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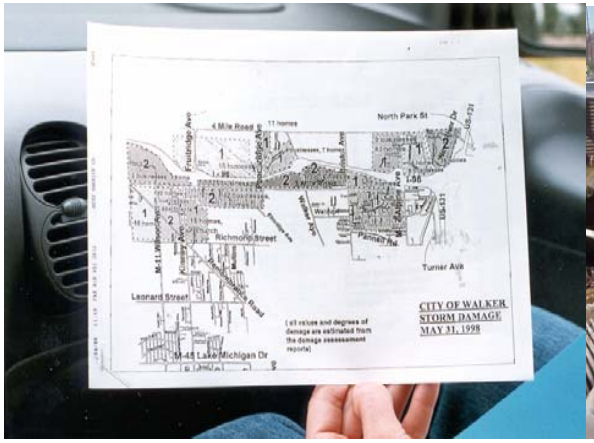
Emergency Management Division
Michigan Department of State Police

MICHIGAN DAMAGE ASSESSMENT HANDBOOK



A GUIDANCE HANDBOOK TO ASSIST LOCAL EMERGENCY MANAGEMENT PROGRAMS AND STATE AGENCIES IN THE COLLECTION, COMPILATION, REVIEW, ANALYSIS, AND REPORTING OF DAMAGE / IMPACT DATA SUBSEQUENT TO A DISASTER OR EMERGENCY.

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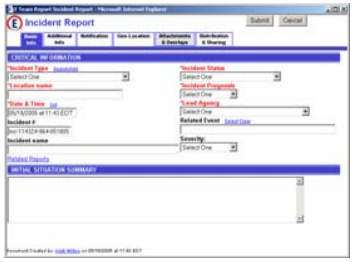
QUICK REFERENCE PAGE: DAMAGE ASSESSMENT REPORTING (NEW WAY VS. OLD WAY)

Old Way

New Way

Flash Report

E Team Incident Report

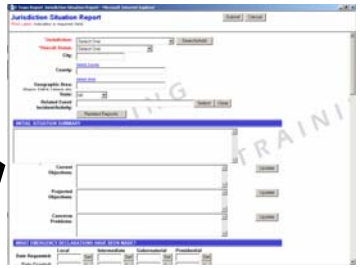


Create **ONE** report and **UPDATE** it.

Local emergency management programs create Incidents and notify MI SEOC Event / Incident Notification group. MSP Posts (per Official Order No. 40) should work with the local emergency management program to create an Incident, if not already done. If an Incident has been created, the MSP Post can update it with new information to meet the Official Order No. 40 requirements. MSP Posts should **NOT** create a duplicate Incident within E Team. (If E Team is inoperable or otherwise unavailable, MSP Posts should file a hardcopy Incident Report to meet the Official Order No. 40 requirements.)

E Team Jurisdiction Situation Report

Damage and Injury Assessment Report (EMD-2)

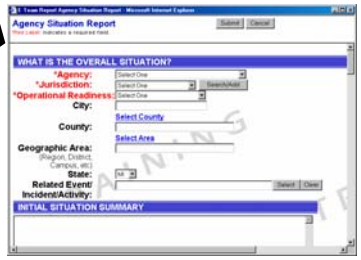


OR

Create **ONE** report and **UPDATE** it.

Local emergency management programs create Jurisdiction Situation Reports and notify MI SEOC Damage Assessment group. (Note: Local agencies may use the Agency Situation Report to compile and report agency-specific information to the local Emergency Manager. The local Emergency Manager will select relevant items to include in a Jurisdiction Situation Report.)

E Team Agency Situation Report



Create **ONE** report and **UPDATE** it.

State agencies create Agency Situation Reports and notify MI SEOC Damage Assessment group. (Note: Individual state offices / facilities may update the Agency Situation Report with new information. However, only **ONE** Agency Situation Report should be established within E Team. **DO NOT** establish duplicate Agency Situation Reports.)

EMD/MSP
1/2006

QUICK REFERENCE PAGE: SUMMARY OF SUGGESTED ASSESSMENT / REPORTING ACTIONS FOR LOCAL EMERGENCY MANAGEMENT PROGRAMS*

Event	State / Federal Assistance Not Required	State / Federal Assistance Required	Suggested Assessment / Reporting Actions	Page Reference
Small-scale community emergency *(Examples: minor flood or storm damage; minor infrastructure failure; minor hazardous material spill; etc.)*	X		• Collect / compile assessment data • Submit Incident Report • Declare local State of Emergency?	6-7; 27-40 5; 17-24 5; 25
Large-scale and/or severe community emergency *(Examples: major flood or storm damage; major infrastructure failure; major civil disturbance; major hazardous material spill; etc.)*		X	• Collect / compile assessment data • Submit Incident Report • Declare local State of Emergency • Request state / federal assistance • Submit detailed Situation Report	6-7; 27-40 5; 17-24 5; 25 9; 26 8; 41-49
Terrorist WMD attack *(Example: terrorist attack using chemical, biological, radiological, nuclear, or explosives / incendiary agents / devices.)*		X	• Collect / compile assessment data • Submit Incident Report • Declare local State of Emergency • Request state / federal assistance • Submit detailed Situation Report	6-7; 27-40 5; 17-24 5; 25 9; 26 8; 41-49
Medical incident *(Example: disease outbreak / epidemic affecting community.)*		X	• Submit Medical Incident Report in E Team** *(Note: the E Team Incident Report can also be used to report Epidemics.)* • Declare local State of Emergency? • Request state / federal assistance†	E Team User Guide 5; 25 5; 25 9; 26
Planned event (minor) *(Example: community-wide festival, rally, or similar event / large gathering.)*	X		• Submit Planned Activity Report in E Team**	E Team User Guide
Planned event (major) *(Examples: major regional or national event – i.e., sports contest, convention, political rally, business meeting, etc.)*		X	• Submit Planned Activity Report in E Team** • Request state / federal assistance†	E Team User Guide 9; 26

*Because each incident / situation is unique, these suggested actions should be used as GUIDELINES only. Each community must determine the appropriate assessment response based on the incident / situational circumstances.

**If E Team is inoperable or otherwise unavailable, use the hardcopy Incident Report found in this handbook (Attachment B).

†If using E Team, use the E Team Resource Request. If E Team is inoperable or otherwise unavailable, use the hardcopy "Format for Requesting a Governor's Emergency or Disaster Declaration" found in this handbook (Attachment D).

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Summary of Major Changes Found in this Guidance Document

Subject	Previous Guidance (2/98)	New Guidance (1/06)	Change	Page References
SEOC Incident Management System (IMS)	Did not follow IMS	NIMS compliant SEOC IMS structure	New SEOC IMS structure; Assessment Group now called Planning Section / Assessment Unit	1-4
Incident Reporting System	Facsimile, LEIN, E-Mail used as primary means to report incidents	E Team Information Management System (web-based) used as primary means to report incidents	New primary reporting system; "traditional" system now used as backup only	4-5, 8, 15-16
Initial Incident Report	Flash Report (EMD-22)	Incident Report (E Team) included as Attachment B	New incident reporting form	5, 17-24, 50
Recipients of Incident Report, Local State of Emergency Declaration, and Governor's Declaration Request	EMD/MSP District Coordinator, MSP Operations, and EMD/MSP Office	EMD/MSP District Coordinator, MSP Operations, and EMD/MSP Office, Post Commander of nearest MSP Post	Reports also go to Post Commander of nearest MSP Post	5, 16, 25-26
Local Data Collection	A variety of locally-derived methods were used to collect data from community businesses and institutions	"Damage Survey Form for Businesses and Institutions" included as Attachment F	New form to aid in local data collection	6-7, 36-37
Detailed Assessment Report	Damage and Injury Assessment Report (EMD-2)	Situation Reports (Jurisdiction Situation Report for locals; Agency Situation Report for state agencies) included as Attachment I	New detailed assessment reporting form	8, 41-49
Damage Classification System	Destroyed, Major Damage and Minor Damage categories	Destroyed, Major Damage, Minor Damage and Affected categories	Affected category added; damage levels and Damage Survey Worksheet revised accordingly	29-34
Geospatial Data Collection	Geospatial data not collected	Geospatial data collection is highly recommended; basic guidance included in Attachment E	Geospatial data collection procedures added; Damage Survey Worksheet revised accordingly	33-35
Disaster Debris Estimating	Disaster debris clearance costs included on Damage and Injury Assessment Report under Public Damage section	Disaster debris clearance costs included on Situation Report under "Public Assistance Damages" section	Disaster Debris Estimating Techniques guidance provided to assist with debris quantity / cost estimations; public damage cost categories simplified	38
Assessment of WMD Attacks	No specific guidance provided	"Assessment Protocols for Weapons of Mass Destruction Attacks" included as Attachment M	New guidance provided to aid in assessing damage / impacts in post-WMD attack environment	61-66
Assessment Standard Operating Procedures	Sample SOP format provided	Sample SOP format provided that reflects the use of E Team (Attachment N)	Appropriate references to E Team included in task assignments	67-74

DAMAGE ASSESSMENT PROCESS:

Damage Assessment Organizational Basics

Basic Purposes of Damage Assessment. Damage assessment is defined as the systematic process of determining and appraising the nature and extent of the loss, suffering, or harm to a community resulting from a disaster or emergency. Damage assessment is concerned with determining ***what*** happened, ***when***, ***where*** and ***how***, and ***who*** it affected. Damage assessment is crucial because of its direct relationship to organized action by response personnel. Effective organized action requires knowledgeable decision making based on accurate information. Unless an organized system for gathering, evaluating, and disseminating information has been set up, managing the response and recovery effort will be much more difficult.

Essentially, there are five basic reasons for local jurisdictions to develop a strong damage assessment capability:

1. To obtain information on the emergency / disaster.
2. To facilitate effective decision making.
3. To enable the public to be quickly and accurately informed.
4. To aid in the prioritization of limited resources.
5. To develop assistance requests.

Without an adequate damage assessment capability, local jurisdictions will not be able to acquire first-hand information from which to make appropriate response and recovery decisions. In addition, federal and state disaster relief assistance cannot be dispatched to the disaster scene unless, 1) adequate information is available to support such actions, and 2) local resources have been committed first, and to their fullest extent. For these reasons, development and maintenance of a strong damage assessment capability should be a top priority for each local jurisdiction.

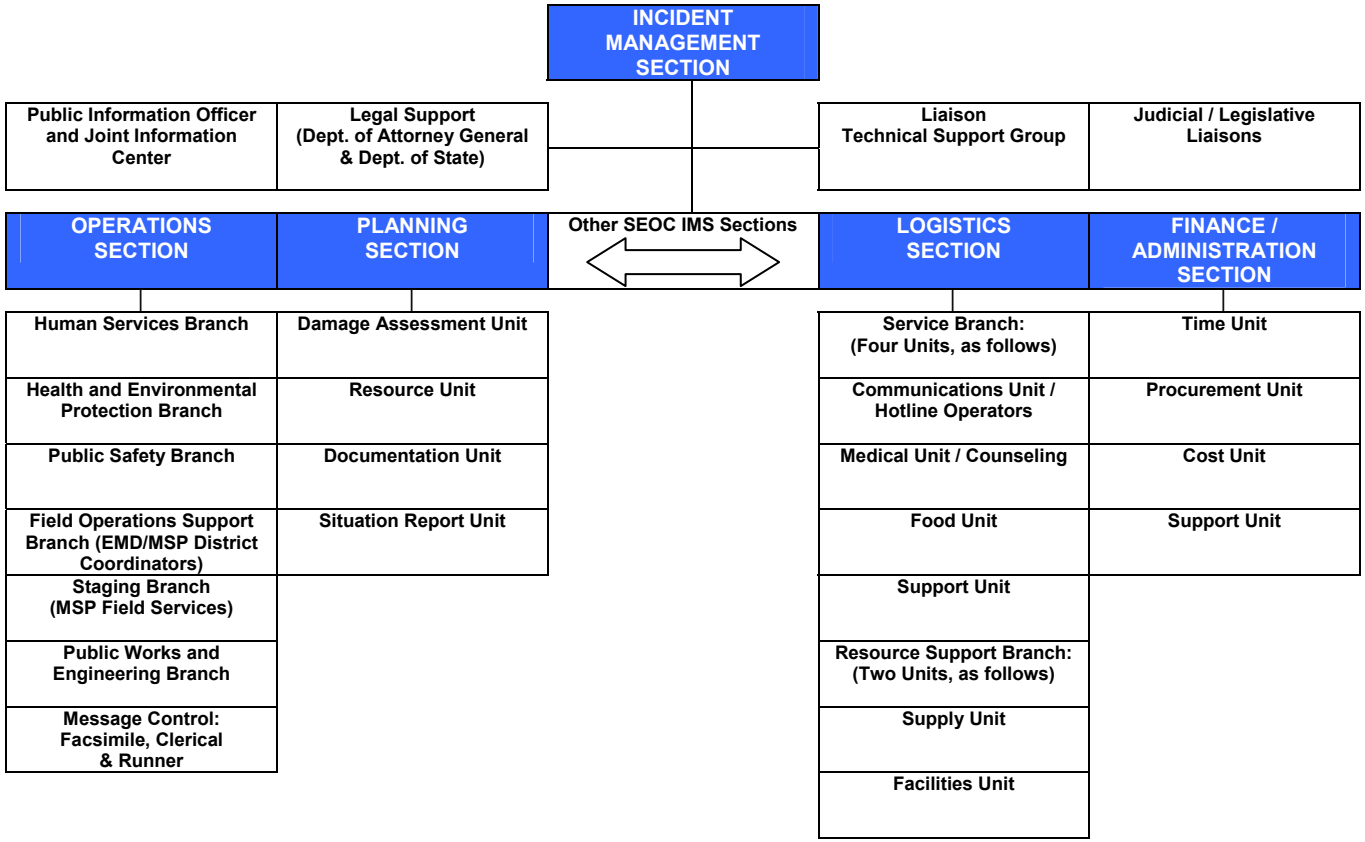
Creating an Effective Damage Assessment Organization. Disasters and emergencies affect many different facets of a community; therefore, the collection of assessment information necessarily involves many sources. No single agency or source of information exists. A number of organizations may have to provide information in order to obtain a complete picture of the situation. Creating an effective damage assessment organization is the most important step in developing a damage assessment capability. This can best be accomplished by assigning personnel from the various organizations involved to support this activity, and developing adequate damage assessment procedures in the local Emergency Operations Plan (EOP) / Emergency Action Guidelines (EAG).

