiction having primary responsibility for the incident	Within 12 hours from initial deployment	
Percent of responding public safety personnel who are self-sufficient (bring their own sleeping/eating/restocking supplies) for a period up to 7 days	100%	

Activity: Assess the Incident Scene and Secure the Area
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Time in which the incident site is secured	Within 30 minutes from initial units arrival on scene	
Hot, warm, and cold zones are identified and segregated	Yes/No	
On scene personnel accountability system is implemented	Yes/No	

Activity: Control Traffic, Crowd, and Scene
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Percent of incident site control zones/points that are clearly identified and staffed	100%	
Perimeter zones are coordinated jointly by hazardous materials personnel, fire/rescue, and law enforcement	Yes/No	
Time in which all traffic control and alternative ingress/egress routes are identified and staffed	Within 30 minutes from initial units arrival on scene	
Percent of new or secondary injuries to the public and first responders at or around the incident site	0%	
Percent of damaged buildings and debris blocking emergency response ingress/egress removed	100%	
Time in which stoppage of all non-critical cargo and passenger rail, maritime, and highway transportation into incident area is coordinated	Within 1 hour from incident	

Activity: Maintain Public Order
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Time in which search and/or apprehension procedures are initiated and conducted	Within 30 minutes from the notification or witnessing of suspected criminal activity	

Activity: Conduct Law Enforcement Operations
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Appropriate and timely enforcement action are taken	Yes/No	

Activity: Manage Criminal Justice Population
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Time in which an arrest processing team is identified and equipped to intake, process, and document a large number of arrests	Within 1 hour from initial deployment	
Time in which alternate housing facilities for local, State, Federally incarcerated prisoners are coordinated and established	Within 1 hour from initial deployment	
Time in which alternate facilities for court services are coordinated and established	Within 2 hours from initial deployment	
Time in which alternate facilities for prosecutor/public defenders are coordinated and established	Within 2 hours from initial deployment	
Time in which prisoner transport is coordinated and established	Within 2-4 hours from initial deployment	
Time in which temporary holding cells for those arrested are coordinated and established	Within 2 hours from initial deployment	

Activity: Demobilize Public Safety and Security Response Operations
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Time in which public safety personnel are restored to normal or original operations	Within 12 hours from start of demobilization	
Percent of public safety and security response personnel debriefed	100%	

General Target Capability Questions: 19) Emergency Public Safety and Security Response

Question: Please select the statement below that best describes what limits your overall Level of Preparedness for this target capability:

Answer Options:

- ☐ Fully achieving the elements of this Capability is not essential due to local conditions/risks
- ☑ There are insufficient resources (personnel, funding) for fully achieving the elements of this Capability
- ☐ Local governance and/or legal issues limit our ability to fully achieve the elements of this Capability
- ☐ Other, please provide a brief description

Comments:

Notes/References:

Target Capability: 20) Animal Disease Emergency Support

Activity: Develop and Maintain Plans, Procedures, Programs, and Systems
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Animal disease emergency plans address demobilization (e.g., return personnel and equipment to normal operations, complete documentation, coordinate long-term support)	Yes/No	
Animal disease emergency plans address procedures for the reduction of the spread of animal diseases (e.g., disposal of contaminated waste, euthanasia of infected animals)	Yes/No	
Animal disease emergency plans address the dissemination of accurate, timely, accessible information to public, media, support agencies and vendors	Yes/No	
Animal disease emergency plans address transportation of live animals, carcasses, people, pharmaceuticals, and equipment while ensuring bio-security	Yes/No	
Animal disease emergency plans include provisions for animal welfare	Yes/No	
Animal disease emergency support plans include a formal process for activating support resources	Yes/No	
Animal welfare organizations (e.g., ASPCA, Humane Society) and other related stakeholders are involved in animal disease emergency planning process	Yes/No	
Communications messages and methods and a plan for dissemination were developed before the outbreak	Yes/No	
Mechanisms for ensuring an early report on suspicious cases (as economic incentives) are in place	Yes/No	
National animal, plant, and health surveillance plan is in place	Yes/No	
National Veterinary Services Laboratory (NVSL), all National Animal Health Laboratory Network (NAHLN) laboratories, and all State veterinary diagnostic laboratories have capacity to process diagnostic samples	Yes/No	
Plans address the processes for investigating animal disease emergency threats (e.g., tracing affected animals to determine source, destination, and disposition, obtaining samples for lab testing)	Yes/No	
Processes are in place to obtain information for tracking the history, location, distribution of animals and their related products	Yes/No	
State Veterinary Service is capable of and authorized to determine, monitor, and verify the sanitary status of the populations covered under its mandate	Yes/No	
State Veterinary Service is capable of and authorized to ensure national regulatory norms covered under its mandate in line with national and international norms, guidelines, and recommendations	Yes/No	

State Veterinary Service is capable of and authorized to ensure that users are incompliance with the regulatory norms covered under its mandate	Yes/No	
State Veterinary Service is capable of and authorized to formulate and adopt regulatory norms for processes and products covered under its mandate	Yes/No	
State Veterinary Service is capable of and authorized to identify in advance those sanitary problems covered under its mandate, including animal and public health, the environment, or the trade of animals or their related products	Yes/No	
State Veterinary Service is capable of and authorized to inform, in an effective and timely fashion, its users of activities, programs, and sanitary developments	Yes/No	
State Veterinary Service is capable of and authorized to negotiate, implement, and maintain equivalency agreements with other States and USDA on veterinary norms and processes under its mandate	Yes/No	
State Veterinary Service is capable of and authorized to notify USDA of its State regulations and sanitary status, in accordance with the procedures established by USDA	Yes/No	
State Veterinary Service is capable of and authorized to prevent the entrance and spread of unwanted pests and diseases in the State	Yes/No	
State Veterinary Service is capable of and authorized to rapidly respond to unexpected pest or disease incursion or other situations that put at immediate risk the sanitary status of the animal populations	Yes/No	
State Veterinary Service is capable of and authorized to record biological, physical, and chemical agents that can adversely affect animals and their related products	Yes/No	
State Veterinary Service is capable of and authorized to track history, location, and distribution of animals and their related products covered under its mandate	Yes/No	
State Veterinary Service is capable of and authorized to update overall service in accordance with the latest scientific advances and based on the sanitary norms and measures of USDA-APHIS, OIE, Codex Alimentarius and the WTO/SPS agreement	Yes/No	

Activity: Develop and Maintain Training and Exercise Programs
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
HSEEP-compliant exercises to test animal disease emergency support operations have been conducted	Yes/No	
Personnel are proficient in delivering just-in-time training at the Federal, State, and local levels	Yes/No	
Plan has been developed for supplies and/or equipment to be available for an FMD outbreak in order to enter, store, and retrieve information from the field and at the coordination center	Yes/No	
Plan has been developed for supplies and/or equipment to be available for an FMD outbreak in order to euthanize animals while meeting optimal humane standards to level described in performance objectives	Yes/No	
Plan has been developed for supplies and/or equipment to be available for an FMD outbreak in order to move live animals, carcasses, people, pharmaceuticals, and equipment within, between, and among quarantine zones while ensuring biosecurity	Yes/No	
Supplies distribution plan is developed before an incident	Yes/No	

Activity: Direct Animal Disease Emergency Support Tactical Operations
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure		Metric	Notes (ENTIRELY OPTIONAL)
Time in which a dedicated communications network outside the incident command system (ICS) is established	✓	Within 7 days from the outbreak	
Time in which a fair market value indemnity is provided to owners of destroyed animals and materials	✓	Within 72 hours from destruction	
Time in which an assessment of the risk wildlife poses to the transmission of a foreign animal disease is conducted	✓	Within 7 days from confirmation of the first positive premises	
Time in which cleaning and disinfection is carried out on premises on which FMD is presumed or confirmed to exist	✓	Within 48 hours from being so identified	
Time in which research into alternative disease control strategies is initiated	✓	Within 7 days from confirmed diagnosis	
Time in which wildlife management plan is developed	✓	Within 48 hours from the identification of the first presumptive positive premises	

Activity: Activate Animal Disease Emergency Support
Level of Preparedness: 1 2 3 4 5 6 7 (8) 9 10

Measure		Metric	Notes (ENTIRELY OPTIONAL)
Time in which communications plan is implemented	✓	Within 24 hours from presumptive diagnosis	
Time in which need for logistical support to aid the operation is identified	✓	Within 48 hours from presumptive diagnosis	
Time in which plans are implemented in accordance with the National Response Plan (NRP/NIMS)	✓	Within 24 hours from establishing an incident command	
Time in which sufficient veterinary medical field staff and other resources (veterinarians, animal health technicians, disease specialists, and veterinary diagnostic labs) are deployed for 3 weeks at a time	✓	Within 24 hours from confirmed diagnosis	

Activity: Conduct Animal Health Epidemiological Investigation & Surveillance
Level of Preparedness: 1 2 3 4 (5) 6 7 8 9 10

Measure		Metric	Notes (ENTIRELY OPTIONAL)
All responders were monitored for exposure to hazardous materials		Yes/No	
Inspection for surveillance of susceptible animals at at-risk premises is conducted a minimum two times per average incubation period	?	Yes/No	
Inspection for surveillance of susceptible animals at contact premises and suspect premises is conducted a minimum of three times per average incubation period of Foot and Mouth Disease (FMD)		Yes/No	
Number of herds per day at which surveys for trace-out and epidemiology reporting can be conducted at potentially affected premises (assuming 670 animals per herd)	?	400	
Number of laboratory samples processed by 90 people and 30 high throughput PCR machines per day	?	10,000	
Number of laboratory serology samples processed by one technician (nonrobotics) per day	?	450	

Number of serum samples processed by 15 people with 1 liquid handling robotic system per day	15,000	
Screening of affected personnel was conducted	Yes/No	
Single laboratory samples are analyzed within 12-72 hours (depending on type of analysis)	Yes/No	
Time in which a foreign animal disease investigation, as verified by the veterinarian in charge (AVIC), is initiated	Within 8 hours from receiving the initial report	
Time in which a surveillance plan is implemented to define the present extent of outbreak and detect new cases	Within 48 hours from confirmed diagnosis	
Time in which absence of diseases is confirmed through monitoring and surveillance	Within 6 months from last diagnosis	
Time in which an investigation of suspected wildlife cases is initiated by a qualified veterinarian	Within 24 hours from confirmed diagnosis	
Time in which case definition using effective epidemiology is completed	Within 24 hours from presumptive or confirmed diagnosis	
Time in which disease-free zones are identified using a surveillance plan	Within 7 days from confirmed diagnosis	
Time in which joint USDA-DOJ investigation into source of introduction is initiated	Within 24 hours from confirmed diagnosis	
Time in which logistical support is delivered to aid the operation	Within 72 hours from arriving at the laboratory	
Time in which status and priority of investigation is assigned to premises	Within 6 hours from identifying them through traces	
Time in which the disease is characterized, risk factors are identified, and mitigation strategies are developed	Within 96 hours from confirmed diagnosis	
Time in which trace-forwards and trace-backs to determine primary and secondary animal exposure to disease and additional contact premises are conducted	Within 48 hours from time of confirmed diagnosis in laboratory	
Trace-back analysis is conducted for a minimum of two average incubation periods before the onset of clinical signs of infected animals	Yes/No	
Trace-forward analysis is conducted up to the time that quarantine is imposed	Yes/No	

Activity: Implement Disease Containment Measures
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
All entities shared and acted upon intelligence information to protective measures	Yes/No	
Contamination source and affected areas are secured	Yes/No	
Decontamination is conducted in accordance with local protocol for all contaminated personnel, equipment, and animals	Yes/No	
Decontamination sites are established	Yes/No	
Last case is diagnosed within 3-12 months depending on circumstances and methods used (Office International des Epizooties (OIE) standards)until trade restrictions no	Yes/No	

longer apply		
Market demand for commodities remains stable throughout outbreak	Yes/No	
Number of herds vaccinated per day for disease control (assuming 670 cloven-hoofed animals per herd)	400	
On-site education for producers, farmers, and responders is provided at the time of diagnosis and/or euthanasia	Yes/No	
Percent of affected personnel screened	100%	
Percent of appropriate personnel who are issued personal protective equipment (PPE)	100%	
Percent of exposed individuals who contract the disease during the epidemic	0%	
Percent of remaining animals affected by the foreign animal disease upon resumption of normal trade	0%	
Percent of responders who are monitored for exposure to hazardous materials	100%	
Time in which a control area is established to ensure effective implementation of quarantine and movement control (Federal quarantine is maintained until the disease is either eradicated or a smaller control area is implemented)	Within 12 hours from a presumptive positive or confirmed positive premises	
Time in which a foreign animal disease is eradicated during the event or exercise (assuming a multiple-point introduction, and optimal response conditions)	Within 12 months from first diagnosis	
Time in which a foreign animal disease is eradicated during the event or exercise (assuming a single-point introduction, and optimal response conditions)	Within 100 days from first diagnosis	
Time in which an emergency ring-vaccination program (assuming vaccination is the selected strategy) is completed	Within 7 days from confirmation of diagnosis	
Time in which bio-security measures are implemented	Within 24 hours from the identification of the first presumptive positive premise	
Time in which security is implemented at processing facilities	Within 24 hours from confirmation of diagnosis	
Time in which zoning plan is implemented	~~Within 7 days from the~~ outbreak	

Activity: Provide Animal Welfare
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Number of animals provided with water, feed, protection from the elements daily	268,000	

Activity: Conduct Euthanasia/Disposal
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Number of herds per day at which appraisal, euthanasia, and/or disposal are carried out at affected locations for 100 days (assuming 670 animals per herd)	20	
Number of herds per day euthanized and disposed of for disease control using a 10-person team (assuming 670 animals per herd)	1	

Time in which a plan for euthanasia and disposal of infected and susceptible animals is implemented	Within 24 hours from a premises being classified as an infected or contact remises	_____
Time in which infected animals are disposed of	Within 24 hours from destruction (whenever possible)	_____

Activity: Demobilize Animal Disease Emergency Support Operations
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Percent of appropriate documentation completed	100%	_____
Percent of personnel and equipment returned to normal operations	100%	_____
Quarantine is lifted following diagnosis of last case within 3-6 months depending on circumstances and methods used	Yes/No	_____

General Target Capability Questions: 20) Animal Disease Emergency Support

Question: Please select the statement below that best describes what limits your overall Level of Preparedness for this target capability:

Answer Options:

- ☐ Fully achieving the elements of this Capability is not essential due to local conditions/risks
- ☒ There are insufficient resources (personnel, funding) for fully achieving the elements of this Capability
- ☒ Local governance and/or legal issues limit our ability to fully achieve the elements of this Capability
- ☐ Other, please provide a brief description

Comments:

Notes/References:

Target Capability: 21) Environmental Health

Activity: Develop and Maintain Plans, Procedures, Programs, and Systems
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)

Comprehensive environmental health assessment is completed for pre-selected facilities and structures	Yes/No	
Contamination survey instrumentation is available	Yes/No	
Drinking water safety is addressed in the comprehensive environmental health emergency response plan	Yes/No	
Emergency plans to assess emergency waste water disposal for impacted populations and key facilities are in place to ensure:- One portable toilet per 25 people- Gray water disposal	Yes/No	
Emergency plans to assess emergency water supply for impacted populations and key facilities are place to ensure:- Two liters per person per day- Bathing/washing/cooking 20 liters per person per day	Yes/No	
Environmental health aspects of waste management and debris removal are addressed in the comprehensive emergency response plan	Yes/No	
Environmental health issues and concerns during hazardous materials incidents are addressed in the comprehensive emergency response plan	Yes/No	
Food safety is addressed in the comprehensive environmental health emergency response plan	Yes/No	
Frequency with which baseline monitoring database is updated	Every 12 months	
Frequency with which environmental vulnerability assessments are updated	Every 3 months	
Frequency with which geo-coded database of potential hazards is updated	Every 12 months	
Frequency with which geo-coded vector control database is updated	Every month	
Frequency with which plans, procedures, programs, and guidance for environmental health support of waste management and debris removal are reviewed, exercised, and updated	Every 12 months	
Frequency with which vector control geo-coded database and updates are distributed to State and local emergency operations	Every month	
Geo-coded database includes community wastewater facilities	Yes/No	
Geo-coded database includes educational and institutional facilities (including associated chemical, biological, and radiological hazards)	Yes/No	
Geo-coded database includes environmental laboratories	Yes/No	
Geo-coded database includes food operations	Yes/No	
Geo-coded database includes hazardous materials facilities (including associated chemical, biological, and radiological hazards)	Yes/No	
Geo-coded database includes mass care and shelter operations	Yes/No	
Geo-coded database includes non- Safe Drinking Water Act (SDWA) systems	Yes/No	
Geo-coded database includes vector control	Yes/No	
Geo-coded database is distributed to State and local emergency operations	Yes/No	
Geo-coded environmental samples database is capable of cataloging results by collection medium (e.g., water, drinking water, soil, air, animal vectors)	Yes/No	

