

Annex H - Damage Assessment

PURPOSE

From the moment a major emergency or disaster occurs, an information process is set in motion which continues from the time of impact to the final stages of recovery and reconstruction. Part of that information process has come to be known as “damage assessment.” This Annex recognizes the need for three phases of damage assessment: Disaster Intelligence; Damage Safety Survey; and Recovery Assessment.

The overall responsible parties for implementing and amending this annex are the Assessor and Highway Engineer.

STANDARD OPERATING GUIDELINES

When an event with damage occurs, it is the responsibility of the county which has sustained damage to report any damage cost estimates, locations, and other information to the state within an allotted amount of time after the event has occurred.

The process of completing a damage assessment in Houston County is done through the Assessor and Highway Engineer’s offices, which each take their allotted area of expertise to assess (i.e., Assessor does buildings and private structures, and the Highway Engineer does public infrastructure).

- a. Annual training should be provided for all city, township, and county officials who may be involved in a damage assessment process. Furthermore, electric co-ops, nonprofits, clinics, and schools should all conduct training to understand the habitability of structure following a disaster. This training shall include the process to fill out local damage and impact assessment forms which are provided through the state.
- b. Following a disaster, officials should collect data about the damage to each of the facilities and infrastructure in their jurisdiction for the Emergency Management Director. Upon receipt of data, officials should contact the Emergency Management Director and make preliminary reports of damage (locations, estimated costs, habitability, etc) known to the director in order for the preliminary local damage and impact assessment to be completed as soon as possible.
- c. It is the responsibility of local business to gather information on their damages and report them to a city or county as able in order for the possibility of funding to be provided as an assistance to recover. Families with damage to primary structures should report their damages to a city or county as able in order to be included in possible Individual Assistance declaration from FEMA. The County Assessor shall assist individuals in identifying the habitability of private structures, with possible assistance from the Emergency Management Director if able.
- d. In the event of damages to a county, responders and personnel shall take pictures prior to any work done on the damaged building or infrastructure, and GIS shall assist in preparing a map of damages to the affected area for a possible state preliminary damage assessment.

SITUATION AND ASSUMPTIONS

Situation

Disaster events have the potential for causing death, injury, and extensive damage to public and private property. A planned damage assessment and reporting procedure is essential for effective response and

recovery operations. Damage assessment procedures are critical to the cost recovery process initiated during presidentially-declared disasters.

Houston County is mainly agricultural. Houston County is 569 square miles or 364,160 acres.

Private non-farm establishments, 2021	400
Non-employer establishments, 2019	1,385
Retail sales, 2017 (\$1000)	111,537
Retail sales per capita, 2017	\$5,963
Accommodation and foodservices sales, 2017 (\$1000)	9,926
Building permits, 2021	35
Population per square mile, 2020	34.1
Housing units, July 1 st , 2021	8,773
Homeownership rate, 2016-2020	81.5%
Median value of owner-occupied housing units, 2016-2020	\$177,000

Assumptions

- This annex may be implemented any time property damage occurs during a disaster or emergency event.
- Transportation and communications systems may be severely disrupted or inoperable. Immediate and comprehensive damage assessment may be impacted by the condition of these systems.
- The initial damage assessment will focus on safety for responders. More detailed assessments of the extent of the damage and estimated cost of recovery will be completed once the areas have been declared safe.
- The prompt and accurate assessment of damage to property following a disaster will be of vital importance to local officials who must make appropriate decisions regarding the recovery operations.
- A comprehensive damage assessment evaluation is necessary to support requests for recovery programs offered at the state and federal levels.
- Damage assessment teams may work for several weeks in varying levels of working conditions. (Long hours, less than ideal working conditions).
- Expert assistance with damage assessment may be available from state government, federal government, other county government, and/or volunteer organizations.
- A properly completed damage assessment may initiate legislation that can mitigate or lessen the effects of future disasters (i.e., building codes may change after a large flood).

CONCEPT OF OPERATIONS

The damage assessment process begins when the Incident Commander determines that significant damage has occurred which needs a systematic damage assessment and/or may meet state or federal assistance guidelines. During and immediately after the event, the incident commander is responsible for conducting a damage assessment of the affected area in an attempt to determine the magnitude, overall impact, dollar loss, and local actions needed.

