

HOW TO PREPARE FOR A HURRICANE



FEMA

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Introduction

A hurricane can cause widespread devastation during and after it occurs. This guide from FEMA is designed to help you properly prepare for a hurricane and know how to protect yourself during and after one.

Planning and preparing can make a big difference in safety and resiliency in the wake of a hurricane. The ability to quickly recover following a hurricane requires a focus on preparedness, advance planning, and knowing what to do in the event of a hurricane.



How to Prepare for a Hurricane

Hurricanes are massive storm systems that form over ocean water and often move toward land. Threats from hurricanes include high winds, heavy rainfall, storm surge, coastal and inland flooding, rip currents, and tornadoes. The heavy winds of hurricanes can cause damage or destroy homes, buildings, and roads, as well as cause power, water, and gas outages. These effects can injure or kill people, disrupt transportation, and pollute drinking water. Hurricanes cause deaths and injuries primarily from drowning, wind, and wind-borne debris. The impact from hurricanes can extend from the coast to several hundred miles inland. To find your risk, visit FEMA's "Know Your Risk Map." Be better prepared for this hurricane season, and learn more at ready.gov/prepare.

Now/Prepare

Sign up for local alerts and warnings. Monitor local news and weather reports.

Prepare to evacuate by testing your emergency communication plan(s), learning evacuation routes, having a place to stay, and packing a "go bag."

Stock emergency supplies.

Protect your property by installing sewer backflow valves, anchoring fuel tanks, reviewing insurance policies, and cataloging belongings.

Collect and safeguard critical financial, medical, educational, and legal documents and records.

During/Survive

Follow guidance from local authorities.

If advised to evacuate, grab your "go bag" and leave immediately.

For protection from high winds, stay away from windows and seek shelter on the lowest level in an interior room.

Move to higher ground if there is flooding or a flood warning.

Turn Around Don't Drown.® Never walk or drive on flooded roads or through water.

Call 9-1-1 if you are in life-threatening danger.

After/Be Safe

Return to the area only after authorities say it is safe to do so. Do not enter damaged buildings until they are inspected by qualified professionals.

Never walk or drive on flooded roads or through floodwaters.

Look out for downed or unstable trees, poles, and power lines.

Do not remove heavy debris by yourself. Wear gloves and sturdy, thick-soled shoes to protect your hands and feet.

Do not drink tap water unless authorities say it is safe.

STAY INFORMED: EMERGENCY NOTIFICATIONS

You can receive alerts and warnings directly from the National Weather Service for all hazards with a NOAA Weather Radio (NWR). Some radio receivers are designed to work with external notification devices for people who are deaf or hard of hearing. For more information on NWR receivers, visit [nws.noaa.gov/nwr/info/nwrrcvr.html](https://www.nws.noaa.gov/nwr/info/nwrrcvr.html).

Sign up for emergency alerts and notifications that your community may offer. Download *Be Smart. Know Your Alerts and Warnings* for a summary of notifications at [ready.gov/prepare](https://www.ready.gov/prepare).



WATCHES AND WARNINGS

The National Weather Service (NWS), part of the National Oceanic and Atmospheric Administration (NOAA), issues alerts when weather conditions make hurricanes more likely. Know the terms used to describe changing hurricane conditions and be prepared to take appropriate action.



ADVISORY

Tropical Storm or Hurricane Advisory—The NWS issues an Advisory when it expects conditions to cause significant inconveniences that may be hazardous. If caution is used, these situations should not be life-threatening.



WATCH

Tropical Storm or Hurricane Watch—The NWS issues a Watch when a tropical storm or hurricane is possible within 48 hours. Tune in to NOAA Weather Radio All Hazards, local radio, TV, or other news sources for more information. Monitor alerts, check your emergency supplies, and gather any items you may need if you lose power.



WARNING

Tropical Storm or Hurricane Warning—The NWS issues a Warning when it expects a tropical storm or hurricane within 36 hours. During a Warning, complete your storm preparations, and immediately leave the threatened area if directed to do so by local officials.

Now/Prepare for a Hurricane

PLAN FOR EVACUATION

If the danger is significant, state or local government officials may issue an evacuation notice. You can do the following to be better prepared.

Learn your community's evacuation plan and identify several posted routes to leave the area.

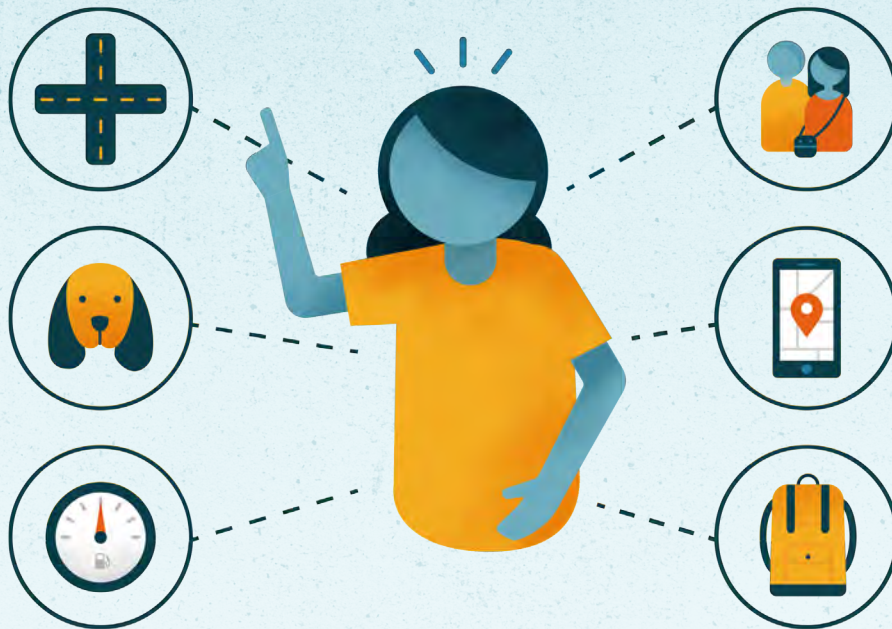
- **Evacuation routes:** Check with your state's Department of Transportation or Office of Emergency Management website to find routes near you.
- **Emergency shelter location:** To find a shelter near you, download the FEMA app at [fema.gov/mobile-app](https://www.fema.gov/mobile-app).

Once you determine your evacuation route and shelter location, write them down on your Hurricane Preparedness Checklist, which is located at the end of this guide.

Make a plan for your pet. To learn more, go to [ready.gov/animals](https://www.ready.gov/animals).

WHAT YOU NEED TO BE READY

- **Plan for your entire household** including children, people with disabilities and access and functional needs, and pets.
- **Keep your gas tank at least half-full at all times.** Maintain basic emergency supplies (e.g., snacks, bottled water, first aid kit, flashlight, flares, jumper cables and other tools, a wool blanket, and a change of clothes) in your vehicle.
- **Pick an out-of-state contact** everyone can call to check-in and report their status.
- **Know where you will meet up** if you are separated and where you will stay.
- **Pack a "go bag"** including items you need to take with you if you evacuate. A "go bag" should be easy to carry and kept in a place where you can grab it quickly.



CREATE YOUR FAMILY EMERGENCY COMMUNICATION PLAN

Your family may not be together when a hurricane occurs, so it is important to know how to contact one another and how to get back together.

Keep important numbers written down in your wallet in case you cannot access the contact list in your phone. Landline and cellular phone systems are often overwhelmed following a disaster, so you may need to use text messages and social media. Designate an out-of-town contact who can help your household reconnect. Be sure to practice your plan with your family. Get more information by downloading *Be Smart Create Your Family Emergency Communication Plan* or visit [ready.gov/make-a-plan](https://www.ready.gov/make-a-plan).

Write down any important phone numbers on your Hurricane Preparedness Checklist so you can access them easily.

Now/Prepare for a Hurricane

EMERGENCY SUPPLIES

You can build your supplies over time by adding a few items each week or month. Gather in advance the necessary supplies and items you will need to stay safe after the hurricane passes and as you start to recover. Stock food items that do not need refrigeration and will last. Regularly replace items like water, food, medications, and batteries that go bad over time.

For a complete list of emergency supplies, visit [ready.gov/prepare](https://www.ready.gov/prepare) and then check them off your Hurricane Preparedness Checklist once you add them to your emergency kit.



EMERGENCY COMMUNICATION

Make sure you have everything you'll need to get in touch with your family either through cellular phones or email.

MEDICAL NEEDS

Be equipped to tend to any current or unexpected medical conditions your family may have.

CRITICAL DOCUMENTS

Place any important documents in a waterproof container to help keep them dry and easily accessible.

TOOLS AND SAFETY ITEMS

Small items like matches, flashlights, a multi-purpose tool, and a whistle can make a huge difference for your family while weathering the storm.

FOOD/SUPPLIES

Have at least a three-day supply of non-perishable food and water for your family. Remember to pack anything specific to your family's needs.

HYGIENE AND SANITATION

Practicing good hygiene can stop the spread of bacteria and infectious disease.

PROTECTIVE GEAR

Protect yourself by packing warm clothes and blankets to prevent hypothermia. Don't forget protective footwear and gloves too.

COMFORT & PRICELESS ITEMS

You may be away from your home for an extended period and your property may be damaged. Grab any items that are irreplaceable or may provide comfort to your family, especially your children.

Ask yourself, "What would I need for myself and my family if a hurricane struck?" Add any of these specific items to your Hurricane Preparedness Checklist.

TAKE ACTION TO PROTECT YOUR PROPERTY AGAINST WIND AND WATER DAMAGE

Planning and preparing before a hurricane strikes can help you manage the impact of high winds and floodwaters. Take the steps outlined below to keep you and your family safe while protecting your home and property. If you are a renter, talk with your landlord or property manager about the steps you can take together to protect yourself, your family, your home, and your property.