Geo-coded environmental samples database is capable of cataloging results by collection medium (such as water, drinking water, soil, air, animal vectors)	Yes/No	
Percent of local vector control programs, both public and private, able to provide geo-coded data	50%	
Percent of Safe Drinking Water Act (SDWA) drinking facilities included in geo-coded database	100%	
Percent of States that include emergency vector control training in their public health pesticide certification program	100%	
Percent of waste management facilities included in geo-coded database	100%	
Percent of waste water facilities (e.g., treatment plants lift stations, etc.) included in geo-coded database	Yes/No	
Priority structures have been identified and assessed	Yes/No	
Risk communication is addressed in the comprehensive environmental health emergency response plan and pre-event messages are developed	Yes/No	
Safe re-entry and re-occupation is addressed in the comprehensive environmental health emergency response plan	Yes/No	
Safe solid waste disposal/debris management is addressed in the comprehensive environmental health emergency response plan	Yes/No	
Sanitation/hygiene/safety issues for mass care facilities are addressed in the comprehensive environmental health emergency response plan	Yes/No	
Vector control is addressed in the comprehensive environmental health emergency response plan	Yes/No	
Waste water disposal is addressed in the comprehensive environmental health emergency response plan	Yes/No	

Activity: Develop and Maintain Training and Exercise Programs
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Frequency with which emergency response training is provided to field staff and managers of State and local environmental health programs	Every 12 months	
Percent of solid waste and debris and disposal workers adequately trained and protected (PPE)	100%	
Training addresses the range of environmental health issues	Yes/No	
Training has been provided to ensure environmental health support to hazardous materials responders	Yes/No	
Training on environmental health is provided to pre-designated managers, responders, and volunteers of mass-care operations	Yes/No	
Training on food safety is provided to responders and volunteers	Yes/No	

Activity: Direct Environmental Health Operations (Command and Control)
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Percent of time that environmental health resources are deployed in response to a	100%	

requestor an identified need

Percent of time that environmental health technical information, support and coordination is provided in response to a request or an identified need	100%	_____
Time in which environmental health input is provided for the forecasting and planning aspects of the Incident Action Plan (IAP)	Within 60 minutes from request	_____
Time in which technical information, support and consultation is provided for the creation of Crisis and Emergency Risk Communication messages	Within 60 minutes from request	_____

Activity: Activate Environment Health
Level of Preparedness: 1 2 3 4 5 6 7 (8) 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Appropriate environmental health specialties have been identified or put on standby	(Yes)/No	_____
Time in which environmental health personnel are mobilized	Within 24 hours from incident	_____

Activity: Ensure Safety of Potable Water Supplies
Level of Preparedness: 1 2 3 4 5 6 7 (8) 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Percent of time that State and local drinking water regulations are met for drinking water at point of use or entry into the distribution system to include the following systems: (1) Public Water Utility; (2) Alternative Water Supplies (Hauled Water, Bulk Water, Bottled Water); (3) Unregulated systems (individual wells); (4)Temporary or mobile treatment systems (ROPU, Portable onsite treatment)	100%	_____
Time in which all public water facilities are assessed	Within 14 days from incident	_____
Time in which initial assessments for water system needs for affected populations and priority facilities are conducted	Within 12 hours from establishment of communications	_____

Activity: Ensure Safety of Food Supplies
Level of Preparedness: 1 2 3 4 5 6 7 8 (9) 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Food safety personnel participate in infrastructure assessment	(Yes)/No	_____
Time in which assessment of priority food facilities is initiated using emergency guidelines and operation criteria applicable to the affected area	Within 24 hours from incident	_____

Activity: Ensure Safety of Wastewater Management
Level of Preparedness: 1 2 3 4 5 6 7 (8) 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Percent of affected populations provided with adequate temporary sewage disposal alternatives (1 portable toilet per 20 persons or access to pit latrines provided to all personnel according to The Sphere Project Minimum Standards in Disaster Response guidelines)	100%	_____
Percent of time that State and local waste water regulations are met for waste water to include the following systems: (1) Public Waste Water Utility; (2) Alternative Waste	100%	_____

Water (portable toilets, temporary lagoons, waste hauling); (3) Unregulated systems (individual septic tanks); (4) Land application

Time in which all public waste water facilities are assessed	Within 14 days from incident	
Time in which initial assessments are conducted for waste water system needs for affected populations and priority facilities (e.g., shelters, hospitals, etc.)	Within 12 hours from establishment of communications	

Activity: Provide Vector Surveillance
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Frequency with which database with areas treated for vector control is updated	Every 48 hours	
Frequency with which geo-coded database is updated with allocations assessed or treated for vectors during incident	Every 48 hours	
Percent of vectors mitigated	85%	
Time in which animal control measures are initiated	Within 96 hours from incident	
Time in which initial assessment of insect, animal, and rodent vectors is completed	Within 72 hours from incident confirmation	

Activity: Ensure Safety of Building Environments
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Documentation is maintained for assessments conducted	Yes/No	
Frequency with which data is analyzed during the incident to determine status of safe reentry and re-occupancy of community, homes, and facilities	Every 12 hours	
Frequency with which geo-coded status report of community, homes and facilities identified as safe or unsafe to re-enter and re-occupy are updated	Every 12 hours	
Percent of affected communities, homes, educational, institutional and health care facilities monitored in accordance with established evaluation processes and criteria	100%	
Time in which a geo-coded system is implemented to determine status of rehabilitation efforts and health and safety issues associated with reentry and re-occupancy	Within 72 hours from the incident	

Activity: Ensure Safety of Outdoor Environments
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Time in which a full characterization and recommendations based upon the initial assessments are developed	Within 14 days from incident	
Time in which the initial findings and response recommendations are summarized and disseminated	Within 96 hours from incident	
Time in which the sampling plan is developed	Within 24 hours from incident	

Time in which the sampling plan is initiated	Within 72 hours from incident	_____

Activity: Provide Environmental Health Support to Mass Care Response
Level of Preparedness: 1 2 3 4 5 6 7 (8) 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Frequency with which geo-coded database is updated with all mass care operations	Every 12 hours	_____
Time in which a sanitation assessment of drinking water at mass care facilities, shelters, and feeding centers is completed to ensure the water quality meets EPA standards	Within 48 hours from onset of shelter operation	_____
Time in which comprehensive environmental assessments (water, air, sanitation, food, and safety) at mass care facilities, shelters, feeding centers, and food/ice distribution centers are completed to ensure: (1) Safe water- 7.7-15 liters/day; (2) Cot spacing (overcrowding)- 3.5m2; (3) Minimum 1 toilet/20 persons, etc.	Within 48 hours from onset of shelter operation	_____

Activity: Provide Environmental Health Support to Solid Waste/Debris Removal
Level of Preparedness: 1 2 3 4 5 6 7 (8) 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Frequency with which geo-coded database is reviewed and updated after the collection and disposal process begins	Every 24 hours	_____
Time in which assessment of waste management and debris removal operations for environmental health concerns is initiated	Within 24 hours from incident	_____
Time in which monitoring of waste management and debris removal operations and practices is initiated	Within 24 hours from incident	_____

Activity: Provide Environmental Health Support to Hazardous Materials Management/Decontamination
Level of Preparedness: 1 2 3 4 5 6 7 (8) 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Time in which technical assistance, consultation, and support for damage assessments during hazardous materials incidents is initiated	Within 48 hours from incident	_____
Time in which technical assistance, consultation, and support to hazardous materials responders is initiated	Within 24 hours from incident	_____

General Target Capability Questions: 21) Environmental Health

Question: Please select the statement below that best describes what limits your overall Level of Preparedness for this target capability:

Answer Options:

- ☐ Fully achieving the elements of this Capability is not essential due to local conditions/risks
- ☑ There are insufficient resources (personnel, funding) for fully achieving the elements of this Capability
- ☐ Local governance and/or legal issues limit our ability to fully achieve the elements of this Capability
- ☐ Other, please provide a brief description

Comments:

Notes/References:

Target Capability: 22) Explosive Device Response Operations

Activity: Develop and Maintain Plans, Procedures, Programs, and Systems

Level of Preparedness: 1 2 3 4 5 6 (7) 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Percent of bomb squads accredited by the FBI to standards set by the National Bomb Squad Commanders Advisory Board (NBSCAB)	100%	
Effective plans for Explosive Device Response Operations are in place	(Yes)/No	
Plans address standardized education to certify bomb technicians (e.g., FBI Hazardous Devices School, National Bomb Squad Commanders Advisory Board)	(Yes)/No	
Plans address onsite treatment of devices (e.g., deactivation, disruption, disabling, containerizing for transport)	(Yes)/No	
Plans address communications requirements (e.g., establish onsite command, control, communications and intelligence operations)	(Yes)/No	
Effective plans, tactics, techniques, and procedures to respond to suicide bombers are in place	(Yes)/No	
Effective plans, tactics, techniques, and procedures to respond to vehicle borne improvised explosive devices are in place	(Yes)/No	
Effective plans, tactics, techniques, and procedures to respond to radio controlled improvised explosive devices are in place	(Yes)/No	
Effective plans, tactics, techniques, and procedures to respond to improvised devices that contain chemical, biological, and radiological components (Weapons of Mass Destruction) are in place	(Yes)/No	
Current mutual aid agreement that permits sharing of personnel and/or equipment is in place (if necessary)	(Yes)/No	
Squads obtain the equipment and training to receive a Type I or II rating	(Yes)/No	

Activity: Develop and Maintain Training and Exercise Programs

Level of Preparedness: 1 2 3 4 5 (6) 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Effective training and exercise programs for responding to suicide bombers are in place	(Yes)/No	

Effective training and exercise programs for responding to Vehicle Borne Improvised Explosive Devices (VBIED) are in place	Yes/No	
Effective training and exercise programs for responding to Radio Controlled Improvised Explosive Devices (RCIED) are in place	Yes/No	
Effective training and exercise programs for responding to improvised devices that contain chemical, biological, and radiological components (Weapons of Mass Destruction) are in place	Yes/No	
Percent of certified bomb technicians trained and exercised in all required areas	100%	
Effective tactics, techniques, procedures, and training are standardized and shared within the bomb squad community	Yes/No	
Effective practices and training are reinforced as needed during practical exercises that accurately replicate threats and operating conditions	Yes/No	
Percent of public safety personnel trained in explosive device awareness	100%	
Percent of squads that meet or exceed the continuing minimum training set in the National Guidelines for Bomb Squad Technicians	100%	
General public and private sector are provided with bomb threat awareness training as needed	Yes/No	
All bomb squad training (including techniques, tactics, and procedures) is consistent with and enhances training delivered by the FBI Hazardous Devices School (HDS)	Yes/No	

Activity: Direct Explosive Device Response Operations
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Time in which onsite command and control communications (C3) is established and real time tactical information is shared Note: If C3 and info-share are established, bomb squad will demonstrate ability to join" rather than establish the network	Within 15 minutes from arrival onsite	

Activity: Activate Public Safety Bomb Squad
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Time in which Bomb Squad personnel is notified by dispatch	Within 15 minutes from time of recognition of explosive device threat by on-scene first responders	
Time in which determination is made as to personnel and equipment that needs to be dispatched	Within 15 minutes from notification	
Time in which required personnel and equipment are en route to the scene	Within 30 minutes from initial notification	

Activity: Search and Assess Site
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Time in which initial cordon is verified	Within 1 hour from arrival at incident scene	

Time in which Operational Threat Assessment is complete	Within 1 hour from arrival at incident scene	

Activity: Render Safe Onsite
Level of Preparedness: 1 2 3 4 5 6 7 (8) 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Time in which public Safety Bomb Squad verifies and assesses site perimeters based on standard operating procedures (SOP) and threat Note: If perimeters were previously established Bomb Squad will verify	Within 1 hour from arrival onsite	
Diagnostics and render safe procedures are conducted as appropriate for threat and device type by function	(Yes)/No	

Activity: Conduct Recovery, Removal, and Transport Operations
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Device and/or components are prepared for transport to a safe and secure site for processing and/or disposal within time period determined by bomb technicians on the scene, in accordance with public safety considerations	(Yes)/No	

Activity: Demobilize Explosive Device Removal Operations
Level of Preparedness: 1 2 3 4 5 6 7 (8) 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Percent of on-scene Bomb Squad personnel provided a debriefing after every incident	100%	
Other responders are debriefed	(Yes)/No	
Additional Bomb Squad personnel who were not at the scene are briefed	(Yes)/No	

General Target Capability Questions: 22) Explosive Device Response Operations

Question: Please select the statement below that best describes what limits your overall Level of Preparedness for this target capability:

Answer Options:

- ☐ Fully achieving the elements of this Capability is not essential due to local conditions/risks
- ☐ There are insufficient resources (personnel, funding) for fully achieving the elements of this Capability
- ☐ Local governance and/or legal issues limit our ability to fully achieve the elements of this Capability
- ☐ Other, please provide a brief description

Comments:

Question: Please estimate to what extent this Capability has improved during FY2009 (October 2008 to September 2009) as a direct result of Federal financial assistance of any kind and from any fiscal year:

Answer Options:

- [ ] None of the improvement was due to Federal funding
- [x] Some of the improvement was due to Federal funding
- [ ] About half of the improvement was due to Federal funding
- [ ] Most of the improvement was due to Federal funding
- [ ] All of the improvement was due to Federal funding

Notes/References:

Target Capability: 23) Fire Incident Response Support

Activity: Develop and Maintain Plans, Procedures, Programs, and Systems

Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric		Notes (ENTIRELY OPTIONAL)
Firefighting plans and procedures address ICS and are integrated with onsite incident management	Yes/No		
Plans include special risk requirements (e.g., alternative water supply)	Yes/No		
Regional and interstate mutual and automatic aid agreements are in place	Yes/No		
Specialized equipment needed for high-rise firefighting (e.g., 1-hr. bottles, high-rise packs, litters for evacuating injured, high-rise communication systems) is available	Yes/No	N/A	
Specialized equipment for subway firefighting and search and rescue is available	Yes/No		
Preplans and maps for subway system and standard operating procedure (SOP) for dispatching companies to subway egress points to assist in search and rescue and evacuation (departments with subway systems) are in place	Yes/No	N/A	
Access to aerial units for deployment to roofs or high-rises (departments with high-rises) is available	Yes/No	N/A	
Stocked and garaged spare apparatus to surge total number of companies by 25 percent over normal first-line staffing (large cities) are available	Yes/No		
Procedures and protocols for coordinating protective action communications with at-risk population on-scene are in place	Yes/No		
Procedures to ensure safety of operating personnel are in place	Yes/No		
Procedures addressing demobilization are in place	Yes/No		

