This supersedes and rescinds all previous versions of this document.

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Acknowledgement

The University of Texas at Austin Campus Safety and Security Committee would like to acknowledge the major contributions of Troy M. Kimmel, Jr. to the creation of this Weather Events Response Annex.

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# Weather Events Response Annex

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## RECORD OF CHANGE

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A. ANNEX REVIEW

The Severe & Inclement Weather Response Annex will be reviewed annually and will be updated and revised as appropriate.

Interim revisions will be made when one of the following occurs:

1. A change in university site or facility configuration materially alters the information contained in the plan or materially affects implementation of the annex
2. A material change in response resources necessitates a change in the annex
3. An incident occurs that requires a review of the annex
4. Internal assessments, third party reviews, or experience in drills or actual responses identify significant changes that should be made in the annex
5. New laws, regulations, or internal policies are implemented that affect the contents or the implementation of the annex
6. Other changes deemed significant occur

Annex changes, updates, and revisions are the responsibility of the associate vice president for Campus Safety and Security who will ensure that any annex changes are distributed accordingly.

B. CONCEPT OF OPERATIONS

Emergency planning requires a commonly accepted set of assumed operational conditions that provide a foundation for establishing protocols and procedures. These assumptions are called planning assumptions, and the standard practice is to base planning on the worst-case conditions.

For the university, the most probable conditions are represented by severe weather hazards. The University of Texas at Austin Emergency Management Plan is based on severe weather model assumptions. Therefore, the management plan will be the principle guidance document and will provide direction for the levels of response, readiness conditions, plan activation, command and control, emergency facilities, communication and administration, and support.

The Severe & Inclement Weather Response Annex addresses the Greater Austin Metropolitan climate and associated severe/inclement weather that may have a direct or peripheral impact on the university campus. This document provides guidance for preparedness and response during weather-related events. Development and implementation of specific response actions is the responsibility of individual departments and colleges.

C. SOURCES OF OFFICIAL INFORMATION

It is assumed that each member of the university community has access to information regarding events on campus and in the community. While these information sources can be local radio and television broadcasts and media Web sites as well as local governmental Web sites, the official site for university information in case of an emergency is:

www.utexas.edu/emergency
The University of Texas at Austin

For the City of Austin and Travis County, the emergency Web site is:

www.ci.austin.tx.us/oem/oem_results.cfm

D. EXPLANATION OF TERMS

1. Köppen Classification
   The modified Köppen classification uses six letters to divide the world into six major climate regions, based on average annual precipitation, average monthly precipitation, and average monthly temperature.
   - A for Tropical Humid
   - B for Dry
   - C for Mild Mid-Latitude
   - D for Severe Mid-Latitude
   - E for Polar
   - H for Highland (this classification was added after Köppen created his system) Each category is further divided into sub-categories based on temperature and precipitation. For instance, the U.S. states located along the Gulf of Mexico are designated as "CFA." The "C" represents the "mild mid-latitude" category, the second letter "F" stands for the German word feucht or "moist," and the third letter "A" indicates that the average temperature of the warmest month is above 72°F (22°C). Thus, "CFA" gives us a good indication of the climate of this region, a mild mid-latitude climate with no real dry season and a hot summer.

2. Saffir-Simpson Hurricane Scale
   Saffir-Simpson Hurricane Scale is a 1-5 rating based on the hurricane’s present intensity. This is used to give an estimate of the potential property damage and flooding expected along the coast from a hurricane landfall. Wind speed is the determining factor in the scale, in general, damage rises by a factor of four per every catagory increase.

E. GREATER AUSTIN METROPOLITAN AREA CLIMATOLOGICAL SUMMARY

Austin and south central Texas are located on the westernmost fringes of the humid subtropical climate type (CFA as defined by Köppen) that covers the southeastern quarter of the United States. This climate type is strongly influenced by the maritime tropical air masses that emerge from the Gulf of Mexico to the southeast. Although this is the dominant air mass, south central Texas and the Austin area is frequented at different times of the year, as well, by other air masses that emerge from areas such as northern Mexico, Canada, the Pacific Ocean, and even occasionally from the arctic regions. All in all, it is an area of weather variety.

With the close proximity of the semiarid climate (BS as defined by Köppen) to our west, south central Texas is in an area of great variety as far as precipitation amounts are concerned. We can and do see years of drought, years of near normal rainfall, and, yes, years of flood... all depending on weather patterns in place across our area of the country.

The winter season is normally the most cloudy and humid time of the year although that moisture does not necessarily find its way into the rain gauge as precipitation. Fog and low clouds are quite common. Temperatures do cool with cold frontal passages, but those fronts are most often of modified Pacific or Canadian origin. Occasionally, perhaps once or twice a year, the much colder Arctic air masses proceed southward across Texas. Freezing or frozen precipitation is infrequent, but when it does occur, travel difficulties result as the area is unaccustomed to such events. Freezing rain, freezing drizzle, and sleet (ice pellets) are most common since the depth of the cold air needed for more significant snow events does not
occur very often.

The spring and fall seasons are, of course, seasons of change. Convective activity, namely rain showers and thunderstorms, become more frequent during the spring months with most of the severe and inclement weather (large hail, damaging thunderstorm wind, flash flooding, and tornadoes) occurring during these months. Although severe weather is not an everyday event, it most commonly occurs in advance of southeastward moving cold fronts and/or upper-level low pressure disturbances as they move sluggishly through increasingly warm and unstable air masses that become more established during the mid and late spring months. Although the fall months exhibit a secondary surge in precipitation amounts, the spring months contain most of the real stormy weather. Many Austinites consider the fall months, especially October and November, as the most pleasant time of the year.

The summer months are fairly consistent as far as weather is concerned. Cold frontal passages are very infrequent as maritime tropical air masses dominate. Normally, summertime in south central Texas is made up of mostly sunny or partly cloudy days with highs in the 90s with overnight lows in the 70s. Air mass rain showers and thunderstorms do occur in association with maximum daytime heating. Occasionally, tropical cyclones do emerge from the Gulf of Mexico in mid and late summer into the early and mid fall months, but the events are usually few and far between. The last tropical cyclones to directly affect the area were Hurricane Allen in 1980, Hurricane Celia in 1970, and Hurricane Carla in 1961. Even though Austin is a little more than 100 miles inland from the Texas gulf coast, these tropical cyclones are still a force to be reckoned with locally as they can produce sustained high winds, torrential rains, and flooding, as well as tornadoes.

F. GREATER AUSTIN METROPOLITAN AREA SEVERE / INCLEMENT WEATHER RISKS

Here is a summary of the different types of severe and inclement weather that south central Texas experiences ranked on the average frequency of their occurrence.

1. **Flash Flooding**
   South central Texas and the Austin metropolitan area is considered the flash flood capital of the United States. This weather hazard is the top weather hazard in the area because of the hilly nature of the adjoining Texas Hill Country, subsoil limestone layers, and the increased urbanization of the area. People driving across flooded low-water crossings during heavy rain events in our area results in deaths, injuries, and rescues every year.

2. **Lightning**
   With an average of 40 to 45 thunderstorm days a year in Austin, lightning is a dangerous atmospheric hazard. Lightning is especially hazardous given that the local area is popular for those involved in outdoor recreation and activities. In addition, lightning can strike up to 10 to 15 miles away from the parent thunderstorm so that people can be struck even outside of the main precipitation area of the thunderstorm. Major university outdoor events receive additional consideration.

3. **Hot Temperatures / High Humidity**
   High humidity combines with summertime temperatures to create a heat stress danger to humans. When the atmospheric humidity levels are high, the human body isn’t able to cool itself as efficiently through sweating and the resultant evaporative cooling that takes place. A related problem is when children are left unattended in automobiles. In summertime heat, the inside of vehicles, without air conditioning, can run as high as 130 °F to 150 °F.
4. **Straight-line Thunderstorm Wind**
   These powerful diverging winds are created when downdrafts sink to the ground directly under mature or dissipating thunderstorms. Since the wind is diverging (unlike in tornadoes when the wind is converging), damage tends to cover a larger area. Winds can gust upwards of 50 to 100 mph in stronger straight-line thunderstorm wind events. Most wind damage in thunderstorms is created by this type of wind rather than that associated with tornadoes (see below).

5. **Hail**
   Most losses associated with hail in the United States are related to automobile, home/business structure, and agricultural damage. Fatalities and injuries are relatively rare. Nevertheless, damage can be quite severe. Hailstones with diameters of 1 inch or larger are considered severe by the National Weather Service.

6. **Tornadoes**
   Tornadoes are more common in areas of the central and southern plains of the United States well to the north of the Austin area. Even so, we have seen our share of tornadoes and they are considered to be a threat. Tornadoes, except in the most severe cases, tend to produce a relatively narrow convergent damage pattern. Most wind damage associated with thunderstorms is not related to tornadoes, but instead to straight-line thunderstorm winds (see above).