WIND

High winds: The best way to reduce the risk of damage to a structure from hurricane winds is to reinforce or strengthen the building including doors, windows, walls, and roofs. The best way to protect yourself is to consider either constructing a safe room that meets FEMA criteria or a storm shelter that meets ICC 500 criteria.

Wind-borne debris: Bring loose, lightweight objects (e.g., patio furniture, garbage cans, and bicycles) inside; anchor objects that would be unsafe to bring inside (e.g., gas grills and propane tanks); and trim or remove trees close enough to fall on buildings.



FLOOD

There are steps that you or your property owner can take now to make your home or business more flood resistant. Some improvements are simple and inexpensive; others require more of an investment. As your budget allows, take these steps to protect your property from flood damage and manage your risks.

- Keep gutters and drains free of debris.
- Install a water alarm and sump pumps with battery backup.
- Install “check valves” in sewer lines to prevent floodwater from backing up into your drains.
- Stockpile emergency protective materials such as plywood, plastic sheeting, and sandbags.
- Elevate the heating system (furnace), water heater, and electric panel if susceptible to flooding.
- Waterproof the basement.
- In areas with repetitive flooding, consider elevating the building.

FLOOD INSURANCE

Most property insurance policies do not cover flood losses, so you will need to purchase separate flood insurance if your property is at risk for flooding. Talk to your insurance agent about buying flood insurance. Flood insurance is available for homeowners, renters, and business owners through the National Flood Insurance Program in participating communities. Keep in mind that a policy purchased today will take 30 days to go into effect, so act now!

Learn how to financially protect yourself from flood damage by visiting [FloodSmart.gov](https://www.floodsmart.gov).

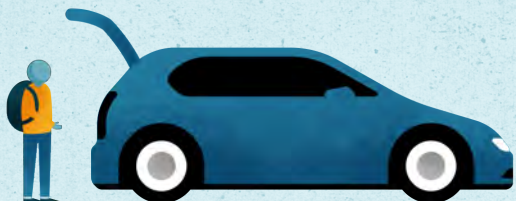
Find your flood risk at [msc.fema.gov/portal](https://www.msc.fema.gov/portal).

DECIDING TO STAY OR GO

If authorities advise or order you to evacuate, grab your “go bag” and **leave immediately**. If you are not in a mandatory evacuation zone, you may still decide to leave the area, you may need to move to higher ground, or you may choose to stay in your home. If you decide to stay home, remember that even if the high winds and floodwaters do not reach your home, you may lose power and water, and you may not be able to leave your home for several days if the roads are impassable.



IF YOU ARE IN AN AREA WHERE AUTHORITIES ADVISE OR ORDER YOU TO EVACUATE: TAKE ACTION IMMEDIATELY TO EVACUATE!



Grab your “go bag” and leave immediately. Follow posted evacuation routes and do not try to take shortcuts because they may be blocked. Stick to designated evacuation routes. **For localized information:**

- **Evacuation routes:** Check with your state’s Department of Transportation or Office of Emergency Management website to find routes near you.
- **Emergency shelter location:** To find a shelter near you, check the FEMA mobile app: [fema.gov/mobile-app](https://www.fema.gov/mobile-app).

Don’t forget: Write down your evacuation route and shelter information on your Hurricane Preparedness Checklist.

IF YOU ARE IN AN AREA WITHOUT AN EVACUATION NOTICE:



If you are in an area that is flooding (e.g., on the coast, on a floodplain, near a river, or on an island waterway), move to a location on higher ground before floodwaters reach you.



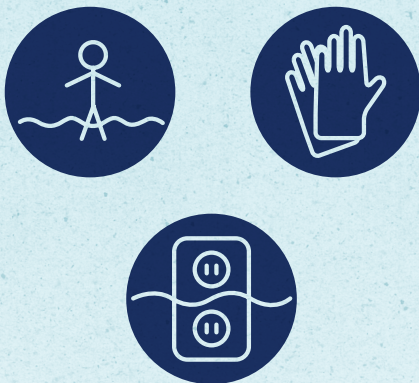
Stay indoors and away from windows and glass doors. If you are in a temporary structure, safely move to a sturdy building and go to a windowless room on the lowest level that is not likely to flood.



Never use a generator, gasoline-powered equipment and tools, grill, camp stove, or charcoal burning device inside or in any partially enclosed area. Keep these devices outside and at least 20 feet from doors, windows, and vents.

POST-DISASTER TIPS TO STAY SAFE

If you've evacuated the area, wait for public officials to say it is safe before returning. Each year, a significant number of people are injured or killed while cleaning up after a hurricane. As you begin cleanup, keep these safety tips in mind:



STAY SAFE

Do not wade in floodwaters, which can contain dangerous debris like broken glass, metal, dead animals, sewage, gasoline, oil, and downed power lines.

Do not enter a building until it has been inspected for damage to the electrical system, gas lines, septic systems, and water lines or wells. Wear appropriate protective equipment such as gloves, safety glasses, rubber boots, and masks to protect you from debris and airborne particles, e.g., mold and dust.

Do not use electrical equipment if it is wet or if you are standing in water.

Protect your pet following a hurricane. To learn more, visit [ready.gov/animals](https://www.ready.gov/animals).



STAY HEALTHY

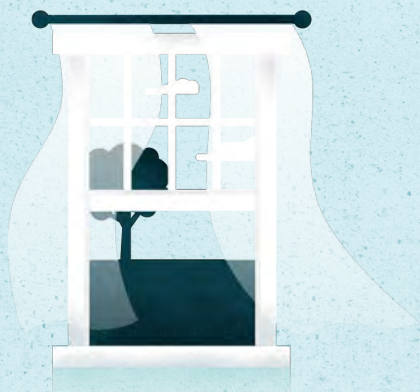
Throw out any food including canned items that were not maintained at a proper temperature or have been exposed to floodwaters. Do not eat food from a flooded garden. When in doubt, throw it out.

Avoid drinking tap water until you know it is safe. If uncertain, boil or purify it first.

Clean and disinfect everything that got wet. Mud left from floodwater can contain sewage, bacteria, and chemicals.

FIVE STEPS FOR POST-HURRICANE CLEAN-UP

Use appropriate personal protective equipment to avoid injury from possible exposure to mold and bacteria including gloves, goggles, rubber boots, and N95 masks.



AIR OUT by opening all doors and windows whenever you are present. Leave as many windows open when you are not present as security concerns allow.



MOVE OUT saturated porous materials such as mattresses or upholstered items, especially those with visible fungal growth.

TEAR OUT flooring, paneling, drywall, insulation, and electrical outlets saturated by floodwater.



CLEAN OUT and disinfect any remaining debris and mud.

DRY OUT the building and any remaining contents.

ADDITIONAL RESOURCES

The following resources and websites can help you further prepare for, respond to, and recover from a hurricane.

FEMA Mobile App: [fema.gov/mobile-app](https://www.fema.gov/mobile-app)

FEMA Against the Wind: Protecting Your Home From Hurricane and Wind Damage:
[fema.gov/media-library/assets/documents/2988](https://www.fema.gov/media-library/assets/documents/2988)

FEMA Community Hurricane Preparedness Training:
training.fema.gov/is/courseoverview.aspx?code=is-324.a

FEMA Taking Shelter From the Storm: Building a Safe Room in Your Home or Small Business:
[fema.gov/media-library/assets/documents/2009?id=1536](https://www.fema.gov/media-library/assets/documents/2009?id=1536)

RELATED WEBSITES

American Red Cross Hurricane Preparedness:
[redcross.org/prepare/disaster/hurricane](https://www.redcross.org/prepare/disaster/hurricane)

FEMA Hurricane: [ready.gov/hurricanes](https://www.ready.gov/hurricanes)

FloodSmart Campaign: [FloodSmart.gov](https://www.floodsmart.gov)

National Oceanic and Atmospheric Administration (NOAA): [noaa.gov](https://www.noaa.gov)

Para obtener información y recursos en español visite
community.fema.gov/?lang=es

TEST YOUR HURRICANE PREPAREDNESS KNOWLEDGE

1 MYTH: Preparing for disasters is time-consuming and expensive.

FACT: Signing up for local alerts and warnings is free. Many preparedness apps are also free.

FACT: Your home may already contain emergency kit items.

FACT: You can purchase items for an emergency kit and assemble it over time.

FACT: Having an adequate emergency supply of food and a communication plan can be of benefit no matter the hazard.

2 MYTH: My homeowners insurance should cover everything if a hurricane affects me.

FACT: This is not always the case. Check your insurance policy and consult your insurance agent.

FACT: Standard homeowners insurance does not cover flood damage.

3 MYTH: In an emergency, only first responders need to know what to do.

FACT: Everyone needs to know what to do before, during, and after a hurricane to protect themselves, their families, and their neighbors.

FACT: First responders may not reach you for hours or days after a hurricane strikes. Everyone needs to know what to do to stay safe.

4 MYTH: I am prepared for any emergency, including a hurricane, if I have an emergency kit packed.

FACT: Emergency preparedness requires more than a kit.

FACT: Having a family communication plan, signing up for alerts and warnings, and knowing what to do and how to evacuate are also important.

FACT: Many emergencies require knowledge of what to do to protect yourself.

5 MYTH: It's okay if I drive through a small amount of floodwater.

FACT: As little as 12 inches of water can float smaller SUVs and 18 inches of water can float larger vehicles such as full-size SUVs.

FACT: The depth of the water is not always obvious, and moving water has tremendous power. Turn Around Don't Drown®

FACT: Even a small amount of water on a road may hide dangers such as undermined roads ready to collapse.

6 MYTH: A person can safely wait to evacuate until confirmation that a hurricane is in their area.

FACT: Those who wait for actual confirmation of a hurricane may be trapped by high winds, flooding, or traffic.

7 MYTH: If I tape my windows, it will protect them from strong hurricane force winds.

FACT: Taping windows can create larger and deadlier shards of glass.