<u>The Assessment Function within the EOC Incident Command Structure</u>

Damage assessment is a unique function in local government; therefore, a unique organization must be formed to perform the damage assessment function. Under the Incident Command System (ICS) for an Emergency Operations Center (and consistent with the National Incident Management System – NIMS), this organization typically falls under the Planning Section. In many cases, a Damage Assessment Unit may be established within the Planning Section. The Planning Section Chief is ultimately responsible for coordinating all planning and assessment activities for the incident and may appoint support staff as required to assist with the data collection, compilation and analysis, mapping / plotting, and reporting functions. Typically, these support staff are organized into various Units within the Planning Section, which

may include a Damage Assessment Unit, a Resource Unit, a Documentation Unit, and a Situation Report Unit. The chart below illustrates the ICS used by the EMD/MSP in the State Emergency Operations Center. Under the NIMS, local ICS structures will likely be similar to this structure:

SEOC Incident Management System



An important point to be considered when developing a local damage assessment capability is the assignment of personnel to support this activity who are normally not operational during a disaster or emergency. Because damage assessment takes place concurrently with and in support of other response and recovery activities, operational heads and other disaster workers probably will not have the time to actively support damage assessment activities. Suitable personnel for assignment to the damage assessment function might be individuals that do not already have an established emergency management role such as the county or municipal assessor, planning director, building inspector, equalization director, or support staff from these agencies.

On-Site Inspection Teams

On-site damage inspection teams are an essential element of the damage assessment organization. These teams assist in documenting the nature, scope, magnitude and location of damage and impacts, and in verifying reports from other sources. Two different types of teams should be formed – one to survey private damage (i.e., homes and businesses) and one to survey public damage (i.e., bridges, roads, schools, etc.). Team assignments can be made in a variety of ways. Possibilities are to make assignments by zones or districts, or to have teams in each political subdivision or department. Local assessors, equalization directors, planners, engineers, building inspectors, realtors, etc. are usually good choices for on-site inspection teams because of their knowledge of community facilities, property values, building construction and engineering. American Red Cross assessment teams and other volunteer organizations may also be able to assist in on-site inspections. Each jurisdiction must examine its own organizational structure, personnel, resources and capabilities, and make assignments accordingly.

Planning and Training

Training for all damage assessment personnel should be provided as soon as possible after assignments are made, and then on a regular basis thereafter. Assessment personnel should also be actively involved in the development and maintenance of damage assessment standard operating procedures, including provisions for notification, staff augmentation, message flow, data collection, compilation, analysis and reporting, mapping, information plotting / display, and communications with field personnel. These specific standard operating procedures should support and implement the general operational guidelines for Damage Assessment found in the local EOP/EAG. (See Attachment N for a sample standard operating procedure format that can be used, with some modification, to develop local damage assessment standard operating procedures.)

Under the ICS, the Planning Section should operate out of the local EOC along with the other ICS Sections (Incident Management, Operations, Logistics, and Finance / Administration). Typically, that is where key decision makers are gathered and communications links are established with response personnel at the incident scene. If the EOC is not utilized for a particular incident, provisions should be made for a work station at or near the alternate coordination facility, such as a Command Post, where good communications links are available and issues can be coordinated with on-scene personnel.

Role of the Planning Section. The Planning Section has a vital role to play in the management of information related to the incident. The Planning Section must actively collect, compile, analyze and display incident-related information on maps and status boards in the EOC to provide a comprehensive, up-to-date and accurate portrayal of events, actions, and damage at all times. In many cases, first responders (i.e., law enforcement officers, fire fighters, EMTs, public works employees) may provide much of the initial assessment data. Street, floodplain, topographic, and population density maps, as appropriate, should be used to plot the affected areas, evacuation routes, shelter locations, number of persons affected, potential disaster conditions, and other information deemed pertinent to the situation. Damaged areas should be plotted on maps and prioritized so that those areas with the most damage can be targeted first for assistance. Status boards should be used to indicate current conditions, including casualty estimates, number of buildings damaged or destroyed, road / bridge damage or closures, number of persons in shelters, etc. A message board should be used to display important messages that everyone needs to see.

Such information is vital in assisting key SEOC personnel in making important decisions regarding response and recovery operations. The Incident Commander in the EOC will activate the Planning Section to collect and compile assessment data if it appears that the situational

circumstances will require such action. In certain situations, the Planning Section may also be activated to perform pre-incident assessments (e.g., to plot rising flood levels).

During the initial stages of the incident, the Planning Section may assist the Incident Commander in preparing the Incident Report and local "state of emergency" declaration for submittal to the EMD/MSP. The Planning Section is also responsible for organizing the on-site inspection teams to conduct more detailed damage surveys, and for determining the various sources from which data must be collected. The Planning Section may be requested to provide regular updated reports with verified damage information to the jurisdiction's Public Information Officer (for release to the media) as well as the Chief Executive and affected department heads. In some instances, these activities may necessitate round-the-clock operation for the first few days of the incident.

Incident Reporting

Damage Assessment under E Team. Beginning in 2004, the State of Michigan began to use web-based proprietary software called "E Team" for its emergency management, event management, and homeland security functions, including integration with its Geographic Information System (GIS) applications in the SEOC. The EMD/MSP has obtained an enterprise license for E Team that will allow it to provide an E Team license to all local emergency management agencies in Michigan. This statewide integration effort, when completed, will allow all local emergency management agencies to easily and quickly communicate with the SEOC and with each other during disasters or emergencies.

Because E Team has excellent incident reporting / tracking and situation reporting capabilities, ***the EMD/MSP has established E Team as the primary mechanism for incident reporting and assessment within the State of Michigan.*** However, because full integration and implementation of E Team will likely take several years to complete, it will be necessary in the interim to have duplicate reporting systems in place to handle all possible situational contingencies. This handbook will guide emergency response personnel through the incident reporting and damage assessment processes using both E Team and hardcopy systems. The hardcopy systems have been modified from past versions to make them more in line with the E Team reporting formats. As E Team becomes fully implemented statewide, E Team will become the primary reporting / tracking system and the hardcopy reporting / tracking system will become a secondary system to be used only in the event of an interruption to Internet service and/or other computer-related problems.

The conversion to E Team does not involve major changes in terms of process or procedure; however, there are minor changes to reporting forms and formats (including form names). The primary changes brought about by the conversion to E Team are as follows:

Comparative Matrix: E Team vs. Pre-E Team Reporting System

Function	Pre-E Team System	E Team System	Change
Initial Report	Flash Report (EMD-22)	**"Incident Report"**	New form with slightly different information fields. Ability to geo-locate incident site by address, intersection, latitude / longitude, or by clicking directly on the map. Ability to more easily add detailed information about function-specific actions taken.
Local Emergency Declaration	EMD/MSP prescribed format as an attachment to the Flash Report	**EMD/MSP prescribed format as an attachment to the Incident Report**	No change. The same format will be used. Only the means of transmittal will change.

Comparative Matrix: E Team vs. Pre-E Team Reporting System (cont.)

Function	Pre-E Team System	E Team System	Change
Request for a Governor's Declaration under 1976 PA 390, as amended	EMD/MSP prescribed format	**EMD/MSP prescribed format as an attachment to the Situation Report**	No change. The same format will be used. Only the means of transmittal will change.
Field Surveys / Assessments	Damage Survey Worksheets used to collect property data	**Damage Survey Worksheets used to collect property data**	Affected category added to damage classification system. Worksheet redesigned to allow for geo-spatial data entry and insurance coverage estimates.
Detailed Damage Assessment Report	Damage and Injury Assessment Form (EMD-2) with maps attached	**"Jurisdiction Situation Report" for local jurisdictions; "Agency Situation Report" for state agencies; electronic / scanned maps attached**	New form with slightly different information fields. Less detail required for public damage estimates. Maps must be electronic or scanned to be transmitted as an attachment.
Disaster Photography	Hardcopy photos or photocopy of photos; digital images submitted by e-mail	**Digital images (photos only) can be attached to Incident Report (initial photos of damage) or Situation Report (photos supporting detailed damage assessment)**	Enhanced ability to submit disaster photography through E Team. (Note: video images should **NOT** be attached to E Team reports.)

Submitting an Incident Report. The E Team Incident Report is used to report disasters or emergency situations. (See Attachment B for a hardcopy version of the E Team Incident Report with instructions.) It should be sent via E Team as soon as possible after the community becomes aware of the disaster or emergency. Incident Reports should be updated as conditions change (for better or worse) to keep the EMD/MSP and other response agencies appraised of the current status of the incident. If E Team is not available or is inoperable, then the hardcopy Incident Report form should be transmitted via facsimile, the Law Enforcement Information Network (LEIN), or e-mail to the appropriate EMD/MSP District Coordinator, MSP Operations, the EMD/MSP office in Lansing, and the Post Commander of the nearest MSP Post. State Police posts in the affected area are also required to submit a report as soon as they become aware of the situation, pursuant to MSP Official Order No. 40. (Note: State Police Posts will not submit a second report if an Incident Report has already been submitted via E Team by the local community; rather, the Post will update the report as appropriate.) If using facsimile, LEIN or e-mail to submit a report will delay the information, the telephone should be used.

The purpose of the Incident Report is to provide state officials and other emergency responders with early information on the situation so that the nature, scope, magnitude, severity and expected duration of the emergency / disaster can be determined and state agencies can be alerted for possible activation to assist local authorities. It also provides a basis for alerting applicable federal agencies and private sector organizations that might be requested later to provide assistance.

Declaring a Local "State of Emergency." If the emergency / disaster is such that significant threats exist to the public health, safety and general welfare, and/or extensive agency coordination and involvement is required to respond to and recover from the situation, then a local "state of emergency" should be declared using the format found in Attachment C ("Format for Declaring Local State of Emergency"). If using E Team, the declaration can simply be attached to the Incident Report under the "Attachments" section of the report. If using the hardcopy system, the declaration should be sent via facsimile, LEIN or e-mail in accordance with the instructions found on the form.

The declaration of a "state of emergency" by a local jurisdiction is important for several reasons. First, such a declaration activates the response and recovery aspects of the local EOP/EAG, as well as the EOC to coordinate such activities. Second, and perhaps most important, declaring a "state of emergency" emphasizes the severity of the situation by indicating that local response efforts are underway, and local resources are being utilized to their maximum potential. Finally, to be eligible for 1976 PA 390, Section 19 state funding, a jurisdiction must have activated the response and recovery aspects of the local EOP/EAG in a timely manner at the beginning of the emergency / disaster.

Data Collection, Compilation, Analysis and Reporting

Data Collection / Compilation / Analysis. The State is dependent upon local government to provide complete, accurate and timely assessment data. The EMD/MSP must ascertain as early as possible whether or not state resources should be committed to assist local authorities, so that adequate alerting and activation of state forces can be accomplished. Accurate damage assessment data must be collected, compiled, analyzed and reported in a timely manner by local government if the nature, scope, magnitude, severity and expected duration of the disaster or emergency are to be known. In addition, this information serves as the basis for requesting federal disaster relief assistance, including a request from the Governor to the President (through FEMA) for a major disaster or emergency declaration under Public Law 93-288, as amended (Robert T. Stafford Disaster Relief and Emergency Assistance Act).

A number of agencies and organizations may have to provide assessment data in order to obtain a complete picture of the total individual, private, public, and agricultural damage sustained. Typical sources of assessment data are shown in the following table. Counties collect, compile and submit assessment data from county agencies, as well as those cities, villages, and townships that are part of the county emergency management program. Separate municipal emergency management programs collect, compile and submit data only from their own departments and agencies.

