



OHIO EMA
PUBLIC
ASSISTANCE
DAMAGE
ASSESSMENT
FIELD GUIDE



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The Purpose of the Damage Assessment Guide

Damage assessment is the process which determines the effects of a natural or human-made disaster. Specifically, Public Assistance damage assessment determines the impact of an event on public entities (cities, townships, counties, villages, schools and universities, special districts and authorities, etc.) and certain private non-profit organizations (PNP). Damages are captured in seven categories: debris removal, emergency protective measures, roads and bridges, water control facilities, buildings and equipment, utilities and parks and recreation.

This field guide has been designed to serve as a quick reference tool to be utilized by local officials and others conducting local damage assessments for public entities and certain private non-profit organizations.

Why Do Damage Assessment?

Each local assessment is essential in determining:

- What happened
- The magnitude and impact of the event
- The effects
- How much damage is there to the infrastructure
- Which areas suffered the greatest impact
- Which situations receive priority
- What types of assistance are needed (local, state, federal)
- The identification of accurate damage totals for reporting purposes

Local Damage Assessment Must Be Rapid, Detailed, and Accurate.

- It should be completed and submitted to Ohio Emergency Management Agency (EMA) as soon as possible following an event. The data collected will then be analyzed to determine if supplemental assistance (physical and/or financial) will be needed from the state and/or federal agencies.
- If necessary, Ohio EMA will request a Joint Preliminary Damage Assessment (Joint PDA) with the Federal Emergency Management Agency (FEMA).
- Delay in completing the assessment could delay supplemental disaster assistance to those most in need.
- Assessment reports should be as accurate as possible.

DO:

- Conduct visual inspections to verify damages and essential services that have been effected.
- Determine extent of insurance coverage.
- Use resources such as public works, county engineer, building officials, etc. to gather quality estimates of needed repairs.
- Identify critical infrastructure/facilities that are affected by the event and associated cost to restore.
- Maintain documentation that identifies costs incurred, and costs remaining.
- Identify health and safety impacts and the overall impact to the community.

DON'T:

- Include costs not related to the event.
- Include costs for deferred maintenance, pre-existing conditions, or wish list type repairs.
- Forget about your insurance coverage.
- Count federal highways in your damage totals.
- Rely on somebody else to assess the situation. Plan ahead and know how you are going to complete damage assessments for every event.
- Think of it as 'filling out paper work for nothing'. Good damage assessments lead to accurate reporting and event situation awareness.
- Exaggerate the amount of damage, as it will be detrimental to the assessment process

Documenting the Damage

Damage assessment starts at the local level.

Local jurisdictions or counties can use the following forms to document the disaster damage estimates:

Damage and Needs Assessment Form

Site Estimate Form

Gathering information to complete the Damage and Needs Assessment Form should be the first priority. Once that is completed, a jurisdiction can start using the Site Estimate forms to gain a more in-depth break down of costs.

Damage and Needs Assessment Form Helpful Hints

- This is a summary of all your damages by category and only the first page is required for Public Assistance Damage Assessment.
- This form needs to be sent into your County EMA as soon as possible. Your County EMA will provide it to the Ohio EMA.
- Damage Assessment is a continuous process. The numbers can be updated as needed.
- Record pertinent information that will impact recovery.
- Include requested budget information.

Site Estimate Form Helpful Hints

- Category A: Debris Removal and Category B: Emergency Protective Measures can each be a site reflecting jurisdiction-wide cost/impact.
- All other categories should have a site by facility unless they are like damages (i.e. chip and seal 20 miles of township road jurisdiction-wide).
- Use the amount of forms necessary to get an accurate representation of all disaster damage estimates that have occurred in the jurisdiction.
- Document all temporary and permanent repairs by site and by category.
- Describe the damage and impact for the site and the percent complete.
- Document populations affected, detours, loss of critical systems, etc., in the impacted area.

Tips for Estimating Costs

- Estimate hours and rates using your own labor, equipment, and materials. Use FEMA Schedule of Equipment Rates for your own equipment. **Note:** Only Overtime for Category A and B
- Request assistance from county engineer.
- Use contract estimates or historical cost data from previous repairs or events.
- Estimate only costs that you will incur. Do not include costs from other agencies. Deduct insurance proceeds.
- Estimates should be based on return to pre-disaster design, function, and capacity.
- Estimates for vehicles or contents should be based on the same type make, year, model, and condition.

Public Assistance Damage Assessment Category Guidelines

The following pages will break down the seven categories involved in capturing costs associated with the event, along with a description and examples of eligible activities.

Documenting costs by category and jurisdiction will lead to an accurate representation of total impact.

Category A: Debris Removal

Purpose:

Debris removal is necessary to eliminate immediate threats to life, public health and safety; to eliminate threat of significant damage to improved public or private property; to ensure economic recovery of the affected community; and to mitigate risk to life or property by removing extensively damaged structures. Includes trees and woody debris, sand, mud, silt, gravel, etc.