FACT: Hurricane shutters or impact-resistant windows are far more effective in protecting against breakage of windows.

HURRICANE PREPAREDNESS CHECKLIST

The right time to prepare for a hurricane is now. This helpful checklist will get you started. Make sure to include your entire family in the preparation and discuss your emergency plan with them. Post this checklist in an easily accessible location so it's always close by. Remember to keep in mind your family's unique needs as you complete the checklist.

BEFORE A HURRICANE

Stock your emergency kit and "go bag" with:

EMERGENCY COMMUNICATION

- Important contact information for family, school, work, doctors, etc., including phone numbers and email addresses
- Cellular phone, extra battery, and chargers for electrical equipment
- AM/FM radio/NOAA Weather Radio (extra batteries)
- _____
- _____

MEDICAL NEEDS

- Medications for at least one week and copies of prescriptions
- Extra eyeglasses/contact lenses
- Medical equipment/assistive technology and backup batteries
- First aid kit
- _____
- _____

CRITICAL DOCUMENTS

- Photo ID (e.g., driver's license, passport)
- Cash and credit cards
- Personal records (e.g., birth certificates, marriage certificates)
- Medical records
- Financial information (e.g., bank account or credit card information)
- Property records (e.g., insurance policies, deed, or lease)
- Waterproof, portable container for important documents
- _____
- _____

TOOLS & SAFETY ITEMS

- Flashlight
- Multi-purpose tool
- Matches or lighter in waterproof container
- Whistle
- _____
- _____

FOOD/SUPPLIES

- At least a three-day supply of water and non-perishable food
- Infant formula and diapers
- Pet food, supplies, and extra water
- _____
- _____

HYGIENE & SANITATION

- Soap/disinfectant/sanitizer
- Paper towels/moist towelettes
- Toilet paper
- Bleach
- Toothbrush and toothpaste
- _____
- _____

PROTECTIVE GEAR & CLOTHING

- Extra warm clothes
- Sturdy shoes
- Blankets or sleeping bags
- _____
- _____

COMFORT & PRICELESS ITEMS

- Items like: books, puzzles, favorite stuffed toy, photo albums, valuables
- _____
- _____

DURING A HURRICANE

When a tropical storm or hurricane watch is issued, it's important to stay informed.

Tune in to channels: _____

Check for alerts on apps: FEMA App

In case of evacuation, grab your "go bag" and leave immediately.
Use evacuation route: _____

The closest shelter is: _____

Meet family at: _____

Make sure to take these important numbers with you:
Family member's name: _____

Phone #: _____
Email: _____

Local contact's name: _____

Phone #: _____
Email: _____

Out-of-state contact's name: _____

Phone #: _____
Email: _____

Primary physician's name: _____

Phone #: _____
Email: _____

Hospital's phone #: _____

Insurance company's phone #: _____

FEMA's helpline: 1-800-621-FEMA

TTY: 1-800-462-7585

VRS: 1-800-621-3362

Red Cross's helpline: 1-800-733-2727



Additional Items to Consider Adding to an Emergency Supply Kit:

- Prescription medications and glasses
- Infant formula and diapers
- Pet food and extra water for your pet
- Important family documents such as copies of insurance policies, identification and bank account records in a waterproof, portable container
- Cash or traveler's checks and change
- Emergency reference material such as a first aid book or information from www.ready.gov
- Sleeping bag or warm blanket for each person. Consider additional bedding if you live in a cold-weather climate.
- Complete change of clothing including a long sleeved shirt, long pants and sturdy shoes. Consider additional clothing if you live in a cold-weather climate.
- Household chlorine bleach and medicine dropper – When diluted nine parts water to one part bleach, bleach can be used as a disinfectant. Or in an emergency, you can use it to treat water by using 16 drops of regular household liquid bleach per gallon of water. Do not use scented, color safe or bleaches with added cleaners.
- Fire Extinguisher
- Matches in a waterproof container
- Feminine supplies and personal hygiene items
- Mess kits, paper cups, plates and plastic utensils, paper towels
- Paper and pencil
- Books, games, puzzles or other activities for children



Ready

Prepare. Plan. Stay Informed.®



Emergency Supply List



FEMA

www.ready.gov



Recommended Items to Include in a Basic Emergency Supply Kit:

Water, one gallon of water per person per day for at least three days, for drinking and sanitation

Food, at least a three-day supply of non-perishable food

Battery-powered or hand crank radio and a NOAA Weather Radio with tone alert and extra batteries for both

Flashlight and extra batteries

First aid kit

Whistle to signal for help

Dust mask, to help filter contaminated air and plastic sheeting and duct tape to shelter-in-place

Moist towelettes, garbage bags and plastic ties for personal sanitation

Wrench or pliers to turn off utilities

Can opener for food (if kit contains canned food)

Local maps

Through its *Ready Campaign*, the Federal Emergency Management Agency educates and empowers Americans to take some simple steps to prepare for and respond to potential emergencies, including natural disasters and terrorist attacks. *Ready* asks individuals to do three key things: get an emergency supply kit, make a family emergency plan, and be informed about the different types of emergencies that could occur and their appropriate responses.

All Americans should have some basic supplies on hand in order to survive for at least three days if an emergency occurs. Following is a listing of some basic items that every emergency supply kit should include. However, it is important that individuals review this list and consider where they live and the unique needs of their family in order to create an emergency supply kit that will meet these needs. Individuals should also consider having at least two emergency supply kits, one full kit at home and smaller portable kits in their workplace, vehicle or other places they spend time.

Ready 



Federal Emergency Management Agency
Washington, DC 20472

Hurricane Terminology

Tropical Disturbance: Organized convection originating in the tropics or sub-tropics having a non-frontal migratory and maintaining its identity for 24 hours or more.

Tropical Wave: A trough of low pressure in the trade winds easterly.

Tropical Depression: A tropical low pressure system in which the maximum sustained surface wind (1 minute mean) is 64 knots (74) or less.

Tropical Storm Watch: An announcement that a tropical storm poses or tropical storm conditions pose a threat to coastal areas generally within 36 hours. A tropical storm watch should normally not be issued if the system is forecast to attain hurricane strength.

Tropical Storm Warning: A warning for tropical storm conditions including sustained winds within the range of 34 to 63 kt (39 to 73 mph or 63 to 118 kph) that are expected in a specified coastal area within 24 hours or less.

Hurricane: A tropical low pressure system in which the maximum sustained surface wind (1 minute mean) is 64 knots (74) or greater.

Hurricane Watch: An announcement of specific coastal areas that a hurricane or an incipient hurricane condition poses a possible threat, generally within 36 hours.

Hurricane Warning: A warning that sustained winds 64 kt (74 mph or 119 kph) or higher associated with a hurricane are expected in a specified coastal area in 24 hours or less. A hurricane warning can remain in effect when dangerously high water or a combination of dangerously high water and exceptionally high waves continue, even though winds may be less than hurricane force.

Storm Surge: An abnormal rise in sea level accompanying a hurricane or other intense storm, and whose height is the difference between the observed level of the sea surface and level that would have occurred in the absence of the storm.

Storm Tide: The actual sea level resulting from the astronomical tide combined with the storm surge. This term is used interchangeably with "Hurricane Tide".

Saffir-Simpson Hurricane Wind Scale

The Saffir-Simpson Hurricane Wind Scale is a 1 to 5 rating based on a hurricane's sustained wind speed. This scale estimates potential property damage. Hurricanes reaching Category 3 and higher are considered major hurricanes because of their potential for significant loss of life and damage. Category 1 and 2 storms are still dangerous, however, and require preventative measures. In the western North Pacific, the term "super typhoon" is used for tropical cyclones with sustained winds exceeding 150 mph.