The Incident Commander or the Planning Chief may appoint a Damage Assessment Unit Leader who will manage all damage assessment efforts. The person appointed to this position will be based on the type of damages seen. For example, if the majority of damage is to infrastructure such as roads the Unit Leader could be the County Engineer while if most of the damage is to private dwellings, the County Assessor may be the more logical choice. If there is a lot of damage, another person may be the unit leader to free the County Assessor and Engineer to free them to do the damage assessment tasks. The County Assessor and County Engineer will ensure that there are personnel trained in the county who can assist in this damage assessment if needed.

Intelligence Gathering

The first step in damage assessment is to gather and evaluate information to determine the location, extent of damage and the impact on the community resulting from a disaster. Receipt of damage notification may come through 911, Fire and Rescue, Public Agencies and private owners. In most cases, this information will come through the incident command structure and will be collated by the planning section.

This information should be supplemented with a windshield survey by the county highway department with oversight by the county engineer, assistant county engineer, and maintenance supervisor, immediately after an event occurs as personnel and safety allows. This should be coordinated through the Incident Commander. Information gathering, generally done in the first 24 hours, provides the Incident Commander with quick information to assess the size of an event and the extent of damage, in addition to prioritizing facilities critical to government response and recovery activities. These facilities generally include: 911 centers, Emergency Operation Centers, Police and Fire stations, Public Works facilities, hospitals, nursing homes/assisted care facilities, bridges and roads, electrical systems, etc. First Responders should report damage information to the Emergency Operations Center (EOC) or the Incident Commander and/or the Damage Assessment Unit Leader, if available. This will be collated and shared with the Incident Commander. If the information is time-critical this information should be given directly to affected groups and the chain of command will be informed as soon as possible.

Damage Safety Survey

Within 36 hours, an initial damage assessment of all major damage should be completed. This information will provide supporting information for a state of emergency declaration and requesting a presidentially declared disaster. This general assessment will include estimates of financial losses of public and private property, and does not need to be an exact number. Damage assessment forms can be revised as more exact information comes in. All damage notifications should be documented and duplicates eliminated. These will then be assigned to a damage assessor for a Preliminary Damage Assessment (PDA).

A PDA will be conducted to determine if the asset is stable or if it requires isolation from occupancy/use. The County Assessor will coordinate the assessment for buildings. The County Engineer will coordinate the assessment of the roads and bridges. Local city/township personnel should be involved with this assessment whenever possible. Additional assistance can be brought in from neighboring counties unaffected by the disaster or local volunteer organizations such as the Red Cross. If this is not possible,

additional assistance from the State or Federal government may be requested by the Emergency Management Director or Incident Commander through the State Duty Officer.

This damage assessment will provide a tool to assist the Incident Commander/Emergency Management Director in deciding whether the event is of such significance that assistance from outside resources should be requested for recovery. It also allows the local, state and federal governments to develop a picture of the overall impact of an emergency incident or disaster and to establish priorities for recovery and future mitigation efforts.

The American Red Cross may provide limited damage assessment information and could provide additional assessment information related to residential properties, based on National Red Cross approval.

Recovery Assessment

During this phase a Damage Estimate Report (DER) will be produced for each asset. The estimate will be based on the cost of returning the asset to pre-event status. The Damage Assessment Unit Leader will ensure that a DER is completed by one of the unit or asset's independent insurance provider will do the DER.

Each DER will be compiled to produce a Damage Assessment Report (DAR) by category as defined by FEMA and will comply with documentation and time frames specified by the Disaster Assistance Program.