Typical Sources of Assessment Data

Type of Information	Typical Sources
Impacts to Individuals	Hospitals, Coroner, Sheriff's / Police Department, Health Department, Unemployment Office, American Red Cross, County Department of Human Services Office, Area Agency on Aging.
Public Damage (Note: PNP = private nonprofit)	Road Commission, Public Works Department, Drain Commission, Parks Commission / Department, Intermediate / Local School District, Publicly-Owned Utilities, Medical Care Facilities (PNP), Educational Facilities (PNP), Custodial Care Facilities (PNP), Emergency Facilities (PNP), Utilities (PNP), Senior Citizen Centers, Community Centers, Libraries, Streets Department, Public Transportation Authority.
Private Damage	Equalization Department, Planning Department, Building Department, Assessor, Chamber of Commerce, Business Council, Tourism Development Office, directly from large private entities such as businesses, institutions, insurance companies and associations.
Agricultural Damage	Obtained by State from County Agricultural Emergency Boards.
Budget Information	Treasurer, Personnel Department, Emergency Management Office, County Controller, Road Commission, Drain Commission, Parks Commission / Department, Public Works Department, Streets Department, City Manager, Budget Director, Public Transportation Authority,
Local Jurisdictional Information	For counties only: local political units that are part of the county emergency management program – cities, villages, and townships.

Field Surveys

On-site inspection teams should be dispatched to survey damaged areas as soon as possible after the occurrence of the disaster. These teams have two major functions: 1) to survey private damage (i.e., homes and businesses); and 2) to survey public damage (i.e., bridges,

roads, schools, etc.). Generally, this necessitates that two separate, but concurrent surveys be taken (one for private damage and one for public damage). Consequently, on-site inspection teams should be formed accordingly.

A damage survey worksheet can be found in Attachment E. This worksheet can be used for surveying both private damage and public damage. A common damage classification system and set of instructions (starting on page 29) are included to assist on-site inspection teams in documenting damage. Damage information should be recorded on the damage survey worksheet and a map by the on-site inspection teams. In addition, in many cases a photographic or video image of the damage should also be taken by the on-site inspection teams. (See Attachment H for instructions and guidelines for disaster photography.) The completed worksheets, maps and photography must then be submitted in a timely manner to the Planning Section in the EOC for compilation, analysis, and reporting.

Note: The original hardcopy damage survey worksheets, damage maps, photographs and videos taken should be retained by the Planning Section in the local EOC for 1) permanent recordkeeping, and 2) use by FEMA / State damage assessment teams in the event they are dispatched to the area to conduct a Preliminary Damage Assessment (PDA) for a Presidential emergency or major disaster declaration. (See the "Preliminary Damage Assessment" section on page 11 for more information on the PDA process.)

Another tool that local jurisdictions can use to collect assessment information from businesses and other community institutions (i.e., schools, churches, nursing homes, etc.) is the "Damage Survey Form for Businesses and Institutions" found in Attachment F. This form can be provided to affected entities so that they can assess their own damages and impacts, and then return the completed form to the local EOC for information compilation, analysis and reporting.

Agricultural Damage Assessment

Local emergency management programs do not need to collect agricultural damage assessment data. Rather, agricultural damage assessment data is normally collected and compiled by the County Agricultural Emergency Board, which is composed of county representatives from federal and state agricultural programs. This process is managed by the United States Department of Agriculture (USDA) and Michigan Department of Agriculture (MDA). A "Flash Situation Report" (similar to the E Team Incident Report) is automatically prepared by the County Emergency Board within 24 hours of the occurrence of a disaster impacting agricultural resources. In addition, a more detailed agricultural "Damage Assessment Report" is prepared upon request of the Governor or the MDA Director, specifying the level of damage to crops, animals, lands, and agricultural facilities, including barns and service buildings. This information is forwarded to the USDA headquarters in East Lansing for verification, summarization, concurrence and distribution.

The Planning Section in the SEOC obtains this data through the MDA Emergency Manager, who serves as liaison to the USDA. Local Emergency Managers should establish a working relationship with the County Agricultural Emergency Board for the purpose of sharing and coordinating information on agricultural damage.

Michigan Rapid Impact Assessment Team Assistance

The Michigan Rapid Impact Assessment Team (MRIAT), composed of functional-area experts from 10 Michigan state agencies, was formed to improve the State's capabilities to determine the nature, scope, magnitude and severity of emergencies and disasters. The MRIAT can be activated to work in partnership with affected local governments to rapidly assess damage and impact to, and the resource needs of, citizens

and communities. The MRIAT can serve many roles – partner, advisor, technical information source, liaison, organizer and advocate. The nature and extent of the MRIAT role will depend on the disaster or emergency, as well as the needs, desires and capabilities of the community. The MRIAT is intended to be a supplemental assessment resource to local jurisdictions. It will NOT serve as a substitute for a good assessment organization for, or assessment effort by, the community.

As a rule of thumb, the MRIAT will only be activated for those situations that, in the opinion of EMD/MSP and/or the Governor's Office, warrant state assistance in assessing damage, impact and resource needs. Generally, MRIAT involvement will be limited to those situations that are 1) "highly problematic" from a technical standpoint; 2) large-scale or widespread in nature; or 3) "high profile" due to intense citizen and/or media interest. Most emergencies and smaller disasters do not fall into one of those categories.

Activation of the MRIAT may be initiated at the request of a local jurisdiction (through the Emergency Manager) and/or the recommendation of the EMD/MSP District Coordinator, or upon request of the Governor's Office. The EMD/MSP will evaluate all requests for activation and make the final determination as to whether to activate the MRIAT. If the MRIAT is activated, local jurisdictions will be notified by their EMD/MSP District Coordinator of the anticipated arrival time and the necessary preparations that must be made.

The MRIAT will work side-by-side, in partnership with local officials, in assessing the damage and impact. The MRIAT will link up with the community's existing damage assessment teams and they will jointly conduct assessment operations in the field. The MRIAT will NOT come into a community to "take over" assessment operations and responsibilities. It can, however, under the appropriate circumstances, assist and coordinate with local officials in conducting a rapid assessment of the situation.

Situation Report. The Planning Section in the local EOC, working in conjunction with the on-site inspection teams, compiles the assessment information on the E Team Jurisdiction Situation Report for submittal to the Planning Section in the SEOC and the appropriate EMD/MSP District Coordinator. Each emergency management program (county or municipal) affected by the disaster / emergency should submit a completed Jurisdiction Situation Report within 3 days (72 hours) of incident occurrence. In rare cases, earlier submittal may be essential to ensure that the jurisdiction is eligible for the full range of assistance for which it may be entitled. (See Attachment I for a hardcopy of the Situation Report along with submittal instructions.) Jurisdiction Situation Reports should be updated if additional damage is discovered or revisions are required.

(Important Note: The "Jurisdiction Situation Report" should be used by local jurisdictions to report damage / impacts. The "Agency Situation Report" should be used by state agencies to report damage / impacts to state facilities and services.)

Mapping Damaged Areas

A map (or maps) should be attached to the Situation Report, outlining the locations of both public and private damage. If both types of damage can be clearly depicted on one map, then one map should be submitted. If not, then separate public damage and private damage maps should be submitted. (See Attachment E for instructions on how to properly depict public and private damage on a map or maps.)

Disaster Photography

Whenever possible, on-site inspection teams should also make a photographic or video record of the damage at the time the information is being gathered so that the damage can be fully documented before the cleanup begins. For most sites, it is recommended that each damaged site be shot from three different positions to ensure proper image documentation. Those positions include a “context” image, a “curbside” image, and a “close-up” image. (See Attachment H for a set of guidelines for disaster photography.)

State Role in Damage Assessment. The SEOC Planning Section compiles and plots incoming damage assessment information from local emergency management programs and state agencies to provide a comprehensive, up-to-date and accurate portrayal of the situation at all times. When this monitoring reveals that a Governor's emergency or disaster declaration may be warranted in order to protect public health and/or safety, the Planning Section will advise members of the Incident Management Section in the SEOC, who in turn will request such an action from the Governor's Office. (See the next section for additional details.)

If further monitoring by the SEOC Planning Section reveals the need for federal disaster relief assistance to supplement local and state response and recovery efforts, the EMD/MSP will work in conjunction with the Governor's Office to take those actions necessary to request activation of the appropriate assistance programs. If a Presidential emergency or major disaster declaration is warranted, the Governor will request such a declaration through the FEMA Region V Office in Chicago, Illinois. (See the next section for additional details.)

Seeking State and Federal Disaster Relief Assistance

Requesting State Assistance. Requests for state assistance must be submitted to the EMD/MSP using the format found in Attachment D (“Format for Requesting a Governor’s Emergency or Disaster Declaration”). This request for state assistance, which takes the form of a message to the Governor from the chief executive official of a county (or municipality with a separate emergency management program from the county), can be sent concurrently with the Jurisdiction Situation Report and local "state of emergency," or separately at a later time, depending on the circumstances. (Note: the chief executive official of a county is not authorized to make such a request for state assistance for an emergency / disaster occurring solely within the confines of a township, city, or village within the county unless requested to do so by the chief executive official of the affected township, city, or village. See Section 14 of 1976 PA 390 for more information.) Generally, before state assistance is requested, counties or municipalities must ensure that local disaster relief forces are utilized to their maximum potential, including use of local contractors, activation of mutual aid, and use of nearby resources.

Once state assistance is requested, Section 14 of 1976 PA 390 prescribes the process that must be followed in order to determine if such assistance is warranted. The EMD/MSP District Coordinator, in conjunction with the local Emergency Manager, assesses the nature and scope of the situation and recommends the personnel, services, and equipment that are needed. The EMD/MSP District Coordinator also verifies that local resources are being used to their maximum potential. Upon completing the joint assessment, the EMD/MSP District Coordinator notifies EMD/MSP command staff of the findings and recommendations. The EMD/MSP notifies the Governor, who takes whatever actions he or she considers appropriate to mitigate the disaster or emergency. If the EMD/MSP determines that immediate action is essential to the preservation of life and property, the MSP Director may initiate temporary assistance to the affected area as necessary and compatible with the policies and procedures of the Michigan Emergency Management Plan (MEMP).

It is important to remember that the purpose of state disaster assistance is to supplement local efforts and resources to protect public health and safety and to help relieve the extraordinary burden local jurisdictions may face. It is not intended to be used for simple budgetary relief or to relieve hardship.

Emergency / Disaster Declaration Process

LEVEL	MAJOR ACTIONS
DISASTER OR EMERGENCY OCCURS	• Initial incident intelligence collected / evaluated / reported by first responders. • Incident Command established in accordance with situational circumstances. • Initial life safety and property protection measures taken. • Key officials notified.
↓	↓
AFFECTED MSP POST AND LOCAL EMERGENCY MANAGEMENT PROGRAM JURISDICTION	• MSP Post and Jurisdiction submit initial Incident Report and updates as necessary. • Jurisdiction collects / compiles assessment data per local procedures; field inspection teams collect data; local response agencies provide data through EOC. • Jurisdiction may activate local EOC to monitor situation and coordinate response. • Jurisdiction may declare local "state of emergency" and request state and federal assistance. • Local PIO issues media releases and public advisories per local procedures. • Jurisdiction submits Situation Report within 72 hours of event; updates Situation Report as necessary.
↓	↓
EMD/MSP	• SEOC may be activated to monitor situation and coordinate response. • EMD/MSP District Coordinator assists jurisdiction in assessing and analyzing situation; determines scope and magnitude of event; determines supplemental resource needs. • MRIAT may be activated to provide supplemental assessment assistance. • SEOC Planning Section compiles and analyzes incoming assessment data. • PIOs issue media releases and public advisories per MEMP; JIC may be activated. • Governmental agencies and private relief organizations are alerted to standby status; may provide immediate support to address threats to public health, safety and welfare.
↓	↓
GOVERNOR	• May declare "State of Emergency" or "State of Disaster" under 1976 PA 390; state assistance rendered to supplement local efforts. • May activate MEMAC / EMAC if appropriate. • May request federal disaster relief assistance, if warranted, through FEMA Region V in Chicago, Illinois.
↓	↓
FEMA (Department of Homeland Security)	• May provide direct response assistance under NRP to save lives, prevent injuries, protect property and the environment. • Conducts Preliminary Damage Assessment (PDA); state and local personnel assist in PDA process. • FEMA Region V reviews and analyzes Governor's request; FEMA Headquarters (Washington, DC) makes recommendation to President.
↓	↓
PRESIDENT	**Issues Declaration:** • Federal disaster assistance programs are activated and an Incident of National Significance is declared. **OR** **Denies Declaration:** • Limited federal assistance may still be available. • Governor may provide assistance through State Disaster Contingency Fund under 1976 PA 390, as amended.

Governor's Declaration. Pursuant to 1976 PA 390, as amended, the Governor may declare a "state of disaster" for affected areas if a disaster has occurred causing widespread or severe damage, injury, or loss of life, or an imminent threat thereof exists. The Governor may declare a "state of emergency" in those situations where state assistance is needed to supplement local efforts and capabilities to save lives, protect property and the public health and safety, or to lessen or avert the threat of a catastrophe. A Governor's "state of disaster" declaration acknowledges the severity of the situation and its impact upon the areas affected, while a "state of emergency" is used to target specialized assistance to meet specific needs which the state is uniquely able to provide.

The Governor may also declare a "heightened state of alert" if he/she believes that terrorists or members of terrorist organizations are within this state or that acts of terrorism may be committed in this state or against a vital resource. Such a declaration provides the Governor with many of the same authorities provided under a "state of emergency" or "state of disaster" declaration described above, and can be instituted to safeguard the interests of the state or a vital resource, to prevent or respond to acts of terrorism, or to facilitate the apprehension of terrorists or members of a terrorist organization and those acting in concert with them.