7. **Freezing / Frozen Precipitation**
   Freezing rain, freezing drizzle, sleet (ice pellets), and snow are all occasional winter visitorsto our Austin area. In most cases, the fairly shallow nature of colder air just off and near the ground at this southern latitude results in a much better chance of seeing freezing rain and freezing drizzle with sleet (ice pellets) and snow coming as the colder air overhead thickens into a deeper layer, which is more uncommon given our southern latitude. On an annual basis, it is not unusual to see one or two freezing rain/freezing drizzle events during the winter months with sleet (ice pellets) occurring about once a winter season. Snow is more infrequent with lightly (and briefly) accumulating snows occurring once every five to ten years.

8. **Tropical Cyclones**
   Austin is located about 140 miles inland from the Texas coast. Even so, tropical cyclone (hurricanes, tropical storms, tropical depressions) are still a threat, especially with slow-moving weaker systems that tend to produce flooding, as well as quicker moving intense systems that can bring sustained winds to and above hurricane force to the Austin area. Tropical tornadoes, associated with fast moving rain bands within the tropical cyclone, are also a big threat.

9. **Cold Temperatures**
   Occasional visits by arctic air masses sometimes bring very cold temperatures southward into the area. The record low temperatures of -5°F at Bergstrom Air Force Base and -2°F at Robert Mueller Airport on January 31, 1949 are a testament to the fact that we can experience very cold temperatures. While fairly rare, these very cold temperatures pose a hazard to the homeless population.

**G. WEATHER SAFETY RULES**

**Lightning**
- If you hear thunder, you are close enough to the thunderstorm to be struck by lightning. Go to safe shelter immediately.
- Go to a steady building or to an automobile. Do not take shelter in small sheds, under isolated trees, or in convertible automobiles. Stay out of boats and away from water.
- If shelter is not available, find a low spot away from trees, fences, and poles. In wooded areas, take shelter under shorter trees.
- Telephone lines and metal pipes can conduct electricity. Unplug appliances not necessary for obtaining weather information. Avoid using the telephone or any electrical appliances. Use the telephone ONLY in emergencies. When in your home, do not take a bath or shower.
- If you feel your skin begin to tingle or your hair starts to stand on end, squat low to the ground on the balls of your feet. Place your hands on your knees with your head...
between your knees and hands. Make yourself the smallest target possible; minimize your contact with the ground.

**Local Considerations for the UT Campus:**
It is easy to remain safe during lightning episodes when thunderstorms are overhead or in the vicinity of the campuses by simply staying or remaining inside of buildings or in your vehicle. When thunderstorms develop or move onto campus, you may wish to wait out the thunderstorm before moving between buildings (even during class changes). Remember that lightning can strike even from storms as far as 10 to 15 miles away from the campus. Special considerations should be given to the hazard when considering outdoor events and activities.

**Flash Flooding**
- When heavy rain threatens, get out of areas subject to flooding. This includes creeks, streams, dips, washes, low spots, canyons, as well as low water crossings.
- Do not camp or park vehicles along streams and creeks, particularly during threatening weather.
- Avoid already flooded and high velocity flow areas. Do not cross, on foot or in your vehicle, quickly flowing creeks, streams, or low water crossings, especially if you do not know the water depth.
- Road beds may not be intact in low water crossings during flash flood episodes. Be especially cautious at night when it is harder to recognize flood dangers.
- If your vehicle stalls in high water, LEAVE IT IMMEDIATELY AND SEEK HIGH GROUND.

**Local Considerations for the UT Campus:**
The threat of flash flooding on our campus is pretty much limited to areas around Waller Creek, which crosses our campus. During periods of heavy rain, avoid low-lying areas. Listen to the advice of campus officials regarding areas where flooding is occurring and avoid these areas.

**Tornadoes**
- When tornadoes threaten, you should leave automobiles and mobile homes for more substantial shelter.
- In substantial shelter, you should put as many walls between you and the tornado as you can. This means that interior bathrooms, hallways, and closets on the lowest floor are the best place to be. If it is available, move to a below-ground shelter, such as a basement.
- Stay away from windows.
- Do not try to outrun a tornado in your automobile.
- If caught outside or in a vehicle with an approaching tornado, lie flat in a nearby ditch or depression (away from your vehicle if you are leaving it).

**Local Considerations for the UT Campus:**
Tornado safety is based upon avoiding windblown debris when tornadoes are near. The common thread in safety rules is putting as many walls as you can between you and the tornado and always on the lowest floor of the building as you can safely get to before the tornado strikes. All building safety plans for tornadoes are centered on these guidelines. On our campuses, always move to interior hallways on the lowest floor possible in all buildings, away from glass and shelter in place.

**Hurricanes**
- Even though we are more than 100 miles inland from the coast, landfalling hurricanes can still be a serious threat.
• High winds, even hurricane force winds, can occur locally.
• Torrential rains can cause severe flash and river flooding.
• Sudden, quick moving tornadoes are common with landfalling hurricanes, even hundreds of miles inland.
• Evacuees from coastal areas will move inland into our area. Roadways may become congested along with a corresponding shortage of hotel and other living spaces. Shelters may be set up throughout our area.

Local Considerations for the UT Campus:
Although we most commonly think of hurricane force winds occurring in coastal areas, in a category 5 hurricane making landfall on the middle Texas coast and moving inland to overhead or just southwest of the Austin area, we could see several hours of hurricane force winds (75 to 110 mph) even in the Austin metropolitan area and the UT campus. Again, safety rules would center upon going into interior hallways on the lowest floor possible and remaining there during these types of events. You should also be aware of the threats of hurricane related tornadoes and flash floods.

Winter (Cold) Weather
• Bundle up when going out. Remember that most of the body heat that is lost to the atmosphere is lost from the region around your head. Wear caps or hats keeping as much of your head (ears, etc) covered as possible.
• Even though air temperatures must be below 15°F with wind speeds in excess of 25 to 30 mph to achieve wind chill temperatures of -25°F or lower, if that does occur, the human body becomes incapable of matching the rate of heat loss. As a result, with wind chill temperatures of -25°F or below, skin temperatures will decrease and exposed flesh may freeze.
• In freezing and frozen precipitation, driving conditions are dangerous. On roadways, slow down (even if other motorists do not). When stopping, do not lock your brakes. Touch them, slowing the vehicle gradually. If the wheels lock, take your foot off of the brakes. If you start skidding, steer the car in the direction that you want to go.

Local Considerations for the UT Campus:
We generally do not see cold enough weather to produce a danger to those outside for brief periods of time like we see in more northern latitudes. Nevertheless, we want to pay attention to homeless persons that may be on our campus looking for a warm place to be (instead of being outside). Reports of this type of occurrence should be made to The University of Texas Police Department so that these persons can obtain help from our local organizations meant to assist them (Salvation Army, etc.).

Summer (Heat) Weather
• When the temperatures go up, you should slow down!
• Heed your body’s early warnings. Reduce your activities and stay in a shady, cool or air conditioned place as much as possible, especially when humidity levels are high.
• Do not dry out. Drink plenty of non-alcoholic liquids while the hot spell lasts. Doctors recommend a glucose replacement drink for those outdoors for more than an hour or two. If this is not available, a good substitute is plain water.
• Dress for hot weather. Wear lightweight, light colored and loose fitting clothing to help maintain normal body temperatures. A hat or cap, and sunglasses are a must if prolonged exposure to the sun’s rays and glare is anticipated.
• Avoid thermal shock. Go slow for those first few real hot days. Heatstroke frequently develops swiftly with little warning. Heatstroke is imminent if you quit sweating, which is your body’s air conditioning system. Immediate medical attention is necessary with heat-related illnesses.

Local Considerations for the UT Campus:
Heat-related illnesses result in more deaths nationwide than any other type of weather phenomena. We need to be aware of conditions (high temperatures and high humidity) that create heat stress danger. Campus related athletic activities and other activities
performed by outdoor staff (lawn/ground maintenance) are especially prone to heat stress dangers. Stay as cool and as hydrated (drink plenty of water) as possible if you are going to be outdoors in high heat stress conditions.

H. STATE OF READINESS CONDITIONS

1. Readiness Levels

Many emergencies follow some recognizable build-up period during which actions can be taken to achieve a gradually increasing state of readiness. A four-tier system is utilized. Readiness levels will be recommended to the president for his/her decision by the vice president for University Operations, the associate vice president for Campus Safety and Security, or the chief of police. General actions to be taken at each readiness level are outlined in the annexes to this plan; more specific actions will be detailed in departmental or agency standard operating procedures (SOPS).

2. Readiness Level Descriptions

The following readiness levels will be used as a means of increasing this jurisdiction’s alert posture.