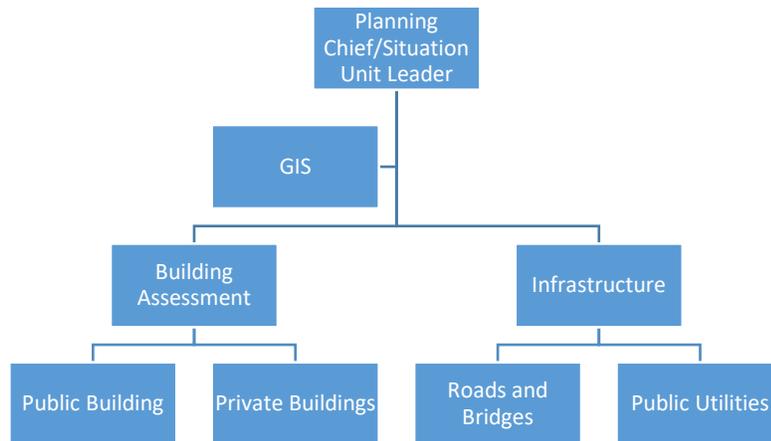
Survey teams will consist of local government employees and designated private sector personnel when necessary (i.e., insurance agents, engineers, contractors, Red Cross, etc.). Situation reports from field operations should be forwarded to the EOC to keep them apprised of the situation. The purpose of the situation report is to continually upgrade disaster status information. All significant damage information will be forwarded and collated in the EOC.

Those involved in Damage Assessment survey teams may use provided Damage Assessment Field Guides to determine habitability and damage costs to a structure.

If state/federal aid is possible, joint state/federal assessment teams will visit affected areas after they have reviewed the initial damage assessment reports provided by the local jurisdiction(s). When federal/state damage survey teams are working in the County, appropriate city/county officials will accompany each team and participate in the survey.

ORGANIZATION AND ASSIGNMENT OF RESPONSIBILITIES

Organization



Responsibilities

Preparedness

Overall coordination and preparedness of damage assessment activities for the Houston County will be the responsibility of the Houston County Assessor in coordination with the County Engineer.

The Houston County Assessor will:

- Coordinate all phases of damage assessment in conjunction with the County Engineer;
- Provide damage assessment training for identified staff;
- Integrate use of Geographic Information System (GIS) to record damage assessment for addresses and facilities
- Identify and establish liaison with volunteer organizations and private individuals who can provide assistance in damage assessment (i.e., Red Cross, Insurance agents, engineers, etc.)
- Review various forms to be completed during damage assessment process and ensure supplies are on hand
- Maintain a file of maps, pre-disaster photos, tax assessments, etc
- Go to the EOC when activated
- Report any immediate life threatening situations directly to the Incident Commander
- Prepare damage assessment reports consistent with state and federal guidelines
- Make initial disaster report to the EOC and follow up with required paperwork to support requests for assistance
- Collect damage assessment information and provide input to Planning Chief for daily briefing
- Establish priorities based on type of event with a focus on key transportation links, 911 centers, Emergency Operation Centers, Police and Fire stations, hospitals, sanitary and storm sewer systems, and water systems
- Ensure damage is photographed and mapped when safety allows
- Collect incident data at earliest possible opportunity; continue collecting data throughout incident
- Form, assign, and supervise damage assessment teams and other field observers

- Collect, compile, and maintain damage records
- Notify Operations Chief of need to relocate building occupants from hazardous structures
- Ensure inspections are conducted of residential, commercial, and public building structures and facilities; ensure posting is made concerning unsafe to occupy, where necessary, or structures are condemned if beyond repair
- Contact volunteer organizations or private individuals who may be needed to provide assistance in damage assessment (i.e., Red Cross, Insurance agents, engineers, etc.)
- Secure services of other professionals, as necessary, to assist in damage assessment and development of repair strategies
- Ensure licensed civil engineers, as well as field inspection staff, perform inspections to determine whether infrastructure is useable or unsafe
- Ensure unsafe facilities, roads, bridges, etc., are visibly marked as unsafe
- Coordinate damage assessment information with Finance/Risk Management Section for inclusion in disaster assistance requests

The Houston County Engineer will:

- Coordinate all phases of damage assessment in conjunction with the County Assessor
- Determine specific roles for damage assessment staff and teams and provide checklists for duties
- Identify expected method of communication that will be used during damage assessment and ensure that appropriate equipment is available
- Assist the County Assessor in specific roles for damage assessment staff and teams and provide checklists for duties
- Provide damage assessment training for identified staff
- Go to the EOC when activated
- Report any immediate life threatening situations directly to the Incident Commander
- Prepare damage assessment reports consistent with state and federal guidelines
- Make initial disaster report to the EOC and follow up with required paperwork to support requests for assistance
- Collect damage assessment information and provide input to Planning Chief for daily briefing
- Establish priorities based on type of event with a focus on key transportation links, 911 centers, Emergency Operation Centers, Police and Fire stations, hospitals, sanitary and storm sewer systems, and water systems
- Ensure damage is photographed and mapped when safety allows
- Collect incident data at earliest possible opportunity; continue collecting data throughout incident
- Form, assign, and supervise damage assessment teams and other field observers
- Collect, compile, and maintain damage records
- Contact volunteer organizations or private individuals who may be needed to provide assistance in damage assessment (i.e., Red Cross, Insurance agents, engineers, etc.)
- Secure services of other professionals, as necessary, to assist in damage assessment and development of repair strategies

- Ensure licensed civil engineers, as well as field inspection staff, perform inspections to determine whether infrastructure is useable or unsafe
- Ensure unsafe facilities, roads, bridges, etc., are visibly marked as unsafe
- Coordinate damage assessment information with Finance/Risk Management Section for inclusion in disaster assistance requests
- Accompany state and federal damage assessment teams to inspect damage sites
- Provide records and mapping information regarding damaged infrastructure and structures including streets, sewers, street lights, signals, airport, bridges, etc.
- Coordinate with PIO and IC regarding keeping the public informed about hazardous roads, bridges, drinking water, etc.

Response

The Building Unit Leader will:

- Assist Damage Assessment Unit Leader in prioritizing and coordinating order of assessment
- Coordinate the assessment of damage to public and private property (i.e., homes, businesses, etc.)
- Coordinate damage assessment to city buildings with city officials
- Prepare priority list for those facilities with highest risk to the public health, welfare, and safety
- Work with insurance companies to gather damage assessments of insured private buildings
- Report inspection results to Damage Assessment Unit Leader

Infrastructure Unit Leader will:

- Assist Damage Assessment Unit Leader in prioritizing and coordinating order of assessment
- Assess damage to roads, bridges, and culverts
- Gather damage assessments for sewers, water systems, electric service, communication, parks, etc
- Prepare priority list for those facilities with highest risk to the public health, welfare, and safety
- Provide technical assistance in evaluation of public buildings and public infrastructure damaged by an event
- Assign field inspectors to damage assessment teams and deploy to areas where damage assessment is needed
- Contact Building Official to coordinate inspections;
- Notify Highway Department of infrastructure to barricade or post as unsafe
- Document damage and report inspection results to Damage Assessment Unit Leader

Operations Chief will assist with assessing the on-site situation (i.e., structures affected, number of injured or killed, evacuated, etc.).

County Auditor, County Feedlot Officer and/or the Planning and Zoning Inspector will be called upon as needed to help with the damage assessment efforts.

Cities and Townships will locate and report the location of damage to the Damage Assessment Unit Leader as soon as possible following a disaster regarding assets directly under their control.

Public and private utility companies serving the area will provide damage information concerning respective operations/facilities and the restoration of services.

Recovery

Damage Assessment Unit

- After emergency situation is resolved, continue to provide building inspections related to health and life safety
- Complete all documentation reports necessary for records and reimbursement
- Work with the Administrative/Finance Chief to compile the damage estimate reports (DERs)
- Compile all costs associated with event and work with Finance Chief to obtain County, State and Federal reimbursement if applicable
- Evaluate operations and collected information during response; submit necessary improvements and revisions to the EOP

The Administrative/Finance Chief will compile damage assessment reports into a summary document of findings in conjunction with the Damage Assessment Unit Leader, and any other people who have input.

Direction and Control

The Damage Assessment Unit Leader is a member of the EOC and will work under the Planning Chief.

All damage reports that come into the EOC will go through the Damage Assessment Unit for analysis and plotting.

ADMINISTRATION AND LOGISTICS

ADMINISTRATION

Private Appraisers, insurance adjusters and others may obtain damage assessment reports from the Emergency Operations Center only with the consent of the Incident Commander.

Actions taken and disaster-related expenses incurred must be documented by all departments. Records must be kept on overtime, invoices for material, equipment usage, temporary/permanent repairs, etc.