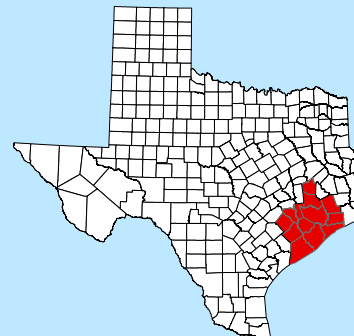
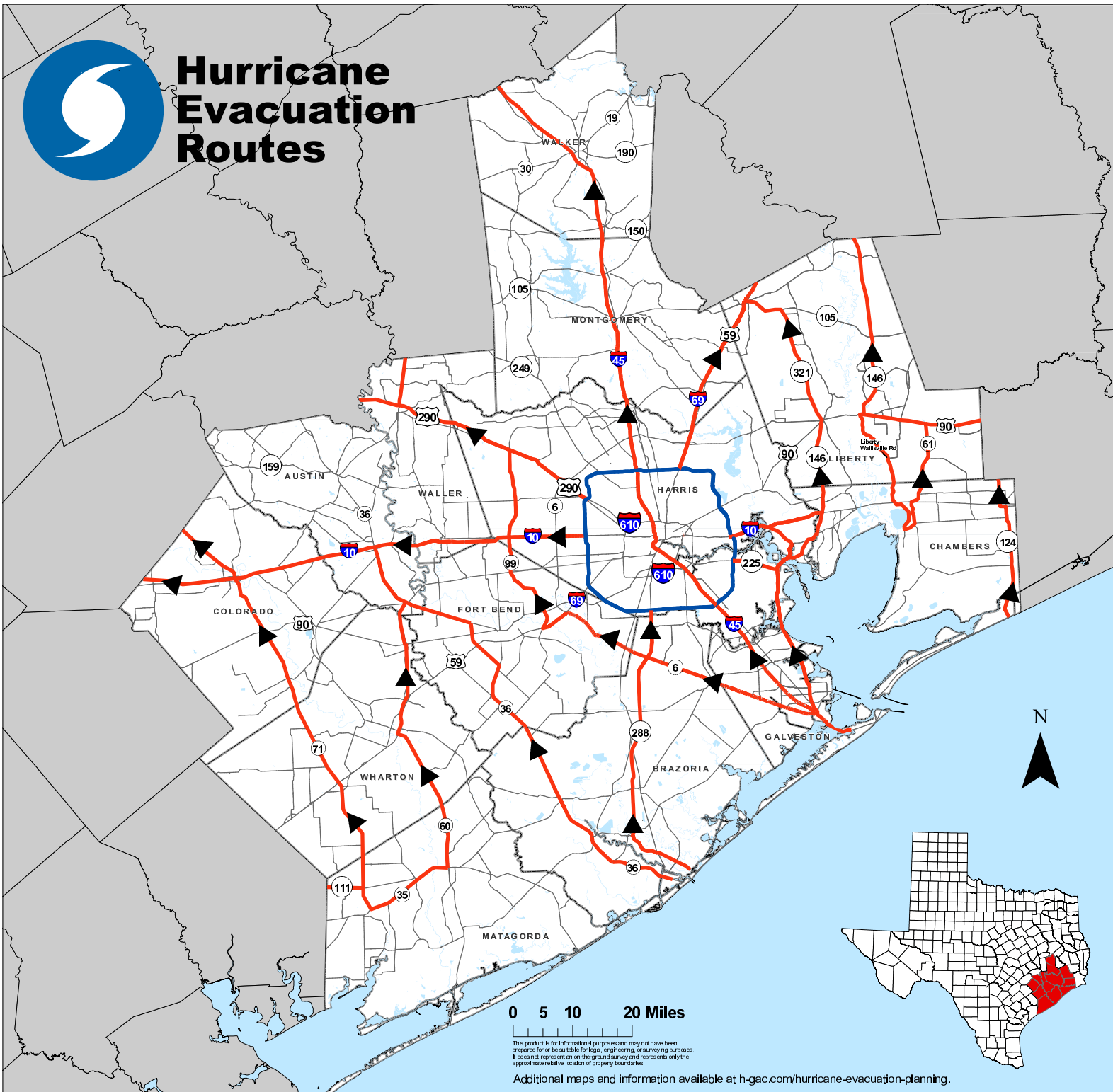
Category	Sustained Winds	Types of Damage Due to Hurricane Winds
1	74-95 mph 64-82 kt 119-153 km/h	Very dangerous winds will produce some damage: Well-constructed frame homes could have damage to roof, shingles, vinyl siding and gutters. Large branches of trees will snap and shallowly rooted trees may be toppled. Extensive damage to power lines and poles likely will result in power outages that could last a few to several days.
2	96-110 mph 83-95 kt 154-177 km/h	Extremely dangerous winds will cause extensive damage: Well-constructed frame homes could sustain major roof and siding damage. Many shallowly rooted trees will be snapped or uprooted and block numerous roads. Near-total power loss is expected with outages that could last from several days to weeks.
3 (major)	111-129 mph 96-112 kt 178-208 km/h	Devastating damage will occur: Well-built framed homes may incur major damage or removal of roof decking and gable ends. Many trees will be snapped or uprooted, blocking numerous roads. Electricity and water will be unavailable for several days to weeks after the storm passes.
4 (major)	130-156 mph 113-136 kt 209-251 km/h	Catastrophic damage will occur: Well-built framed homes can sustain severe damage with loss of most of the roof structure and/or some exterior walls. Most trees will be snapped or uprooted and power poles downed. Fallen trees and power poles will isolate residential areas. Power outages will last weeks to possibly months. Most of the area will be uninhabitable for weeks or months.
5 (major)	157 mph or higher 137 kt or higher 252 km/h or higher	Catastrophic damage will occur: A high percentage of framed homes will be destroyed, with total roof failure and wall collapse. Fallen trees and power poles will isolate residential areas. Power outages will last for weeks to possibly months. Most of the area will be uninhabitable for weeks or months.



Hurricane Evacuation Routes

H-GAC Region

Austin, Brazoria, Chambers, Colorado, Fort Bend, Galveston, Harris, Liberty, Matagorda, Montgomery, Walker, Waller, Wharton



0 5 10 20 Miles

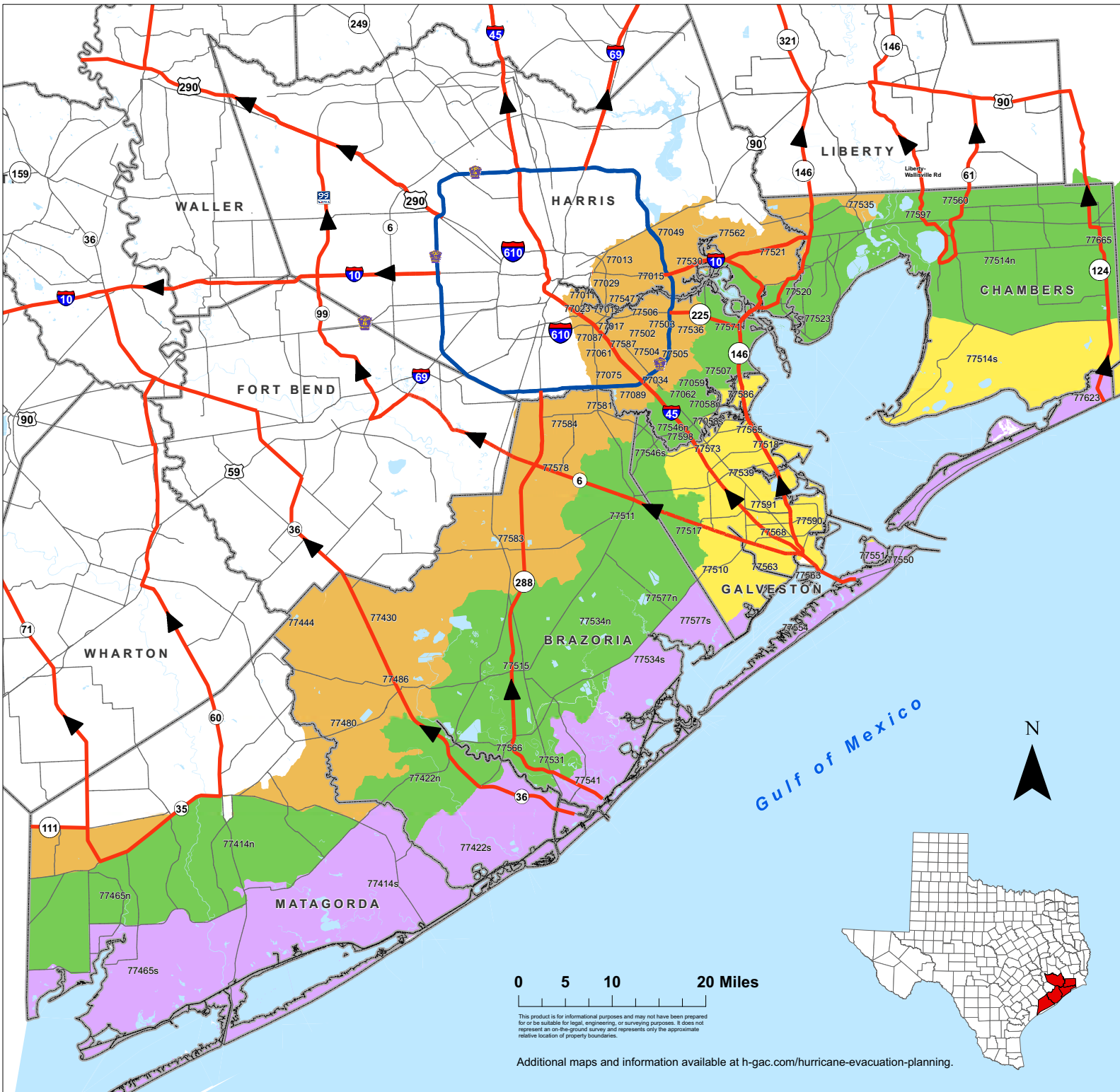
This product is for informational purposes and may not have been prepared for or be suitable for legal, engineering, or surveying purposes. It does not represent an on-the-ground survey and represents only the approximate relative location of property boundaries.

Additional maps and information available at h-gac.com/hurricane-evacuation-planning.

- Route Designation**
- Evacuation Corridors
 - Evacuation Connections
 - Other Roads
 - County Boundary



Brazoria, Chambers, Galveston, Harris, and Matagorda Hurricane Evacuation Zip-Zones Coastal, A, B, C



ZIP ZONE COASTAL				
77414s	77422s	77465s	77534s	77541
77550	77551	77554	77563	77577s
77623				
ZIP ZONE A				
77058s	77510	77514s	77518	77539
77563	77565	77568	77573	77586
77590	77591			
ZIP ZONE B				
77058n	77059	77062	77414n	77422n
77465n	77507	77511	77514n	77515
77517	77520	77523	77531	77534n
77546n	77546s	77560	77566	77571
77577n	77597	77598	77665	
ZIP ZONE C				
77011	77012	77013	77015	77017
77023	77029	77034	77049	77061
77075	77087	77089	77430	77444
77480	77486	77502	77503	77504
77505	77506	77521	77530	77535
77536	77547	77562	77578	77581
77583	77584	77587		

Some zip codes are split into north (n) and south (s) for evacuation purposes.

Route Designation

- Evacuation Corridors
- Evacuation Connections
- Other Roads
- County Boundary



0 5 10 20 Miles

This product is for informational purposes and may not have been prepared for or be suitable for legal, engineering, or surveying purposes. It does not represent an on-the-ground survey and represents only the approximate relative location of property boundaries.

Additional maps and information available at h-gac.com/hurricane-evacuation-planning.

Important Tips

Your needs and those of your family should be the primary factors considered when determining the timing of your evacuation. Should the Evaculane be activated, citizens will be advised through local radio and television stations.

All citizens should prepare a plan well in advance of the evacuation.