Eligible Activities:

- Debris removal from publically owned streets or highways to allow for the safe passage of emergency vehicles and the general public.
- Debris must have been generated by the disaster event.
- Private property debris must be brought to the curb or right-of ways.
- Debris must be located on improved property or right-of-ways.

Category A: Debris Removal

Debris Estimating Formulas

Estimating Rule of Thumb:

Cubic yards=CY

- 15 trees, 8 inches in diameter = 40 CY
- Single wide mobile home = 290 CY
- Double wide mobile home = 415 CY
- Root system (8'-10' dia.) = One flatbed trailer to move

Treat debris piles as a cube, not a cone, when performing estimates.

Formulas

Building formula:

$L' \times W'$ (building footprint) x No. of Stories x
 $0.2 = \underline{\hspace{2cm}}$ CY of debris

Debris pile formula:

$\underline{L' \times W' \times H'}$ = $\underline{\hspace{2cm}}$ CY of debris.

Category B: Emergency Protective Measures

Purpose:

Measures taken before, during, and after a disaster to save lives, protect public health and safety, and protect improved public and private property.

Eligible Activities:

- Emergency Operations Center activation (EOC)
- Warning devices (barricades, signs, and announcements)
- Fire, police, and search & rescue
- Provision of shelters or emergency care
- Mutual aid or donated resources
- Provision of food, water, ice, and other essential needs
- Emergency repairs, sandbagging
- Removal of health and safety hazards
- Track organized volunteer hours during the event. It could lead to a local match offset.

Category C: Roads and Bridges

Purpose:

Repair to eligible facilities to include public roads and bridges. To be eligible, roads and bridges cannot be part of a Federal-Aid system or fall under authority of another jurisdiction.

Eligible Activities:

- Road surfaces, bases
- Shoulders, ditches, and guardrails
- Culverts
- Low water crossings
- Decking and Pavement
- Slope protection
- Drainage structures
- Approaches
- Piers
- Girders and abutments
- Determine extent of damage; what is needed to return to pre-disaster design, function, and capacity.
- If the road/bridge needs to be completely shut down document: population affected, detour miles, and time to complete repairs.

Category D: Water Control Facilities

Purpose:

Repair of irrigation systems, engineered drainage channels, and pumping facilities. Repair of levees, dams, and flood control channels fall under Category D, but the eligibility of these facilities is restricted. US Army Corp of Engineers (USACE) and Natural Resources Conservation Service (NRCS) have primary authority for flood control works.

Eligible Activities:

- Channel alignment
- Recreation
- Navigation
- Land reclamation
- Fish and wildlife habitat
- Interior drainage or Irrigation
- Erosion prevention
- Flood control
- Did facility cause flooding or damage to adjacent properties?
- Did you need to evacuate? How many?

Category E: Building and Equipment

Purpose:

Repair or replacement to eligible facilities to include public or PNP buildings, structural components, interior systems, equipment, vehicles, and content. The public entity must be responsible for the repair or replacement.

Eligible Activities:

- Buildings, including contents such as furnishings and interior systems.
- Replacement of pre-disaster quantities of consumable supplies and inventory.
- Replacement of library books and publications.
- Removal of mud, silt, or other accumulated debris.
- Equipment and vehicles may be eligible for repair or replacement if damaged as result of an event.
- Estimates based on return to pre-disaster design, function, and capacity.
- Determine insurance coverage.

Category F: Utilities

Purpose:

Damage to public or PNP utilities can impact the community's ability to respond and recover after the event and may cause health and safety risks when services are disrupted. Repair to these facilities are crucial and eligible unless repairs are the responsibility of another entity.

Eligible Activities:

- Water treatment and delivery facilities
- Power generation facilities
- Sewage collection and treatment facilities
- Natural gas systems
- Communication systems
- Substations/power lines
- Temporary and permanent repair costs
- Restoration costs
- Determine amount of insurance coverage.
- Estimates based on return to pre-disaster design, function, and capacity.

Category G: Parks, Recreational, and Other

Purpose:

Damage to parks, recreational, and other facilities can impact the community's ability to respond and recover after the event.

Consideration should be given to securing the damaged areas from public access.

Eligible Activities:

- Public mass transit facilities
- Playground equipment, swimming pools, tennis courts, and recreation fields
- Boat docks, ramps, and piers
- Public-owned golf courses
- Fish hatcheries
- Determine amount of insurance coverage.
- Estimates based on return to pre-disaster design, function, and capacity.

Facilities that do not fit into categories C-F fall in this category. PNP-owned parks and recreational facilities are not eligible.

Resource Information

Ohio EMA Recovery Branch: (614) 799-3665

Public Assistance Program:

http://ema.ohio.gov/Recovery_PAGrantProgram

FEMA Schedule of Equipment Rates:

<http://www.fema.gov/government/grant/pa/eqrates>

Ohio EMA Assistance Tool Box:

http://ema.ohio.gov/Recovery_DAToolbox

Notes:



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