Activity: Develop and Maintain Training and Exercise Programs
Level of Preparedness: 1 2 3 4 5 6 7 (8) 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Frequency with which training is provided in strategies for large-scale incidents	Every 12 months	
Frequency with which training is provided in flammable liquid/bulk fuel storage firefighting (for jurisdictions with ports, refineries, storage, and shipment facilities for flammable liquids and gases)	Every 12 months	
Frequency with which training is provided in high-rise fires (for jurisdictions with high rises)	Every 12 months	
Frequency with which training is provided in mass transit fires (for jurisdictions with subways and/or commuter rail or light rail)	Every 12 months	
Frequency with which training is provided in shipboard firefighting (for jurisdictions with deep-water ports)	Every 12 months	
Frequency with which training is provided in wilderness/urban interface firefighting	Every 12 months	

Activity: Activate Fire Incident Response Support
Level of Preparedness: 1 2 3 4 5 6 7 (8) 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Time in which first fire suppression resource arrives on scene (at least 90% of the time)	Within 4 minutes from call	
Initial resource assignment is assembled in accordance with NFPA 1710 and NFPA 1720 (National Fire Protection Association Standards)	(Yes)/No	
Personnel accountability system is implemented upon arrival	(Yes)/No	
Time in which tactical operations are initiated	Within 2 minutes from arrival on scene	

Activity: Size Up (Assess Site)
Level of Preparedness: 1 2 3 4 5 6 7 (8) 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Time in which situation report is provided to additional responding personnel/units	Within 2 minutes from arrival on scene	

Activity: Direct Fire Incident Response Support Tactical Operations
Level of Preparedness: 1 2 3 4 5 6 7 (8) 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Time in which incident command for firefighting operations is established	Within 5 minutes from arrival on scene	
Rapid Intervention Crew is established prior to start of interior structural firefighting operations	Yes/No	
Time in which to request local mutual aid	Within 60 minutes from arrival on scene	

Time in which other agencies are notified of incident as required by law	Within 30 minutes from arrival on scene	
Time in which responder rehabilitation is established	Within 30 minutes from arrival on scene	

Activity: Search Scene and Rescue
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Primary and secondary search is completed within appropriate time give the size of structure, available resources, and incident conditions	Yes/No	

Activity: Contain and Control
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Tactics employed were commensurate with incident	Yes/No	
Fire is contained and extinguished within time appropriate for size of structure, available resources, and incident conditions	Yes/No	
Sufficient size and quantity of hand lines are deployed for type and size of structure and volume of fire present	Yes/No	
Time in which sufficient volume of alternate water supply in the event of loss of domestic water supply is established	Within 30 minutes from loss of supply	

Activity: Conduct Overhaul Operations
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Percent of hot spots located and extinguished	100%	
Percent of heavily involved areas opened up, from which materials are removed from the structure, and are thoroughly soaked, as appropriate	100%	

Activity: Conduct Cause and Origin
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Time in which other agencies are notified of incident in compliance with applicable laws	Within 30 minutes from size-up	
Time in which qualified Fire Investigator arrives on-site	Within 60 minutes from notification	
Cause of fire is determined	Yes/No	

Activity: Demobilize Fire Incident Response Support
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)

Capability is demobilized as specified in demobilization plan	Yes/No	
Time in which equipment and apparatus are inventoried	Within 30 minutes from start of demobilization	
Time in which equipment and apparatus are cleaned and prepared to return to service	Within than 60 minutes from start of demobilization	

General Target Capability Questions 23) Fire Incident Response Support

Question: Please select the statement below that best describes what limits your overall Level of Preparedness for this target capability:

Answer Options:

- ☐ Fully achieving the elements of this Capability is not essential due to local conditions/risks
- ☑ There are insufficient resources (personnel, funding) for fully achieving the elements of this Capability
- ☐ Local governance and/or legal issues limit our ability to fully achieve the elements of this Capability
- ☐ Other, please provide a brief description

Comments:

Notes/References:

Target Capability 24) WMD and Hazardous Materials Response and Decontamination

Activity: Develop and Maintain Plans, Procedures, Programs, and Systems

Level of Preparedness: 1 2 3 4 5 (6) 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
WMD/hazmat Response and Decontamination plans are based on a formal assessment of risks and vulnerabilities	(Yes)/No	
Risk analysis is completed for potential hazmat vulnerabilities, including fixed facilities and transportation-related emergencies	(Yes)/No	
Frequency with which Emergency Response Plan is reviewed	✓ Every 12 months	
Local Emergency Planning Commission is functional	✓ Yes/No	
Frequency with which pre-planned hazards and targets are reviewed and updated	Every 12 months	
Plans for pre-identified and equipped hazmat personnel to respond to hazmat incident and provide initial rapid hazmat incident size-up within 30 minutes from notification (< 2 hrs if regional resource) are in place	(Yes)/No	

Hazmat personnel are equipped and trained for weather prediction and hazard pluming	Yes/No	
Redundant hazmat response teams and equipment are available (or accessible through mutual aid agreements) to provide resiliency in the event of a large-scale incident	Yes/No	
WMD/hazmat plans address substance identification equipment (e.g., bases, vapors, liquids, solids, biologicals like white powder)	Yes/No	
WMD/hazmat plans address personnel needs (e.g., work/rest cycles, medical, psychological, financial assistance, etc.)	Yes/No	
WMD/hazmat plans address demobilization (e.g., debrief personnel, repackage equipment)	Yes/No	
Jurisdiction's hazmat team(s) has current protocol to coordinate with emergency medical services (EMS) on victim care post-decontamination (identification of substance, administration of antidotes, etc.)	Yes/No	
Jurisdiction's hazmat team(s) has current protocol to coordinate with law enforcement for evidence collection and crime scene control	Yes/No	
Emergency response and command vehicles and Incident Command Posts are equipped with Emergency Response Guidebook, NIOSH pocket guidebook, and discipline-related references relevant to the region	Yes/No	

Activity: Develop and Maintain Training and Exercise Programs
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Percent of police, fire, EMS, first responders (other than those assigned to hazmat responses) that are trained to hazmat awareness level	100%	
Percent of first responders assigned to hazmat operations that are trained to hazmat operations level (in accordance with 1910.120 (g) or NFPA 472)	100%	
Percent of personnel assigned to hazmat technician responsibilities who are trained to the hazmat technician level (in accordance with 1910.120 (g) or NFPA 472)	100%	
Percent of personnel assigned to hazmat specialist responsibilities who are trained to the hazmat specialist level (in accordance with 1910.120 (g) or NFPA 472)	100%	
Percent of personnel assigned to manage hazmat who are trained to hazmat management level (in accordance with 1910.120 (g), NFPA 471 and NFPA 472) for detection equipment, including flammability, toxicity, radiations, chemical warfare agents(CWAs) and biologicals	100%	
Percent of personnel assigned to manage hazmat who are trained to hazmat management level (in accordance with 1910.120 (g), NFPA 471 and NFPA 472) for substance identification equipment, for bases and vapors, liquids, solids and biologicals (white powder)	100%	
Hazmat personnel are equipped and trained for weather prediction and hazard pluming	Yes/No	
Jurisdiction's hazmat team(s) trains regularly with EMS to ensure proper coordination of victim care post-decontamination (identification of substance, administration of antidotes, etc.)	Yes/No	
Jurisdiction's hazmat team(s) trains regularly with law enforcement to ensure proper coordination for evidence collection and crime scene control	Yes/No	

Activity: Direct WMD and Hazardous Material Response and Decontamination Tactical Operations
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Number of loss-time injuries (per deployment) of WMD/Hazmat Response and Decontamination personnel during rescue efforts	<1	
Time in which tactical plan is developed, based on the incident action plan (IAP), and for implementation by the State, region, and/or local WMD/Hazmat Response and Decontamination	Within 2 hours from arrival on scene	

Activity: Activate WMD and Hazardous Material Response and Decontamination
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Team is coordinated/incorporated into ICS upon arrival	Yes/No	
Time in which initial hazmat size-up is completed	Within 30 minutes from notification of incident	
Time in which regional assets (e.g., Type I Hazmat Team or Type III or IV Incident Management team) arrive on scene, if requested by IC	Within 2 hours from asset request	
Time in which State assets (e.g., Type I Hazmat Team or Type II or III Incident Management team) arrive on scene, if requested by IC	Within 12 hours from asset request	
Time in which Federal assets (e.g., Type I Hazmat Team or Type I or II Incident Management team) arrive on scene, if requested by IC	Within 24 hours from asset request	
Time in which Radiological Emergency Preparedness Program (REPP) Response Teams appropriate for the incident size involving a radiological hazard are deployed	Within 24 hours from asset request	
Time in which Radiological Assistance Program (RAP) Teams are deployed	Within 2 hours from asset request	

Activity: Identify the Hazard
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Time in which area is isolated and public access is controlled	Within 15 minutes from arrival on scene	
Time in which hazardous materials or category involved are identified	Within 30 minutes from arrival on scene	

Activity: Assess Hazard and Evaluate Risk
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Time in which preliminary estimate of number of victims exposed to toxic/hazardous material and source identification is obtained	Within 2 hours from arrival on scene	
Time in which the at-risk population is identified and protective action recommendations are made	Within 1 hour from arrival on scene	
Time in which the WMD/Hazmat elements of the overall IAP are developed	Within 1 hour from arrival on scene	

Activity: Conduct Rescue Operations
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Time in which contaminated victims are rescued from contaminated area	Within 2 hours from arrival on scene	

Activity: Conduct Mitigation Activities
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Time in which implementation of initial action plan and objectives is initiated	Within 4 hours from arrival on scene	
Time in which hazmat/WMD contamination is contained	Within 12 hours from arrival on scene	

Activity: Conduct Decontamination and Clean-up/Recovery Operations
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Victims are provided maximum amount of privacy within site and situational constraints	Yes/No	
Percent of victims provided clothing, blankets, and protection from the elements as needed	100%	
Time in which technical decontamination of first responders on-site is performed (depending on substance)	Within 2 hours from end of work period	
Time in which technical decontamination of household pets off-site (e.g., at designated decontamination stations) is performed (depending on substance)	Within 2 hours from arrival	
Time in which technical decontamination of off-site victims (e.g., at hospitals and designated decontamination stations) is performed (depending on substance)	Within 2 hours from arrival	
Time in which technical decontamination of human remains is performed	Within 24 hours from end of work period	
Time in which technical decontamination of facilities and equipment is performed	Within 24 hours from end of work period	

Activity: Demobilize WMD and Hazmat Response and Decontamination
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Time in which equipment cache is re-inventoried and packaged for transport	Within 12 hours from start of demobilization process	
Time in which base of operations is returned to original conditions	Within 12 hours from start of demobilization process	
Percent of WMD/Hazmat Response and Decontamination task force debriefed	100%	

General Target Capability Questions: 24) WMD and Hazardous Materials Response and Decontamination

Question: Please select the statement below that best describes what limits your overall Level of Preparedness for this target capability:

Answer Options:

- [ ] Fully achieving the elements of this Capability is not essential due to local conditions/risks
- [x] There are insufficient resources (personnel, funding) for fully achieving the elements of this Capability
- [ ] Local governance and/or legal issues limit our ability to fully achieve the elements of this Capability
- [ ] Other, please provide a brief description

Comments:

Question: Please describe the sufficiency of this capability, jurisdiction-wide, with respect to special needs populations, as defined in the National Response Framework:

Answer Options:

- [ ] Does not identify Special Needs Populations
- [x] Identifies Special Needs Populations, but is insufficient in meeting their needs
- [ ] In Progress to identify Special Needs Populations and meet their basic needs
- [ ] Identifies Special Needs Populations and can meet their basic needs
- [ ] Identifies Special Needs Populations and can meet the majority of their needs
- [ ] Identifies Special Needs Populations and can meet all of their needs

Notes/References:

Target Capability: 26) Citizen Evacuation and Shelter-in-Place

Activity: Develop and Maintain Plans, Procedures, Programs, and Systems

Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
An information tracking system is in place to support evacuation and shelter-in-place operations	Yes/No	
Arrangements with agencies to be involved in evacuations/sheltering, staffing of shelters, logistical supply, security, and support of shelters are in place	Yes/No	
Evacuation and shelter-in-place plans address the development and dissemination of accurate, timely, accessible information to public, media, support agencies	Yes/No	
Evacuation plan(s) are in place to provide transportation and other evacuation assistance to all persons who need evacuation assistance; plans, at a minimum,	Yes/No	

address assistance for companion animals	Yes/No	
Evacuation plan(s) are in place to provide transportation and other evacuation assistance to all persons who need evacuation assistance; plans, at a minimum, address assistance for institutionalized populations (e.g., nursing homes, hospitals, psychiatric institutions, boarding schools)	Yes/No	
Evacuation plan(s) are in place to provide transportation and other evacuation assistance to all persons who need evacuation assistance; plans, at a minimum, address assistance for non- institutionalized populations requiring assistance to be moved (e.g., the elderly, disabled, etc.)	Yes/No	
Evacuation plan(s) are in place to provide transportation and other evacuation assistance to all persons who need evacuation assistance; plans, at a minimum, address assistance for populations out of the home (e.g., students, those in public venues) and the work force during a surprise incident	Yes/No	
Evacuation plan(s) are in place to provide transportation and other evacuation assistance to all persons who need evacuation assistance; plans, at a minimum, address assistance for transient populations (e.g., the homeless, tourists and visitors)	Yes/No	
Evacuation plan(s) identifying evacuation routes and traffic flow and control measures are in place	Yes/No	
Evacuation routes are marked	Yes/No	
Informational materials for use in citizen preparedness for evacuation and shelter-in-place have been developed and coordinated with public education/citizen preparedness programs on citizen responsibilities	Yes/No	
Informational materials for use in citizen preparedness for evacuation and shelter-in-place have been developed and coordinated with public education/citizen preparedness programs on options and guidance for the handling of companion animals	Yes/No	
Informational materials for use in citizen preparedness for evacuation and shelter-in-place have been developed and coordinated with public education/citizen preparedness programs on procedures and guidance for biological and chemical hazards	Yes/No	
Informational materials for use in citizen preparedness for evacuation and shelter-in-place have been developed and coordinated with public education/citizen preparedness programs on procedures and guidance for explosive hazards	Yes/No	
Informational materials for use in citizen preparedness for evacuation and shelter-in-place have been developed and coordinated with public education/citizen preparedness programs on procedures and guidance for radiological and nuclear hazards	Yes/No	
Memoranda of Understanding (MOU) with jurisdictions to serve as host communities for evacuees during an incident have been developed	Yes/No	
Nonprofit organizations/NGOs (e.g., the American Red Cross, Salvation Army, faith-based organizations) were actively engaged in plan development	Yes/No	
Planning and informational materials to be released to the public for evacuation or sheltering in place have been shared with the servicing public safety communication centers and Public Service Answering Points (PSAPs)	Yes/No	
Plans addressing authority and decision-making processes for shelter-in-place and/or evacuations are in place	Yes/No	
Plans addressing authority and procedures to declare and enforce a mandatory evacuation are in place	Yes/No	
Plans are in place for the evacuation of airports	Yes/No	