The following steps are recommended:

- ✓ Assemble your disaster supplies kit with items such as flashlights, cell phones, extra batteries, battery chargers, portable radio, first aid kit, emergency water and food, medical supplies and equipment, non-electric can opener, highway map, important documents, such as insurance and medical information, etc.
- ✓ Secure your home against disaster to help reduce damages. Cover windows with shielding materials. Secure or put up any loose objects from around your home.
- ✓ If you cannot take your pets with you, make provisions for them.
- ✓ Know your area's evacuation plan/routes before you leave home (www.texasonline.com).
- ✓ Fill your vehicle with gas as early as possible. Take only the vehicle necessary to transport you and your family to safety. Extra vehicles create congestion.
- ✓ Bring extra cash in case banks are closed and ATMs are not working.
- ✓ Notify family and friends (especially those out the area) of your plan and your destination.
- ✓ Develop an emergency plan in case family members are separated. Instruct all evacuating family members of the name and contact information of your designated out-of-area friend or family.
- ✓ Ensure children know how and when to call 9-1-1.
- ✓ Evacuate, traveling safely to your destination.
- ✓ Expect travel times to destinations to be significantly longer than normal.

After the storm, listen to local officials for the all-clear signal before returning home. Check for information at www.texasonline.com.

Do not try to drive through standing water. Just a few inches can float a vehicle.

Fender-Bender?

State law requires motorists to move fender-bender accidents out of active travel lanes in order keep all travel lanes clear; however, disabled vehicles will be relocated to the next exit ramp where further assistance may be available.

More information on hurricane preparedness and evacuation safety is available from the following:

Shelters and Special Needs

Call 2-1-1

Emergency Alert Stations

Houston: KTRH 740 AM
San Antonio: WOAI 1200 AM

State of Texas

www.texasonline.com

Texas Department of Transportation

www.txdot.gov

Highway Road Conditions and Evacuation Routes

www.drivetexas.org

1-800-452-9292

Texas Department of Public Safety

www.txdps.state.tx.us

Governor's Division of Emergency Management

www.txdps.state.tx.us/dem

American Red Cross

www.redcross.org

1-800-RED-CROSS (733-2767)

For Emergencies: Call 9-1-1

HOUSTON TO SAN ANTONIO

TEXAS



Hurricane Shoulder Evaculane



HOUSTON TO SAN ANTONIO

TEXAS



Hurricane Evacuees need to consider the travel path of the hurricane and their destination in choosing evacuation routes. Listen to local authorities and emergency broadcasts about weather and highway conditions. TxDOT will have courtesy patrols along this route to assist motorists.

Hurricane Evaculane Plan

WHO...This plan will affect motorists evacuating from Houston.

WHY...To help move citizens safely and efficiently out of harm's way during evacuations.

WHAT...If this plan is activated, the outside shoulder of I-10 will be opened to traffic.

WHEN...The Evaculane may be allowed when the Houston area is threatened by a hurricane and voluntary evacuations are issued. Motorists will be notified through local media and the activation of the Evaculane Signs on the route. The Evaculane may be used with or without the separate Contraflow plan.

WHERE...The Evaculane will begin east of Pin Oak Rd. in Katy, TX. The Evaculane will end at State Loop 1604 in San Antonio, TX.



Important Tips

Your needs and those of your family should be the primary factors considered when determining the timing of your evacuation. If you must evacuate, do not delay your departure in anticipation of the opening of the contraflow lanes. Should the contraflow be activated, citizens will be advised through local radio and television stations. All citizens should prepare a plan well in advance of the evacuation.

The following steps are recommended:

- ✓ Assemble your disaster supplies kit with items such as flashlights, cell phones, extra batteries, battery chargers, portable radio, first aid kit, emergency water and food, medical supplies and equipment, non-electric can opener, highway map, important documents, such as insurance and medical information, etc.
- ✓ Secure your home against disaster to help reduce damages. Cover windows with shielding materials. Secure or put up any loose objects from around your home.
- ✓ If you cannot take your pets with you, make provisions for them.
- ✓ Know your area's evacuation plan/routes before you leave home (www.texasonline.com).
- ✓ Fill your vehicle with gas as early as possible. Take only the vehicle necessary to transport you and your family to safety. Extra vehicles create congestion.
- ✓ Bring extra cash in case banks are closed and ATMs are not working.
- ✓ Notify family and friends (especially those out of the area) of your plan and your destination.
- ✓ Develop an emergency plan in case family members are separated. Instruct all evacuating family members of the name and contact information of your designated out-of-area friend or family.
- ✓ Ensure children know how and when to call 9-1-1.
- ✓ Evacuate, traveling safely to your destination.
- ✓ Expect travel times to destinations to be significantly longer than normal.

After the storm, listen to local officials for the all-clear signal before returning home. Check for information at www.texasonline.com.

Do not try to drive through standing water. Just a few inches can float a vehicle.

Fender-Bender?

State law requires motorists to move fender-bender accidents out of the travel lanes to the shoulder of the road. To keep all travel lanes and shoulders clear, however, disabled vehicles on the shoulder will be relocated to the next exit ramp where further assistance may be available.

More information on hurricane preparedness and evacuation safety is available from the following:

Shelters and Special Needs

Call 2-1-1

Emergency Alert Stations

Houston: KTRH 740 AM

San Antonio: WOAI 1200 AM

State of Texas

www.texasonline.com

Texas Department of Transportation

www.txdot.gov

Highway Road Conditions and Evacuation Routes

www.drivetexas.org

1-800-452-9292

Texas Department of Public Safety

www.txdps.state.tx.us

Governor's Division of Emergency Management

www.txdps.state.tx.us/dem

American Red Cross

www.redcross.org

1-800-RED-CROSS (733-2767)

For Emergencies: Call 9-1-1

HOUSTON TO SAN ANTONIO

TEXAS



Hurricane Evacuation Contraflow Route

Motorist Advisory

**Evacuation Plans May or May Not
Include Activating Contraflow Lanes**




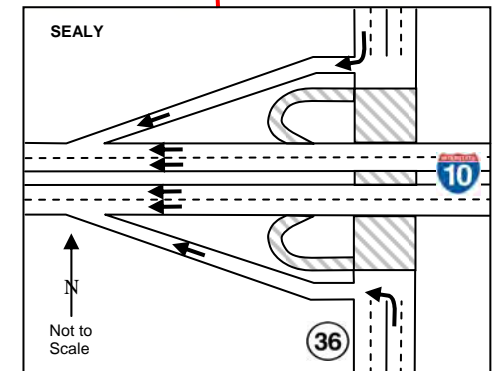
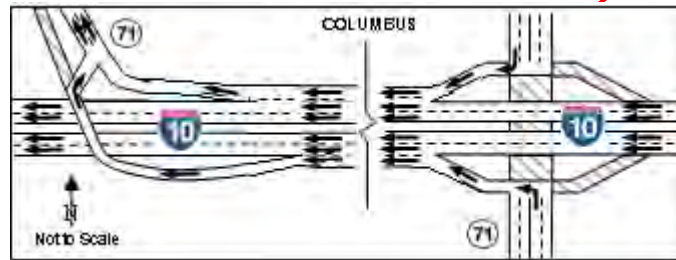
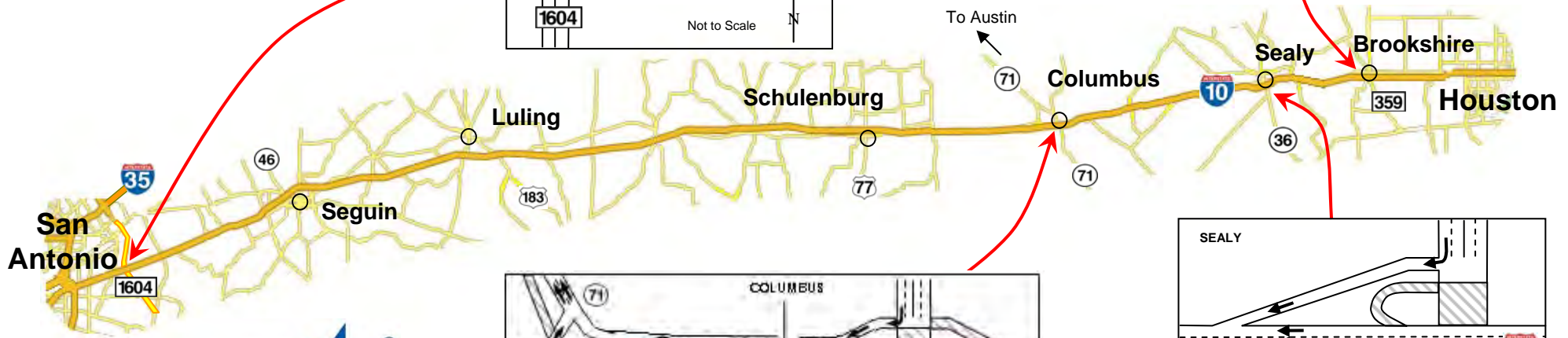
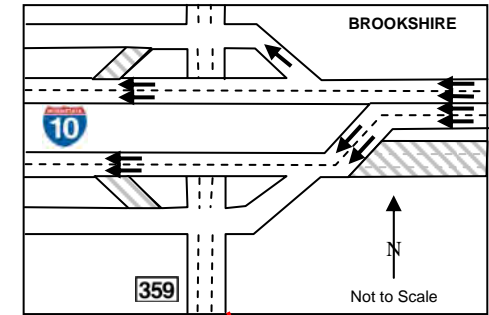
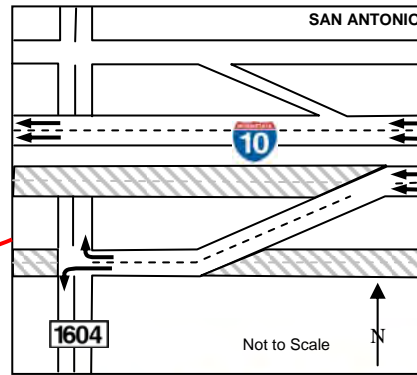
HOUSTON TO SAN ANTONIO

TEXAS



LEGEND

 No Traffic Zone



WHO.....This plan will affect motorists evacuating from Houston.