**Condition 1—Normal Conditions**

This is the default standby condition. Conditions are monitored and communicated as necessary. The normal operations of the university are not affected.

**Condition 2—Increased Readiness**

Increased readiness refers to a situation that presents a greater potential threat than “Condition 1”, but poses no immediate threat to life and/or property. Increased readiness actions may be appropriate when situations similar to the following occur:

- **Tropical Weather Threat**: A tropical weather system has developed that has the potential to impact the local area. Readiness actions may include: regular situation monitoring, a review of plans and resource status, determining staff availability, and placing personnel in on-call status.

- **Tornado / Severe Thunderstorm Watch**: This is issued by the National Weather Service (NWS) and indicates the possibility of tornadoes and/or severe thunderstorm development. Readiness actions may include increased situation monitoring and placing selected staff on alert.

- **Flash Flood Watch**: Flash flooding is possible due to heavy rains occurring or expected to occur. Readiness actions may include: increased situation monitoring, reconnaissance of known trouble spots, and deploying warning signs.

- **Wildfire Threat**: During periods of extreme wildfire threat, readiness actions may include: deploying additional resources to areas most at risk, arranging for standby commercial water tanker support, conducting daily aerial reconnaissance, or initiating burn bans.

- **Ice**: Ice conditions can create dangerous walking and driving surfaces. Readiness actions may include: surface treatment and placing the university community on alert.

Declaration of “Condition 2” will generally require the initiation of the “Increased Readiness” activities identified in each annex to this plan.

**Condition 3—High Readiness**

High readiness refers to a situation with a significant potential and probability of causing loss of life and/or property. This condition will normally require some degree of warning to the public. Actions could be triggered by severe weather warning information issued by the National Weather Service such as:

- **Tropical Weather Threat**: A tropical weather system may impact the local area within 72 hours. Readiness actions may include:
continuous storm monitoring, identifying worst-case decision points, increasing preparedness of personnel and equipment, updating evacuation checklists, verifying evacuation route status, and providing the public information for techniques to protect homes and businesses on the evacuation routes.

- **Tornado / Severe Thunderstorm Warning**: This is issued by the National Weather Service when a tornado and/or a severe thunderstorm has been sighted/reported in the area or indicated by weather radar and is imminent or occurring in the warning area. Readiness actions may include: activating the Emergency Operations Center (EOC), continuous situation monitoring, and notifying the public about the warning.

- **Flash Flood Warning**: This is issued to alert persons that flash flooding is imminent or occurring on certain streams or designated areas, and immediate action should be taken. Readiness actions may include: notifying the public about the warning, evacuating low-lying areas, open shelters to house evacuees, and continuous situation monitoring.

- **Winter Storm Warning**: This is issued when heavy snow, sleet, or freezing rain are forecast to occur separately or in a combination. Readiness actions may include: preparing for possible power outages, putting road crews on standby to clear and/or sand the roads, and continuous situation monitoring.

Declaration of a “Condition 3” will generally require the initiation of the “High Readiness” activities identified in each annex to this plan.

**Condition 4—Maximum Readiness.**

Maximum readiness refers to a situation in which hazardous conditions are imminent. This condition denotes a greater sense of danger and urgency than associated with a “Condition 3” event. Actions could also be generated by severe weather warning information issued by the National Weather Service (NWS) combined with factors making the event more imminent.

- **Tropical Weather Threat**: The evacuation decision period is nearing for an approaching tropical weather system that may impact the local area. Readiness actions may include: continuous situation monitoring, activation of the appropriate EOC, recommending precautionary actions for special facilities, placing emergency personnel and equipment into position for emergency operations, and preparing university transportation resources for evacuation support.

- **Tornado / Severe Thunderstorm Warning**: This is issued by the NWS when a tornado, very large hail, or widespread straight line damaging wind has been sighted or is approaching a highly populated area or a special event (football game or other highly attended outdoor venue). Readiness actions may include taking immediate shelter and putting damage assessment teams on stand-by.

- **Flash Flood Warning**: Flooding is imminent or occurring at specific locations. Readiness actions may include: evacuations, rescue teams on alert, sheltering evacuees and/or others displaced by the flooding, and continuous monitoring of the situation.

Declaration of “Condition 4” will generally require the initiation of the “Maximum Readiness” activities identified in each annex to this plan.

I. **Worst Case Track Scenario for the Austin Metropolitan Area Given Different Tropical Cyclone Strengths and Landfall on the Texas Coast**
The following scenarios, given landfall on the Texas coast and movement as indicated in the map, are approximations depending on the following:

- Small changes in the track can result in major changes in conditions that might be expected at any given location. Remember that, in general, if the storm center passes east of Austin, the local effect will be less while systems passing immediately south and west of the area will result in more extreme conditions since the north and east side of tropical cyclones often have the worst meteorological impacts.
- The rate at which tropical cyclones weaken as they move ashore varies considerably.
- The forward speed of the system is an important factor on the strength of a system as it moves inland.

<table>
<thead>
<tr>
<th>Track, with a landfalling...</th>
<th>The Austin Metropolitan Area has the potential to see...</th>
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| TROPICAL DEPRESSION (< 39 mph) | • Tropical funnel clouds/very weak short-lived tornadoes (less of a risk if Austin is not in the north/east quadrant of the system)  
  • Highest risk of flooding/flash flooding (particularly in slower moving systems with nighttime core rains)  
  • Sustained winds of 10 to 20 mph with wind gusts up to 20 to 30 mph in heavier rain bands  
  Local wind effects: Some small weak tree limbs down in strongest gusts  
  • Tropical funnel clouds/weak short lived tornadoes (less of a chance if Austin is not in the north/east quadrant of the system) |
| TROPICAL STORM (39 to 74 mph) | • Highest risk of flooding/flash flooding (particularly in slower moving systems with nighttime core rains)  
  • Sustained winds of 15 to 30 mph with wind gusts up to 30 to 50 mph in heavier rain bands  
  Wind effects: Some tree limbs broken/downed, some light sign damage, some power line arcing with other power lines/tree limbs  
  • Tropical funnel clouds/tornadoes (less of a chance if Austin is not in the north / east quadrant of the system) |
| CATEGORY 1 HURRICANE (74 to 95 mph) | • High risk of flooding/flash flooding (particularly in slower moving systems with nighttime core rains)  
  • Sustained winds of 30 to 45 mph with wind gusts up to 45 to 65 mph in heavier rain bands  
  Wind effects: Some tree limbs downed, damage to poorly constructed signs, some power lines downed with isolated power outages, power line arcing with other power lines/tree limbs, some shingles blown off roofs |
| On this track, with a landfalling... | The Austin Metropolitan Area has the potential to see... |
| CATEGORY 2 HURRICANE (96 to 110 mph) | • Tropical funnel clouds / tornadoes (less of a chance if Austin is not in the north/east quadrant of the system)  
  • High risk of flooding / flash flooding (particularly in slower moving systems with nighttime core rains)  
  • Sustained winds of 45 to 65 mph with wind gusts up to 65 to 75 mph in heavier rain bands  
  Wind effects: Damage primarily to unanchored mobile homes, shrubbery, and trees; some power lines downed with widely scattered to scattered power outages, moderate damage to signs, more substantial damage to roof shingles |
| CATEGORY 3 HURRICANE | • Tropical funnel clouds/tornadoes (less of a chance if Austin is not in the north/east quadrant of the system)  
| | • Moderate to high risk of flooding/flash flooding (particularly in slower moving systems with nighttime core rains)  
| | • Sustained winds of 55 to 75 mph with wind gusts up to 75 to 85 mph in heavier rain bands  
| Wind effects: Trees and some power poles down, power lines downed with scattered power outages, more extensive sign damage, unanchored mobile homes may be extensively damaged or overturned, more extensive roofing damage, some light damage to cell towers, light structural damage to poorly constructed buildings |
| CATEGORY 4 HURRICANE | • Tropical funnel clouds/tornadoes (less of a chance if Austin is not in the north/east quadrant of the system)  
| | • Moderate to high risk of flooding/flash flooding (particularly in slower moving systems with nighttime core rains)  
| | • Sustained winds of 65 to 80 mph with wind gusts up to 80 to 90 mph in heavier rain bands  
| Wind effects: Some roofing material, door and window damage to buildings, considerable damage to shrubbery and trees with some trees blown completely down or uprooted, power lines and poles downed with extensive power outages, some damage to cell towers, considerable damage to mobile homes, signs and piers |
| CATEGORY 5 HURRICANE | • Tropical funnel clouds/tornadoes (less of a chance if Austin is not in the north/east quadrant of the system)  
| | • Moderate to high risk of flooding/flash flooding (particularly in slower moving systems with nighttime core rains)  
| | • Sustained winds of 80 to 95 mph with wind gusts up to 95 to 110 mph in heavier rain bands  
| Wind effects: Structural damage to small residences and utility buildings with some curtain wall failures, widespread damage to shrubbery and trees with foliage blown from trees and large trees blown down or uprooted, power lines and poles downed with widespread power outages, cell towers badly damaged or downed, mobile homes and signs are destroyed |

Prepared by Meteorologist Troy Kimmel / Intern – Research Assistant Jason Joiner  
Department of Geography and the Environment, The University of Texas at Austin
### J. SEVERE WEATHER MATRIX AND PREPAREDNESS RESPONSE

Organization and assignment of responsibilities will be department/college specific per each time frame and severity category. Refer to page 39 of *The University of Texas at Austin Emergency Management Plan* (publish date Fall 2012) for a list of university annexes responsible for the development and maintenance of department-specific emergency response operational plans.