Plans are in place for the evacuation of animal shelters and zoos	Yes/No	
Plans are in place for the evacuation of correctional facilities	Yes/No	
Plans are in place for the evacuation of high-rise buildings	Yes/No	
Plans are in place for the evacuation of hospitals/nursing homes/assisted-living/elder care facilities	Yes/No	
Plans are in place for the evacuation of neighborhoods	Yes/No	
Plans are in place for the evacuation of other high-risk areas in response to a threat or attack	Yes/No	
Plans are in place for the evacuation of special events venues	Yes/No	
Plans are in place for the evacuation of subways	N/A ~~Yes/No~~	
Plans for coordinating with law enforcement (e.g., to identify risk to transportation infrastructure from potential terrorist attack, identify security and survival vulnerabilities to evacuated population, identify protective countermeasures) are in place	Yes/No	
Plans identifying measures to ensure adequate services (e.g., gas, food, water, tow trucks, medical emergencies, etc.) along the evacuation route(s) are in place	Yes/No	
Plans to address decontamination of evacuees (e.g., coordination with HazMat) are in place	Yes/No	
Plans to address re-entry of the general population are in place	Yes/No	
Plans to address re-entry support for populations requiring assistance to return are in place	Yes/No	
Plans to coordinate with mass care agencies to provide required services at evacuation staging points and/or at temporary evacuation shelters for at least 72 hours are in place	Yes/No	
Plans to coordinate with medical care agencies to provide medical support, supervision, and symptom surveillance of evacuees during a prolonged evacuation (e.g., monitoring and caring for people with pre-existing medical conditions or disabilities and those who may become ill during the evacuation) are in place	Yes/No	
Plans to coordinate with public safety agencies in evacuating incarcerated populations are in place	Yes/No	
Plans to coordinate with utility companies regarding safety instructions for returning homeowners are in place	Yes/No	
Plans to provide for leadership at evacuation staging points and/or at temporary evacuation shelters for up to 72 hours are in place	Yes/No	
Populations that may need assistance with evacuation/shelter-in-place have been identified	Yes/No	
Processes for identifying and addressing the different types of assistance needed (e.g., physical movement, transportation assistance, language translation, etc.) are in place	Yes/No	
Processes for identifying populations that may need assistance with evacuation/shelter-in-place, prior to an incident are in place	Yes/No	
Processes for identifying, during an incident, populations that may need assistance with evacuation/shelter-in-place are in place	Yes/No	

Activity: Develop and Maintain Training and Exercise Programs
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Staff of agencies to be involved in evacuations/sheltering, staffing of shelters, logistical supply, and support of shelters have been trained	Yes/No	
Pre-event exercises of the notification and activation of evacuation and shelter-in-place plans are conducted with citizen participation	Yes/No	
Local emergency response agencies/staff including public safety answering points, are trained on local evacuation/shelter-in-place strategies	Yes/No	

Activity: Direct Evacuation and/or In-Place Protection Tactical Operations
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Individual(s) with authority to select protective strategy is identified	Yes/No	
Individual(s) with authority identifies the information needed to make decision(s)	Yes/No	
Necessary information is gathered	Yes/No	
Appropriate and available strategies are identified	Yes/No	
An appropriate strategy is selected and communicated	Yes/No	
Appropriate protective strategy to meet the potential risk/danger to the various populations is selected within appropriate timeframe	Yes/No	
Citizen protection decision is coordinated with surrounding jurisdictions to support evacuation routes, and activate reception facilities and shelters	Yes/No	
Re-entry planning is conducted during the course of response to the event	Yes/No	

Activity: Activate Evacuation and/or In-Place Protection
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Time in which affected population is notified of shelter-in-place order	Within 15 minutes from order to shelter-in-place	
The most affected populations for evacuation are notified first (e.g., ring evacuations)	Yes/No	
Percent of population appropriately notified of evacuation procedures, routes, locations, and sources of evacuation information throughout the incident	100%	
Percent of population requiring assistance that has been identified	100%	

Activity: Implement Evacuation Orders for General Population
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)

Frequency with which public is initially notified of evacuation procedures, routes, locations, or sources of evacuation information	✓ Every 30 minutes	
Frequency with which public is notified of evacuation procedures, routes, locations, or sources of evacuation information throughout the incident.	✓ Every 2 hours	
Time in which the traffic and transportation plan is implemented to enable evacuation within the incident timeframe	✓ Within 3 hours from evacuation order	
Time in which the evacuation of the affected general population for an event with advanced warning is completed	✓ Within 72 hours from the order to evacuate	

Activity: Collect and Evacuate Population Requiring Assistance
Level of Preparedness: 1 2 3 4 5 6 7 (8) 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Collection points for individuals needing special evacuation assistance are established and publicized	✓ (Yes)/No	
Percent of requests for evacuation assistance for those in need that are met in accordance with established procedures	✓ 100%	
Percent of service organizations following established procedures to provide evacuation assistance	✓ 100%	
Procedures for obtaining evacuation assistance are publicized to general public	✓ (Yes)/No	
Sources of assistance to evacuated persons with special needs are contacted and provided information on their role.	✓ (Yes)/No	
Sources of surge transportation assistance for evacuations are contacted and provided information on their role	(Yes)/No	
Specific arrangements for medical support services for evacuation of those requiring it are implemented	(Yes)/No	
Transportation assistance is provided for/by hospitals, nursing homes and other institutions that will need to evacuate or help/evacuate those in their care	(Yes)/No	

Activity: Operate Evacuation Staging/Reception Area
Level of Preparedness: 1 2 3 4 5 6 7 8 (9) 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Percent of evacuation staging/reception areas in the affected area that are coordinated with necessary sites and assisting agencies	100%	
Public information messages regarding evacuation staging/reception areas are prepared and disseminated	Yes/No	
Percent of evacuees whose basic needs are addressed at the staging area	100%	

Activity: Manage Incoming Evacuees
Level of Preparedness: 1 2 3 4 5 6 7 8 9 (10)

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Percent of evacuation staging/reception areas in the host jurisdiction that are coordinated with necessary authorities and assisting agencies	100%	
Public information messages to publicize evacuation staging/reception areas in the host jurisdiction are prepared and disseminated	(Yes)/No	

Processing, registration and tracking systems are established with procedures, necessary forms and materials, and trained staff	Yes/No	
Plans are completed and arrangements established to provide necessary care, shelter, lodging and short term needs of evacuees	Yes/No	

Activity: Implement In-Place Protection Procedures
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Percent of affected population immediately notified of initial in-place protection procedures, using standing emergency instructions	100%	
Time in which the affected general population is sheltered in place	Within 30 minutes from notification	
Frequency with which follow-on instructions are provided to sheltered-in-place populations (e.g., hazard mitigation recommendations)	Continuous	

Activity: Assist Re-Entry
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Re-entry planning is conducted during the course of response to the event	Yes/No	
Percent of affected evacuees notified of temporary re-entry procedures	100%	
Percent of affected evacuees instructed of permanent re-entry procedures, including safety precautions	100%	

Activity: Demobilize Citizen Evacuation and Shelter-In-Place Operations
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Percent of Citizen Evacuation and/or Shelter-In-Place personnel debriefed	100%	
Lessons learned are identified	Yes/No	
Lessons learned are addressed	Yes/No	

General Target Capability Questions: 25) Citizen Evacuation and Shelter-In-Place

Question: Please select the statement below that best describes what limits your overall Level of Preparedness for this target capability:

Answer Options:

- ☐ Fully achieving the elements of this Capability is not essential due to local conditions/risks
- ☐ There are insufficient resources (personnel, funding) for fully achieving the elements of this Capability
- ☐ Local governance and/or legal issues limit our ability to fully achieve the elements of this Capability
- ☐ Other, please provide a brief description

Comments:

Question: Please estimate to what extent this Capability has improved during FY2009 (October 2008 to September 2009) as a direct result of Federal financial assistance of any kind and from any fiscal year:

Answer Options:

- [ ] None of the improvement was due to Federal funding
- [x] Some of the improvement was due to Federal funding
- [ ] About half of the improvement was due to Federal funding
- [ ] Most of the improvement was due to Federal funding
- [ ] All of the improvement was due to Federal funding

Question: Please describe the sufficiency of this capability, jurisdiction-wide, with respect to special needs populations, as defined in the National Response Framework:

Answer Options:

- [ ] Does not identify Special Needs Populations
- [x] Identifies Special Needs Populations, but is insufficient in meeting their needs
- [ ] In Progress to identify Special Needs Populations and meet their basic needs
- [ ] Identifies Special Needs Populations and can meet their basic needs
- [ ] Identifies Special Needs Populations and can meet the majority of their needs
- [ ] Identifies Special Needs Populations and can meet all of their needs

Notes/References:

Target Capability: 26) Isolation and Quarantine

Activity: Develop and Maintain Plans, Procedures, Programs, and Systems

Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Legal authority to isolate and/or quarantine individuals, groups, facilities, animals, and food products is defined	Yes/No	
Legislation has been enacted authorizing appropriate isolation and quarantine measures(including quarantine of groups)	Yes/No	
Plan addresses coordinating quarantine activation and enforcement with public safety and law enforcement	Yes/No	

Plan addresses coordinating with Mass Care (e.g., for provision of water, food, bulk supplies to isolated and quarantined individuals)	Yes/No	
Plan addresses cultural characteristics of populations to be isolated and/or quarantined (e.g., religious needs, language barriers)	Yes/No	
Plan addresses having or having access to information systems to support tracking adherence to isolation and quarantine measures that comply with the PHIN functional requirements for Countermeasure and Response Administration	Yes/No	
Plan addresses how to ensure adequate stockpiles of appropriate personal protective equipment (PPE)	Yes/No	
Plan addresses implementation of infection control precautions	Yes/No	
Plan addresses the financial impact to individuals who are placed in isolation and quarantine	Yes/No	
Plan addresses tracking details of individuals placed in Isolation or Quarantine using Personal Health Identification Number (PHIN)	Yes/No	
Plan for conducting isolation and quarantine operations is in place	Yes/No	
Plan specifies the criteria for activating Isolation and Quarantine procedures	Yes/No	
System is in place for monitoring people who have been isolated or quarantined (e.g., for evidence of infection, progression of illness)	Yes/No	

Activity: Develop and Maintain Training and Exercise Programs
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Exercises to test plans for implementing isolation and quarantine have been conducted	Yes/No	
Staff have been trained in isolation and quarantine operations and plans	Yes/No	

Activity: Direct Isolation and Quarantine Tactical Operations
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Public health official with legal authority to issue isolation and quarantine orders is identified	Yes/No	
Time in which isolation and quarantine order is issued	Within 4 hours from notification of need to implement isolation and quarantine	
Time in which educational information is provided for release	Within 1 hour from issuance of order	
Time in which medical resource personnel are notified and assembled at isolation and quarantine areas	Within 12 hours from need to implement isolation and quarantine	
Time in which communications with public health officials and CDC are established	Within 30 minutes from need to implement isolation and quarantine	

Activity: Activate Isolation and Quarantine
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Time in which isolation and quarantine units are stood up	Within 24 hours from notification of need to implement isolation and quarantine	
Time in which personnel are deployed to traveler screening locations	Within 2 hours from identifying screening locations	
Time in which restriction guidelines and treatment protocols are disseminated to medical care providers	Within 2 hours from order being issued	

Activity: Implement Travel Restrictions
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Time in which screening locations are established	Within 30 minutes from screener arrival onsite	
Percent of inbound/outbound travelers screened while isolation and quarantine order is in effect	100%	
Percent of screened positive persons isolated and quarantined	100%	

Activity: Implement Voluntary Isolation and Quarantine
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Percent of caregivers for isolated patients who become infected while under voluntary isolation and quarantine	0%	
Frequency with which updates are provided to tracking system from voluntarily isolated or quarantined individuals while under voluntary isolation and quarantine	Every 24 hours	
Percent of persons receiving care and prevention instruction while under voluntary isolation and quarantine	100%	
Percent of caregivers using infection control precautions while under voluntary isolation and quarantine	100%	

Activity: Implement Mandatory Isolation and Quarantine
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Percent of caregivers for isolated patients who become infected while under mandatory isolation and quarantine	0%	
Frequency with which updates to tracking system are provided from isolated or quarantined individuals while under mandatory isolation and quarantine	Every 24 hours	
Percent of persons receiving care and prevention instruction while under mandatory isolation and quarantine	100%	

Percent of caregivers using infection control precautions while under mandatory isolation and quarantine	100%	
Percent of isolated or quarantined persons receiving daily monitoring and compliance contact	100%	

Activity: Demobilize Isolation and Quarantine
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Time in which isolation and quarantine facilities are restored to pre-incident operations	Within 7 days from isolation and quarantine order being lifted	
Isolation and quarantine personnel are debriefed	Yes/No	

General Target Capability Questions: 26) Isolation and Quarantine

Question: Please select the statement below that best describes what limits your overall Level of Preparedness for this target capability:

Answer Options:

- ☐ Fully achieving the elements of this Capability is not essential due to local conditions/risks
- ☐ There are insufficient resources (personnel, funding) for fully achieving the elements of this Capability
- ☐ Local governance and/or legal issues limit our ability to fully achieve the elements of this Capability
- ☐ Other, please provide a brief description

Comments:

Question: Please describe the sufficiency of this capability, jurisdiction-wide, with respect to special needs populations, as defined in the National Response Framework:

Answer Options:

- ☐ Does not identify Special Needs Populations
- ☐ Identifies Special Needs Populations, but is insufficient in meeting their needs
- ☐ In Progress to identify Special Needs Populations and meet their basic needs
- ☐ Identifies Special Needs Populations and can meet their basic needs
- ☐ Identifies Special Needs Populations and can meet the majority of their needs
- ☐ Identifies Special Needs Populations and can meet all of their needs

Notes/References:

Target Capability: 27) Search and Rescue (Land-Based)

Activity: Develop and Maintain Plans, Procedures, Programs, and Systems
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Scale of jurisdiction's urban search and rescue capability is related to risk/threat analysis	Yes/No	
Team is equipped in accordance with the National Incident Management System (NIMS) Resource Typing System	Yes/No	
Federal, State, regional, and local SAR Capabilities are NIMS-Compliant	Yes/No	
SAR plans address logistical support (e.g., directing resources, re-assigning tech specialists, managing uncertified volunteers)	Yes/No	
Plans address demobilization of SAR operations (e.g., replenishing supplies and equipment, re-assigning personnel).	Yes/No	
Plans address SAR personnel needs (e.g., physical, psychological, financial assistance)	Yes/No	
SAR plans are integrated with the incident management structure (e.g., USAR teams coordinated with fatality management and EMS resources)	Yes/No	
SAR plans address information sharing requirements	Yes/No	

Activity: Develop and Maintain Training and Exercise Programs
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Training program has been established	Yes/No	
Training and exercises programs address both urban and civil search and rescue	Yes/No	
SAR personnel trained and equipped as per EOP and SOPs	Yes/No	
Frequency with which SAR activities are exercised in large and complex exercises	Every 12 months	

Activity: Direct Search & Rescue Tactical Operations
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
SAR teams are incorporated into the incident command structure	Yes/No	
Frequency with which situation and resource status information are received (and also after a significant change)	Every 30 minutes	
Number of loss-time injuries per deployment of SAR personnel during SAR efforts	<1	
Time in which tactical plan is developed and implemented by State, regional, and/or local SAR, based on the Incident Action Plan (IAP)	Within 2 hrs from arrival on-scene	

Time in which tactical plan is developed and implemented by Federal SAR resource(s) based on the (IAP)	Within 4 hrs from arrival on-scene	
Demobilization/reassignment plan is developed and takes into account long-term personnel follow-up	Yes/No	

Activity: Activate Search & Rescue
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Time in which local SAR capability arrives on-scene	Within 2 hours from notification	
Time in which regional SAR capability arrives on-scene	Within 12 hours from notification	
Time in which federally designated SAR capable resources are deployed	Within 6 hours from task force notification of request	
Time in which first activated Federal SAR resources arrive on-scene	Within 24 hours from activation	

Activity: Provide Materiel and Other Support
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Time in which functional Base of Operation is established and ready to support initial SAR operations	Within 60 minutes from arrival at incident site	
Percent of accountability for team equipment/supplies maintained	100%	
Percent of deployable SAR capability that can sustain its own operations for up to 72 hours without additional resources	100%	
Percent of SAR personnel and service animals whose health is monitored at least once per work cycle	100%	

Activity: Conduct Search and Rescue Reconnaissance
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Time in which reconnaissance team provides preliminary recommendation on search priorities and strategy	Within 1 hour	

Activity: Search
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Percent of assigned area searched	100%	
Time in which systematic search of an area affected by a large-scale emergency is initiated	Within 30 minutes from operations briefing	
Percent of ambulatory victims directed to safe assembly point	100%	
Frequency with which updated situation and resource status report is provided (including after major change in conditions)	Every 30 minutes	

Activity: Extricate
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Percent of dangerous conditions affecting extrication mitigated to allow worker and victim safety in accordance with SOP	100%	
Frequency with which updated situation and resource status report is provided(including after major change in conditions)	Every 30 minutes	
Percent of located victims extricated	100%	

