

# Executive Summary

## Purpose and Process of Development

This document, “*Mitigating Risk: Protecting the Brazos Valley from All Hazards, 2004 – 2009*,” was prepared by thirty-three cities and counties with the support of the Brazos Valley Council of Governments (BVCOG) and its contractor, H2O Partners, Inc. of Austin, Texas.

This Plan is a five-year blueprint for the future, aimed at making communities in the Brazos Valley disaster resistant by reducing or eliminating the long-term risk of loss of life and property from the full range of natural and man-made disasters. It meets the requirements of the Disaster Mitigation Act of 2000 (P.L. 106-390); Section 44 of the Code of Federal Regulations, Part 206; and State of Texas Division of Emergency Management standards. An open public process was established to provide multiple opportunities for all sectors in the Brazos Valley to become involved in the planning process and make input during its drafting stage.

## Hazards Facing the Brazos Valley

The Plan identifies and assesses the potential impact of fourteen natural and man-made hazards that threaten the Brazos Valley region. These include: dam failures; drought; energy pipeline failures; excessive heat; fires; floods; hail; hazardous materials incidents; hurricanes; nuclear power plant incidents; severe winter storms; terrorism; thunderstorms; and tornadoes. Hazards were identified based on a review of historical records, national data sources, existing plans and reports, and discussions with local, regional, and national experts. Each hazard was profiled based on its severity of impact, frequency of occurrence, seasonal patterns, warning time, cascading potential, and existing warning systems. An inventory of populations, buildings, critical and special facilities, and commercial facilities at potential risk was conducted. The probability of occurrence and potential dollar losses from each hazard were estimated using the Federal Emergency Management Agency’s Hazards U.S. (“HAZUS”) multi-hazards model and other HAZUS-like modeling techniques. The hazards were then ranked based on potential damages in terms of lives lost, dollars lost, and other relevant community factors. In order of priority, they are:

- Floods
- Droughts
- Hurricanes



- Fires
- Severe Winter Storms
- Tornadoes
- Hail
- Thunderstorms
- Hazardous materials incidents
- Dam failures
- Energy pipeline failures
- Nuclear Power Plant Incidents
- Terrorism
- Excessive Heat

## Mitigation Vision

A vision statement, 6 goals, and 21 objectives were developed to guide the jurisdictions in the Brazos Valley Council of Governments in reducing or eliminating the long-term risk of loss of life and property from the full range of natural and man-made disasters. The mitigation vision for the Brazos Valley region incorporates:

- An informed citizenry aware of the risks they face and the measures that can be taken to protect their families, homes, workplaces, communities and livelihoods from the impact of disasters.
- Local governments and regional entities that are capable of high-level hazard-mitigation planning and project implementation, and of leveraging state, federal, and private resources for investments in mitigation;
- Intergovernmental coordination and cooperation on mutual issues of concern related to floodplain management and hazard mitigation.
- A commitment to locate buildings outside hazardous areas and to promote building methods that result in structures able to withstand the natural and man-made hazards that threaten them;
- The integration of mitigation into routine budgetary decisions and planning for future growth and development by Brazos Valley communities, making disaster resistance an integral part of the livability and sustainability of the Valley.



# Goals, Objectives and Actions

The overall goal of this Plan is to reduce or eliminate the long-term risk of loss of life and property damage in the Brazos Valley region from the full range of disasters. Individual goals are:

- GOAL 1.** Develop new, and upgrade existing capabilities for identifying the need for and implementing hazard mitigation activities.
- GOAL 2.** Generate support for and increase public awareness of the need for hazard mitigation.
- GOAL 3.** Increase awareness of public officials, community and business leaders of the need for hazard mitigation, and support actions to protect public health and safety.
- GOAL 4.** Promote resource-sharing and increase coordination and cooperation among governmental entities in conducting hazard-mitigation activities.
- GOAL 5.** Mitigate damage to and losses of new and existing real property.
- GOAL 6.** Promote sustainable growth.

Twenty-one objectives in support of these goals are presented in Section 3.

## Mitigation Actions

This Plan sets forth mitigation actions and action plans to be carried out by the 33 participating jurisdictions to reduce the risks to these hazards facing the Brazos Valley region. Each action statement includes a description of the action, estimated costs, benefits, the responsible organization for implementing the action, an implementation schedule, objective(s) to which it relates, priority, and potential funding sources. Some actions are directed at reducing the risk from a single hazard, such as flooding. Others pertain to multiple hazards or all 14 hazards. The hazards differ in important ways, such as in their predictability, length of warning time, speed of onset, magnitude, scope, duration of impact, and the possibilities of secondary impacts. Many of the demands on the emergency management infrastructure they generate, however, arise not from their differences but from their commonalities.



# Organization of the Plan

The Executive Summary is at the beginning of the plan. Sections 1 and 2 outline the purpose of the plan and the process of development. Section 3 contains the vision statement and mitigation goals and objectives. Section 4 describes profiles the geography, population, economy, land use and development trends, government, and disaster declaration history in the Brazos Valley region.

The major natural and man-made hazards that the BVCOG region faces and the property at risk are identified in Section 5. Background on each hazard, including why the hazard is a threat, a hazard profile, the location of hazardous areas, history of hazardous events, people and property at risk, and potential damages and losses, is presented in Sections 6 through 19.

Section 20 reports previously implemented mitigation actions, including those supported by Federal and State agencies, and local programs relating to building and fire codes and floodplain management ordinances. Section 21 presents mitigation actions to be undertaken by each participating jurisdiction. Section 22 discusses plan maintenance procedures, including how the plan is to implemented, maintained and evaluated, and how the public will continue to be involved.

Appendices include a list of acronyms used (A), detailed information on potential Federal and State funding sources that may support the mitigation actions (B), the results of a survey to elicit information from the public on issues of concern about hazard mitigation (C), identification of members of the hazard mitigation team that helped to develop this plan (D), critical facilities in the BVCOG Region (E), the Local Hazard Mitigation Plan Review Crosswalk for FEMA Region VI and the State of Texas (F), Mapping Products of Texas A&M Spatial Sciences Center, by county (G), and the governing body resolutions approving the plan (H, forthcoming upon plan adoption).