<table>
<thead>
<tr>
<th>Time Frame</th>
<th>-72 hours</th>
<th>-48 hours</th>
<th>-24 hours</th>
<th>0 hours</th>
<th>+12 hours</th>
<th>+24 hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Tropical Depression</strong></td>
<td>• Standby • Monitor • Alert</td>
<td>• Standby • Monitor • Alert</td>
<td>• Standby • Monitor • Alert</td>
<td>• Standby • Monitor • Alert</td>
<td>• Damage assessment • Begin cleanup procedures • Begin after action report</td>
<td>• Continue +12 hour activities • Begin after action report</td>
</tr>
<tr>
<td><strong>Tropical Storm</strong></td>
<td>• Standby • Monitor • Alert</td>
<td>State of Readiness Condition 2: Increased Readiness</td>
<td>State of Readiness Condition 2: Increased Readiness</td>
<td>State of Readiness Condition 2: Increased Readiness</td>
<td>• Damage assessment • Resume business • Damage assessment</td>
<td>• Continue +12 hour activities • Begin after action report</td>
</tr>
<tr>
<td><strong>Category 1 Hurricane</strong></td>
<td>• Standby • Monitor • Alert</td>
<td>State of Readiness Condition 2: Increased Readiness</td>
<td>State of Readiness Condition 2: Increased Readiness</td>
<td>State of Readiness Condition 2: Increased Readiness</td>
<td>• Damage assessment • Resume business • Damage assessment</td>
<td>• Continue +12 hour activities • Begin after action report</td>
</tr>
<tr>
<td><strong>Category 2 Hurricane</strong></td>
<td>• Standby • Monitor • Alert</td>
<td>State of Readiness Condition 2: Increased Readiness</td>
<td>State of Readiness Condition 2: Increased Readiness</td>
<td>State of Readiness Condition 2: Increased Readiness</td>
<td>• Damage assessment • Resume business • Damage assessment</td>
<td>• Continue +12 hour activities • Begin after action report</td>
</tr>
<tr>
<td><strong>Category 3 Hurricane</strong></td>
<td>• Standby • Monitor • Alert</td>
<td>State of Readiness Condition 2: Increased Readiness</td>
<td>State of Readiness Condition 3: High Readiness</td>
<td>State of Readiness Condition 3: High Readiness</td>
<td>• Damage assessment • Resume business • Damage assessment</td>
<td>• Continue +12 hour activities • Begin after action report</td>
</tr>
<tr>
<td><strong>Category 4 Hurricane</strong></td>
<td>• Standby • Monitor • Alert</td>
<td>State of Readiness Condition 2: Increased Readiness</td>
<td>State of Readiness Condition 3: High Readiness</td>
<td>State of Readiness Condition 3: High Readiness</td>
<td>• Damage assessment • Resume business • Damage assessment</td>
<td>• Continue +12 hour activities • Begin after action report</td>
</tr>
<tr>
<td><strong>Category 5 Hurricane</strong></td>
<td>• Standby • Monitor • Alert</td>
<td>State of Readiness Condition 2: Increased Readiness</td>
<td>State of Readiness Condition 4: Maximum Readiness</td>
<td>State of Readiness Condition 4: Maximum Readiness</td>
<td>• Damage assessment • Resume business</td>
<td>• Continue +12 hour activities • Begin after action report</td>
</tr>
</tbody>
</table>
K. ORGANIZATION AND ASSIGNMENT OF RESPONSIBILITIES: HIGH READINESS ACTIVITIES

1. **University Police Department (UTPD)**

UTPD will assist our community during severe Weather events. While officers should assist anyone in the path of a dangerous weather event, all precautions should be taken to prevent an officer from becoming a victim.

- In the event that our university population is unaware of impending severe weather (e.g., wind in excess of 60 mph, tornados, extreme hail, or flooding), UTPD will activate the siren and send text alerts to warn the university community of the impending weather event. Officers should drive through their districts alerting the public (read from card in glove box) of the impending event via their PSA. Announcement cards have been placed in the glove box of each district vehicle with a severe weather announcement. Officers making announcements should be aware of the closest shelter should the weather suddenly change.
- Lock and secure all facilities prior to landfall.
- Restrict access to campus to essential personnel and supplies.
- Patrol campus until 12 hours before landfall or winds of 60 mph.
- Cooperate and communicate with other law enforcement agencies on storm status and community readiness.
- Monitor weather reports and update administration as necessary.
- After landfall, maintain security and assist with assessing the safety of campus. UTPD will be responsible for prohibiting entry into campus buildings by unauthorized personnel.

2. **Parking and Transportation Services**

- Open garages, relocate all university vehicles to garages, and encourage students to park in garages instead of on the street or in open lots.
- Clean all lots of loose debris.
- Prepare to barricade and restrict parking on San Jacinto, 24th Street and 21st Street near Waller Creek.
- Raise and lock elevators at the third level in all garages that flood.
- Check and clear all drains.
- Top off gas tanks for university vehicles needed during emergency situations, as fuel pumps have no backup power.

3. **Campus Planning Facilities Management**

- Establish a central command center at FC1 one day prior to the anticipated hurricane landfall.
- Assign standby custodial, building maintenance, and utilities staff to be on campus during the anticipated severe weather event.
- Clean gutters, downspouts, and drains.
- Clean leaves and other debris on the grounds.
- Inspect roofs, remove all material, and secure covers.
- Sweep streets and parking lots to reduce litter and debris.
- Empty all dumpsters prior to hurricane landfall.
- Ensure water pumps in tunnels are checked for functionality.
- Fill sandbags and have empty bags and additional sand available.
- Have plywood available for boarding certain glass windows and doors.
- Have plastic sheeting available to protect furniture and equipment.
- Alert the primary contractor for water clean-up and place the contractor on standby.
- Following the severe weather, sweep the campus again to remove any debris that may pose a hazard.
4. **Housing and Food Services**

During the academic year, housing will be fully occupied and there will not be space for emergency housing of evacuees.

- Distribute additional flashlights to the building RAS.
- Make portable generators available to power wet-dry vacuums for removing water in the event of power loss.
- Initiate 24-hour student help desk in the event of flooding.
- Prepare to initiate emergency food preparation plans in the event of power loss.
- Allow residence hall students to host immediate family members in their rooms.

5. **Environmental Health and Safety (EHS)**

- Create a necessary personnel list that designates persons needing to be on call during the storm. Also, designate potential members for EHS hurricane ride-out teams to be present on campus during the storm.
- Check the compactor building (CPB) to make sure there is nothing on the floor that would be damaged by water. Assume that the vent fan in the center of the roof will blow off and leave a hole for rain to come through. Place any breakable liquid containers in secondary containers.
- Walk the perimeter of buildings to ensure that there are not loose materials that could be swept up by winds and turned into projectiles.
- Check the calibration lab (SER 212A) and the counting lab (SER 216) to make sure everything is secure such that should a window in the room break, minimal damage to equipment and supplies would result.
- Check the PRC storage building (175) to assure water on the floor will not cause damage to items inside. This would also include the waste storage buildings at PRC.
- Be aware that the Hazardous Waste section may temporarily store empty drums in our PRC storage building (175). They will contact EHS to gain access to the building.
- Secure the equipment and supplies in our truck (995) to minimize damage should the windows break out during the storm.
- Top off the fuel tanks of all EHS vehicles and make provisions for secure and safe parking for vehicles. Make sure keys are available to necessary parties.
- Designate an appropriate number of persons to be on call given the severity of the hurricane threat.
- Consider the potential threat from hazardous or sensitive materials stored in fume hoods and freezers if power is lost.
- Inspect respective facilities and buildings for damage following the storm.

6. **Assumptions and Dependencies**

This plan assumes that other campus utilities will generally be up and working including electrical power, chilled water for cooling, external communications services (internet, cellular, Time Warner, Gmail, Google, Facebook, Skype).