A Governor's declaration of a "state of disaster," a "state of emergency" or a "heightened state of alert" activates the response and recovery aspects of the MEMP and authorizes the deployment and use of state resources to provide assistance to the areas under the declaration. This includes all disaster relief forces under state authority, as well as supplies, equipment, materials and facilities. The EMD/MSP coordinates the provision of such assistance with the involved state agencies and affected local jurisdictions through the SEOC, if activated.

Upon declaring a "state of disaster" or a "state of emergency," the Governor may seek assistance (either financial or otherwise) from the federal government for those areas included in the declaration, including (if the situation warrants) requesting a Presidential emergency or major disaster declaration through the FEMA Region V office in Chicago, Illinois.

Preliminary Damage Assessment. If the Governor requests a Presidential declaration, a Preliminary Damage Assessment (PDA) is normally conducted within a few days of the request to determine if the situation warrants federal assistance. Damage assessment teams (composed of representatives of the federal government, state government, and the affected local jurisdiction) are dispatched to the incident scene to survey and confirm the damage and impacts reported by the affected local jurisdiction(s) and the State of Michigan. The local representative(s) on the teams must be thoroughly familiar with the area and knowledgeable about the damage and impacts incurred.

Damage survey worksheets and copies of damage maps, photographs / videos of the damage, etc. from local on-site inspection teams will be reviewed by the PDA teams prior to going into the field. This information provides the basis for further investigation by these teams to support the request for federal assistance, and greatly expedites the damage verification process. Damage assessment teams from the U.S. Small Business Administration (SBA) will also conduct their on-site damage surveys based on this information.

Based on the results of the PDA, FEMA will be able to conclude whether or not sufficient damage and impact have occurred to support a Presidential declaration. Damage assessment information collected by local emergency management programs and confirmed by the PDA is then used by the Governor's office and EMD/MSP as the basis for the Governor's request to the President for a declaration. This information is also used by FEMA to document the recommendations made to the President in response to the Governor's request.

Presidential Emergency / Major Disaster Declaration. The Governor's letter of request for a Presidential emergency or major disaster declaration is forwarded to the President through the FEMA Regional Director. After careful analysis of the request by Regional Office staff, the Regional Director makes a recommendation to the Director of FEMA in Washington, D.C., who in turn recommends a course of action to the President. Under the Stafford Act, the President has three options when a Governor's request for a declaration is submitted:

Declaration Request Denied

If the President does not find sufficient damage and impacts to warrant a declaration, he may deny the request outright. In those cases, limited disaster relief assistance may still be available from specific federal agencies and volunteer organizations, including SBA low-interest disaster loans and USDA emergency loans for agricultural damage. Refer to Attachment K for details on available programs.

Emergency Declaration

In those situations where the full range of assistance available with a major disaster declaration is not required, the President may declare that an "emergency" exists, which provides specialized assistance from federal agencies to meet a specific need that the federal government is uniquely able to provide. Examples of emergency assistance are: temporary housing; mass care; debris removal when in the public interest; emergency repairs to keep essential facilities operating; technical assistance with essential community services; public health and safety measures; and public information and warning. The federal share of such assistance is not less than 75 percent of eligible costs, with a cap of $5,000,000 for a single emergency unless additional assistance is approved by the President.

Major Disaster Declaration

The President may declare that a "major disaster" exists, which makes available the widest variety of federal assistance programs to jurisdictions within the designated disaster area. The three basic types of assistance available under a Presidential major disaster declaration through the Stafford Act are Public Assistance, Individual Assistance, and Hazard Mitigation Assistance. In addition, SBA and USDA loans and other appropriate federal assistance programs are made available as necessary.

Emergency and major disaster declarations under the Stafford Act are also automatically declared an "Incident of National Significance" by the federal Secretary of Homeland Security.

Post-Declaration Activities. Upon approval of the Governor's request for a declaration, a number of support and coordination activities will be initiated by FEMA and the EMD/MSP within a relatively short period of time:

- **Immediate notification** of the emergency or major disaster declaration is made to the Governor, appropriate members of Congress, and affected federal agencies.

- A **Federal Coordinating Officer (FCO)** is appointed from FEMA to determine the type of relief needed, to coordinate federal disaster assistance programs to ensure their maximum effectiveness, and to help affected citizens and public officials obtain the assistance to which they are entitled.

- A counterpart **State Coordinating Officer (SCO)** is appointed at the state level and serves as the primary point of contact with the FCO and between state and local officials. The SCO is appointed from within EMD/MSP.

- FEMA **designates the counties** that are eligible for federal assistance and the kinds of assistance to be made available.

- A **Federal / State Agreement** is jointly developed by FEMA and EMD/MSP, covering a number of topics regarding delivery of the various disaster assistance programs. This agreement is signed by the FEMA Regional Director and the Governor.

- A **Joint Field Office (JFO)** is jointly established by the FCO and SCO in the declared area to coordinate the federal disaster relief and recovery effort. This office is staffed with federal and state representatives having disaster assistance responsibilities.

- A **Disaster Assistance Teleregistration Center** is activated to allow disaster victims to register for available assistance programs via a toll-free telephone number. This number is widely publicized within the declared area. In some situations, federal and state Community Outreach Teams may be dispatched to distribute disaster-related information and answer questions residents may have about available assistance programs and registration procedures.

- One or more **Disaster Recovery Centers (DRCs)** may be established in the declared area to advise disaster victims of available programs and coordinate the provision of recovery assistance. Representatives of federal and state agencies, affected local governments, private relief agencies, and other organizations which can provide assistance or counseling are normally present at the DRCs to advise and assist disaster victims. These centers are kept in operation as long as required by the situation.

- An **Applicant Briefing** is conducted jointly by FEMA and the EMD/MSP to inform all potentially eligible public entities and private nonprofit facilities of the assistance available through the Public Assistance Grant Program (PAGP) under the Stafford Act. In some circumstances, an Applicant Briefing may also be conducted for assistance available through the Hazard Mitigation Grant Program (HMGP), also under the Stafford Act. (In most cases, however, notification of available HMGP assistance is handled via electronic mail and regular U.S. Mail.)

- An **Inspector's Briefing** for federal, state and local engineers and specialists appointed to survey damage to public facilities under the PAGP is conducted jointly by FEMA and the EMD/MSP. The purpose of this briefing is to inform these inspectors of PAGP requirements regarding eligibility of work, completion of necessary forms, cost estimation, etc. After the briefing, inspectors are organized into **damage survey teams** composed of engineers and specialists from federal and state agencies and an authorized local engineer, assessor, planner, etc. from the applicant's jurisdiction. (This local representative is a key member of the team and is responsible for ensuring that all applicable damage in the jurisdiction is inspected.)

  Teams are assigned specific locations for on-site inspections based upon data contained in the Situation Report submitted by the local emergency management program and the findings of the PDA. Each team prepares **Project Worksheets (PWs)** which document the type and extent of damage and describe the scope and estimated cost of work needed to repair the damage. These Project Worksheets provide the basis for determination of eligible work under the PAGP.

- A federal / state **Hazard Mitigation Team** may be dispatched by the FEMA Regional Director to the declared area to: 1) determine the extent, nature, and cause of the disaster; 2) identify potential hazard mitigation measures that could be utilized to reduce or

eliminate damage from future disasters; and 3) develop recommendations for implementing hazard mitigation measures. (Note: these hazard mitigation surveys may be conducted prior to the declaration as part of the PDA process, at the discretion of FEMA and the EMD/MSP.)

A number of federal and state agencies may be represented on the team, depending on the situation. Local government representatives are key members of the team. Local participation is essential to the successful identification and implementation of mitigation measures that are acceptable to the local community. In addition, many mitigation strategies involve the regulation or direction of development, which local government has the authority to do. The team findings serve as the basis for the development of the Hazard Mitigation Strategy for the disaster, which is coordinated by the EMD/MSP. Relevant aspects of the Hazard Mitigation Strategy must then be incorporated into the Michigan Hazard Mitigation Plan (MHMP) and the applicable local hazard mitigation plans for future implementation consideration.

Many of the recommendations outlined in the Hazard Mitigation Strategy and then incorporated into the MHMP and local mitigation plans will be implemented using Hazard Mitigation Grant Program (HMGP) funds. The HMGP provides up to 75% federal funding for cost-effective mitigation measures that are consistent with the Hazard Mitigation Strategy, the MHMP and applicable local mitigation plans. In addition, the federal government may contribute up to 75% of the eligible costs of hazard mitigation measures determined to be necessary under the Public Assistance Grant Program (PAGP). Mitigation measures can also be implemented under the Pre-Disaster Mitigation Program (PDMP), the Flood Mitigation Assistance Program (FMAP) and a variety of other programs administered by various federal and state agencies. (Refer to Attachment K for more information.)

Section 19 (of 1976 PA 390, as amended) Funding. Under Section 19 of 1976 PA 390, as amended, funding under this state program may be available for eligible counties and political subdivisions severely affected by a disaster. To be eligible for this funding, affected counties and municipalities must meet a number of requirements or standards, including the timely submittal of damage assessment data. See the Administrative Rules for Section 19 funding.

Assistance grants under this program are limited to $30,000 or 10% of the total annual operating budget of the county or municipality for the preceding fiscal year, whichever is less. ***Section 19 funds are only available in the absence of federal Public Assistance funding, and only if approved by the Governor.*** Also, the county or municipality applying for the funds must be included in the Governor's emergency or disaster declaration. Application is made by the governing body of the county or municipality by adopting a resolution according to the specified format in the Administrative Rules, and by completing form EMD/MSP-19 ("Application for Disaster Assistance"). The resolution and completed EMD/MSP-19 form are submitted to the appropriate EMD/MSP District Coordinator for processing. The Governor makes the final determination for funding, based at least partly on the recommendation made by the EMD/MSP. (Refer to Attachment L for a copy of the EMD/MSP-19 form.)

ATTACHMENTS:

Attachment A: E Team Instructional Resources
Based on E Team Release 2.3

When launching E Team to enter an Incident Report or a Jurisdiction or Agency Situation Report, a start up screen will appear that will look similar to this screen. For real emergencies, log into the Operations side of E Team:

If you have trouble logging into E Team, please contact the EMD/MSP E Team Administrator. If you have questions about how to fill out the E Team reports, please refer to the various E Team user guides and help documents stored in the E Team system. All of these documents can be found by clicking on the blue “Reference Document by Category” link on the menu and then choosing the “E Team User Guides” category. You may also click on the round “Help?” button along the top of the E Team screen.

HARDCOPY Submittal Instructions

If for any reason E Team is not accessible, the hardcopy Incident Report or Jurisdiction / Agency Situation Reports found in this document should be used to submit assessment information in accordance with the following instructions:

1. Forward the **INCIDENT REPORT** immediately by facsimile, LEIN, or e-mail (listed in order of transmittal preference) to:

    - the appropriate EMD/MSP District Coordinator;
    - the EMD/MSP office (facsimile #: 517/333-4987; LEIN code: ELES; e-mail address: emdseoc@michigan.gov);
    - MSP Operations (facsimile #: 517/336-6257; LEIN code: ELOP; e-mail address: operationslts@michigan.gov);
    - the Post Commander of the nearest MSP Post.

    (IF USING E-MAIL): TO ENSURE THAT MSP OPERATIONS HAS RECEIVED THE E-MAIL TRANSMISSION, PLEASE CALL THEM AT (517) 336-6605 (24 HR. #), OR SEND THEM A BRIEF LEIN MESSAGE, INDICATING THAN AN E-MAIL MESSAGE HAS BEEN SENT. BE SURE TO PROVIDE A CONTACT PHONE # AND E-MAIL ADDRESS FOR DATA VERIFICATION.

2. Forward the **JURISDICTION / AGENCY SITUATION REPORT(S)** within 3 days (72 hours) by facsimile, LEIN or e-mail to:

    - the appropriate EMD/MSP District Coordinator;
    - the EMD/MSP office (facsimile #: 517/333-4987; LEIN code: ELES; e-mail address: emdseoc@michigan.gov);

3. If using facsimile, LEIN, or e-mail will delay the information, the telephone should be used.

4. Update the information (for better or worse) as necessary.

5. To access the **INCIDENT REPORT** form via LEIN, type **F DISASTERS**.

6. To access the **JURISDICTION SITUATION REPORT** form via LEIN, type **F DAMAGE INJURY**.

(Note: The hardcopy forms found in Attachments B and I also have line designators – i.e., Line 1, Line 2, Line 3, etc. – in each information box that correspond exactly with the report formats already pre-established within the LEIN system. If for some reason the pre-established forms are not accessible, damage assessment information can be entered into the system by simply typing in each individual line designator and then entering the narrative or numerical data.)

Attachment B: Incident Report Form

(The following hardcopy form should be used <u>ONLY</u> if E Team is inaccessible or not available. Otherwise, all assessment reports should be filed electronically through E Team. The hardcopy form has been modified <u>slightly</u> from the E Team online form.)

Note: All E Team forms depicted in this document are based on E Team Release 2.3.