Activity: Provide Medical Treatment
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Percent of victims whose standard of care is maintained according to local medical protocols	100%	
Percent of time resources were identified to transfer patient to more definitive medical care	100%	

Activity: Demobilize/Redeploy
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Time in which equipment cache is re-inventoried and packaged for transport	Within 12 hours from start of demobilization	
Time in which base of operations is returned to original conditions	Within 12 hours from start of demobilization process	
Percent of Search and Rescue task force personnel debriefed before leaving the scene	100%	

General Target Capability Questions: 27) Search and Rescue (Land-Based)

Question: Please select the statement below that best describes what limits your overall Level of Preparedness for this target capability:

Answer Options:

- ☐ Fully achieving the elements of this Capability is not essential due to local conditions/risks
- ☑ There are insufficient resources (personnel, funding) for fully achieving the elements of this Capability
- ☐ Local governance and/or legal issues limit our ability to fully achieve the elements of this Capability
- ☐ Other, please provide a brief description

Comments:

Notes/References:

Target Capability: 28) Emergency Public Information and Warning

Activity: Develop and Maintain Plans, Procedures, Programs, and Systems
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Communications plan in place to communicate changes in threat level (in the Homeland Security Advisory System) to the public	Yes/No	
Contact information for public and private partners is current and available	Yes/No	
Crisis and emergency risk communications (CERC) plans are in place	Yes/No	
Emergency Alert System (EAS) activation plan is in place and is tested regularly	Yes/No	
Information dissemination and alert/warning mechanisms are structured so that private sector entities receive accurate, timely, and unclassified information	Yes/No	
Plans and procedures for a post-incident containment informational program are in place	Yes/No	
Plans and procedures for how notification of recovery assistance information will be disseminated to the public are in place	Yes/No	
Plans and procedures to receive and archive responses from stakeholders that have been previously notified are in place	Yes/No	
Plans and procedures to update alerts/warning frequently are in place	Yes/No	
Plans for Joint Information Center (JIC) include multi-jurisdictional, multi-disciplinary agencies, the private sector, nongovernmental organizations, and staffing JIC functions	Yes/No	
Preparedness information is widely distributed in languages appropriate to the cultural and ethnic needs of the populations of the area	Yes/No	
Procedures and protocols to communicate and coordinate effectively with other JICs and other incident command system (ICS) components, structured according to the incident command, unified command, or area command are in place	Yes/No	
Procedures are in place for communicating with external groups and individuals about disasters and emergencies following established standards, as appropriate (e.g., the EMAP and the NFPA 1600)	Yes/No	
Procedures are in place for communicating with internal groups and individuals about disasters and emergencies following established standards, as appropriate (e.g., the Emergency Management Accreditation Program (EMAP) and the National Fire Protection Association (NFPA) 1600)	Yes/No	
Procedures are in place for rapidly deploying public affairs teams, which are self-sufficient, established across all Federal departments and agencies with key Homeland Security responsibilities, and can deploy	Yes/No	

Public awareness and education plan is in place with all appropriate agencies and partners	Yes/No	
Public Information Field Guide includes a listing of homeland security and emergency management sources of information and updatable media lists	Yes/No	
Public Information Field Guide includes protocols for identification of resources and responsibilities in advance of an accident	Yes/No	
Public Information Field Guide includes protocols for interfacing with the media, legislative interests, officials and celebrities, community-citizens, and tribal, city, county, State, Federal, and private industry leaders	Yes/No	
Public Information Field Guide includes protocols for operating in Joint Information Center (JIC)	Yes/No	
Public Information Field Guide is in place	Yes/No	
The emergency operations plan (EOP) includes a communications strategy to engage the media to ensure accurate information is disseminated	Yes/No	
The emergency operations plan (EOP) provides procedures for use when normal information sources are lost	Yes/No	
The emergency operations plan (EOP) specifies how and when to activate public alert and warning functions	Yes/No	
The emergency operations plan (EOP) specifies how and when to enact a Joint Information System (JIS)	Yes/No	
The emergency operations plan (EOP) specifies how and when to enact the notification function	Yes/No	
The emergency operations plan (EOP) specifies how and when to enact the public information function	Yes/No	

Activity: Develop and Maintain Training and Exercise Programs
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Frequency with which alert and warning systems are exercised	Every 3 months	
Frequency with which all appropriate agencies and personnel are trained in and exercise the Emergency Alert System (EAS) plan	Every 12 months	
Frequency with which Emergency Operations Plans are exercised	Every 12 months	
Frequency with which emergency risk communications plan is exercised	Every 12 months	
Frequency with which exercise community-based mechanisms to support providing prompt, accurate information to the public in the dominant languages of the community and languages and formats appropriate for those with limited language proficiency, disabilities, cultural or geographic isolation, or vulnerabilities due to age	Every 12 months	
Frequency with which Joint Information Center (JIC) deployment and operations are exercised	Every 12 months	
Frequency with which plans and procedures are tested to ensure accuracy and completeness	Every 12 months	
Frequency with which public awareness and education plan is updated	Every 12 months	
Percent of relevant staff trained on public information, alert/warning, and notification policy and procedures	100%	

Activity: Manage Emergency Public Information and Warnings
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Time in which initial communications strategy is developed in collaboration with interagency partners	Within 90 minutes from the incident	
Frequency with which public warnings, instructions, and information updates are planned and coordinated during an incident	Continuous	
Pre-established mechanisms are used to provide State, local, and tribal authorities with clear and easy to understand information based on the threat environment	Yes/No	
Percent of public information, alert/warning, and notifications that are managed according to the established plan	100%	

Activity: Activate Emergency Public Information, Alert/Warning, and Notification Plans
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Time in which partner agencies are notified by the designated or assigned public information officer (PIO) at the initial responding agency	Within 60 minutes from notification to respond to the incident	
Emergency Operations Plan is activated	Yes/No	
Percent of JIC personnel registered	100%	
Percent of JIC personnel briefed	100%	
Information is delivered to stakeholders based on security clearance level and need to know	Yes/No	
Time in which appropriate spokesperson is identified	Within 60 minutes from opening of JIC	

Activity: Establish Joint Information Center
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Time in which JIC is activated	Within 2 hours from notification of threat or incident	
Percent of JIC personnel that have been vetted and credentialed	100%	
JIC chain of command and operations management chain of command are established	Yes/No	
Regularly scheduled updates are provided for JIC personnel	Yes/No	
Percent of major JIC activities for which written documentation or log is kept	100%	

Activity: Conduct Joint Information Center Operations
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Time in which media are alerted of JIC activation and how to access services	Within 2 hours from JIC activation	
Time in which first formal news conference is held	Within 3 hours from incident, as appropriate	
Time in which public messages are released providing information on how to apply for individual assistance	Within 24 hours from incident	
Inaccuracies are addressed prior to next news cycle	Yes/No	
Time in which public information hotline is activated	Within 4 hours from incident	
Frequency with which hotline information is updated to ensure that the most accurate information is distributed in a timely fashion	Continuous	
Frequency with which alerts/warnings and notifications are provided to planners and decision makers at all levels as appropriate	Continuous	
Information is authenticated and screened for relevance at the supervisory level as received	Yes/No	
Percent of first responders notified of new and developing information as it is authenticated	100%	

Activity: Issue Public Information, Alerts/Warnings, and Notifications
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Time from threat notification to activation of warning systems	Within 30 minutes from threat notification	
Population is notified of an emergency utilizing multiple available warning systems	Yes/No	
Percent of appropriate individuals and special needs groups provided with notification communications in accordance with the public awareness and education plan	100%	
Percent of alert/warning systems and media outlets monitored to assure the proper message is delivered	100%	
System is in place to receive response to interagency notifications previously sent out (if required)	Yes/No	
System is in place to conduct public information activities, as needed	Yes/No	

Activity: Conduct Media Relations
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
N/A	N/A	

Activity: Provide Public Rumor Control
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)

N/A N/A

Activity: Demobilize Emergency Public Information and Warning
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Time in which notice of JIC closure is disseminated	Yes/No	
Percent of staff and JIC partners debriefed	Yes/No	
Pertinent information and documentation is collected	Yes/No	
After action review is conducted to determine strengths and shortfalls and develop a corrective plan accordingly	Yes/No	
Percent of alert/warning systems returned to normal operations mode	Yes/No	

General Target Capability Questions: 2B) Emergency Public Information and Warning

Question: Please select the statement below that best describes what limits your overall Level of Preparedness for this target capability:

Answer Options:

- ☐ Fully achieving the elements of this Capability is not essential due to local conditions/risks
- ☑ There are insufficient resources (personnel, funding) for fully achieving the elements of this Capability
- ☐ Local governance and/or legal issues limit our ability to fully achieve the elements of this Capability
- ☐ Other, please provide a brief description

Comments:

Question: Please estimate to what extent this Capability has improved during FY2009 (October 2008 to September 2009) as a direct result of Federal financial assistance of any kind and from any fiscal year:

Answer Options:

- ☐ None of the improvement was due to Federal funding
- ☑ Some of the improvement was due to Federal funding
- ☐ About half of the improvement was due to Federal funding
- ☐ Most of the improvement was due to Federal funding
- ☐ All of the improvement was due to Federal funding

are in place for common hospital diversion and bed capacity situational awareness at the local, State, and regional levels		
EMS personnel participate on a regular basis with emergency management planning and operations	Yes/No	_____
EMS plans address patient and resource transportation (i.e., helicopters and corresponding landing zone, ambulances and en route health care providers)	Yes/No	_____
EMS plans address the treatment of EMS response personnel, site staff, and their families (e.g., medical needs, stress management strategies)	Yes/No	_____
Jurisdiction-wide EMS data collection system that complies with the National EMS Information System (NEMSIS) Version 2.0 or later is in place	Yes/No	_____
Recall procedures to summon off-duty EMS personnel when needed are in place	Yes/No	_____
Redundant public safety answering points (PSAPs) that comply with phase II Federal Communications Commission (FCC) requirements for cell phone access are available and are capable of handling a large volume of calls	Yes/No	_____
State EMS personnel certification and licensure system modeled after the principles of the National EMS Education Agenda for the Future (and its five components) and NIMS is in place	Yes/No	_____
Sufficient certified/licensed EMS personnel are available to staff the current EMS system 24 hours per day, 7 days per week, and with a response consistent with established local response times	Yes/No	_____
Sufficient numbers of ambulance transport and support vehicles are available to handle routine call volume 24/7 with response consistent with established local response times	Yes/No	_____
Sufficient PPE is available for all EMS personnel who would respond to a catastrophic or routine incident (scenario-specific)	Yes/No	_____
The vehicle tracking system is consistent with a written infrastructure protection plan and NIMS resource typing	Yes/No	_____
Written EMS dispatch procedures include the dispatch of personnel and equipment in the unique circumstances of a catastrophic event	Yes/No	_____
Written mutual aid protocols and procedures for EMS support are in place	Yes/No	_____
Written plans and procedures for coordination of the local EMS system with the National Disaster Medical System are in place	Yes/No	_____
Written protocols approved by medical control for EMS assessment, triage, transport, and tracking of patients during a catastrophic event are in place	Yes/No	_____

Activity: Develop and Maintain Training and Exercise Programs

Level of Preparedness: 1 2 3 4 5 6 (7) 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Frequency with which exercises are conducted using scenarios based on a jurisdiction specific risk vulnerability assessment and Homeland Security Exercise and Evaluation Program (HSEEP) guidelines	Every 12 months	_____
Percent of dispatchers who received training on dispatch, triage, treatment, and transport protocols and procedures	80%	_____
Percent of field responders who received training on dispatch, triage, treatment, and transport protocols and procedures	80%	_____

Activity: Direct Triage and Pre-Hospital Treatment Tactical Operations
Level of Preparedness: 1 2 3 4 5 6 7 (8) 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Procedures for the safety, health, and well-being of on-scene personnel are followed	(Yes)/No	yes
Time in which medical coordination of on-scene EMS system personnel and other health resources is provided	Within 30 minutes from initial units arrival on scene	yes
Time in which medical coordination of public health services, hospitals, and healthcare providers is provided	Within 60 minutes from the establishment of Medical Command	yes
Time in which medical dispatch react and respond to the increased call volume	Within 30 minutes from start of increased call volume	yes
Time in which primary and secondary communication is established	Within 30 minutes from the establishment of Tactical Operations	
Time in which recall and mutual aid agreements with State and local partners are executed	Within 60 minutes from initial request for additional resources	No
Time in which special safety equipment is organized and made available to all on-scene medical personnel	Within 60 minutes from initial units arrival on scene	yes
Time in which sufficient and appropriate medical equipment and supplies are readily available to on scene personal	Within 2 hours from initial units arrival on scene	

Activity: Activate Triage and Pre-Hospital Treatment
Level of Preparedness: 1 2 3 4 5 6 7 8 9 (10)

10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Time in which EMS responders are notified and dispatched toward the scene	Within 10 minutes from 911 receipt of initial call	yes

Activity: Triage
Level of Preparedness: 1 2 3 4 5 6 7 8 9 (10)

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Data management system is operational	(Yes)/No	
Time in which a patient tracking system is initiated	Within 30 minutes from the initiation of on scene triage	yes
Time in which triage of ill/injured patients is initiated	Within 30 minutes from receipt of call	yes

10

Activity: Provide Treatment
Level of Preparedness: 1 2 3 4 5 6 7 8 9 (10)

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Time in which ill/injured patients receive initial treatment by appropriately credentialed on-scene medical personnel	Within 30 minutes from initial units arrival on scene	yes

Question: Please describe the sufficiency of this capability, jurisdiction-wide, with respect to special needs populations, as defined in the National Response Framework:

Answer Options:

- [ ] Does not identify Special Needs Populations
- [x] Identifies Special Needs Populations, but is insufficient in meeting their needs
- [ ] In Progress to identify Special Needs Populations and meet their basic needs
- [ ] Identifies Special Needs Populations and can meet their basic needs
- [ ] Identifies Special Needs Populations and can meet the majority of their needs
- [ ] Identifies Special Needs Populations and can meet all of their needs

Notes/References:

Target Capability: 29) Emergency Triage and Pre-Hospital Treatment

Activity: Develop and Maintain Plans, Procedures, Programs, and Systems
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
A NIMS-compliant plan that enables communicable disease first responders and receivers to understand their roles, responsibilities, and requirements when responding to a communicable disease outbreak (scenario-specific) is in place	Yes/No	
A plan for prophylaxis and issuance of PPE to non-surge first responders and first receivers within 24 hours from a communicable disease outbreak, including the logistical chain to support this effort is in place	Yes/No	
A plan that accounts for the multi-jurisdictional pre-hospital response to a catastrophic incident that considers mutual aid agreements, associated equipment, staff, command and control, and nontraditional patient movement and transfers is in place	Yes/No	
A plan to return to normal operations post-incident is in place	Yes/No	
All cities have a minimum of one spare ALS vehicle available	Yes/No	
An interoperable patient tracking system is in place that allows patient tracking from the first response site to a healthcare facility, and allows data to be accessible among geographically appropriate users	Yes/No	
Cities greater than 300,000 have at least one spare vehicle for every 100,000 maintained on an in-service basis (i.e., stocked and garaged) to support immediate surge needs	Yes/No	
Compatible communications equipment and communications radio frequency plans are in place for command and control dispatch procedures for task force operations	Yes/No	
Compatible communications equipment and communications radio frequency plans	Yes/No	

Time in which on-line medical control is notified of incident	10	Within 10 minutes from initial patient triage on a not-to-interfere basis with immediate patient treatment	yes
Time in which coordination of patient treatment with on-line medical control is initiated		Within 60 minutes from arrival on scene	yes

Activity: Transport
Level of Preparedness: 1 2 3 4 5 6 7 8 9 (10)