Damage assessment information will be provided to the State Homeland Security/Emergency Management Department for necessary release to the Federal agencies.

All organizations supporting emergency communications within the County will follow their individual departments and agencies administrative procedures, in so as far they do not conflict with the County's emergency operations.

Logistics

The County Assessor and GIS Coordinator will maintain updated data and maps pertaining to the County's infrastructure to include facilities, streets, roads, and utility systems. Up-to-date maps will be provided to the EOC.

PLAN DEVELOPMENT AND MAINTENANCE

The primary responsibility for coordinating the development and maintenance of this annex rests with the County Assessor and County Engineer. It will be reviewed in accordance with the Basic Plan.

Organization SOPs

All organizations that support this annex will develop and maintain their own organization’s Standard Operating Procedures (SOPs), and mutual aid agreements, as appropriate, that are supportive of this annex. This information will be coordinated with and provided to the County EMD, as necessary.

Training and Exercises

The County Assessor will train an assessment team and exercise this annex periodically, as necessary. This should be coordinated with the County’s training and exercise plan maintained by the EMD.

Training to and exercise of individual organization’s SOPs that support this annex are the responsibility of each respective organization. Whenever possible this should be coordinated with the county plan.

AUTHORITIES AND REFERENCES

None.

Attachment 1

ARC/FEMA Levels of Disaster Damage (10/2006)		
DAMAGE LEVEL	FEMA DEFINITION (Use this criteria when making reports)	RED CROSS DEFINITION (For comparison purposes only)
Affected	<p>This structure is habitable. A structure which received damage but is useable for its intended purpose.</p> <p>Water Damage: (Single/Multi) Less than 1 foot in basement, minor access problem. (Mobile) Water causes access problems underneath. No water touched unit.</p>	<p>The structure is habitable. Structure damage considered to be nuisance; dwelling is livable without repairs. Water Damage: (Single/Multi) 0” – 12” on first floor including basement flooding. (Mobile) 0” – 6” in unit; skirting damaged or missing.</p>
Minor Damage	<p>This structure is currently uninhabitable. A structure, which has received such damage that it is no longer useable for its basic purpose but can be easily repaired and made useable in a short time.</p> <p>Water Damage: (Single/Multi) Less than 2 feet on first floor. No basement or 1 to 8 feet in basement. (Mobile) Utilities flooded, piers shifted/washed out.</p>	<p>The structure requires minor repairs to habitable. Minor structural damage, i.e. numerous broken windows, portions of roofing and/or siding missing, damage to small sections of roof. Water Damage: (Single/Multi) 12” – 36” water in first floor; (Mobile) 6” – 24” in the mobile home.</p>
Major Damage	<p>Structure currently uninhabitable, which has received substantial damage and will require considerable time to repair, but is economically feasible to repair.</p> <p>Water Damage: (Single/Multi) 2 feet or more on first floor. Structural damage; collapsed basement walls. (Mobile) Water-soaked bottom board, shifted on piers.</p>	<p>Structure currently uninhabitable and will require extensive repairs to be made habitable.</p> <p>Water Damage: 36” to 60” of water in the structure (main floor) (single family homes and apartments) 24” to 48” of water in the structure (mobile homes).</p>
Destroyed	<p>Structure is permanently uninhabitable, has received severe damage and repair is not economically or technically feasible.</p> <p>Water Damage: (Single/Multi) Not economical to repair, home pushed off of foundation. (Mobile) Water above floor level, or unit swept off of foundation.</p>	<p>Structure is permanently uninhabitable and cannot be economically repaired.</p> <p>Water damage: More than 60” of water in structure(single/multi family) 48” of water in mobile home.</p> <p>Special Note: Any structure which has been shifted off of its foundation is considered destroyed by the Red Cross.</p>

INDIVIDUAL/BUSINESS DAMAGE ASSESSMENT COLLECTION FORM												
COUNTY	JURISDICTION	DATE	DAMAGE ASSESSOR				CONTACT TELEPHONE					
General Description of Area/Comments												
Property Address	Property Type				Status	Damage Level				App Ins	Water Depth	COMMENTS
	Single Fam	Multi Fam	MH	Business	Own/Rent	Dest	Maj	Min	Aff	Y/N	No. Ft./Flr.	