The line designators (Line 1, Line 2, Line 3, etc.) in each information box are for LEIN and radio / telephone transmittal purposes only. They will not be found in the E Team online report form.

Attachment B: Incident Report Form – Critical Information
(Submit this page FOR EVERY INCIDENT being reported)

Incident Report – Hardcopy (Notes: * = required field; see page 19 for field selections)

CRITICAL INFORMATION

***Incident Type:** (Line 1)	***Incident Status:** (Line 2)
***Location Name:** (Line 3)	***Incident Prognosis:** (Line 4)
***Date & Time:** (Line 5)	***Lead Agency:** (Line 6)
Related Event: (Line 7)	**Severity:** (Line 8)

Contact Info (Name/Title/Phone/E-Mail of person submitting report):
(Line 9)

SITUATION SUMMARY

(Line 10)

Attachment B: Incident Report Form – Field Selections for Critical Information Page
(**DO NOT** SUBMIT THIS PAGE)

Incident Report - Hardcopy

*Incident Type (select only one):

Not Yet Designated
Airplane Crash
Arrest
Assassination
Assassination Attempt
Automobile Accident
Avalanche
Boating/Shipping Accident
Bridge Damage/Collapse
Building Collapse
Civil Disturbance
Computer System Damage/Failure
Counterfeiting
Dam Failure/Damage
Downed Power Line
Drug Seizure
Earthquake
Enemy Attack
Epidemic
Evacuation
Explosion
Fire
Fire - Storm
Fire - Structure
Fire - Wildland
Flood
Flood - Flash
Freeway Damage/Closure
Harassment
Hazardous Material Incident - Biological
Hazardous Material Incident - Chemical
Hazardous Material Incident - Oil/Petroleum
Hazardous Material Incident - Radiological
Hazardous Material Incident - Unknown
IED/VBIED
Illegal Merchandise Seizure
Insect Infestation
Labor Action - Vital Public Service
Land Slide
Levee Damage/Break
Missing Person
Mud Slide
Natural Disaster
Nuclear Facility Accident/Incident
Police Incident
Prison/Jail Riot
Protest March/Rally
Road Damage/Closure
Severe Weather - Blizzard/Snow Storm
Severe Weather - Drought
Severe Weather - Freeze
Severe Weather - Hail Storm
Severe Weather - Hurricane
Severe Weather - Lightning
Severe Weather - Other
Severe Weather - Storm
Severe Weather - Tornado
Severe Weather - Wind
Shooting
Sinkhole
Suspect IED/VBIED
Technological Disaster
Terrorist Incident - Biological
Terrorist Incident - Bombing
Terrorist Incident - Chemical
Terrorist Incident - Cyber
Terrorist Incident - Other
Terrorist Incident - Radiological
Terrorist Incident - Shooting/Hostage
Terrorist Indicator - Acquiring Supplies
Terrorist Indicator - Deploying Assets
Terrorist Indicator - Dry Run/Trial Run
Terrorist Indicator - Elicitation
Terrorist Indicator - Surveillance
Terrorist Indicator - Suspicious Persons
Terrorist Indicator - Tests of Security
Terrorist Threat - Biological
Terrorist Threat - Bombing
Terrorist Threat - Chemical
Terrorist Threat - Cyber
Terrorist Threat - Other
Terrorist Threat - Radiological
Terrorist Threat - Shooting/Hostage
Traffic Stop
Train Wreck/Accident
Transborder Haz Mat Spill
Tunnel Accident
Unattended Package/Vehicle
Utilities Incident - Communications
Utilities Incident - Electrical System
Utilities Incident - Natural Gas Line
Utilities Incident - Other
Utilities Incident - Sewer System
Utilities Incident - Water System

*Incident Status (select only one):

Black – Major Assistance Required
Red – Assistance Required
Yellow – Under Control
Green – Resolved
Gray – Unknown
Blue – Closed

*Location Name:

List jurisdiction by name
(Include date in this field
when entering into E Team)

*Incident Prognosis (select only one):

Red – Worsening
Yellow – Improving
Green – Stable
Gray – Unknown

*Date & Time:

List date & time of incident

*Lead Agency:

List agency or community

Related Event:

List name of related event (if any) that caused this incident

Severity (select only one):

Red – Worsening
Yellow – Improving
Green – Stable
Gray – Unknown

Contact Info:

List name/title/phone #/e-mail address of person submitting report

Situation Summary:

Provide synopsis of current situation – including chronology of events, damage / impacts incurred, response actions taken, number of persons affected, resources used, etc.

Attachment B: Incident Report Form – Page 2
(As appropriate, submit this page as information becomes available)

Incident Report – Hardcopy (Note: see page 24 for field selections)

PERSONNEL AND INFRASTRUCTURE

# of Fatalities: (Line 11)	**Building Damage:** (Line 12)
# of Injuries: (Line 13)	**Utilities Damage:** (Line 14)
# of Evacuations: (Line 15)	**Road Damage:** (Line 16)

OTHER

Action Plan: (Line 17)	**Weather Information:** (Line 18)

Supporting Agencies:
(Line 19)

Supporting Agencies Contact Information:
(Line 20)

ICP Established (Yes/No)?
(Line 21)

Note: When submitting this via E Team, the fields on the Additional Info Tab are not visible until after the Incident Report has been submitted. The fields can be filled out when the report is updated.

Attachment B: Incident Report Form – Page 3
(As appropriate, submit this page as information becomes available)

Incident Report – Hardcopy (Note: see page 24 for field selections)

WHAT ADDITIONAL INFORMATION CAN YOU PROVIDE?

Law Enforcement

 # People Involved: (Line 22)
Group Affiliation: (Line 23)
Activity Engaged In: (Line 24)
How Equipped/Armed: (Line 25)
Details: (Line 26)

Medical Health

 # Field Sites: (Line 27)
Public Water System Affected: (Line 28)
Food Contamination: (Line 29)
Sewage/Solid Waste Problems: (Line 30)
Quarantine Area: (Line 31)
Animal Control Problem: (Line 32)
Infectious Disease: (Line 33)
Mental Health Issues: (Line 34)
Haz Mat Issues: (Line 35)
Evacuation Issues: (Line 36)
Shelter Issues: (Line 37)

Mass Care and Shelter (for each line indicate number and provide comments)

Shelters Open: (Line 38)
Persons Displaced: (Line 39)
Persons In Shelters: (Line 40)
Persons Not Sheltered: (Line 41)
Feeding Sites: (Line 42)
Mobile Feed Sites: (Line 43)
Persons Fed (past 24 hrs.): (Line 44)
Persons Projected Fed (next 24 hrs.): (Line 45)

Attachment B: Incident Report Form – Page 4
(As appropriate, submit this page as information becomes available)

Incident Report – Hardcopy (Note: see page 24 for field selections)

Fire and Rescue

# of Fires: (Line 46)
# of Acres Burned: (Line 47)

	Destroyed	Threatened	Comments
# of Homes: (L-R, Lines 48, 49, 50)			
# of Outbuildings: (L-R, Lines 51, 52, 53)			
# of Commercial: (L-R, Lines 54, 55, 56)			

Hazardous Materials

Type of Threat: (Line 57)
Properties of Threat: (Line 58)
Form of Material: (Line 59)
Specific Agent(s): (Line 60)
Immediate Hazard to People: (Line 61)
Evacuation Recommended: (Line 62)
Decontamination Required: (Line 63)
How Propagating: (Line 64)
Direction/Speed Moving: (Line 65)

Casualties

	Civilians	Responders
Fatalities: (L-R, Lines 66, 67)		
Injuries: (L-R, Lines 68, 69)		
Missing: (L-R, Lines 70, 71)		
Totals: (L-R, Lines 72, 73)		
Comments: (Line 74)		

Attachment B: Incident Report Form – Page 5
(As appropriate, submit this page as information becomes available)

Incident Report – Hardcopy (Note: see page 24 for field selections)

LOCATION

Site Name: (Line 75)	**Site Type:** (Line 76)
Street Address: (Line 77)	**City/State/Zip:** (Line 78)
Intersection – Street 1: (Line 79)	**Intersection – Street 2:** (Line 80)
County: (Line 81)	**Geographic Area:** (Line 82)

Additional Location Information:
(Line 83)

GEO LOCATION & MAPPING

Latitude: (Line 84)	**Longitude:** (Line 85)

ATTACHMENTS

Supporting Documents Attached:
(Line 86)

Attachment B: Incident Report Form – Field Selections for Pages 2-5
(**DO NOT** SUBMIT THIS PAGE)

Incident Report - Hardcopy

Building Damage (select only one):
Heavy
Moderate
Light
None

Utilities Damage (select only one):
Heavy
Moderate
Light
None

Road Damage (select only one):
Heavy
Moderate
Light
None

Action Plan:
Identify applicable pre-defined plan of action being followed (i.e., local EOP/EAG, MEMP)

Support Agencies:
List agency or community

ICP Established:
Indicate Yes or No if Incident Command Post has been established

Site Name:
Indicate name of site where incident first occurred

Site Type (select only one):
Airport
Corporate Campus
Entertainment Venue
Executive Home
Factory
Fire Station
Headquarters
Office Building
Police Station
Port
R & D Facility
Railhead
School
Shopping Center
Warehouse

Geographic Area:
List MSP District in which incident occurred

Additional Location Information:
Provide any other site information that could be useful to responding agencies

Supporting Documents Attached:
Indicate what documents, if any, are attached to this incident report
(i.e., damage map, contact list, photographs, local emergency declaration)

Attachment C: Format for Declaring a Local "State of Emergency"

To: Commanding Officer - Emergency Management Division, Department of State Police; (***District #***) Emergency Management Division District Coordinator; (***Post #***) State Police Post Commander

On (***insert date the incident occurred***) the (***insert name of political jurisdiction***) sustained widespread or severe damage, injury or loss of life or property caused by (***describe the type of incident – e.g., tornado, flood, ice storm, etc.***). As a result of this situation, the following conditions exist: (***describe the impact on the community and the area affected – e.g., many homes and businesses destroyed; numerous deaths and injuries in the southern part of the city; high school severely damaged; only bridge connecting the east and west sections of the city completely destroyed; etc***.).

Therefore, as (***insert title of chief executive***) of (***name of political jurisdiction***), in accordance with Section 10 of 1976 PA 390, as amended, I hereby declare that a "state of emergency" exists therein, that the response and recovery aspects of the emergency operations plan have been activated, and that local resources are being utilized to the fullest possible extent.

Authorized by: (***insert name/title of chief executive***)

Submittal Instructions

1. This declaration must be promptly forwarded (**via E Team as an attachment to the Incident Report or Jurisdiction Situation Report,** or by facsimile, LEIN or e-mail as a backup in the event E Team is not available) to the Commanding Officer of the Emergency Management Division, Department of State Police (facsimile #: 517/333-4987; LEIN code: ELES; e-mail address: emdseoc@michigan.gov), MSP Operations (facsimile #: 517/336-6257; LEIN code: ELOP; e-mail address: operationslts@michigan.gov), the appropriate EMD/MSP District Coordinator, and the Post Commander of the nearest MSP Post, pursuant to Section 10 of 1976 PA 390, as amended.

2. If using E Team to submit the declaration, please choose the "MI SEOC Damage Assessment" notification group in the notification section of the Incident Report or Jurisdiction Situation Report.

3. If E Team is unavailable and using facsimile, LEIN or e-mail will delay the information, the telephone should be used. If the telephone is used, E Team and/or hardcopy confirmation must be forwarded as soon as possible.

   (IF USING E-MAIL): TO ENSURE THAT MSP OPERATIONS HAS RECEIVED THE E-MAIL TRANSMISSION, PLEASE CALL THEM AT (517) 336-6605 (24 HR. #), OR SEND A BRIEF LEIN MESSAGE, INDICATING THAT AN E-MAIL MESSAGE HAS BEEN SENT. BE SURE TO PROVIDE YOUR PHONE # AND E-MAIL ADDRESS FOR DATA VERIFICATION.

4. A copy of this declaration should be kept on file with the local Clerk (County Clerk for counties; City or Township Clerk for municipal emergency management programs).

Attachment D: Format for Requesting a Governor's Emergency or Disaster Declaration

To: Governor, State of Michigan

On (***insert date***), pursuant to Section 10 of 1976 PA 390, as amended, I declared that a "state of emergency" exists in (***insert name of political jurisdiction***) due to (***describe the type of incident – e.g., tornado, flood, ice storm, etc.***) which caused widespread and severe damage, injury and loss of life and property. The response and recovery aspects of the (***insert name of political jurisdiction***) Emergency Operations Plan have been activated, and local resources are being utilized to the fullest possible extent. Despite these efforts, local resources are not sufficient to cope with the situation.

Therefore, in accordance with Section 12 of 1976 PA 390, as amended, I deem this incident to be beyond the control of this political subdivision and I respectfully request, for and on behalf of the citizens of this political subdivision, that you declare that a "state of disaster" or "state of emergency" exists therein and that consideration be given, if conditions warrant, to petitioning the President of the United States for assistance provided by Public Law 93-288, as amended. In support of this request, we will submit specific damage assessment data through official channels and in accordance with the guidance provided by the Emergency Management Division, Department of State Police (EMD/MSP) within three (3) days of this incident, unless circumstances dictate an earlier submittal as requested by the EMD/MSP. Furthermore, I understand that this request will not be acted upon without sufficient damage assessment data to substantiate the need for assistance.