Measure	10	Metric	Notes (ENTIRELY OPTIONAL)
Percent of patients transported in vehicles appropriate to each patient's conditions and the nature and magnitude of the incident		100%	yes 100%
Time in which patients are transported		Within 2 hours from initial units arrival on scene	yes
Time in which single patient transportation is coordinated with appropriate treatment facility for single patient transfer		Within 30 minutes from initial unit arrival on scene	yes
Time in which mass casualty patient transportation is coordinated with appropriate treatment facility		Within 30 minutes from EMS Transportation/ Communications Officer arrival	yes
Protocols are in place that address return to service of transport vehicles(e.g., decontamination, stocking, and personnel)		Yes/No	yes

Activity: Demobilize Triage and Pre-Hospital Treatment
Level of Preparedness: 1 2 3 4 5 (6) 7 8 9 10

Measure	6	Metric	Notes (ENTIRELY OPTIONAL)
Time in which triage and pre-hospital personnel are restored to normal or original operations		Within 12 hours from start of demobilization	yes
Percent of triage and pre-hospital treatment personnel debriefed		100%	NO

General Target Capability Questions: 29) Emergency Triage and Pre-Hospital Treatment

Question: Please select the statement below that best describes what limits your overall Level of Preparedness for this target capability:

Answer Options:

- [ ] Fully achieving the elements of this Capability is not essential due to local conditions/risks
- [x] There are insufficient resources (personnel, funding) for fully achieving the elements of this Capability
- [ ] Local governance and/or legal issues limit our ability to fully achieve the elements of this Capability
- [ ] Other, please provide a brief description

Comments:

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Notes/References:

Target Capability: 30) Medical Surge

Activity: Develop and Maintain Plans, Procedures, Programs, and Systems
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
A 50-bed nursing sub-unit - per 50,000 population - can be staffed	Yes/No	
A data base to track the status of medical surge resources (e.g., medications, medical professionals) is in place or accessible	Yes/No	
A local regional/State regional pharmaceuticals management system is in place that captures current inventory of Metropolitan Medical Response System, Health Resources and Services Administration-hospital, CHEM-PACK caches	Yes/No	
A local regional/State regional pharmaceuticals management system is in place that ensures a sufficient supply of pharmaceuticals to provide prophylaxis for 3 days first responders and their families, and other key incident response/management personnel and the general public as determined by local authorities	Yes/No	
A local regional/State regional pharmaceuticals management system is in place that tracks the dispensing of pharmaceuticals during the incident	Yes/No	
A process is in place to project the demand for Medical Surge (e.g., how many people will need treatment, how long it will take to secure facilities)	Yes/No	
A scalable patient tracking system is in place	Yes/No	
All acute care hospitals have capacity to maintain, in negative pressure isolation, at least one suspected case of a highly infectious disease or a febrile patient with a suspect rash or other symptoms of concern who might be developing a highly communicable disease	Yes/No	
At least one healthcare facility that is identified in each defined sub-State region is able to support initial evaluation and treatment of at least 10 total adult and pediatric patients at a time in negative pressure isolation within 3 hours from the event	Region Yes/No	
Plan for community based surge hospital bed surge capacity is in place	Yes/No	
Plans address dissemination of accurate, timely, accessible information to public, media, support agencies	Yes/No	
Plans address facility based evacuation (e.g., identification of receiving facilities, coordination of transportation assets)	Yes/No	
Plans address patient and resource transportation (e.g., identification and availability of traditional and non-traditional resources)	Yes/No	
Plans address the identification and setting up of additional facilities (e.g., provision of personnel, equipment, pharmaceuticals) when needed	Yes/No	
Plans address the treatment of Medical Surge personnel, site staff, and their families	Yes/No 5	

(e.g., medical needs, stress management strategies)		
Plans address the use of existing facilities (e.g., hospitals, clinics, extended care facilities)	Yes/No	
Plans for the set up, staffing, and operation of alternate care facilities are in place	Yes/No	
Plans to operate without public utilities for 72 hours are in place	Yes/No	
Secure and redundant communications system that provide connectivity during a catastrophic event among healthcare facilities and all other responder disciplines at all jurisdictional levels is in place	Yes/No	
Sufficient supplies of Personal Protective Equipment are available for current and surge healthcare personnel to work safely within the limits defined by their SOPs	Yes/No	
Sufficient supply of pharmaceuticals are stored at the healthcare facility to provide prophylaxis for 3 days to hospital personnel (medical and ancillary staff), their family members, and hospital based emergency first responders and their families	Yes/No	
The healthcare system has the capacity to complete triage, treatment, and initially stabilize50 cases per million population for patients manifesting the symptoms of radiation induced injury - especially bone marrow suppression	Yes/No	
The healthcare system has the capacity to complete triage, treatment, and initially stabilize50 cases per million population for patients suffering burn or trauma	Yes/No	
The healthcare system has the capacity to complete triage, treatment, and initially stabilize50 cases per million population for patients with symptoms of acute botulinumin toxication, acute chemical poisoning, and nerve agent exposure	Yes/No	
The healthcare system has the capacity to complete triage, treatment, and initially stabilize500 cases per million population for patients with symptoms of acute infectious disease -especially smallpox, anthrax, plague, tularemia, and influenza	Yes/No	
Updated medical surge plans have been developed in conjunction with critical multidisciplinary partners (public health, emergency management agency (EMA), law enforcement, etc.)	Yes/No	

Activity: Develop and Maintain Training and Exercise Programs
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Hospitals and their healthcare partners have an exercise program that conforms with Joint Commission on Accreditation of Healthcare Organizations, Health Resources and Services Administration, Center for Disease Control (CDC), NIMS, and Homeland Security Exercise and Evaluation Program (HSEEP) requirements	Yes/No	
Hospitals utilize competency-based education and training programs for all hospital personnel responding to a terrorist incident or other public health emergency	Yes/No	
Percent of acute care facilities that participate in exercises consistent with national and Joint Commission on Accreditation of Healthcare Organizations requirements	75%	100 %
Percent of hospitals that are NIMS/Incident Command System-compliant	100%	100 %
State participates in Emergency System for Advance Registration of Volunteer Health Professionals (ESAR-VHP) Program	Yes/No	State

Activity: Direct Medical Surge Tactical Operations
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)

Percent of hospitals in the local regional incident impact area that support the incident recognizing that most regions will only have a couple of hospitals	90%	100%
Policies are implemented for security of healthcare facilities and its perimeter during a mass casualty incident or large scale public health emergency	Yes/No	
Time in which deployment actions for the Health and Human Services (HHS) Incident Response Coordination Team are initiated	Within 4 hours from the incident	yes
Time in which deployment actions for the National Disaster Medical System (NDMS) Disaster Medical Assistance Teams (DMAT) are initiated	Within 6 hours from incident	yes
Time in which deployment actions for the National Disaster Medical System (NDMS) Disaster Medical Assistance Teams (DMAT) equipment caches are initiated and activated	Within 24 hours from the incident	yes
Time in which Federal ESF 8 assets are activated	Within 6 hours from notification of the incident	yes
Time in which National Disaster Medical System (NDMS) and other hospital asset reporting and tracking systems are activated	Within 60 minutes from the incident	yes
Time in which the State medical coordinating system is activated	Within 2 hours from notification of the incident	yes
Timely public health information is disseminated to improve provision of home healthcare and other personal, family, and employer actions	Yes/No	yes

Activity: Activate Medical Surge
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Medical Surge plans are implemented	Yes/No	
Personnel are available to augment treatment facilities	Yes/No	
Time in which, for cases of a Catastrophic Incident Supplement (CIS) activation, Department of Veteran Affairs (VA) Primary Receiving Centers (PRCs) within 500 miles of an incident venue prepare to terminate non-critical medical services and redirect available resources for receipt of patients at VA medical facilities. Department of Defense (DOD) facilities in the United States will respond under the National Response Plan Pursuant to a Request for Assistance approved by the Secretary of Defense or when directed by the President. DOD facilities within close proximity of the event may be able to render assistance under "Immediate Response Authority."	Within 24 hours from CIS activation	Regional ?
Development of a reconstitution plan is initiated upon identification of Planning Section Chief	Yes/No	

Activity: Implement Surge Patient Transfer Procedures
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Systems are in place to identify patients able to be transferred	Yes/No	
Time in which patients to discharge are identified	Within 6 hours from notification of requirement to move patients	Yes
Resources are available to provide tracking and mass movement of patients	Yes/No	

Patient transfers are coordinated with local or State Emergency Operations Center (EOC)	Yes/No	
Time in which traditional and non-traditional emergency transport vehicles are activated	Within 3 hours from notification	yes
Percent of level of coordination with patient tracking system	100%	100%

Activity: Implement Surge Staffing Procedures
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Percent of healthcare organizations involved in surge that implement call-back procedures	100%	100 %
Just-in-time materials and instructions are developed and distributed	Yes/No	

Activity: Receive and Treat Surge Casualties
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Systems are in place to accrue supplies, pharmaceuticals, and equipment to support facility surge capacity	Yes/No	
Percent of patients for whom decontamination is confirmed prior to facility access	100%	No
Percent of patients and responders identified, screened, and monitored after an event	100%	NO
Percent of patients tracked from arrival at healthcare system though duration of medical care	100%	NO

Activity: Demobilize Medical Surge
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Percent of healthcare system conducting an After-Action Review	100%	yes

General Target Capability Questions: 30) Medical Surge

Question: Please select the statement below that best describes what limits your overall Level of Preparedness for this target capability:

Answer Options:

- [x] Fully achieving the elements of this Capability is not essential due to local conditions/risks
- [x] There are insufficient resources (personnel, funding) for fully achieving the elements of this Capability
- [ ] Local governance and/or legal issues limit our ability to fully achieve the elements of this Capability
- [ ] Other, please provide a brief description

Comments:

Question: Please estimate to what extent this Capability has improved during FY2009 (October 2008 to September 2009) as a direct result of Federal financial assistance of any kind and from any fiscal year:

Answer Options:

- ☐ None of the improvement was due to Federal funding
- ☑ Some of the improvement was due to Federal funding
- ☐ About half of the improvement was due to Federal funding
- ☐ Most of the improvement was due to Federal funding
- ☐ All of the improvement was due to Federal funding

Notes/References:

1. P 95 MASF
2. TAMAFU
3. h.N2 UACC
4. Webeoc.

Target Capability: 31) Medical Supplies Management and Distribution

Activity: Develop and Maintain Plans, Procedures, Programs, and Systems
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Distributors' plans and logistical systems to identify potential sources of excess in their supply chains that might be diverted to higher need locations are in place	Yes/No	
Emergency public health and medical material distribution plans are in place	Yes/No	
Frequency with which pre-plan worst-case scenario orders are reviewed and updated	Every 6 months	
Frequency with which the Federal Government receives updates from distributors and manufacturers on the status of critical items that would prove necessary in a large scale incident with the focus on likely shortage and bottleneck situations	Yes/No	
Hazard-specific response plan identifies and prioritizes resource needs	Yes/No	
Increased inventory levels of critical items are maintained by medical suppliers, equipment, and pharmaceutical manufacturers and distributors working in conjunction with the government	Yes/No	
Jurisdiction has acquired and established access, through memoranda of understanding (MOUs), contracts or established supply depots, to effective pharmaceuticals (including medical gases) and medical material in accordance with forecasted needs	Yes/No	
Jurisdiction has identified locally available sources of critical medical supplies to use prior to arrival of external (State/Federal) resources	Yes/No	

Manufacturers memoranda of understanding (MOUs) to determine collective inventory accessibility and to ramp up manufacturing capability as needed are in place	Yes/No	
Medical treatment facilities and State, county and local government plans reflect input from local and regional sources of potential medical supplies and pharmaceuticals to lower dependency on Federal assets	Yes/No	
Medical treatment facilities and State, county and local governments have coordinated with medical distributors to develop preplanned worst-case scenario orders that reflect differing needs for various possible scenarios (e.g., chemical, biological attacks, natural disaster)	Yes/No	
Plans address storage of supplies (e.g., secure, climate-controlled)	Yes/No	
Plans address unused resources and disposal of waste materials generated by medical supplies warehousing operations	Yes/No	
Plans for assuring physical security of medical materiel in transport and distribution are in place	Yes/No	
Plans for the procurement, rotation and maintenance of Federal, State, local stockpiled assets or private/commercial inventories are implemented	Yes/No	
Processes for obtaining and distributing medication, DME, and/or CMS address re-supply of medication/equipment/supplies	Yes/No	
Processes for obtaining and distributing medication, DME, and/or CMS address sources of medication/equipment/supplies (e.g., vendors, medical facilities, strategic stockpiles)	Yes/No	
Processes for obtaining and distributing medication, DME, and/or CMS address staging locations and distribution sites	Yes/No	
Processes for obtaining and distributing medication, DME, and/or CMS address transport of medication/equipment/supplies to staging locations and distribution sites	Yes/No	
Processes for obtaining and distributing medication, DME, and/or CMS address what medication/equipment/supplies should be stockpiled versus obtained just in time	Yes/No	
Stockpile includes supplies and pharmaceuticals for special populations (i.e., pediatrics and geriatrics)	Yes/No	

Activity: Develop and Maintain Training and Exercise Programs
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Frequency with which NIMS-compliant courses are held to train emergency coordinators on plans and procedures	Every 12 months	
Frequency with which NIMS-compliant exercise is conducted to ensure that plans and procedures are understood and executable	Every 12 months	

Activity: Direct Medical Supplies Management and Distribution Tactical Operations
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Time in which Strategic National Stockpile (SNS) is requested following medical surveillance indication of requirement	Within 6 hours from indication	

Activity: Activate Medical Supplies Management and Distribution
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Time in which Federal medical assets warehouse are activated and fully staffed	Within 6 hours from approved request	
Time in which local supplies arrive at warehouse (to be used until Federal/State assets arrive)	Within 2 hours from request	
Percent of medical supplies and pharmaceuticals that are properly maintained and arrived in undamaged, serviceable condition and within the expiration date indicated on each container (bottle, case, vial, etc.)	100%	
Time in which backfill of medical support packages from Strategic National Stockpile (SNS) is initiated	Within 36 hours	

Activity: Establish Security
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Percent of appropriate security (e.g., U.S. Marshals, State police, county sheriff, city police) and credentialing provided at all steps of transportation of pharmaceuticals and supplies	100%	

Activity: Repackage and Distribute
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Time in which medical resources/SNS at warehouse arrive at points of distribution (PODs)	Within 12 hours from arrival at warehouse	
Time in which additional medical assets are delivered to POD or other health facility	Within 36 hours from approval of request for re-supply	

Activity: Recover Medical Resources
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Percent of unused medical assets recovered	100%	

Activity: Demobilize Medical Supplies Management and Distribution
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Percent of medical waste materials disposed of in accordance with applicable State laws and regulations	100%	

General Target Capability Questions: 31) Medical Supplies Management and Distribution

Question: Please select the statement below that best describes what limits your overall Level of Preparedness for this target capability:

Answer Options:

- [ ] Fully achieving the elements of this Capability is not essential due to local conditions/risks
- [x] There are insufficient resources (personnel, funding) for fully achieving the elements of this Capability
- [ ] Local governance and/or legal issues limit our ability to fully achieve the elements of this Capability
- [ ] Other, please provide a brief description

Comments:

Question: Please describe the sufficiency of this capability, jurisdiction-wide, with respect to special needs populations, as defined in the National Response Framework:

Answer Options:

- [ ] Does not identify Special Needs Populations
- [x] Identifies Special Needs Populations, but is insufficient in meeting their needs
- [ ] In Progress to identify Special Needs Populations and meet their basic needs
- [ ] Identifies Special Needs Populations and can meet their basic needs
- [ ] Identifies Special Needs Populations and can meet the majority of their needs
- [ ] Identifies Special Needs Populations and can meet all of their needs

Notes/References:

Target Capability: 12) Mass Prophylaxis

Activity: Develop and Maintain Plans, Procedures, Programs, and Systems
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Frequency with which mass prophylaxis plan is reviewed and updated	Every 12 months	
Mass prophylaxis plan incorporates input from all relevant stakeholders (including health department, emergency management agency, public works, department of transportation, law enforcement, EMS, fire, hospitals, military installations, department of finance)	Yes/No	
Mass prophylaxis plan is incorporated into overall emergency response plan	Yes/No	