WHY.....To help move citizens safely and efficiently out of harm's way during large-scale evacuations.

WHAT...If this plan is activated, I-10 eastbound lanes will be reversed to carry two lanes of westbound traffic. Traffic in the contraflow lanes will be able to exit I-10 at selected locations.

WHEN...The reversal will be considered only when the Houston area is threatened by a major hurricane and mandatory evacuations are issued. A decision to reverse I-10 will be made by local authorities working with the State Operations Center based on the strength of the storm and projected landfall.

WHERE...The contraflow operations will begin east of FM 359 in Brookshire, TX. Traffic in two westbound lanes will cross over to the contraflow side to travel westbound. The contraflow lanes will end at Loop 1604 in San Antonio, TX.

Important Tips

Your needs and those of your family should be the primary factors considered when determining the timing of your evacuation. If you must evacuate, do not delay your departure in anticipation of the opening of the contraflow lanes. Should the contraflow be activated, citizens will be advised through local radio and television stations. All citizens should prepare a plan well in advance of the evacuation.

The following steps are recommended:

- ✓ Assemble your disaster supplies kit with items such as flashlights, cell phones, extra batteries, battery chargers, portable radio, first aid kit, emergency water and food, medical supplies and equipment, non-electric can opener, highway map, important documents, such as insurance and medical information, etc.
- ✓ Secure your home against disaster to help reduce damages. Cover windows with shielding materials. Secure or put up any loose objects from around your home.
- ✓ If you cannot take your pets with you, make provisions for them.
- ✓ Know your area's evacuation plan/routes before you leave home (www.texasonline.com).
- ✓ Fill your vehicle with gas as early as possible. Take only the vehicle necessary to transport you and your family to safety. Extra vehicles create congestion.
- ✓ Bring extra cash in case banks are closed and ATMs are not working.
- ✓ Notify family and friends (especially those out the area) of your plan and your destination.
- ✓ Develop an emergency plan in case family members are separated. Instruct all evacuating family members of the name and contact information of your designated out-of-area friend or family.
- ✓ Ensure children know how and when to call 9-1-1.
- ✓ Evacuate, traveling safely to your destination.
- ✓ Expect travel times to destinations to be significantly longer than normal.

After the storm, listen to local officials for the all-clear signal before returning home. Check for information at www.texasonline.com.

Do not try to drive through standing water. Just a few inches can float a vehicle.

Fender-Bender?

State law requires motorists to move fender-bender accidents out of the travel lanes to the shoulder of the road. To keep all travel lanes and shoulders clear, however, disabled vehicles on the shoulder will be relocated to the next exit ramp where further assistance may be available.

More information on hurricane preparedness and evacuation safety is available from the following:

Shelters and Special Needs

Call 2-1-1

Emergency Alert Station

Houston: KTRH 740 AM

State of Texas

www.texasonline.com

Texas Department of Transportation

www.txdot.gov

Highway Road Conditions and Evacuation Routes

www.drivetexas.org

1-800-452-9292

Texas Department of Public Safety

www.txdps.state.tx.us

Governor's Division of Emergency Management

www.txdps.state.tx.us/dem

American Red Cross

www.redcross.org

1-800-RED-CROSS (733-2767)

For Emergencies: Call 9-1-1

HOUSTON TO AUSTIN, BRYAN, COLLEGE STATION, WACO

TEXAS



Hurricane Evacuation Contraflow Route

Motorist Advisory

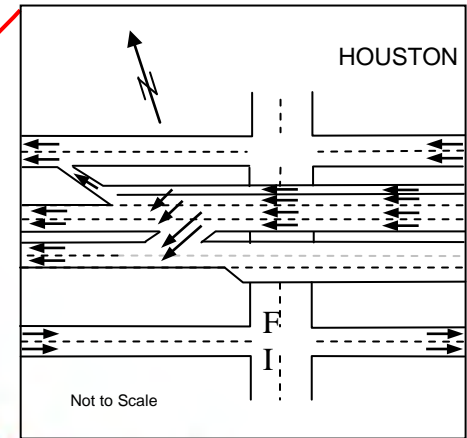
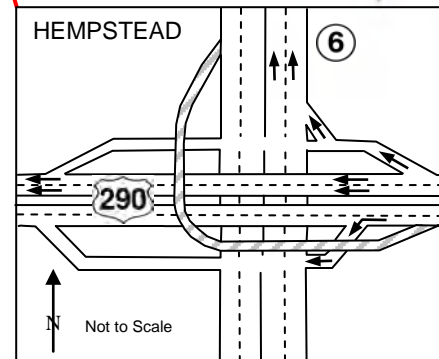
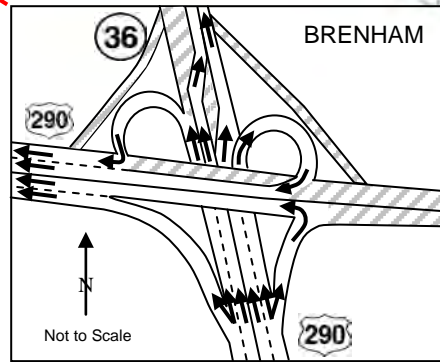
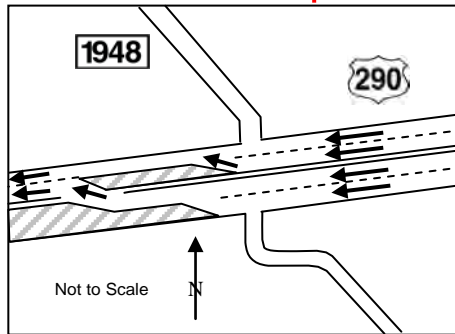
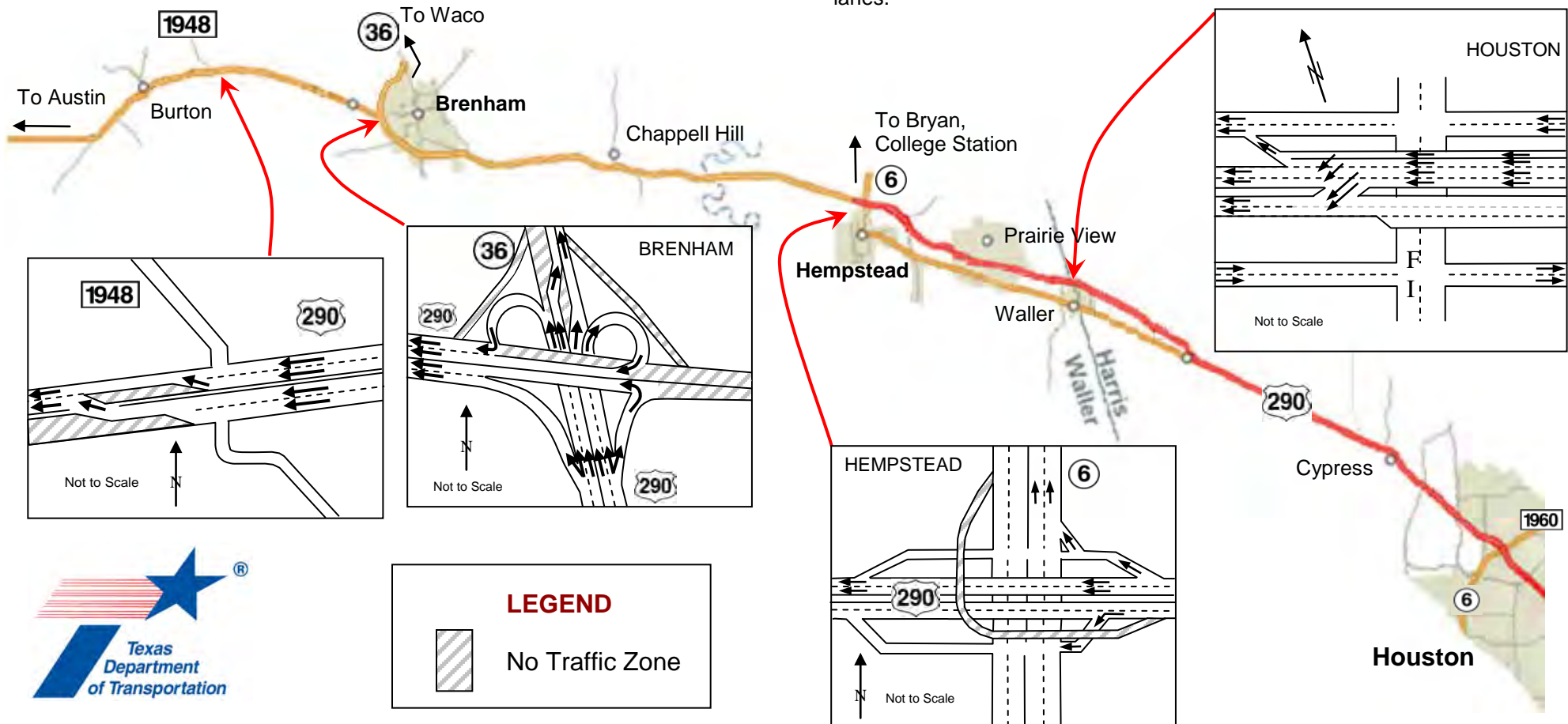
**Evacuation Plans May or May Not
Include Activating Contraflow Lanes**



HOUSTON TO AUSTIN, BRYAN, COLLEGE STATION, WACO

Hurricane Evacuation Route's Potential Contraflow Plan

TEXAS



LEGEND

 No Traffic Zone

WHO...This plan will affect motorists evacuating from the Houston area.
WHY...To help move citizens safely and efficiently out of harm's way during large-scale evacuations.