Specifically, I request the following state assistance to supplement local response and recovery efforts: (***describe the assistance needed to cope with the situation – e.g., State Police officers to staff eight access control points; five dump trucks and front-end loaders for debris removal; 50 traffic barricades for blocking traffic; National Guard troops to provide 24-hour security for eight severely damaged schools; etc.***).

Accordingly, be advised that (***insert name/title of local official - usually the Emergency Manager***) will provide liaison and coordination with state and federal authorities for assistance related to this incident, and in accordance with Section 14 of 1976 PA 390, as amended, he/she is directed to transmit this request to the EMD/MSP.

Authorized by: (***insert name/title of chief executive***)

Submittal Instructions

1. This format should be used to request a Governor's Emergency or Disaster Declaration pursuant to 1976 PA 390, as amended, and the Michigan Emergency Management Plan (MEMP).

2. This request should be promptly forwarded (**via E Team as an <u>attachment</u> to the Jurisdiction Situation Report**, or by facsimile, LEIN or e-mail as a <u>backup</u> in the event E Team is not available) to the Commanding Officer of the Emergency Management Division, Department of State Police (facsimile #: 517/333-4987; LEIN code: ELES; e-mail address: emdseoc@michigan.gov), MSP Operations (facsimile #: 517/336-6257; LEIN code: ELOP; e-mail address: operationslts@michigan.gov), the appropriate EMD/MSP District Coordinator, and the Post Commander of the nearest MSP Post, pursuant to Section 10 of 1976 PA 390, as amended., in the same manner as the Incident Report and local "state of emergency" declaration.

3. If using E Team to submit the request, please choose the "MI SEOC Damage Assessment" notification group in the notification section of the Jurisdiction Situation Report.

4. If E Team is unavailable and using facsimile, LEIN or e-mail will delay the information, the telephone should be used. If the telephone is used, E Team and/or hardcopy confirmation must be forwarded as soon as possible.

   (IF USING E-MAIL): TO ENSURE THAT MSP OPERATIONS HAS RECEIVED THE E-MAIL TRANSMISSION, PLEASE CALL THEM AT (517) 336-6605 (24 HR. #), <u>OR</u> SEND A BRIEF LEIN MESSAGE, INDICATING THAT AN E-MAIL MESSAGE HAS BEEN SENT. BE SURE TO PROVIDE YOUR PHONE # <u>AND</u> E-MAIL ADDRESS FOR DATA VERIFICATION.

5. This request ***will not*** be acted upon without sufficient data to substantiate the need for assistance.

6. In accordance with Section 12 of 1976 PA 390, as amended, the chief executive official of a county or municipality may initiate or authorize this request for their political subdivision.

7. A copy of this request should be kept on file with the local Clerk (County Clerk for counties; City or Township Clerk for municipal emergency management programs).

Attachment E: Damage Survey Worksheet and Mapping Instructions

The damage survey worksheet found on pages 33-34 is provided to assist on-site inspection teams in documenting damage to homes and businesses (private damage) and public facilities (public damage). By using this worksheet, an accurate house-by-house, business-by-business, facility-by-facility, etc. survey can be completed in the shortest time possible. Each street, block, section, etc., (depending on how the surveys are conducted) should be recorded on a separate worksheet. **NOTE: SEPARATE WORKSHEETS SHOULD BE USED FOR PUBLIC AND PRIVATE DAMAGE.**

Mapping Private Damage. Damaged areas should be outlined on one or more maps (ideally one for private damage and one for public damage) and classified according to the predominant level of damage encountered. A common damage classification system is provided on pages 29-31. For example, if an on-site inspection team surveys a four square block area and, upon reviewing their completed worksheets, finds that 75% of the homes and businesses surveyed received major damage (category 2 in the classification system), then the area surveyed should be outlined on the map and assigned a "2." Similarly, if the majority of homes and businesses surveyed received only minor damage (category 1 in the classification system), then a "1" should be assigned to that area, and so on. The number of damaged homes / businesses should be indicated (in parenthesis) in each outlined area. See the sample map on page 32.

Mapping Public Damage. For public facilities, this system works in the same manner. Damaged public facilities are classified on the damage survey worksheet using the same classification system. In addition, a damage cost estimate also should be entered in the "Description of Damage" column on the right side of the worksheet. This damage estimate will only be a "ballpark" number, since there normally isn't time to develop the highly-detailed labor and material estimates necessary for a more accurate cost figure. On the public damage map, a short description of the damage (i.e., 50 ft. section of roadbed collapsed; road impassable) should be entered next to the damaged facility, in addition to the damage classification (i.e., major damage, or "2").

Facilitating Federal / State Assessments. Classifying and mapping the damage in this way makes it easier for Preliminary Damage Assessment (PDA) teams to prioritize damage and complete their necessary damage surveys in the shortest time possible. It also helps ensure that the most serious damage is surveyed first by these teams so that assistance can be targeted where it is needed most. In addition, it also assists federal and state authorities in developing appropriate response and recovery strategies, and in determining the type and amount of assistance required.

Information Submittal. The completed damage survey worksheets, along with the map(s) with damaged areas outlined and classified and any photography taken of the damaged facilities / areas, should be submitted to the Planning Section (in the local EOC) per local procedure. The Planning Section then compiles this information in the appropriate fields on the E Team Jurisdiction Situation Report, attaches one or more damage maps and any applicable photography (hardcopy maps and photographs must be scanned and attached), and submits the report to the SEOC and the appropriate EMD/MSP District Coordinator within the specified three (3) day time period. **DO NOT SUBMIT DAMAGE SURVEY WORKSHEETS TO THE EMD/MSP. THEY SHOULD BE RETAINED LOCALLY FOR PERMANENT RECORDKEEPING AND FOR USE IN A PDA, IF ONE IS CONDUCTED.**

Notes Regarding Backup Submittal Methods. If E Team is not available and the backup submittal methods (facsimile, LEIN or e-mail) must be used instead, the following instructions may apply:

- *Map / Image Size and Quality*. If submitting by facsimile, the damage map(s) and photography must be no larger than 8 ½" X 11" in size and of appropriate resolution to be legible once transmitted. (Keep in mind that the image that comes out of the facsimile machine on the other end will in many cases be of significantly lower quality than the original. Maps must be compiled with this in mind. Similarly, photographs that have overly dark backgrounds or dark features may not transmit well by facsimile.) If submitting by e-mail, maps and photographs can be captured digitally and submitted as attachments. Maps and photographs cannot be submitted via the LEIN.

- *Page Numbering*. If submitting by facsimile, be sure to number the pages in chronological order (at the top or bottom of the page) in such a manner that the numbers will appear on each transmitted page. This will ensure that the package is arranged in the intended order, and that no pages are missing. The numbers can simply be hand written in and then circled for greater visibility.

- *List of Damaged Areas*. If submitting information electronically (LEIN or e-mail), a list of damaged areas can be compiled in lieu of the damage map(s). For example, private damage could be described by street, block, section, etc., in any of the following manners:

  - Elm Street from Maple to Oak Streets – major damage to 12 homes, minor damage to 17 homes; OR
  - The area bounded by Elm, Maple, Oak, and Pine Streets – major damage to 12 homes, minor damage to 17 homes; OR
  - The northwest section of the city bounded by Elm Street on the south, M-60 on the west, the Pine River on the north, and US-23 on the east – major damage to 12 homes, minor damage to 17 homes.

  Public damage should be described using the exact (official) name of the facility (e.g., Maple Street Elementary School; Ingham County Courthouse; etc.) or, in the case of bridges, roads, sewer lines, etc., the approximate location (e.g., M-60, 1/4 mile south of Centerline Road; the intersection of Davis Road and Burke Highway; the bridge over Maple River on M-25; etc.).

  On the hardcopy E Team Jurisdiction Situation Report, this information can be entered in the "Comments" field in the "What Additional Information Can You Provide" section. See page 44.

Damage Survey Considerations: Degree of Damage Categories

The following classification system is consistent with FEMA PDA guidelines and should be used for classifying private and public damage. This information should be recorded on a damage survey worksheet and damage map(s), as per the examples found on pages 32-34.

3 **DESTROYED:** Structure is not habitable / useable, and cannot be repaired to make habitable / useable. Structure is a total loss because the cost of repairs would likely exceed the replacement cost. Structure has complete failures to major components (i.e., basement walls / foundation, walls, roof, etc.). Generally, what is left will have to be bulldozed off or dismantled for new construction.

For flooding, structures that will not be economically repairable (i.e., pushed off foundation) can generally be considered destroyed. If the structure has 2 or more feet of water on the first floor and the water has remained in the structure for an extended period of time (more than one day), it is likely that the structure has incurred extensive damage to the walls and foundation and it can generally be considered destroyed. If the flood is of short duration (rapid rise and fall of the water) consideration can be given to classifying the damage as "major damage" (see below). Mobile homes that have water above the floor level can be considered destroyed. Mobile homes that have been swept from their foundations by flood waters can be considered destroyed.

EXAMPLES OF DESTROYED STRUCTURES:

2 **MAJOR DAMAGE:** Structure has sustained structural or significant damage, is not habitable / useable, and requires extensive repairs before it can be used again. Damage involves the structural features affecting strength and safety (i.e., foundation; collapse of any part of a building; two or more severely cracked, bulging or slanting walls; substantial roof damage; building obviously not straight or level; collapsed roadbed or bridge deck; etc.). In general, has more than 50% damage to the structure and the damage will likely take more than 30 days to repair. ***(Note: damage expressed as a percentage of structure replacement value.)***

For flooding, structures with no basement that have 2 or more feet of water covering the first floor can be considered to have major damage. (If the water has been in place for more than one day, more extensive damage may have occurred. Consideration can be given to classifying the damage as "destroyed" – see above.) For structures with basements, if the water has caused structural

damage to the basement (i.e., a collapsed basement wall), it can be considered major damage. For mobile homes, if water has soaked the bottom board or the home has shifted on its piers, it can be considered major damage.

EXAMPLES OF STRUCTURES WITH MAJOR DAMAGE:

1 **MINOR DAMAGE:** Structure is damaged and not habitable / useable, but can be made habitable / useable in a short period of time. Examples: one wall or a section of roof damaged; minor problems in road or bridge deck; mobile home foundation has shifted or utility connections have been broken; etc. Generally has less than 50% damage to structure, and can be repaired within 30 days.

For flooding, structures with no basement that have less than 2 feet of water covering the first floor can be considered to have minor damage. For structures with basements, less than 8 feet of water in the basement and no structural damage can be considered minor damage. (If the water has been in place for more than one day, extensive foundation damage may have occurred. Consideration can be given to classifying the damage as “major damage” – see above.) For mobile homes, if water has flooded utilities and/or piers have shifted or washed out, it can be considered minor damage.

EXAMPLES OF STRUCTURES WITH MINOR DAMAGE:

0 **AFFECTED:** Structure is habitable / usable, but requires mostly cosmetic repairs to return it to pre-disaster condition. Examples: lost shingles or other minor roof problems; broken windows, walls or doors; debris blocking otherwise undamaged roadway; etc.

For flooding, in structures with basements, less than one foot of water in the basement can be considered affected. Structures with minor access problems due to flooding can also be considered affected. For mobile homes, if water is under but did not touch the unit, it can be considered affected.