	Destroyed	Major	Minor	Affected	Totals
Single Family					
Multi-Family					
Mfg. Homes					
Business					
Totals:					

Totals:

INDIVIDUAL/BUSINESS DAMAGE ASSESSMENT
COLLECTION FORM INSTRUCTIONS

General Comments

The purpose of this assessment is to get a quick overview of damage to the jurisdiction that may form the basis for requesting assistance from state and federal authorities and for local disaster recovery efforts. This assessment should be completed within 48 hours after the disaster occurs. Do not conduct damage assessments at night, or unnecessarily expose assessors to dangerous situations. **Respect private property by conducting the assessment from the outside of homes and businesses.** Refer any questions from the public regarding the situation to the appropriate authorities. Report the information collected to your County Emergency Manager, so it can be included in the County’s report, and keep copies of the survey itself, for possible later use by State/FEMA PDA Teams, should a disaster declaration be sought.

<u>FIELD</u>	<u>EXPLANATION</u>
COUNTY	Name of the County where the damage assessment is being done. Use separate forms for each county surveyed.
JURISDICTION	City/Area being surveyed. Try to keep all damage assessment information for a city/area together.
DATE	Day, month and year that the survey is completed. Use the format mm/dd/yy for dates.
DAMAGE ASSESSOR	Name(s) of those completing the survey.
CONTACT TELEPHONE	Area Code and 10-digit phone number where the assessor(s), or someone who can interpret assessment results can be reached.
GENERAL DESCRIPTION OF AREA/ COMMENTS	Describe, in general terms, the effects of the disaster on homes and businesses in the jurisdiction surveyed. Highlight, problems caused by flooding, lack of access, or utility outages. Describe the boundaries of the area that was affected, as well as any unique characteristics of the area that may impact or complicate the recovery effort.
PROPERTY ADDRESS	Enter the street address of the property being surveyed. If no street number is available, list the “fire number” or other identification number the property has been assigned. In the event that none of these methods of ID are available, describe in the address and notes blocks using any information about the house that would set it apart from others. An example would be “White house on south side of the road, 5 houses from the intersection of Flower and Cactus Streets.
PROPERTY TYPE	Check the “ Single Fame ” block if the property is a one family home. Check “ Multi Fame ” if a duplex, triplex, fourplex, or an apartment, condominium or town home. Count each unit as a separate dwelling (i.e., an apartment building with 20 apartments is considered 20 dwellings). If the dwelling is a “mobile” or “manufactured” home, check the “ MH ” dwelling type. If the property is a Business , check that block on the form.). Don’t forget that the damaged apartment complex or mobile home park itself is also considered a business for survey purposes.

STATUS . An exact count is not necessary, a rough percentage will do. Indicate whether the dwelling is owned or rented by the resident, to the extent you are able. In general terms (for estimating when necessary), facilities listed as apartments are rented. Most condominiums are owner-occupied. Manufactured housing (mobile homes) is usually a “mix” of rented and owner-occupied units. In many cases, mobile home park managers, town-home and condominium associations can provide more accurate information on the number of owner-occupied dwellings

DAMAGE LEVEL	Use the FEMA criteria for estimating damage contained on the chart at the end of these instructions. NOTE: American Red Cross definitions are also provided, for purposes of comparison.
APP INS (Y/N)	Does the resident/business owner have the appropriate kind of insurance to cover their disaster loss? General information about insurance coverage can be obtained from local agents.
WATER DEPTH	If the disaster includes flooding, indicate how deep floodwaters got into the residence or business. Report in feet/inches for each floor involved (ex. 8 feet of water in basement/3 feet of water in main floor).
COMMENTS	Note any observations you have made at this address, which aided you in making your damage rating decision. Also note any special situations (i.e. Low-income housing, elderly population, etc.)
TOTALS	Record the numbers of single-family homes destroyed, with major damage, minor damage and those affected from the information collected above. Total all single-family homes damaged in the far-right column of the table. Repeat the process for multi-family, manufactured homes and businesses damaged. Finally, please total each of the columns (Destroyed, Major, Minor, Affected and Total).