WHAT...If this plan is activated, US 290 eastbound lanes will be reversed to carry two lanes of westbound traffic. Traffic in the contraflow lanes will be able to exit US 290 at selected locations.

WHEN...The reversal will be considered only when the Houston area is threatened by a major hurricane and mandatory evacuations are issued. A decision to reverse US 290 will be made by local authorities working with the State Operations Center based on the strength of the storm and projected landfall.

WHERE...The contraflow operations will begin west of Field Store Road. The inside and middle lanes will traverse over on to the US 290 contraflow lanes.

Important Tips

Your needs and those of your family should be the primary factors considered when determining the timing of your evacuation. Should the Evaculane be activated, citizens will be advised through local radio and television stations.

All citizens should prepare a plan well in advance of the evacuation.

The following steps are recommended:

- ✓ Assemble your disaster supplies kit with items such as flashlights, cell phones, extra batteries, battery chargers, portable radio, first aid kit, emergency water and food, medical supplies and equipment, non-electric can opener, highway map, important documents, such as insurance and medical information, etc.
- ✓ Secure your home against disaster to help reduce damages. Cover windows with shielding materials. Secure or put up any loose objects from around your home.
- ✓ If you cannot take your pets with you, make provisions for them.
- ✓ Know your area's evacuation plan/routes before you leave home (www.texasonline.com).
- ✓ Fill your vehicle with gas as early as possible. Take only the vehicle necessary to transport you and your family to safety. Extra vehicles create congestion.
- ✓ Bring extra cash in case banks are closed and ATMs are not working.
- ✓ Notify family and friends (especially those out the area) of your plan and your destination.
- ✓ Develop an emergency plan in case family members are separated. Instruct all evacuating family members of the name and contact information of your designated out-of-area friend or family.
- ✓ Ensure children know how and when to call 9-1-1.
- ✓ Evacuate, traveling safely to your destination.
- ✓ Expect travel times to destinations to be significantly longer than normal.

After the storm, listen to local officials for the all-clear signal before returning home. Check for information at www.texasonline.com.

Do not try to drive through standing water. Just a few inches can float a vehicle.

Fender-Bender?

State law requires motorists to move fender-bender accidents out of active travel lanes in order keep all travel lanes clear; however, disabled vehicles will be relocated to the next exit ramp where further assistance may be available.

More information on hurricane preparedness and evacuation safety is available from the following:

Shelters and Special Needs

Call 2-1-1

Emergency Alert Stations

Houston: KTRH 740 AM
San Antonio: WOAI 1200 AM

State of Texas

www.texasonline.com

Texas Department of Transportation

www.txdot.gov

Highway Road Conditions and Evacuation Routes

www.drivetexas.org

1-800-452-9292

Texas Department of Public Safety

www.txdps.state.tx.us

Governor's Division of Emergency Management

www.txdps.state.tx.us/dem

American Red Cross

www.redcross.org

1-800-RED-CROSS (733-2767)

For Emergencies: Call 9-1-1

HOUSTON TO HEMPSTEAD TEXAS



Hurricane Shoulder Evaculane

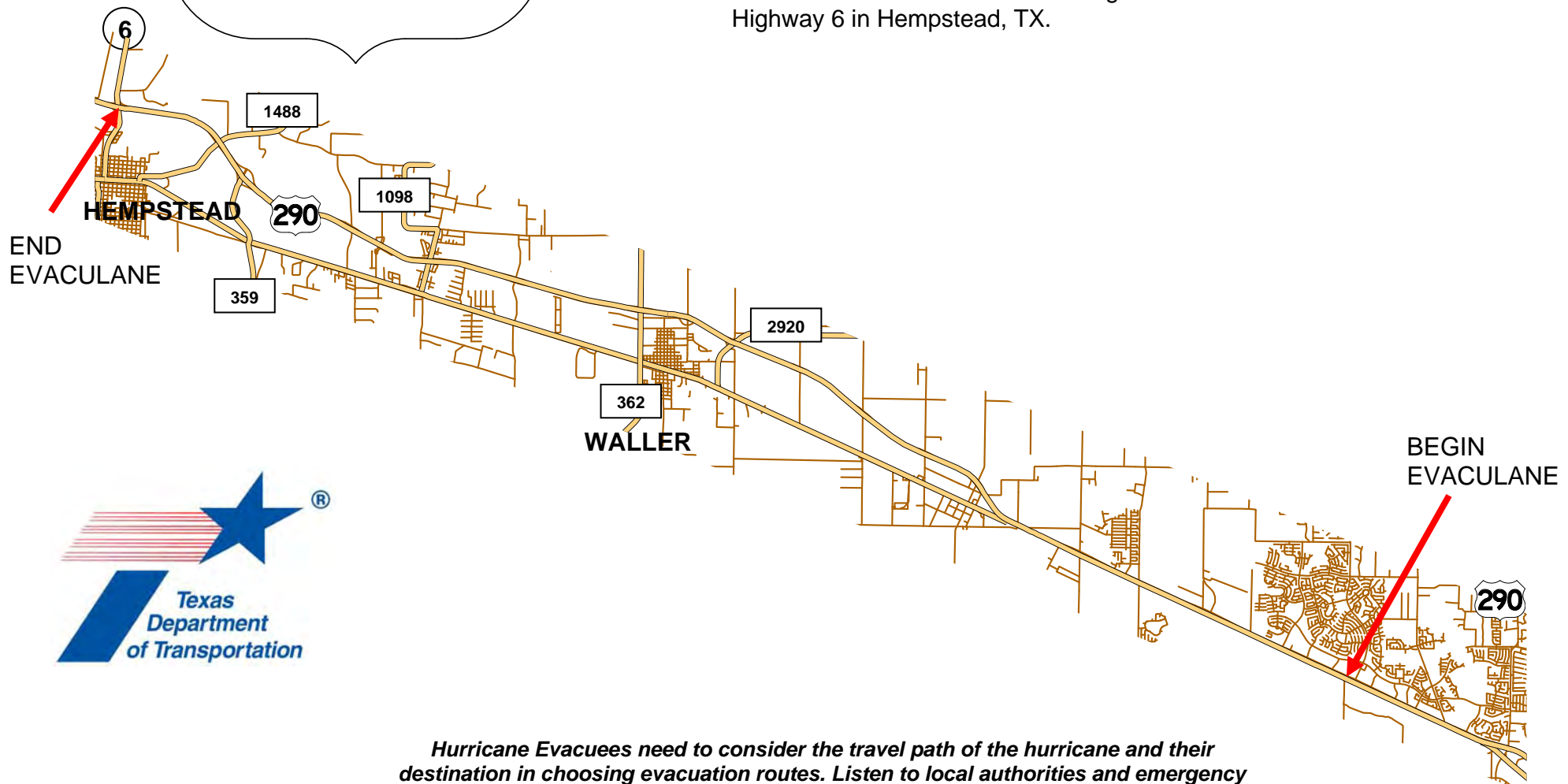
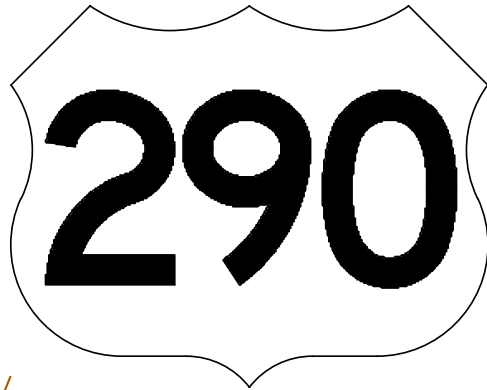
Motorist Advisory



HOUSTON TO HEMPSTEAD

Hurricane Evaculane Plan

TEXAS



WHO...This plan will affect motorists evacuating from Houston.

WHY...To help move citizens safely and efficiently out of harm's way during evacuations.

WHAT...If this plan is activated, the outside shoulder of US 290 will be opened to traffic.

WHEN...The Evaculane may be allowed when the Houston area is threatened by a hurricane and voluntary evacuations are issued. Motorists will be notified through local media and the activation of the Evaculane Signs on the route. The Evaculane may be used with or without the separate Contraflow plan.

WHERE...The Evaculane will begin east of Mason Rd. and will end at State Highway 6 in Hempstead, TX.



Hurricane Evacuees need to consider the travel path of the hurricane and their destination in choosing evacuation routes. Listen to local authorities and emergency broadcasts about weather and highway conditions. TxDOT will have courtesy patrols along this route to assist motorists.

Important Tips

Your needs and those of your family should be the primary factors considered when determining the timing of your evacuation. If you must evacuate, do not delay your departure in anticipation of the opening of the contraflow lanes. Should the contraflow be activated, citizens will be advised through local radio and television stations. All citizens should prepare a plan well in advance of the evacuation.

The following steps are recommended:

- ✓ Assemble your disaster supplies kit with items such as flashlights, cell phones, extra batteries, battery chargers, portable radio, first aid kit, emergency water and food, medical supplies and equipment, non-electric can opener, highway map, important documents, such as insurance and medical information, etc.
- ✓ Secure your home against disaster to help reduce damages. Cover windows with shielding materials. Secure or put up any loose objects from around your home.
- ✓ If you cannot take your pets with you, make provisions for them.
- ✓ Know your area's evacuation plan/routes before you leave home (www.texasonline.com).
- ✓ Fill your vehicle with gas as early as possible. Take only the vehicle necessary to transport you and your family to safety. Extra vehicles create congestion.
- ✓ Bring extra cash in case banks are closed and ATMs are not working.
- ✓ Notify family and friends (especially those out the area) of your plan and your destination.
- ✓ Develop an emergency plan in case family members are separated. Instruct all evacuating family members of the name and contact information of your designated out-of-area friend or family.
- ✓ Ensure children know how and when to call 9-1-1.
- ✓ Evacuate, traveling safely to your destination.
- ✓ Expect travel times to destinations to be significantly longer than normal.