EXAMPLES OF AFFECTED STRUCTURES:

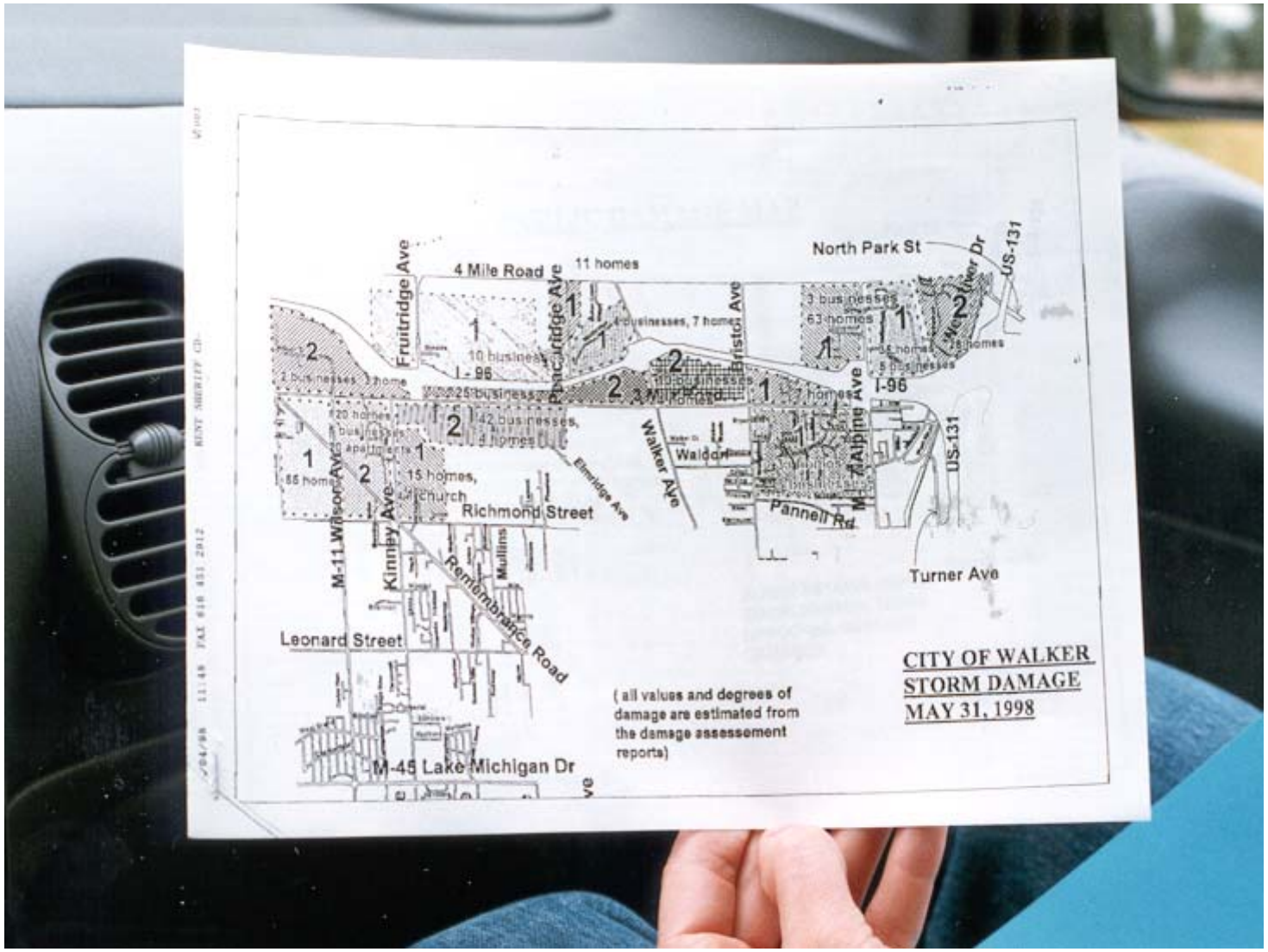
Damage Classification: Rapid Evaluation Matrix

Damage Classification	Currently Habitable / Useable?	Approximate % of Damage	Flood Depth: Single / Multi-Family Home	Flood Depth: Mobile Home	Flood Duration: 1 Day or Less, Consider This Classification	Flood Duration: >1 Day, Consider This Classification
0 – Affected	Yes	Mostly cosmetic	B = <1 ft in basement NB = minor access problems	Minor access problems	0 – Affected	0 – Affected
1 – Minor Damage	No	Less than 50%	B = <8 ft in basement NB = <2 ft on 1st floor	Flooded utilities / piers	1 – Minor Damage	2 – Major Damage
2 – Major Damage	No	50% or more	B = structural damage NB = 2+ ft on 1st floor	Bottom board soaked / home shifted on piers	2 – Major Damage	3 – Destroyed
3 – Destroyed	No	100%	B = 2+ ft on 1st floor for more than 1 day	Water above floor level / unit swept from foundation	2 – Major Damage	3 – Destroyed

Notes: B = structure with basement / flooding in basement; NB = structure with no basement / flooding on first floor; > = greater than; < = less than. Follow the chart from left to right, beginning with the left hand column. For non-flood disasters, use the first three columns to evaluate. For flood disasters, use all of the columns to evaluate. Damage is expressed as a percentage of structure replacement value.

Damage Map(s)

Damage information recorded on the damage survey worksheets should be recorded on one or more maps (ideally one for private damage, as shown below, and one for public damage) with the predominant level of damage clearly indicated within each survey area. This area had a mixture of major damage ("2") and minor damage ("1").



Damage Survey Worksheet (showing how private damage is recorded)

Type of Disaster: Flooding/Severe Storm **County/City:** Anytown, MI **Team Conducting Survey:** Smith/Jones/Thompson
Survey Date / Street Name or Location: 10/21/03; Maple Street **Damage Type (Public or Private):** Private

Address or General Location	Degree of Damage				Type of Structure	Flood Level in Feet: B=basement F=first floor		Description of Damage (Include cost estimate for public facility damage. Include insurance coverage estimate for damage, if available / applicable. An alternative would be to use a simple alphabetic code for insurance coverage – e.g., N = no insurance; U = under insured; I = fully insured.)	Latitude / Longitude
	0	1	2	3		B	F		
100 Block: 105 Maple Street		X			S	1.5	---	1.5 feet of water in basement only; has flood insurance (100%)	N42°57'19 / W085°07'45
108 Maple Street		X			S	1.5	---	1.5 feet of water in basement only; no flood insurance (0%)	N42°57'24 / W085°08'02
111 Maple Street			X		S	---	2.5	Water below door knob; basement inundated; no flood insurance (0%)	N42°57'19 / W085°07'58
114 Maple Street				X	M	---	1.5	1.5 feet of water on first floor – destroyed; has flood insurance (100%)	N42°57'19 / W085°08'58
200 Block: 207 Maple Street				X	S	---	---	Completely gone – destroyed; has insurance (100%)	N42°57'16 / W085°08'14
212 Maple Street				X	S	---	---	Front walls still standing; everything else gone; has insurance (100%)	N42°57'14 / W085°08'14
217 Maple Street				X	S	---	---	Roof / outside walls gone – destroyed; has insurance (100%)	N42°57'13 / W085°08'18
239 Maple Street	X				S	---	---	Downed tree damaged porch corner only; insurance info not available	N42°57'11 / W085°08'21
TOTALS:	**1**	**2**	**1**	**4**					

Degree of Damage:
3 Destroyed (100% - not habitable or useable)
(Flooding: 2+ feet of water on first floor for more than 1 day; for mobile homes, water above the floor level)
2 Major Damage (50% or more damage; not habitable / useable; requires extensive repairs)
(Flooding: no basement – 2+ feet of water on first floor; basement – has caused structural damage)
1 Minor Damage (<50% damage; not habitable / useable, but can be made so in short time; minor repairs only)
(Flooding: no basement – less than 2 feet of water on first floor; basement – less than 8 feet of water in basement)
0 Affected (Habitable / usable; requires mostly cosmetic repairs)
(Flooding: no basement – minor access problems; basement – less than 1 foot of water in basement)

Type of Structure:
Private Damage
S Single Family Home (primary residence)
M Mobile/Manufactured Home (primary residence)
A Apartment/Rental Unit (rental residence)
V Vacation Home/Cottage (secondary residence)
B Business (includes churches)

Public Damage
P (For public structures, also indicate the type of structure by name)

IMPORTANT NOTE: After the survey is completed, this worksheet should be **RETAINED** locally for reference and follow-up by federal and state officials. Also, be sure to use **SEPARATE WORKSHEETS** for public and private damage, to eliminate any possibility of confusion.

Damage Survey Worksheet (showing how public damage is recorded)

Type of Disaster: Flooding/Severe Storm **County/City:** Anytown, MI **Team Conducting Survey:** Smith/Jones/Thompson
Survey Date / Street Name or Location: 10/21/03; Northeast Quadrant **Damage Type (Public or Private):** Public

Address or General Location	Degree of Damage				Type of Structure	Flood Level in Feet: B=basement F=first floor		Description of Damage (Include cost estimate for public facility damage. Include insurance coverage estimate for damage, if available / applicable. An alternative would be to use a simple alphabetic code for insurance coverage – e.g., N = no insurance; U = under insured; I = fully insured.)	Latitude / Longitude
	0	1	2	3		B	F		
Intersection of M-49 and CR-223		X			Road	---	---	Shoulder washout; minor pavement collapse; $5,000; **N**	N42°57'19 / W085°07'45
M-62 bridge at Oak River			X		Bridge	---	---	Partial washout of bridge deck; not usable; $52,000; **N**	N42°57'24 / W085°08'02
M-49 culvert at Perkins Drain				X	Culvert	---	---	Complete washout; culvert gone, roadbed collapsed; $80,000; **N**	N42°57'19 / W085°07'58
M-49 at mile marker 21	X				Road	---	---	15 downed trees on road; no damage; $3,000 to remove / dispose of	N42°57'19 / W085°08'58
M-49 bridge at Red Run Drain				X	Bridge	---	---	Bridge completely washed out; total replacement; $250,000; **N**	N42°57'16 / W085°08'14
Oak Township Public Works Garage (221 Oak Rd.)				X	Building	---	---	Building completely gone; total replacement; $900,000; **U**	N42°57'14 / W085°08'14
Oak Township Water Treatment Facility (600 Oak Rd.)		X			Building	---	---	Roof partially blown off; walls intact; $50,000; **U**	N42°57'13 / W085°08'18
TOTALS:	**1**	**2**	**1**	**3**					

Degree of Damage:
3 Destroyed (100% - not habitable or useable)
(Flooding: 2+ feet of water on first floor for more than 1 day; for mobile homes, water above the floor level)
2 Major Damage (50% or more damage; not habitable / useable; requires extensive repairs)
(Flooding: no basement – 2+ feet of water on first floor; basement – has caused structural damage)
1 Minor Damage (>50% damage; not habitable / useable, but can be made so in short time; minor repairs only)
(Flooding: no basement – less than 2 feet of water on first floor; basement – less than 8 feet of water in basement)
0 Affected (Habitable / useable; requires mostly cosmetic repairs)
(Flooding: no basement – minor access problems; basement – less than 1 foot of water in basement)

Type of Structure:
Private Damage
S Single Family Home (primary residence)
M Mobile/Manufactured Home (primary residence)
A Apartment/Rental Unit (rental residence)
V Vacation Home/Cottage (secondary residence)
B Business (includes churches)

Public Damage
P (For public structures, also indicate the type of structure by name)

IMPORTANT NOTE: After the survey is completed, this worksheet should be **RETAINED** locally for reference and follow-up by federal and state officials. Also, be sure to use **SEPARATE WORKSHEETS** for public and private damage, to eliminate any possibility of confusion.

Geospatial Data Collection

Whenever possible, geospatial coordinates (latitude and longitude) should be collected (in addition to the street address) for each damaged structure / facility (or clusters of damaged structures / facilities, as appropriate). This information can be entered in the last (far right hand) column of the damage survey worksheet. Collecting this information will assist the EMD/MSP in mapping the damaged areas using a GIS in the SEOC. For some public facility sites (e.g., drains, bridges, culverts, etc.) it will not be possible to include a street address so the geospatial coordinates will be the only method to accurately locate the damaged sites. (Note: if the community has already geo-located structures as part of the property assessment process, it will not be necessary to duplicate that effort in the field when conducting damage surveys.)

In general, geospatial data should be collected in the following manner:

- The standard datum of GPS latitude / longitude collection is the North American Datum of 1983 (NAD-83) or the World Geodetic System of 1984 (WGS-84) of the U.S. Defense Mapping Agency. Coordinates ideally will be in decimal degrees longitude and latitude with at least 6 decimal places for property locations and include a negative sign (-) to show west longitude or south latitude. For example: latitude 36.999221 longitude -109.044883. However, in most instances it will not be feasible to collect and report data in this manner. Therefore, it is acceptable to record the coordinates in the standard format of degrees, minutes and seconds. For example: latitude 36°42'36" longitude 085°81'18". The EMD/MSP can convert coordinates in this format to decimal format for database and map production purposes. It is also possible, on many GPS units, to simply enter the location as a "waypoint" and the coordinates can then be copied from the GPS unit to the EMD/MSP's GIS for database and map production.

- FEMA guidelines specify that geospatial coordinates (latitude and longitude) should be taken from one of the following places, listed in order of preference:

  - ✓ The front door of the structure;
  - ✓ The center of the beginning of the driveway, road, or access way that is used to access the property; or
  - ✓ From the westernmost or easternmost point of the property closest to the road or access way (either the SW, SE, NW or NE corner of the property). This specifically applies to areas / facilities / structures where actual addresses and easily recognizable property divisions may not exist.

Although collection of geospatial data is important to the State's assessment and response / recovery efforts, it is also important to remember that the actual assessment of the damaged facility is the ultimate purpose of the assessment effort. Therefore, keeping geospatial data collection as simple as possible is important to keeping the assessment operations on track and on time. It is very easy to get wrapped up in the intricacies of the geo-location process and ultimately forget the intended purpose of the assessment effort. Geospatial data collection helps ensure an accurate geographic portrayal of the damage; however, the actual assessment of the damage should remain the focus of the assessment effort. In some instances this may mean that **NO** geospatial data will be collected – depending on the situational circumstances and the time available for collecting information.

Attachment F: Damage Survey Form for Businesses and Institutions

Usage Note: This tool should be used by businesses and other community institutions (i.e., schools, churches, nursing homes, etc.) to independently assess their own damages and impacts. The completed form should be returned to the local EOC or other designated location for information compilation, analysis and reporting by the requested due date.