Mass prophylaxis plan provides authorization for practitioners to dispense medications	Yes/No	
Mass prophylaxis plan provides authorization for practitioners to issue standing orders and protocols for dispensing sites	Yes/No	
Percent of state/local plans that contain elements included in the State/Local SNS Assessment Tool	100%	
Plan addresses cultural characteristics of populations to be treated (e.g., religious needs, language barriers)	Yes/No	
Plan addresses infection control measures to protect staff and patients (e.g., medical screening is performed in separate area away from mass prophylaxis site)	Yes/No	
Plan addresses requesting and receiving Mass Prophylaxis from the State and/or CDC	Yes/No	
Plan addresses the distribution of mass therapeutics (e.g., Points of Dispensing, medical supplies, staffing, security)	Yes/No	
Plan addresses the provision of prophylaxis to special needs populations (e.g., disabled people, quarantined individuals, people requiring ongoing medical support)	Yes/No	
Treatment center point of contact is identified and documented in mass prophylaxis plan	Yes/No	

Activity: Develop and Maintain Training and Exercise Programs
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Exercises evaluate the mass prophylaxis dispensing procedures	Yes/No	
Exercises evaluate the mass prophylaxis inventory management system plan	Yes/No	
Exercises evaluate the mass prophylaxis plan procedures to distribute prophylaxis	Yes/No	
Exercises evaluate the mass prophylaxis plan procedures to maintain security	Yes/No	
Exercises evaluate the public information and communication portion of the mass prophylaxis plan	Yes/No	
Exercises evaluate the tactical communications portion of the mass prophylaxis plan	Yes/No	
Exercises evaluate the treatment center coordination plan	Yes/No	
Frequency with which all key emergency and public health personnel to include Leaders and POD Managers are trained in accordance with identified training plans	Every 12 months	
Frequency with which at least one full scale POD exercise to test Mass Prophylaxis capability is conducted	Every 12 months	

Activity: Direct Mass Prophylaxis Tactical Operations
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Percent of public health personnel who arrive safely within target timeframe to perform capability	100%	
Percent of PODs that completely deplete all medical resources prior to re-supply	0%	

Time in which public is provided with accurate and consistent information messages regarding POD locations	Within 4 hours from POD opening	
Testing and functionality of tactical equipment and communication networks is demonstrated and documented	Yes/No	
The availability of the intervention is not affected by supply chain or other logistical problems	Yes/No	
Percent of population covered by PODs that are secured, open, and prepared to serve	100%	

Activity: Activate Mass Prophylaxis Dispensing Operations
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Percent of security forces designated in the POD specific plan who report for duty	100%	
Percent of sufficient, competent personnel available to staff dispensing centers or vaccination clinics, as set forth in SNS plans and State/local plans	100%	
Time for all equipment and operational supplies to be in place	4 hours from notification	
Time for all first shift staff to be at the POD Site and ready	3 hours from notification	

Activity: Establish Points Of Dispensing
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Percent of IND drugs dispensed that have corresponding consent forms	100%	
Percent of POD staff, first responders, and critical infrastructure personnel and their families given prophylaxis prior to POD opening to general public	100%	
Percent of PODs that are easily accessible and fully functional	100%	
Percent of population directed to appropriate stations	100%	

Activity: Conduct Triage for Symptoms
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Time in which clinical staff and volunteers become available at triage station	Within 4 hours from decision to activate site	
Transportation assets are available to bring symptomatic individuals to appropriate treatment facility	Yes/No	

Activity: Conduct Medical Screening
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Time in which clinical staff and volunteers become available at medical screening station	Within 4 hours from decision to activate site	

Proper documentation secured	Yes/No	
Percent of people dispensed the appropriate drug	100%	

Activity: Conduct Mass Dispensing
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Percent of dispensing centers or vaccination clinics that are able to process patients at the rate (persons per hour) specified in SNS Plans and State/Local Plans	100%	
Percent of at-risk population that was successfully provided initial prophylaxis within 48 hours of State/local decision to provide prophylaxis	100%	
Dispensing is not interrupted due to lack of preparation, availability of forms and materials and equipment	Yes/No	
Percent of patients who are transported from station to station within times specified in SNS Plans and State/local plans	100%	
Percent of parents receiving appropriate dosage and/or instructions to prepare oral suspensions for their children according to FDA Guidelines	100%	
Percent of individuals receiving appropriate medication	100%	

Activity: Monitor Adverse Events
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Percent of patients who receive instructions for adverse event reaction	100%	
Adverse event monitoring system is in place	Yes/No	
Number of staff or mechanisms to monitor individuals is adequate based on number of individuals receiving prophylaxis	Yes/No	

Activity: Demobilize Mass Prophylaxis Operations
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Percent of staff debriefed after mass prophylaxis distribution	100%	

General Target Capability Questions: 32) Mass Prophylaxis

Question: Please select the statement below that best describes what limits your overall Level of Preparedness for this target capability:

Answer Options:

- [ ] Fully achieving the elements of this Capability is not essential due to local conditions/risks
- [x] There are insufficient resources (personnel, funding) for fully achieving the elements of this Capability
- [ ] Local governance and/or legal issues limit our ability to fully achieve the elements of this Capability
- [ ] Other, please provide a brief description

Comments:

Question: Please estimate to what extent this Capability has improved during FY2009 (October 2008 to September 2009) as a direct result of Federal financial assistance of any kind and from any fiscal year:

Answer Options:

- [ ] None of the improvement was due to Federal funding
- [x] Some of the improvement was due to Federal funding
- [ ] About half of the improvement was due to Federal funding
- [ ] Most of the improvement was due to Federal funding
- [ ] All of the improvement was due to Federal funding

Notes/References:

Target Capability: 33) Mass Care (Sheltering, Feeding, and Related Services)

Activity: Develop and Maintain Plans, Procedures, Programs, and Systems

Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
A mass care plan for companion animals (includes provision of shelter, food, and animal welfare inquiry services) is in place	Yes/No	
A mass care plan for the general population is in place	Yes/No	
Local government has a companion animal care/handling plan coordinated with appropriate partners	Yes/No	
Mass care plan addresses cultural characteristics and needs of populations to be sheltered (e.g., religious needs, language barriers)	Yes/No	
Mass care plan addresses the feeding needs of affected populations (e.g., estimate projected need, identify distribution, preparation, and feeding sites, establish mobile feeding routes)	Yes/No	
Mass care plan addresses the safety and security of shelter facilities	Yes/No	
Mass care plan addresses the shelter requirements of special needs populations (e.g., disabled people, people requiring ongoing medical support)	Yes/No	
Mass care plan includes programs for recruiting volunteers	Yes/No	
Mass care plan is integrated with our plans for evacuation (e.g., evacuation routes to shelters are identified, exercise evacuation from various locations to local shelters)	Yes/No	

Plan to utilize ARC/HHS Initial Intake and Assessment Tool to assess individuals arriving at shelters is in place	Yes/No	
Plans for the transference of individuals with needs beyond the shelter's capacity to a Functional and Medical Support Shelter or other appropriate care facility with their caregivers/family are in place	Yes/No	
Shelter agreements for each jurisdiction are in place	Yes/No	
The mass care plan includes MOUs with non-governmental organizations (NGOs) to provide personnel and equipment support following an incident	Yes/No	

Activity: Develop and Maintain Training and Exercise Programs
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Training and exercise program for mass care personnel is in place and covers sheltering, feeding and bulk distribution services	Yes/No	
Training and exercise program addresses common mass care issues (e.g., culture, language, accommodating people with disabilities in general population shelters etc.)	Yes/No	
Training and exercises for mass care operations occur on regular basis	Yes/No	
Shelter staff are familiar with ARC/HHS Initial Intake and Assessment Tool that is used for initial screening of clients	Yes/No	
Training and exercise program is in place	Yes/No	

Activity: Direct Mass Care Operations
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Frequency with which mass care needs are assessed	Every 24 hours	
Frequency with which reports of shelter populations and locations are received from all mass care facilities	Every 24 hours	
Percent of total number of people seeking shelter who are either sheltered or referred to appropriate facilities	100%	
Time in which appropriate organizations are tasked to mobilize resources to provide mass care services	Within 6 hours from the notification of need for mass care services	
Time in which oversight of sanitation of shelters, food service, and distribution operations is established	Within 12 hours	
Time in which the initial mass care needs assessment is completed (sheltering, feeding, and bulk distribution)	Within 4 hours from notification of need for mass care services	
Time in which the mass care plan is activated	Within 2 hours from notification of need for mass care services	

Activity: Activate Mass Care
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Time in which mass care staff are notified	Within 2 hours from notification of need for mass care services	
Percent of mass care staff mobilized within timeframe designated in SOPs	100%	
Time in which to determine availability of shelter and staff within jurisdiction	Within 4 hours from activation of mass care plan	

Activity: Establish Shelter Operations
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Time in which shelters are opened with appropriate staff	Within 6 hours from activation of mass care plan	

Activity: Shelter General Population
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Frequency with which shelter population is reported	Every 24 hours	
Percent of general population shelters that have access to the ARC/HHS Initial Intake and Assessment Tool	100%	
Percent of population initially assessed and referred to appropriate accommodation within 24 hours of seeking shelter	100%	
Percent of shelter population registered within 24 hours of residing in shelter	100%	
Time in which all individuals at general population shelters are evaluated for health and mental health services	Within 12 hours from arrival	
Time in which shelter is able to provide 2 meals per day	Within 24 hours from shelter opening	

Activity: Shelter Companion Animals
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Time in which shelters are opened for staff and set-up	Within 8 hours from mobilization	
Companion animal import/export process complies with local holding regulations	Yes/No	
Percent of companion animals sheltered and/or referred to appropriate responsible authority	100%	

Activity: Close Shelter
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Percent of shelter residents transitioned from shelter to their residence or to	100%	

alternative accommodations prior to shelter closure

Time in which shelter closure notification is provided	Within 48 hours prior to shelter closure	

Activity: Establish Feeding Operations
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Time in which strategy is developed to meet demand for feeding services	Within 6 hours from notification of need for mass care services	
Time in which feeding services are mobilized	Within 12 hours from activation of mass care plan	
Time in which locations are identified for effective service delivery to meet feeding needs	Within 36 hours from activation of mass care plan	
Frequency with which reassessment of feeding strategy is conducted	Every 24 hours	

Activity: Prepare and Distribute Food
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Percent of anticipated need for feeding services met	100%	
Time in which initial food is provided	Within 6 hours from activation	
Time in which notification of end to feeding services is provided	48 hours prior to end of operations	

Activity: Establish Bulk Distribution Operations
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Time in which operational sites receive logistics support to maintain service delivery	Within 24 hours from site activation	
The locations of distribution centers are accurately and clearly communicated to the public	Yes/No	

Activity: Conduct Bulk Distribution Operations
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Time in which facilities can receive and distribute disaster relief items	Within 24 hours from site activation	
Time in which notification of end to bulk distribution services is provided	Within 48 prior to end of operations	

Activity: Demobilize Mass Care Operations
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Percent of participating agencies notified of demobilization	100%	
Percent of staff debriefed	100%	

General Target Capability Questions: 33) Mass Care (Sheltering, Feeding, and Related Services)

Question: Please select the statement below that best describes what limits your overall Level of Preparedness for this target capability:

Answer Options:

- [ ] Fully achieving the elements of this Capability is not essential due to local conditions/risks
- [x] There are insufficient resources (personnel, funding) for fully achieving the elements of this Capability
- [ ] Local governance and/or legal issues limit our ability to fully achieve the elements of this Capability
- [ ] Other, please provide a brief description

Comments:

Question: Please estimate to what extent this Capability has improved during FY2009 (October 2008 to September 2009) as a direct result of Federal financial assistance of any kind and from any fiscal year:

Answer Options:

- [ ] None of the improvement was due to Federal funding
- [x] Some of the improvement was due to Federal funding
- [ ] About half of the improvement was due to Federal funding
- [ ] Most of the improvement was due to Federal funding
- [ ] All of the improvement was due to Federal funding

Question: Please describe the sufficiency of this capability, jurisdiction-wide, with respect to special needs populations, as defined in the National Response Framework:

Answer Options:

- [ ] Does not identify Special Needs Populations
- [x] Identifies Special Needs Populations, but is insufficient in meeting their needs
- [ ] In Progress to identify Special Needs Populations and meet their basic needs
- [ ] Identifies Special Needs Populations and can meet their basic needs
- [ ] Identifies Special Needs Populations and can meet the majority of their needs
- [ ] Identifies Special Needs Populations and can meet all of their needs

Notes/References:

Target Capability: 34) Fatality Management

Activity: Develop and Maintain Plans, Procedures, Programs, and Systems

Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
A comprehensive fatality management plan is in place	Yes/No	
Fatality management plan addresses ante mortem data management (e.g., establish record repository and its housing facility, conduct DNA collection of family members, enter interview data into library, balance victim needs with those who have lost family members)	Yes/No	
Fatality management plan addresses documenting on-site Fatality Management operations (e.g., photographing, measuring, obtaining witness statements)	Yes/No	
Fatality management plan addresses management of facilities (e.g., morgue locations, portable and temporary morgues, decontamination, storage)	Yes/No	
Fatality management plan addresses management of family relations (e.g., notification, grief services, ante mortem information)	Yes/No	
Fatality management plan addresses personnel needs (e.g., medical, psychological, financial assistance)	Yes/No	
Fatality management plan addresses victim identification (e.g., conduct DNA, finger/palm/foot print analysis; compare morgue and Family Assistance Center information)	Yes/No	
Frequency with which contingency plans with local, State, and private entities regarding final disposition of remains (e.g., contaminated, unclaimed remains) are updated	Every 2 years	
Frequency with which contingency plans with local, State, and private entities regarding surge (e.g., pandemic flu, natural disasters, terrorism) are updated	Every 2 years	
Frequency with which the collection, storage and management of ante mortem data is updated	Every 2 years	
Frequency with which the comprehensive fatality management mission critical list (i.e., facilities, personnel and agencies) is reviewed and updated	Every 12 months	

Activity: Develop and Maintain Training and Exercise Programs

Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Frequency with which exercises are conducted contingency plans with local, State, and private entities regarding final disposition of remains (i.e., contaminated, unclaimed remains)	Every 2 years	

Frequency with which exercises are conducted for contingency plans with local, State, and private entities regarding surge (i.e., pandemic flu, natural disasters, terrorism)	Every 2 years	
Frequency with which training is conducted for augmented fatality management personnel(i.e., law enforcement, fire, dental ID team, anthropologists, funeral directors)	Every 2 years	
Frequency with which training is conducted on the collection, storage and management of ante mortem data	Every 2 years	

Activity: Direct Fatality Management Tactical Operations
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Surge morgue resources are activated	Yes/No	
Time in which suitable facilities for fatality management activities are located	Within 18 hours from report of deceased victims	

Activity: Activate Fatality Management Operations
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Appropriate number of physicians with medical legal authority are available based on incident needs	Yes/No	
Time in which functional morgue facilities (e.g., portable morgue) are set up	Within 24 hours from arrival on-scene	
Time in which surge resources and personnel are operational	Within 12 hours from callout	
Time in which DMORT arrives on-scene and sets up	Within 72 hours from callout	

Activity: Conduct On-scene Fatality Management Operations
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Time in which initial scene survey is completed	Within 2 hours from notification	
Time in which appropriate refrigerated storage units arrive on-scene	Within 48 hours from notification	

Activity: Conduct Morgue Operations
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Percent of remains tracked through morgue	100%	
Percent of personal effects tracked with appropriate set of remains	100%	
Percent of complete and accurate records following quality control procedure	100%	