A. **Weather Events for Which There Is Advanced Warning Internal Contact**

Lists:

- Within 2-3 days of an anticipated inclement weather event
(or as soon as an event is forecasted), all units of ITS will review and ensure all emergency contact lists are up to date and circulated to all staff as appropriate, designating on those lists the essential staff. Ensure all alternate email addresses are up to date.

- Review call trees and procedures for all units.
- Review essential staff lists to ensure adequate overage. Assign back-ups as appropriate.
- Review internal communication protocol and trouble reporting procedures.
- Review the call tree communications to ensure all staff are accounted for post event.

**External Contact Lists:**
- Ensure essential staff have updated contact lists for vendors and suppliers. (Examples: cellular providers, telecom systems support vendors, data network support vendors, cabling contractors, systems hardware/software support vendors…)
- Review ITS-to-campus communications protocol for any trouble or all-clear systems and services reporting.
- Establish conference bridges and conference call times for communication of critical items, expected call attendees and action items backed up by email.

**B. Responsibilities within Each Unit**

All units within ITS will do the following prior to an expected inclement weather event:

- Review Disaster Recovery and Business Continuity plans
- Review planned early closure and employee release procedures
- Review staffing of critical services

**Applications, Systems:**

- Update main UT website as directed by University Operations.
- Review staffing of critical services needed during the event either on or off site and designate supplemental or back-up personnel if needed

**User Services:**

- Review and prepare gating messages for the ITS Help Desk.
- Identify priorities for campus desk top support for critical areas.
- Assist other departments with implementing their inclement weather plans which may include communications with instructions on powering down computers, servers and other equipment as necessary.
- ITS Technical Support Contacts may make modifications to VPN groups to allow essential staff to work and monitor systems from remote locations.

**Networking and Telecommunications:**

- Top off fleet vehicles fuel tanks.
- Have an alternate location for parking vehicles during event.
- Secure all loose items inside the warehouse prior to event (for example vehicle ladders…)
- Ensure Warehouse availability of emergency supplies (batteries, flashlights, VOIP and analog phones, etc.)
- Ensure availability of work supplies (manhole pumps etc.)
- Review staffing of critical services needed during the event either on or off site and designate supplemental or back-up personnel if needed
- Verify functionality of telecom and data networks in EOC’s and ECC’s on campus
- Ensure operability of campus siren system and CATV emergency alert system
- Notify BACS Administrators and Building Managers their buildings will be secured during the weather event
- Review and prepare gating messages for the UT Operators.
- Provide telecom call forwarding instructions for telecommuting if needed
- Ensure equipment and tools are safely stowed away at work sites.
University Data Center:
- Review Failover procedures to alternate monitoring center
- Top off generator fuel
- Top off fleet vehicle fuel tanks
- Review staffing of critical services needed during the event and designate supplemental or back-up personnel if needed
- Stock water and MRE’s in case inclement weather delays shift rotations

C. Weather Events for Which There Is NO Advanced Warning

If severe weather, such as a tornado, is imminent and there is time, occupants of a building should move to an identified primary location in the building that is below ground level such as a mechanical room. If there is not enough time to move occupants to the primary location, occupants should immediately seek shelter indoors and move to an identified location on each floor of a building as instructed by their Building Managers or Floor Managers. After the event, all ITS employees will report their status to their supervisors to account for the safety of all staff. Identified essential staff will follow DR/BC procedures as required to restore any campus outages. Building Security Staff will monitor the Emergency Information page and be on standby for EOC instructions to electronically secure buildings and assist with Siren and emergency alert systems on the CATV systems. University Data Center staff will also continue to monitor their systems as well as the Emergency Information page and will report back any issues according to the established ITS communication protocol.

7. Faculty and Staff Office Shut-down Procedures
- Back up computers. (NOTE: Make sure to back up all mission critical data located on local hard drives, such as C: or A:. Network drives are periodically backed up by ITS.)
- Turn off and unplug computers and other essential office equipment.
- Move essential office equipment to protected areas. (Best location: away from windows, preferably behind a protected wall.)
- Move equipment off the floor.
- Cover all equipment and important files with plastic.
- Close and lock all windows.
- Lower all Venetian blinds.
- Place all loose papers and important documents in cabinets or files.
- Remove personal items.
- Deliver all university vehicles to the Facilities Complex for fueling and storage.
- Secure labs and remove items that require refrigeration.
- Employees check out with immediate supervisor prior to leaving campus at completion of hurricane preparations. You will have eight hours to accomplish shutdown. Take personal items, which are not covered by university insurance. The electricity will be turned off at this time.

8. Laboratories
- Remove portable electrical equipment and small motors from the flood zone.
- Remove all sensitive laboratory equipment from the flood zone, where possible.
- Remove or store computers in a safe area.
- Remove or store all important records in a safe area.
- Remove or store furnishings in a safe place, when practical.

9. Final Note
In the interest of economy and time, it is recommended that each college and department store a supply of black plastic to be used to cover equipment in order to protect it from water damage. Said equipment could include computers, adding
machines, calculators, typewriters, desks, books, permanent files, etc. This way, each area will be ready to implement the hurricane plan without last minute procuring of additional materials.

Delicate non-replaceable computer data tapes or disks should be stored in a water-tight secure place above the floor. When possible, make duplicate data backups and store them in a water-tight place off campus. Electrical machines left in their working place should be unplugged to protect from electrical surges during the shut down and start up of the campus. Do not operate this equipment until you have been informed that the power is back on and will stay on.

The more equipment, files, data tapes or disks, etc. that are moved and stored in a room without windows, the better the chances these items have of surviving the storm without damage. This must be done by the personnel responsible for this equipment.

L. OUTDOOR WARNING SYSTEM/SHELTER-IN-PLACE

The University of Texas at Austin installed an outdoor warning system on its main campus in February 2007. The system consists of strategically placed sirens that warn the university community to take shelter in the event of an emergency, such as a severe weather event.

The warning system will be audible throughout the main campus on both the west and east sides of I-35. Siren speakers are located on top of the Beauford H. Jester Center, Jesse H. Jones Hall, Jesse H. Jones Communication Center B, and the Printing and Press Building.

Whenever an emergency poses a direct threat to the university community requiring individuals to take shelter, the system will warn the campus by continuous activation of the outdoor warning siren. When you hear the warnings, you should seek shelter immediately in the nearest building. Move into interior corridors away from exterior windows, close all doors to rooms with exterior windows, and move to the lowest level of the building. When the threat has passed, a verbal “all clear” announcement will broadcast using the warning system’s voice feature.

The university will perform a monthly siren system test. System tests will last approximately one minute, and are scheduled to take place at 11:50 a.m. on the first Wednesday of every month. No action is expected during the monthly test. To avoid confusion, monthly tests will be cancelled whenever there is a chance of severe weather on the scheduled test day.

**Shelter-in-Place Defined**: Shelter-in-place is the use of any classroom, office, or building for the purpose of providing temporary shelter.

**Shelter-in-Place: Tornado**

- **If inside a building:**
  1. Go to the lowest level of the building, if possible.
  2. Stay away from windows.
  3. Go to an interior hallway.
  4. Use arms to protect head and neck in a “drop and tuck” position.

- **If there is no time to get inside:**
  1. Lie in a ditch or low-lying area or crouch near a strong building.
  2. Be aware of potential for flooding.
  3. Use arms to protect head and neck in a “drop and tuck” position.
  4. Use jacket, cap, backpack, or any similar items, if available, to protect face and eyes.
If you need to report a tornado or severe weather event:

1. Dial 911 from a campus phone or 471-4441 to report a tornado sighting to the UTPD dispatcher.
2. Seek a safe shelter inside a building, in a ditch, or beside an embankment.

M. CAMPUS CLOSURE OR DELAY GUIDELINES AND DECISION CONSIDERATIONS

1. Decision Authority

The University of Texas at Austin president makes all final decisions, based on recommendations from the Vice President of University Operations.

2. Decision Timeline

a. In the event that the university has compelling information the night before an anticipated weather event, the deciding authority will to its best to communicate a decision by approximately 10 p.m. CST

b. Decision to Close All Day or in the Morning

This decision will be made by 5:00am CST for an all-day or morning closure. This will stop most university employees from reporting to work for the typical day shift (Monday through Friday). The shuttle service starts at 6:30a.m., and at 5:00a.m. closure decision will stop the service from bringing passengers to campus. The unlock crew may already be en route or on campus at this time, but notice of the closure will reach them at least before they start working. In order to notify all employees in a timely manner, it is best to make the decision as soon as possible.

c. Decision to Close in the Afternoon

This decision will be made by 11:00am CST for a 2:00pm CST or later closure. This will stop the evening crew from coming to campus, and notify students and faculty in advance of afternoon/evening class cancellations. Note: campus event venues (i.e., the Frank Erwin Center, LBJ Library, and PAC) close at their own discretion and do not necessarily adhere to university closures.