After the storm, listen to local officials for the all-clear signal before returning home. Check for information at www.texasonline.com.

Do not try to drive through standing water. Just a few inches can float a vehicle.

Fender-Bender?

State law requires motorists to move fender-bender accidents out of the travel lanes to the shoulder of the road. To keep all travel lanes and shoulders clear, however, disabled vehicles on the shoulder will be relocated to the next exit ramp where further assistance may be available.

More information on hurricane preparedness and evacuation safety is available from the following:

Shelters and Special Needs

Call 2-1-1

Emergency Alert Station

Houston: KTRH 740 AM

State of Texas

www.texasonline.com

Texas Department of Transportation

www.txdot.gov

Highway Road Conditions and Evacuation Routes

www.drivetexas.org

1-800-452-9292

Texas Department of Public Safety

www.txdps.state.tx.us

Governor's Division of Emergency Management

www.txdps.state.tx.us/dem

American Red Cross

www.redcross.org

1-800-RED-CROSS (733-2767)

HOUSTON TO NACOGDOCHES

TEXAS



Hurricane Evacuation Contraflow Route

Motorist Advisory

**Evacuation Plans May or May Not
Include Activating Contraflow Lanes**



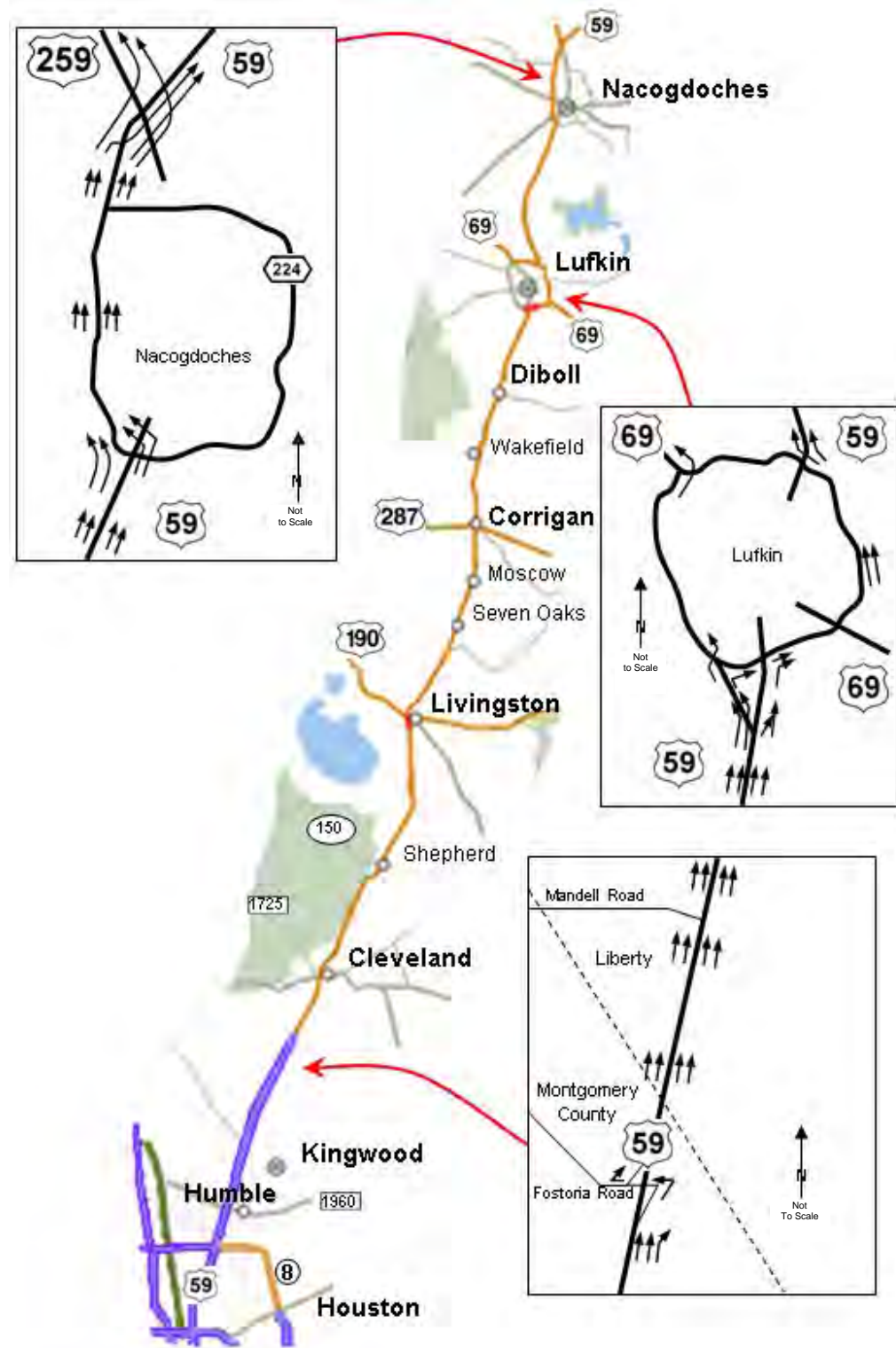
HOUSTON TO NACOGDOCHES

TEXAS



Hurricane Evacuation Route's Potential Contraflow Plan

- WHO.....**This plan will affect motorists evacuating from the Houston area.
- WHY.....**To help move citizens safely and efficiently out of harm's way during large-scale evacuations.
- WHAT...**If this plan is activated, US 59 southbound lanes will be reversed to carry two lanes of northbound traffic. Traffic in the contraflow lanes will be able to exit US 59.
- WHEN...**The reversal will be considered only when the Houston area is threatened by a major hurricane and mandatory evacuations are issued. A decision to reverse US 59 will be made by local authorities working with the State Operations Center based on the strength of the storm and projected landfall.
- WHERE..** The contraflow operations will begin at Fostoria Road with the outside lane exiting US 59 at the Fostoria Road exit and being redirected to enter the contraflow by using the exit ramp on the southbound side of US 59, and continue to Nacogdoches, TX.



Important Tips

Your needs and those of your family should be the primary factors considered when determining the timing of your evacuation. If you must evacuate, do not delay your departure in anticipation of the opening of the contraflow lanes. Should the contraflow be activated, citizens will be advised through local radio and television stations. All citizens should prepare a plan well in advance of the evacuation.

The following steps are recommended:

- ✓ Assemble your disaster supplies kit with items such as flashlights, cell phones, extra batteries, battery chargers, portable radio, first aid kit, emergency water and food, medical supplies and equipment, non-electric can opener, highway map, important documents, such as insurance and medical information, etc.
- ✓ Secure your home against disaster to help reduce damages. Cover windows with shielding materials. Secure or put up any loose objects from around your home.
- ✓ If you cannot take your pets with you, make provisions for them.
- ✓ Know your area's evacuation plan/routes before you leave home (www.texasonline.com).
- ✓ Fill your vehicle with gas as early as possible. Take only the vehicle necessary to transport you and your family to safety. Extra vehicles create congestion.
- ✓ Bring extra cash in case banks are closed and ATMs are not working.
- ✓ Notify family and friends (especially those out the area) of your plan and your destination.
- ✓ Develop an emergency plan in case family members are separated. Instruct all evacuating family members of the name and contact information of your designated out-of-area friend or family.
- ✓ Ensure children know how and when to call 9-1-1.
- ✓ Evacuate, traveling safely to your destination.
- ✓ Expect travel times to destinations to be significantly longer than normal.

After the storm, listen to local officials for the all-clear signal before returning home. Check for information at www.texasonline.com.

Do not try to drive through standing water. Just a few inches can float a vehicle.

Fender-Bender?

State law requires motorists to move fender-bender accidents out of the travel lanes to the shoulder of the road. To keep all travel lanes and shoulders clear, however, disabled vehicles on the shoulder will be relocated to the next exit ramp where further assistance may be available.

More information on hurricane preparedness and evacuation safety is available from the following:

Shelters and Special Needs

Call 2-1-1

Emergency Alert Station

Houston: KTRH 740 AM

Dallas: WBAP 820 AM

State of Texas

www.texasonline.com

Texas Department of Transportation

www.txdot.gov

Highway Road Conditions and Evacuation Routes

www.drivetexas.org

1-800-452-9292

Texas Department of Public Safety

www.txdps.state.tx.us

Governor's Division of Emergency Management

www.txdps.state.tx.us/dem

American Red Cross

www.redcross.org

1-800-RED-CROSS (733-2767)

For Emergencies: Call 9-1-1

HOUSTON TO DALLAS

TEXAS



Hurricane Evacuation Contraflow Route

Motorist Advisory

Evacuation Plans May or May Not Include Activating Contraflow Lanes



HOUSTON TO DALLAS

TEXAS



Hurricane Evacuation Route's Potential Contraflow Plan

WHO...This plan will affect motorists evacuating from the Houston area.

WHY...To help move citizens safely and efficiently out of harm's way during large-scale evacuations.

WHAT...If this plan is activated, I-45 southbound lanes will be reversed to carry two lanes of northbound traffic. Traffic in the contraflow lanes will be able to exit I-45 at selected locations.

WHEN...The reversal will be considered only when the Houston area is threatened by a major hurricane and mandatory evacuations are issued. A decision to reverse I-45 will be made by the Texas Department of Public Safety based on the strength of the storm and projected landfall.

WHERE...The contraflow operations will begin at the Montgomery/Walker County line. Some northbound traffic will cross over to the contraflow side to travel northbound. Contraflow and other I-45 motorists will have access to fuel stations at multiple locations along I-45. The contraflow lanes will end south of US 287 near Ennis, TX, 40 miles south of Dallas, TX.