Activity: Manage Ante mortem Data
Level of Preparedness: 1 2 3 4 5 (6) 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Time in which a communications system is activated for the general public to report missing persons	Within 60 minutes from incident	
Time in which first public announcement is made of missing persons reporting	Within 4 hours from incident	
Time in which Jurisdictional Medical Examiner/Coroner (ME/C) participates in the family assistance center (if one is established)	Within 2 hours from Family Assistance Center establishment	
Time in which the ante mortem information collection process is activated and staffed	Within 48 hours from incident	
Time in which the repository/library is ready to receive ante mortem victims' records from establishment of Family Assistance Center (FAC)	Within 48 hours from incident	

Activity: Conduct Victim Identification
Level of Preparedness: 1 2 3 4 5 (6) 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Percent of recovered remains identified	100%	
Time in which ante mortem and postmortem medical, dental, and fatality management databases are ready to receive records from establishment of Family Assistance Center (FAC)	Within 48 hours from FAC establishment	

Activity: Conduct Final Disposition
Level of Preparedness: 1 2 3 4 5 (6) 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Percent of deceased individuals for whom death certificate is issued	100%	

Activity: Demobilize Fatality Management Operations
Level of Preparedness: 1 2 3 4 5 6 (7) 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Time in which irretrievable resources are re-ordered	Within 48 hours from start of demobilization	
Percent of fatality management personnel participating in operational review	100%	

General Target Capability Questions: 34) Fatality Management

Question: Please select the statement below that best describes what limits your overall Level of Preparedness for this target capability:

Answer Options:

- [ ] Fully achieving the elements of this Capability is not essential due to local conditions/risks
- [ ] There are insufficient resources (personnel, funding) for fully achieving the elements of this Capability
- [ ] Local governance and/or legal issues limit our ability to fully achieve the elements of this Capability
- [ ] Other, please provide a brief description

Comments:

Notes/References:

Target Capability: 35) Structural Damage Assessment

Activity: Develop and Maintain Plans, Procedures, Programs, and Systems

Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Code enforcement activities are conducted	Yes/No	
Critical Resource List is in place	Yes/No	
Damage assessment procedures are in place	Yes/No	
Mitigation measures and emergency restoration procedures are in place	Yes/No	
Mitigation plans and procedures are in place	Yes/No	
Procedures address conducting inspections and assessments	Yes/No	
Procedures address demobilization of structural damage assessment operations	Yes/No	
Procedures address identifying and mobilizing personnel to support structural damage assessment operations	Yes/No	
Procedures address identifying qualified contractors offering recovery/restoration service	Yes/No	
Procedures address post-incident assessments and follow-up	Yes/No	
Procedures address required forms, reports, documentation, and follow-up notation	Yes/No	

Relevant qualifications and certification standards for paid and volunteer staff are in place	Yes/No	
Situation and damage assessment plans are in place	Yes/No	
Street maps are available for determining alternate routes	Yes/No	

Activity: Develop and Maintain Training and Exercise Programs
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
"Just-in-time" training for personnel is developed and implemented	Yes/No	
Damage assessment procedures are exercised	Yes/No	
Mitigation plans and procedures are exercised	Yes/No	

Activity: Activate Structural Damage Assessment
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Time in which damage assessment personnel are mobilized after the observed end of the incident	Within 24 hours from notification	

Activity: Direct Structural Damage Assessment Operations
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Private sector entities participate in recovery efforts	Yes/No	
Time in which prioritization schedule for critical infrastructure is developed	Within 24 hours from assessment completion	
FEMA and non-FEMA mitigation activities are identified and prioritized concurrent to development of individual project worksheets for specific repair/reconstruction projects	Yes/No	

Activity: Conduct Inspections and Assessments
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Situation assessments are conducted using one of following methods: (1) aerial reconnaissance; (2) remote sensing; (3) computer modeling (e.g., HAZUS); (4) rapid field assessments/windshield surveys	Yes/No	
Results of situation assessments are compared and contrasted to provide best initial estimate	Yes/No	
Time in which situation assessment is conducted and provides results	Within 24 hours from the incident	
Time in which a detailed situation assessment is conducted, to include information on buildings that are in imminent danger of collapse and critical resources of infrastructure are threatened	Within 48 hours from the conclusion of the disaster	

Time in which building safety inspections are conducted for habitability (green, yellow, and red tags)	Within 4 weeks from the event	
Time in which an emergency work damage assessment and public works (PW) preparation is conducted	Within 6 months from end of the incident period	
Time in which a permanent work damage assessment and public works (PW) preparation (FEMA and non-FEMA) is conducted	Within 12 months from end of the incident period	

Activity: Provide Mitigation and Technical Assistance
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Time in which jurisdiction provides technical assistance to responders	Within 24 hours from the end of the disaster	
Time in which all FEMA project worksheets are processed and eligibility and other reviews are completed	Within 14 days from the project worksheet entry	
Time in which 200 applicants' briefings for FEMA's Public Assistance Program applicants are completed (based on estimate: 100,000 category E Projects, at 10 buildings per applicant)	Within 2 months	

Activity: Demobilize Structural Damage Assessment
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Personnel and equipment are returned to normal operations	Yes/No	
Percent of appropriate documentation completed in timely manner	100%	

General Target Capability Questions: 35) Structural Damage Assessment

Question: Please select the statement below that best describes what limits your overall Level of Preparedness for this target capability:

Answer Options:

- ☐ Fully achieving the elements of this Capability is not essential due to local conditions/risks
- ☑ There are insufficient resources (personnel, funding) for fully achieving the elements of this Capability
- ☐ Local governance and/or legal issues limit our ability to fully achieve the elements of this Capability
- ☐ Other, please provide a brief description

Comments:

Notes/References:

Target Capability: 36) Restoration of Lifelines

Activity: Develop and Maintain Plans, Procedures, Program, and Systems
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Contingent contracts and mutual aid agreements for personnel and equipment are in place	Yes/No	
Credentialing procedures to allow repair personnel access to critical sites are in place	Yes/No	
EOC/JFO liaison has been identified	Yes/No	
Interdependencies among lifelines have been identified	Yes/No	
Lifeline companies/sectors and government coordinated emergency planning and operations	Yes/No	
Plans address demobilization of Restoration of Lifeline operations (e.g., consideration of personnel and equipment for permanent repair operations, personnel and equipment are returned to normal operations, appropriate documentation is completed, etc.)	Yes/No	
Plans address establishing key transportation avenues (e.g., best routes for personnel and equipment to access disaster locations, etc.)	Yes/No	
Procedures address housing and essential services for mobilized personnel	Yes/No	
Procedures are in place for mobilizing personnel and equipment for the restoration of lifelines.	Yes/No	
Procedures for assessing and prioritizing affected lifelines are in place	Yes/No	
Procedures for identifying affected lifelines (entities and structures) are in place	Yes/No	

Activity: Develop and Maintain Training and Exercise Programs
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Best practices are available	Yes/No	
Exercises include lifeline sectors	Yes/No	
Information has been disseminated to lifeline customers regarding what they should expect after an event	Yes/No	

Training occurred on lifeline restoration processes — Yes/No

Activity: Direct Mechanisms to Facilitate the Restoration of Lifelines
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Alternate means for providing critical lifeline services are coordinated	Yes/No	
Coordination between lifeline services' EOCs and government EOC/JFO is conducted	Yes/No	
Dissemination of status and priority information are coordinated	Yes/No	
Entities affected by the loss of lifeline infrastructure are identified	Yes/No	
Obstacles to the restoration of lifelines are removed	Yes/No	
Resources required to manage and restore lifeline operations are identified	Yes/No	

Activity: Activate Restoration of Lifelines
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Appropriate lifeline restoration personnel are mobilized	Yes/No	
Appropriate lifeline restoration personnel are notified	Yes/No	
Equipment and resources appropriate for the incident are mobilized	Yes/No	

Activity: Implement Restoration of Lifelines
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Lifeline restoration operations are in process	Yes/No	

Activity: Demobilize Restoration of Lifelines Operations
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Demobilization plan is implemented	Yes/No	
Personnel and equipment used for lifeline restoration are restored to normal operations	Yes/No	
Restoration activities are documented as needed	Yes/No	

General Target Capability Questions: 36) Restoration of Lifelines

Question: Please select the statement below that best describes what limits your overall Level of Preparedness for this target capability:

Answer Options:

- [ ] Fully achieving the elements of this Capability is not essential due to local conditions/risks
- [ ] There are insufficient resources (personnel, funding) for fully achieving the elements of this Capability
- [ ] Local governance and/or legal issues limit our ability to fully achieve the elements of this Capability
- [ ] Other, please provide a brief description

Comments:

Question: Please describe the sufficiency of this capability, jurisdiction-wide, with respect to special needs populations, as defined in the National Response Framework:

Answer Options:

- [ ] Does not identify Special Needs Populations
- [ ] Identifies Special Needs Populations, but is insufficient in meeting their needs
- [ ] In Progress to identify Special Needs Populations and meet their basic needs
- [ ] Identifies Special Needs Populations and can meet their basic needs
- [ ] Identifies Special Needs Populations and can meet the majority of their needs
- [ ] Identifies Special Needs Populations and can meet all of their needs

Notes/References:

Target Capability: 37) Economic and Community Recovery

Activity: Develop and Maintain Plans, Procedures, Programs, and Systems

Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Appropriate insurance coverage policies are in place	Yes/No	
Continuity of Operations Plans (COOP) are in place	Yes/No	
Debris management priorities have been established, to include improving restoration of key community functions and critical infrastructures	Yes/No	
Each functional area has qualified personnel	Yes/No	

Plan addresses the coordination of economic and community recovery operations (e.g., prioritizing recovery sequence, requesting State and Federal aid, establishing long-term goals, etc.)	Yes/No	
Plans address demobilization (e.g., personnel and equipment are returned to normal operations, appropriate documentation is completed)	Yes/No	
Plans address the assessment and prioritization of recovery needs	Yes/No	
Plans include processes for providing monetary relief (e.g., notify businesses and individuals of disaster relief reimbursement vehicles, provide financial counseling)	Yes/No	
Plans include processes for providing non-monetary direct assistance (e.g., facilitate recovery activities related to public works and engineering, provide temporary housing, initiate crisis counseling)	Yes/No	
Private sector and voluntary agency input are reflected in planning process	Yes/No	
Processes are in place for mobilizing personnel to support economic and community recovery operations	Yes/No	
Protocols for ensuring access to qualified personnel (e.g., loan officers, community planning officers, development officers, etc.) are in place	Yes/No	
Protocols for locating and recalling staff during recovery process are in place	Yes/No	
Recovery and mitigation planning efforts are coordinated with existing or ongoing Continuity of Operations Plan (COOP)	Yes/No	
Resumption, restoration, and recovery plans in place	Yes/No	

Activity: Develop and Maintain Training and Exercise Programs
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Personnel are trained in stabilization and recovery plans	Yes/No	
Recovery Plans are exercised	Yes/No	

Activity: Direct Economic and Community Recovery Operations
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Assessment and implementation of appropriate changes to codes and code enforcement begins immediately and continuously	Beginning immediately and continuing	
Debris management strategies are implemented immediately and continuously	Yes/No	
Mitigation plan is implemented	Yes/No	
Recovery efforts are coordinated with other levels of government	Yes/No	
Time in which a recovery plan is implemented	Within 48 hours from need to activate plan	
Time in which an assessment of the effectiveness of recovery planning and mitigation efforts is initiated	Within 12 months from the event	

Time in which efforts to coordinate with nonprofit sector and relief NGOs is initiated	Within 48 hours from incident	
Time in which estimates of social and economic consequences of an event in affected area are refined	Within 30 days	
Time in which jurisdiction begins to estimate the social and economic consequences of an event in the affected area	Within 7 days from incident	
Time in which meetings with private industries and NGOs on long-term community recovery begin	Within 30 days from incident	
Time in which property damage mitigation initiatives are implemented	Within 90 days	

Activity: Activate Economic and Community Recovery
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Percent of notified personnel who report	100%	

Activity: Assess and Prioritize Recovery Needs
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Time in which 50 percent of impacted individuals and business are registered for disaster assistance	Within 60 days from when assistance is available	

Activity: Provide Monetary Relief
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Businesses and individuals are notified of disaster relief reimbursement and available financial counseling	Yes/No	
Unmet economic needs have been identified	Yes/No	
Time in which process to manage individual assistance claims is activated	Within 7 days	
Time in which process to manage government-to-government assistance claims is activated	Within 12 months	
Time in which Federal disaster assistance grants are provided to affected individuals	Within 14 days from registration	
Time in which Federal disaster assistance loans are provided to individuals and businesses	Within 30 days from application	
Time in which Federal grant funds are obligated for 50 percent of FEMA's Public Assistance applications	Within 12 months	
Time in which Federal grant funds are obligated for 75 percent of FEMA's Public Assistance applications	Within 2 years	
Time in which Federal grant funds are obligated for 90 percent of FEMA's Public Assistance applications	Within 3 years	
Time in which Federal grant funds are obligated for 95 percent of FEMA's Public Assistance applications	Within 4 years	

Time in which Federal grant funds are obligated for 100 percent of FEMA's Public Assistance applications	Within 5 years	
Time in which fair market value indemnity is provided to owners of destroyed animals and materials	Within 72 hours from destruction	

Activity: Provide Non-monetary Relief
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Unmet social needs have been identified	Yes/No	
Time in which non-monetary forms of disaster assistance (e.g., crisis counseling, disaster legal services) to individuals and businesses are initiated	Within 7 days	
Time in which persons in temporary housing/interim shelters are relocated to long term housing	Within 30 to 90 days	

Activity: Demobilize Economic and Community Recovery
Level of Preparedness: 1 2 3 4 5 6 7 8 9 10

Measure	Metric	Notes (ENTIRELY OPTIONAL)
Personnel and equipment are returned to normal operations	Yes/No	
All appropriate documentation is completed	Yes/No	

General Target Capability Questions: 37) Economic and Community Recovery

Question: Please select the statement below that best describes what limits your overall Level of Preparedness for this target capability:

Answer Options:

- [x] Fully achieving the elements of this Capability is not essential due to local conditions/risks
- [ ] There are insufficient resources (personnel, funding) for fully achieving the elements of this Capability
- [ ] Local governance and/or legal issues limit our ability to fully achieve the elements of this Capability
- [ ] Other, please provide a brief description

Comments:

Question: Please describe the sufficiency of this capability, jurisdiction-wide, with respect to special needs populations, as defined in the National Response Framework:

- **Answer Options:**
  - ☐ Does not identify Special Needs Populations
  - ☑ Identifies Special Needs Populations, but is insufficient in meeting their needs
  - ☐ In Progress to identify Special Needs Populations and meet their basic needs
  - ☐ Identifies Special Needs Populations and can meet their basic needs
  - ☐ Identifies Special Needs Populations and can meet the majority of their needs
  - ☐ Identifies Special Needs Populations and can meet all of their needs

Notes/References:

APPENDIX J: RESOLUTION ADOPTING THE UPDATED HMAP

A RESOLUTION ADOPTING THE CITY OF NACOGDOCHES HAZARD MITIGATION ACTION PLAN.

WHEREAS, the City of Nacogdoches has gathered information and prepared the City of Nacogdoches Hazard Mitigation Action Plan to serve as a guiding document for local officials; and,

WHEREAS, the Hazard Mitigation Action Plan will be utilized by elected officials, staff, and community members to ensure continuity of future mitigation programs and policies; and,

WHEREAS, the City of Nacogdoches is a local unit of government that has afforded the citizens an opportunity to comment and provide input in the Plan and the actions in the Plan; and,

WHEREAS, the City of Nacogdoches has reviewed the Plan and affirms that the Plan will be updated no less than every five years.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Nacogdoches, Texas that the Hazard Mitigation Action Plan is hereby adopted.

ADOPTED this the 16th day of September 2014 at a regular meeting of the City Council.

THE CITY OF NACOGDOCHES TEXAS

Roger Van Horn, Mayor
City of Nacogdoches

ATTEST:

Lila Fuller, City Secretary

Approved as to form: _____
Rob Atherton, City Attorney