3. Decision Elements

The university should consider the following questions when deciding whether to close:

- Have AISD and/or other area ISDs closed or delayed?
- Is there a request from city, state, or federal authorities asking to restrict or curtail traffic or movement?
- Has the city or state issued a closure message for their offices?
- Is Capital Metro operating?
Following is a table of shift hours the university should consider when making closure decisions:

<table>
<thead>
<tr>
<th>Shift</th>
<th>Hours</th>
<th>Days</th>
<th># of Employees</th>
</tr>
</thead>
<tbody>
<tr>
<td>Custodial Services</td>
<td>Night Shift</td>
<td>5:30 p.m. - 1:30 a.m.</td>
<td>Mon - Fri</td>
</tr>
<tr>
<td></td>
<td>30 to 60 minutes to lock up</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Regular Day Shift</td>
<td>8:00 a.m. - 4:30 p.m.</td>
<td>Mon - Fri</td>
</tr>
<tr>
<td></td>
<td>5:30 a.m. - 2:00 p.m.</td>
<td></td>
<td>9 full-time</td>
</tr>
<tr>
<td></td>
<td>2 to 2.5 hours to lock or unlock</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Unlocking Crew</td>
<td>6:00 a.m. - 5:00 p.m.</td>
<td>Sat - Sun</td>
</tr>
<tr>
<td></td>
<td>2:00 p.m. - 1:00 a.m.</td>
<td></td>
<td>5 full-time</td>
</tr>
<tr>
<td></td>
<td>4 to 5 hours to lock up</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Weekend Crew</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Landscape Services</td>
<td>7:00 a.m. - 4:00 p.m.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>General Services</td>
<td>6:00 a.m. - 2:30 p.m.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>7:00 a.m. - 4:00 p.m.</td>
<td></td>
</tr>
</tbody>
</table>

4. **Release Guidance**

Upon releasing the campus, the university should consider giving the campus this guidance:

- First priority for release should be employees with children to pick up.
- Second priority should be those who live the farthest from the university.
- Third priority should be all others.
- The university community should also give consideration to those faculty, staff, and students with mobility disabilities.

5. **CapitalMetro**

Capital Metro will do its best to increase the number of buses devoted to campus in order to get faculty, staff, and students off campus. The university may make a decision to pull circulator buses from the Forty Acres (FA) and West Campus (WC) routes to add vehicles to the radial routes that take the students to their apartments, and will post signs at the bus stops if this occurs.
6. Start Times
Changes in class end and start times due to university closures need to be made with the understanding that the class schedule changes; for example, restarting at 10:00 a.m. after a closure will not work if scheduled classes start at 9:30 a.m. and 11:00 a.m. These changes also must be made with consideration to the day of the week, because class schedules for Monday, Wednesday, and Friday are different from those for Tuesday and Thursday.

NOTE: Decisions regarding class schedules rest with the provost and the Office of the Registrar.

Decision Process for a Delayed Opening or Closure of Campus during a Weather Event

The safety of students, faculty, and staff is the University’s top priority. Any decision that disrupts the normal operations of the campus seriously impacts the teaching and research mission of the university. Because of this, a process has been developed that aims to minimize the negative impacts, while ensuring the highest safety possible of the UT community.

How does the decision process begin?

The decision to delay opening or close the campus during a weather event begins as soon as the event is forecasted. Group conference calls for information gathering are scheduled with top administrators from the following organizations:

- City of Austin
- Travis County and Travis County Sheriff
- Multiple County Independent School Districts (ISD’s)
- Texas Department of Transportation (TXDOT)
- Austin Police Department
- Homeland Security
- National Weather Service Meteorologist
- Area Incident Meteorologist
- Other Government and Non-government Agencies

Weather can often be unpredictable but forecast information is obtained from the best meteorological sources available. A projection is made about the possible accumulation of sleet, snow, or ice on area roads and highways. Special consideration is given to elevated or otherwise hazardous routes. A determination is made as to whether travel can be made safe by treating roadways with salt or sand or whether certain routes will require closure due to conditions. Each organization carefully weighs the impact that the road conditions will have on their ability to carry out normal operations.

How are decisions made to delay opening or close the UT campus?

University administrators involved with campus operations, safety and security, and facilities and grounds evaluate the projected forecast. Temperatures and wind chill are taken into consideration due to the high amount of time students, faculty, and staff spend outdoors in order to reach their destinations. Because of their impact on our UT students’ and employees’ lives, consideration is also given to decisions made by ISD’s and other higher education institutions.
If it is determined that conditions will be unsafe during the early hours when employees and students need to travel to campus, but that conditions are projected to improve later in the day, a delayed opening is recommended. Conditions continue to be monitored to assure that this decision is remains prudent. A second delay may be necessary. If conditions do not improve as expected, a recommendation is made to close the university campus until the weather improves.

N. UTPD-Weather Operational Plan

Weather events have the potential to disrupt many basic services including power and travel. These events can include but not limited to snow, ice, flash flooding, high winds, hail storms and tornadoes. The impact can be minimized through advance planning and preparation. The department will accomplish this through a combination of in-house preparedness and inter-agency coordination.

During any official National Weather Service (NWS) weather watch, advisory or warning, regardless if the Austin/Travis County EOC is open, or not UTPD will do the following:

**Shift Commander:**
- Will notify the Duty Commander, if they are not already aware.
- Will coordinate the exchange of information and make appropriate notifications to the Duty Commander.
- Will insure that officers in the field advise Dispatch of deteriorating weather conditions and potential problem areas.
- Shift commander/dispatch will make contact with the University Weather Incident Meteorologist to help determine any changing weather conditions, if needed.
- Should also be cognizant of the needs and uses of various buildings on campus and how they may be affected. Factors to consider, and examples, include occupancy (dormitories), critical infrastructure. All factors must be evaluated and resources allotted accordingly.

**Duty Commander:**
- Will follow prescribed emergency contact protocol as determined by University Emergency Procedure.
- Monitor any emergency conference calls and insure that the Shift Commander also monitors the conference calls in listen only mode.
- Insure that regular Situational Reports (SitReps) are being generated and indicating current or ongoing condition of campus, including crashes, falls, icy roads and parking lots, etc., (the information should be logged in the Global CAD sheet).
- Insure that emergency updates to the campus community are sent per Department and University policy using the predetermined weather alert options below:
  - Option 1: (Weather Event). UT Austin closed for the day. Check [www.utexas.edu/emergency](http://www.utexas.edu/emergency) re: evening classes, activities. (110 characters)
  - Option 2: (Weather Event). UT Austin closed for the day, including evening classes. Check with sponsors re: evening activities (116 characters)
• Option 3: (Weather Event). UT Austin closed for the day, including evening classes and all evening activities. (98 characters)

• Option 4: (Weather Event). UT Austin will open at XX:XX xx (time and date). Conditions may change. Check www.utexas.edu/emergency (102 characters)

• Option 5: Weather Update
Weather conditions have deteriorated. UT Austin closed today. Check www.utexas.edu/emergency (105 characters)

• Option 6: Weather Update
Weather conditions have deteriorated. UT Austin will open at XX:XX xx. Check www.utexas.edu/emergency (114 characters)

Dispatch:

• Dispatch will call into the Austin/Travis County EOC “duty officer) or the Austin/Travis County EOC when open.
• Dispatch will log into regional website or other system as indicated.
• Dispatch will monitor the weather radar and advise the shift commander of weather watches, advisories and warnings issued for Austin/Travis County.
• Dispatch will place TVs on the weather channel and local news station to monitor for any sudden or unexpected changes in the weather forecast.
• Dispatch/shift commander will make contact with the University Weather Incident Meteorologist to help determine any changing weather conditions, if needed.
• Dispatch will create a sheet to log conditions on campus by on duty university staff (e.g. icy roads, icy parking lots, icy sidewalks and/or parking garage ramps).
• Dispatch will also log on the Global CAD sheet any other information provided by other Law Enforcement Agencies, Austin/Travis County EOC or verified media accounts that has an impact on the University, (e.g. 20 car crash, upper decks closed due to ice, etc.).

University Status Conditions:

• Planned delay or closure (time certain beginning and ending)
• Emergency delay or closure (unexpected conditions suddenly occur causing immediate need to close for safety purposes)
• Monitoring status decision has been made or no decision yet made, but due to declared advisory above UTPD will provide ongoing monitoring 24/7 to give key Campus decision makers “visibility” of rapidly changing events that perhaps require modifying existing decision.

NWS Weather Alerts:

NWS Watches are issued when conditions are favorable for the weather condition specified (winter weather, severe thunderstorms, tornadoes, flash floods, hurricanes, high winds) and for the time period and geographic area specified. The sky may be clear or there may be little weather going on at the time of the watch issuance. Watch areas tend to be larger in geographic scope and cover longer time periods. With the possible exception of hurricane watches when more action may be required - watches were given that name because they indicate that usual activities by the general public won’t generally be affected. A watch is simply a sign for the public to have a heightened weather awareness and to keep a “watch” on the weather for the threats specified and to, of course, listen for later possible NWS advisories or warnings.

NWS Advisories are issued when the type of weather specified (fog, winter weather, thunderstorms) is imminent or occurring but it is issued to increase
awareness to the public of a weather event that is more of a public inconvenience and/or it creates travel or general hazard.

**NWS Warnings** are issued when the type of weather specified (severe thunderstorm, tornado, flash flood, winter storm, hurricane) is imminent or occurring and is considered to be a threat to life and/or property which will likely require immediate protective action by the general public.

**DEPARTMENTAL PREPARATION**

Before the event, the following listed items should be completed by the Day/Evening Shift Commanders:

**Vehicles**
- All vehicles fueled. Tire and fluid levels checked.
- Personnel trained on snow chain installation
- Snow chains installed as needed or on select vehicles in advance
- Moved to Manor Garage when appropriate
- Install soft doors onto utility ATV “mules”
- Vehicle related items
- Jump boxes charged
- Antifreeze
- Oil
- Ice scrapers

**Supplies**
- Water
- MREs
- Kitty Litter/Sand

Important Note:

During the event, the shift commander should monitor employees time spent in the inclement weather, provide for basic needs, i.e. food, water, and breaks, and provide transportation to and from home or post if needed.

**OUTSIDE ASSISTANCE**

If the event expands in severity or scope beyond the capabilities of UTPD alone, additional outside resources may be needed either on a short or long term basis. Options include but are not limited to:
- EOC
- Other law enforcement agencies
- UT Facilities
- ATT Conference Center
- Erwin Center
- Division of Housing and Food services
- Parking and Transportation Services

**UTPD PERSONNEL: INDIVIDUAL PREPARATION**

Employees can begin by preparing themselves and their homes for the possibility of having to work extended hours or being unable to travel freely due to blocked roadways.

**Home**
- Check heating system well in advance of winter
- Keep extra food and water on hand
- Insulate exposed pipes and faucets
- Bring pets and vulnerable plants inside
Work

- Dress appropriately, layer clothing to adjust to changing conditions.
- Be prepared for extended stays and keep extra items on hand
  - Uniforms and personal items
  - Bedroll or sleeping bag
  - Extra food and water
  - Medication
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APPENDICES
APPENDIX A. Residential Student Action Plan

The University of Texas at Austin Division of Housing and Food Service

University Closure Due to Emergency/Inclement Weather

Should the university be suddenly closed due to inclement weather or local or national emergencies, the following policy should be implemented.

Notification of Closure

Notification of closure will typically occur in one of two ways:

1. University officials will communicate closures via the voicemail system and on the UT home page.

Staff Members Responsible for Implementing Policy

The staff members who will lead the effort in implementing this policy will vary depending on the time of day such information is received. These persons will be responsible for contacting each desk and notifying them to follow the appropriate procedures for University Closing due to Emergency/Inclement Weather.

8 a.m. - 5 p.m.: Area Managers for each area will be responsible.
5 p.m. - midnight: Hall Coordinators on duty for each area will be responsible.
Midnight - 8 a.m.: AHC or AM for Night Management will be responsible.

Staff Availability

In the event of an emergency closure, all Hall Coordinators and Resident Assistants will be expected to be available throughout the closure, unless they are stranded away from campus.

Staffing Hall Desks

During an emergency closure, desk supervisors should strive to maintain desk operations at all desks. If that should become impossible, the following list dictates the priority of desks that should remain open. Desks should be closed in order from the bottom of the list to the top, and staff from closed desks should be relocated to the priority desk. Appropriate signage should be displayed, directing residents to the nearest open desk.

**Jester Center**
1. Jester West Desk
2. Jester Mail and Service Center
3. Jester East Desk

**Waller Creek**
1. San Jacinto Desk
2. Moore-Hill Desk
3. Prather Desk

**Whitis Residence Halls**
1. Kinsolving Desk
2. Carothers Desk
3. Littlefield Desk (7 p.m. - midnight only)
Duty Coverage

Anytime the university is closed, RA and HC staff should revert to weekend coverage (i.e., 24-hour coverage). This may require that the duty shift for these staff members will be extended, and that staff may have to begin their duty shift early, or remain on duty until 5 p.m., when the next person will come on duty.

Night Staffing

Night staffing should not be affected by the closure as every effort will be made to staff all night supervisor locations. Should it be necessary to close a night supervisor location, the below listed areas may be locked down, with student traffic directed to the appropriate entry.

Jester West South Lounge: redirect student traffic to Jester West Main Entrance  Jester East South Lounge: redirect student traffic to Jester East Main Entrance Littlefield Lobby: redirect student traffic to Carothers Main Entrance

Once the staff member responsible has communicated that there is a University Closing, the following staff members will be responsible for the duties listed.

Desk Staff
1. Notify the Hall Coordinator (HC) and Resident Assistant (RA) on-call of closings.
2. If there are any maintenance concerns or emergency work orders and it is between 7:00 a.m. – 4:30 p.m. Monday – Friday, call the Building Services Supervisor (only if the university is open).
3. If there are any maintenance concerns or emergency work orders and it is between 4:30 p.m. – 12:00 a.m., contact the Second Shift maintenance staff member through the B/R desk (1-3714). If after 12:00 a.m., Contact the Hall Coordinator on call who will contact Emergency Maintenance.
4. Contact additional Resident Assistants to assist as instructed by the HC on-call.
5. Monitor the emergency pager and update on-call HC on status of weather emergency and any campus closings.
6. Contact Night Management (NM) supervisor to make sure that NM staff are available and can assist.
7. Call building services supervisor to update them on any maintenance concerns/needs (between 7:00 a.m. and 4:30 p.m.).

Resident Assistants
1. Hang signage to indicate University Closing, including times that classes/business will resume. Hang signage indicating dangerous areas like slippery or icy floors by entryways. If possible, clean wet areas or spread materials to de-ice those areas.
2. If needed, assist Food Service with any needs they have. Staff will be paid for time worked in the dining halls.
3. If there are any maintenance issues, work with the HC on-call to respond to these.
4. Should a snowball fight break out, see the Crowd Control Policy or call UTPD for any assistance with large crowds or complications. Communicate with HC on-call every time UTPD is contacted.
5. Continue to check the radio and news for updates on closures and such.
6. Rely upon all staff to help out, not just those on call.
Night Management Staff

1. NM supervisor should contact AM/HC to determine status of area.
2. Advise nm staff on need for desk coverage, extra building rounds, etc.
3. Closely monitor CCURE for added safety check.

Hall Coordinators

1. Maintain contact with Food Service if they need assistance serving; if so, organize Residence Life staff to do so. Staff will be paid hourly wages for the time they work in dining halls. Keep log of names and work times. Residence Life Director for dining services will serve as our contact.
2. Call upon all HCS to assist with work, not just those on duty.
3. Call UTPD for assistance with large crowds, complications, or special situations.
4. Check list of available rooms.
5. Make sure 24-hour desks are covered and have weather radio available.
6. Instruct RAS on placing “wet floor” signs and other appropriate/related signage.
7. Provide RAS with update on classes and university offices closings and have them post on floors.

Area Manager

1. Notify Residence Life Director and advise on status of area(s).
2. Advise HCs concerning staffing for area office – update area office voicemail appropriately.
3. Be available by phone or on site to troubleshoot and provide support to AM/HC on call.
4. Work with building services supervisors to provide staff and students with updates.
5. Make sure that the most up-to-date information on classes and office closings is communicated to the HC and RA staff.

Residence Life Director

1. Notify Director. Check with AMs periodically to trouble-shoot and anticipate challenges.
2. Provide instructions on posting office closings on movie channel.

Linen Locations

- Jester West linen room is located in Room W0013CL (sheets, towels, pillows, and pillow cases). Key to unlock is available at the JW Desk, and is available to authorized staff (HCs, ACs) only. (The key to the linen area is on a trap that is ONLY accessible to the HCS with a JW trap key—RA trap keys are different and cannot access it.)
- Moore-Hill linen room is located in Room 020 on the ground floor (sheets, pillows, and blankets). The WCR area will use Moore-Hill linen. Towels will need to be obtained from Jester.
- WRH has the following linen closet locations:
  ◦ LLB kitchen area janitorial closet (sheets, towels, pillows, and blankets)
  ◦ Kinsolving basement housekeeping main storage (sheets, towels, pillows, and blankets)
**APPENDIX B. Tornadoes**

The University of Texas at Austin Division of Housing and Food Service

**Desk**

1. With the onset of inclement weather, the desk staff should turn on the weather radio and monitor the outside weather.

There are two types of alerts connected with tornadoes:

- **A Tornado Watch means that conditions outside are right for a tornado** to form and area residents should continue to monitor weather for further developments and be prepared to take cover.

- **A Tornado Warning means that a tornado has been sighted on the ground** and residents should take immediate action to take cover.

**NOTE:** Tornadoes are often preceded by gusty winds, hail, and a loud, roaring sound similar to that of a locomotive or jet engine. If you see a tornado and it looks like it is not moving, it may be headed straight at you.

2. If a tornado warning is issued, the Desk Staff should contact the Assistant/Hall Coordinator.

3. A bad storm may cause a window to break.
   - If between 7:30 a.m. and 4:30 p.m., call the Building Services Supervisor.
   - If between 4:30 p.m. and 12:00 a.m., call the second shift through Prather desk (1-3714).
   - If between 12:00 a.m. and 7:30 a.m., call the on-duty Resident Assistant to board the window. **NOTE:** If the broken window is a first floor window, it is a security breach that should be reported to the Hall Coordinator. The Hall Coordinator will contact Emergency Maintenance.

4. Complete a Maintenance Request Form (MRF) for any broken windows that need to be repaired by maintenance.

**Resident Assistant**

1. Board up windows as needed using plywood and duct tape located in emergency janitorial closet. If the broken window is on the first floor, notify the Hall Coordinator who will call Emergency Maintenance.

2. If a tornado warning is issued, instruct your residents to exit their rooms and line the hallway.

**NOTE:** Jester Center residents who reside on the sixth floor or higher should proceed down the stairwells to the fifth floor or below to take cover.

- Residents should stay away from windows as well as doors and walls that face the exterior.
- Residents should remain quiet so that they can hear further instructions given by staff.
- Residents should cover their heads to protect against flying debris if a tornado does hit.
- Residents should remain on their assigned floor until an “all clear” signal is given by the Hall Coordinator.

**Hall Coordinator**

1. If a tornado warning is issued, the Graduate/Hall Coordinator should contact the Area Manager. Upon confirmation with the Area Manager, the Hall Coordinator should make an announcement using the fire panel speaker. The announcement should be as follows:
Jester
“A Tornado Warning has been issued for the downtown Austin area (if accurate, state a tornado has touched down in the area). All residents are being asked to vacate their rooms and move to a safer location in the building. Please exit your room, lock your door, and proceed to a hallway on the fifth floor or below, staying far away from any windows, open lounges, or elevator landings. Please remain in this area until an all-clear is given over this announcement system.”

Moore-Hill
“A Tornado Warning has been issued for the downtown Austin area (if accurate, state a tornado has touched down in the area). All residents are being asked to vacate their rooms and move to a safer location in the building. Please exit your room, lock your door, and proceed to the basement area, connecting hallway, between Moore and Hill or your hallway, staying far away from any windows. Please remain in this area until an all-clear is given over this announcement system.”

San Jacinto
“A Tornado Warning has been issued for the downtown Austin area (if accurate, state a tornado has touched down in the area). All residents are being asked to vacate their rooms and move to a safer location in the building. Please exit your room, lock your door, and proceed to your hallway or the basement area in the South Tower, staying far away from any windows, open lounges, or elevator landings. Please remain in this area until an all-clear is given over this announcement system.”

Creekside
“A Tornado Warning has been issued for the downtown Austin area (if accurate, state a tornado has touched down in the area). All residents are being asked to vacate their rooms and move to a safer location in the building. Please exit your room, lock your door, and proceed to your hallway or the basement area, staying far away from any windows. Please remain in this area until an all-clear is given over this announcement system.”

Brackenridge/Roberts/Prather
“A Tornado Warning has been issued for the downtown Austin area (if accurate, state a tornado has touched down in the area). All residents are being asked to vacate their rooms and move to a safer location in the building. Please exit your room, lock your door, and proceed to your hallway or the basement area, staying far away from any windows. Please remain in this area until an all-clear is given over this announcement system.”

Kinsolving
“A Tornado Warning has been issued for the downtown Austin area (if accurate, state a tornado has touched down in the area). All residents are being asked to vacate their rooms and move to a safer location in the building. Please exit your room, lock your door, and proceed to your hall, staying far away from any windows. Proceed to the basement of the lower floors of the building and remain in rooms without windows or in inner hallways. Please remain in this area until an all-clear is given over this announcement system.”

Andrews/Blanton/Carothers
“A Tornado Warning has been issued for the downtown Austin area (if accurate, state a tornado has touched down in the area). All residents are being asked to vacate their rooms and move to a safer location in the building. Please exit your room, lock your door, and proceed to your hall, staying far away from any windows. Proceed to the basement of the lower floors of the building and remain in rooms without windows or in inner hallways. Please remain in this area until an all-clear is given over this announcement system.”

Littlefield
“A Tornado Warning has been issued for the downtown Austin area (if accurate, state a tornado has touched down in the area). All residents are being asked to vacate their rooms
and move to a safer location in the building. Please exit your room, lock your door, and proceed to your hall, staying far away from any windows. Proceed to the basement of the lower floors of the building and remain in rooms without windows or in inner hallways. Please remain in this area until an all-clear is given over this announcement system.”

**Whitis Court**
“A Tornado Warning has been issued for the downtown Austin area (if accurate, state a tornado has touched down in the area). All residents are being asked to vacate their rooms and move to a safer location in the building. Please exit your room, lock your door, and proceed to your hall, staying far away from any windows. Proceed to the first floor hallway. Please remain in this area until an all-clear is given over this announcement system.”

**Almetris Duren**
“A Tornado Warning has been issued for the downtown Austin area (if accurate, state a tornado has touched down in the area). All residents are being asked to vacate their rooms and move to a safer location in the building. Please exit your room, lock your door, and proceed to your hallway or the basement area, staying far away from any windows. Please remain in this area until an all-clear is given over this announcement system.”

2. The Graduate/Hall Coordinator should keep in close contact with **UTPD** as well as the Area Manager to determine when the all-clear can be given. Once it is determined that the immediate threat of a tornado has passed, the Graduate/Hall Coordinator should give an “all-clear” over the fire panel speaker. The announcement should state that an all-clear has been issued and that residents may return to their rooms.

3. Once the all-clear is given, **RA** staff should immediately do a set of rounds in the building to determine if any damage has been done (i.e. broken windows, leaks, etc…).

**Area Manager**

Notify the Residence Life Director.

**Residence Life Director**

Notify the Director.
APPENDIX C. Division of Housing and Food Service
Action Plan

Decision Process for a Delayed Opening or Closure of Campus during a Weather Event
The safety of students and staff is the DHFS top priority. Any decision that disrupts the normal operations of DHFS affects the mission of the university. Because of this, a process has been developed that aims to minimize the negative impacts, while ensuring the highest safety possible of the DHFS community.

DHFS Plan of Action by areas:

Associate Director of Occupational and Environment Safety and DHFS Emergency Team (Directors).
• Associate Director of OES monitors communications for closure through CS&S and University communications.
• Once communication has been received it is shared to all DHFS Directors and the Executive Director.
• Each Director of their respected area has already started their emergency planning with staff in the event of a closure since we have to address the students’ needs in our halls. Also the essential staff that remain with DHFS and University staff, students and faculty that remain throughout the closure.
• DHFS IT, Food Service and Housing Office update our Emergency Homepage/Facebook and twitter to reflect University emergency page.

Food Service
• Food Service Director determine the hours of operation for his area and send out email to all parties of which Food Service areas will be open and hours of operations.
• Updates emergency information as needed.
• Essential staffs come to work or stay overnight as needed.
• Meals are determined by amount of staff and time they have.

Facilities Staff
• Second shift starts to put down sand in select areas. This will minimize chances of injuries or slips.
• Make arrangements for DHFS staff (essential staff) in Building Service, Trades and Food Service to stay overnight if needed or come in early. They would be responsible for setting up rooms and beds for essential staff.
• Security shop would be available to address any emergency lock changes or electronic door issues.

Residence Life
• Address closure of entrance doors or any other door closures as needed.
• Address with night staff any issues that need attention
• Make sure 24 hour desk have personal to keep them open.
• Assist in other area like food service if needed.
• Address any programs that may need to be cancelled
IT and Human Resources
• IT staff would assist in updating emergency webpage
• IT staff would assist or come in if needed for computer issues-most concerns could wait until opening or handle over phone.
• HR would address time keeping concerns as communicated through University HR.
• Address WCI concerns as needed by phone or if staff member is available in office.

DHFS Safety Office
• Monitor communication throughout night and early morning on possible closures
• Update weather and communication from CS&S updates
• Make sure DHFS Emergency page, Facebook and Twitter are being enter and updated.
• Follow up on all emergency actions and be available if concerns need addressing
• Keep all records for After Action Reports and review later for Lesson learned.