The ***(jurisdiction name)*** emergency management office needs accurate and timely information about this incident in order to determine it overall impacts, and to facilitate appropriate response and recovery efforts. The information you provide will help aid in determining the nature, scope, magnitude, extent of loss, and anticipated duration of the incident. **DIRECTIONS:** Please fill out this form completely and submit it by ***(due date)*** to the ***(jurisdiction name)*** Emergency Management Office using the contact information provided at the end of the form. If you have **immediate needs at your facility related to health and safety, please dial 911. Do NOT use this form to mobilize life safety assistance.** Also, this is **NOT** an application for state or federal disaster assistance; rather, it is an information gathering tool that will aid local, state and federal officials in making a determination whether or not such assistance may be required or warranted.

INCIDENT TYPE: _____ **DATE OF INCIDENT:** _____ **FACILITY LATITUDE/LONGITUDE:** _____ **NOTE: ATTACH PHOTOS / VIDEO OF THE DAMAGE, IF POSSIBLE.**

FACILITY INFORMATION:

Facility Name	Facility Contact Person	
Address	City	Zip Code
E-Mail	Phone	Cell Phone

1. Check the type(s) of function(s) that best describe(s) your facility:

Private Business

- ☐ Manufacturing
- ☐ Cultural / Tourism
- ☐ Agriculture / Agribusiness
- ☐ School (K-12)
- ☐ Warehousing / Distributing
- ☐ Educational
- ☐ Science / Technology
- ☐ College / University / Trade School
- ☐ Transportation (any mode)
- ☐ Retail
- ☐ Service / Trade
- ☐ Media
- ☐ Hospitality
- ☐ Medical / Health Care
- ☐ Building / Construction
- ☐ Association
- ☐ Entertainment / Recreation
- ☐ Office / Financial
- ☐ Utility
- ☐ Other *(specify)* _____

Governmental or Private Non Profit

- ☐ School (K-12)
- ☐ Cultural / Tourism
- ☐ Community Center
- ☐ Correctional Facility
- ☐ College / University / Trade School
- ☐ Police / Fire / EMS Facility
- ☐ Religious
- ☐ Science / Technology
- ☐ Library / Museum / Arts
- ☐ Transportation (any mode)
- ☐ Legal / Court
- ☐ Zoo / Animal Control
- ☐ Office
- ☐ Water Control Facility
- ☐ Military
- ☐ Service / Trade
- ☐ Medical / Health Care
- ☐ Park / Recreational
- ☐ Shelter (any type)
- ☐ Other *(specify)* _____

SERVICES PROVIDED BY FACILITY:

2. Check the service(s) that your facility provides that contribute(s) to the health, safety, or general well being of the community:

- ☐ Shelter / Evacuation Assistance
- ☐ Health / Medical
- ☐ Elderly Services
- ☐ Utility Services
- ☐ Food Service
- ☐ Transportation
- ☐ Child Care / Entertainment
- ☐ Continuity of Government
- ☐ Education
- ☐ Legal Services
- ☐ Donations / Volunteers
- ☐ Public Works / Engineering
- ☐ Human Services
- ☐ Public Safety
- ☐ Planning / Regulatory
- ☐ Financial
- ☐ Warning / Communications
- ☐ Damage Assessment
- ☐ Cleaning / Restoration
- ☐ Other (specify) _____

3. Do you provide services to any "special needs" populations (those that may require additional assistance in a disaster)? ☐ Yes ☐ No

3a. If yes, check all that apply:

- ☐ Elderly
- ☐ Tourists
- ☐ Children
- ☐ Disabled
- ☐ Prisoners
- ☐ Supervised / Custodial Care
- ☐ Homebound
- ☐ Migrant Workers
- ☐ Other *(specify)* _____
- ☐ Persons with Medical Needs
- ☐ Homeless
- ☐ Non-English Speaking
- ☐ Animals

3b. What services do you provide to them? _____

3c. Are you still able to provide the services? ☐ Yes ☐ No

3d. If you are unable to provide services, how many individuals will be affected? _____

FACILITY DAMAGE:

4. Did your facility receive damage in the event? ☐ Yes ☐ No

Attachment F: Damage Survey Form for Businesses and Institutions (cont.)

4a. If yes, indicate the degree of damage:
☐ "0" Affected (mostly cosmetic) ☐ "1" Minor Damage (needs repair but safe to use) ☐ "2" Major Damage (not safe to use until repaired) ☐ "3" Destroyed (total loss)

5. Type of damage (check all that apply):
☐ Building ☐ Contents ☐ Critical Systems / Infrastructure ☐ Other *(specify)* _____

5a. If critical systems / infrastructure were affected, indicate those that are currently inoperable (check all that apply):
☐ Electric ☐ Water ☐ Sanitary Sewer ☐ Communications ☐ Data / Computer
☐ Natural Gas ☐ Roads / Bridges ☐ Storm Drainage ☐ Other *(specify)* _____

6. Injuries / casualties at facility (indicate number for each category, as applicable; DO NOT double count!):
Injured _____ Of the Injured, number that required hospital treatment _____ Still missing _____ Deaths _____

7. Other impacts to facility (indicate number for each category, as applicable):
Staff evacuated from facility _____ Staff sheltered at facility _____ Other impacts *(specify)* _____

8. Is the facility listed on state / national registers of historic places? ☐ Yes ☐ No

9. Were there any cultural, historical or archeological artifacts on your property that were damaged? ☐ Yes ☐ No

9a. If yes, check all that apply:
☐ Furniture / Other Property ☐ Structures ☐ Documents / Records ☐ Artwork ☐ Vehicles
☐ Clothing / Garments ☐ Religious / Tribal Artifacts ☐ Other *(specify)* _____

ASSISTANCE REQUIRED:

10. Do you require assistance from the local government as a result of the incident? ☐ Yes ☐ No

10a. If yes, indicate the type(s) of assistance that might be required (check all that apply):
☐ Missing Person Assistance ☐ Traffic Control / Barricading ☐ Security ☐ Flood Fighting ☐ Animal Care / Control
☐ Transportation ☐ Fire Investigation ☐ Debris Clearance / Removal ☐ Shelter / Food / Water / Clothing ☐ Emergency Power
☐ Financial Assistance ☐ Medical Services ☐ Engineering Advice / Assistance ☐ Damage Assessment ☐ Artifacts Preservation
☐ Hazardous Material Removal ☐ Emergency Information ☐ Volunteers ☐ Temporary Facilities ☐ Technical Advice
☐ Materials (tarps, plywood, sheeting) ☐ Language Translation ☐ Continuity of Government ☐ Other *(specify)* _____

OPERATIONAL STATUS:

11. How "operational" is your facility at this time? ☐ Full (no service reduction) ☐ Partial (some service reduction) ☐ Closed (due to incident)

11a. If closed, who else in the community / area will be significantly affected? (check all that apply)
☐ Other Businesses *(specify)* _____ ☐ Government Agencies *(specify)* _____ ☐ Community Groups *(specify)* _____ ☐ Children ☐ Tourists
☐ Surrounding Communities ☐ Other *(specify)* _____

12. Have you relocated to another facility? ☐ Yes ☐No **12a. If yes, where?** _____

13. Number of persons employed at your facility (prior to the incident) _____ **13a. Number of persons employed at your facility (after the incident)** _____

14. What is your insurance status relative to the damage / impacts caused by this incident? (indicate which insurances your facility carries)
☐ Property / Casualty (full coverage) ☐ Property / Casualty (partial coverage) ☐ Business Interruption ☐ Flood (if applicable) ☐ Other *(specify)* _____
☐ None (uninsured – no coverage)

15. As a result of this incident, have any upcoming scheduled events at your facility been cancelled, postponed, altered or relocated? ☐ Yes ☐No

15a. If yes, provide specific details: _____ **16. What is the estimated revenue loss for your facility due to this incident?** _____

SUBMIT TO: Name / Title _____ **Phone / Cell** _____ **E-Mail** _____ **Facsimile** _____ **Mailing Address** _____

Attachment G: Disaster Debris Estimating Techniques

Note: The following guidelines can be used to aid in estimating the amounts of disaster debris on the ground. By using these measures and some simple mathematical calculations, good ballpark debris figures can be generated in a relatively short amount of time. Determining the amount and types of disaster debris is a necessary first step in setting up a debris removal and disposal operation, and in determining potential costs associated with Category A (Debris Removal and Disposal) work under the federal Public Assistance Grant Program (PAGP), or Section 19 of 1976 PA 390 state funding in the absence of federal PAGP funding. This information can be reported in the "Public Assistance (PA) Damages" section of the E Team Jurisdiction Situation Report (for local jurisdictions) and E Team Agency Situation Report (for state agencies). It can also be reported in the "Situation Summary" section of the E Team Incident Report if early debris estimates are generated.

Standard Acronyms / Terms: L = Length; W = Width; H = Height; CY = Cubic Yards; T = Tons; SF = Square Feet; C & D = construction and demolition debris (materials from damaged buildings / related); woody debris = downed trees / shrubbery

FORMULAS:

One story building: L' x W' x H' / 27 = (#) Cubic Yards x .33 (compaction factor) = **(#) Cubic Yards**
*(For example: the formula for a building that is 100' long x 50' wide x 10' high is….100 x 50 x 10 / 27 = 1,852 CY x .33 = **611 CY**)*

Debris pile: L' x W' x H' / 27 = **(#) Cubic Yards**
*(For example: the formula for a debris pile that is 50' long x 75' wide x 4' high is….50 x 75 x 4 / 27 = **556 CY**)*

QUICK REFERENCE TABLE - DEBRIS PILES:

Length (Ft.)	Width (Ft.)	Height (Ft.)	Volume (CY)	Tons (T) – C & D Debris	Tons (T) – Woody Debris	Approximate Size Reference
10	10	4	15	7.5	3.75	Small above ground pool
20	10	4	30	15	7.5	Medium above ground pool
30	10	4	45	22.5	11.25	Medium above ground pool
40	10	4	60	30	15	Large above ground pool
50	10	4	75	37.5	18.75	Large above ground pool

QUICK REFERENCE TABLE - TYPICAL 1 STORY HOUSE*:

House Size (SF)	Volume (CY)	Tons (T) – C & D Debris
1,800	175	87.5
2,000	195	97.5
2,200	215	107.5
2,400	235	117.5
2,600	255	127.5
2,800	275	137.5
Single wide mobile home	80	40
Double wide mobile home	160	80

Formula: Square feet x 8 (feet) / 27 x .33 (compaction factor) = CY. *Just C & D debris – does not account for vegetative cover around house. To account for vegetation, multiply CY total by 1.1 for light vegetation, 1.3 for medium vegetation, and 1.5 for heavy vegetation.

QUICK REFERENCE TABLE – OTHER:

Type of Debris	Volume (CY)	Tons (T)
Trees (15 @ 8" diameter)	40	10
House (2,000 SF with vegetation)**	300	150

**Provides a good all-around guideline which accounts for vegetative cover around the house.

Attachment H: Guidelines for Disaster Photography

Taking photographs and/or video footage of incident scenes is a critically important part of the damage assessment process, yet it is a skill that is often overlooked in damage assessment training. As a result, many incident scene images do not adequately identify the site or portray the nature and extent of the physical damage. These guidelines are meant to help minimize sub-standard disaster photography by providing a simple process to follow when shooting photographs and/or video footage in the field.

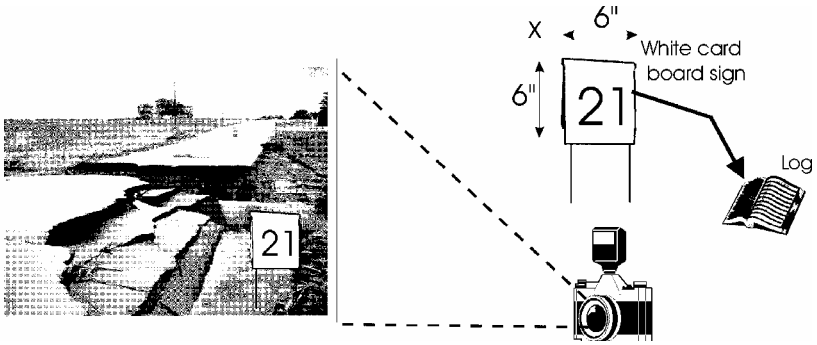
STEP 1: SITE IDENTIFICATION

Proper identification of the site being shot is the first step in the process. Even the best image is worthless if the person reviewing the photograph or video cannot determine where the image was taken. In most instances, the person that actually took the photo or shot the video footage in the field is not the person that ultimately ends up reviewing the images at a later time. In addition, in many disaster situations, it is not uncommon for dozens of sites to be photographed or video recorded, greatly increasing the likelihood that the person shooting the images may not remember where each and every image was taken. Therefore, there is a definite need to establish the identification of the site when it is actually being recorded in the field.

For **VIDEO IMAGES,** the person shooting the scene should verbally identify the name and general location of the site, as well as the date and time that the video is being shot. This should be done for every site being shot. That way, any chance for misinterpretation of the site location is eliminated. (Note: it is also important to remember to keep the camcorder as still as possible when shooting the footage, to avoid the "ocean motion" syndrome that is prevalent in many amateur videos. Unnecessary and excessive movement of the camcorder greatly detracts from the video images. In addition, unnecessary background conversation and noises should be kept to a minimum to provide for the best possible audio quality. Lastly, as a rule of thumb, you should not focus on a particular site image for more than 15 seconds. For example, you may want to show the "context" image for 15 seconds, the "curbside" image for 15 seconds, and the "close-up" image for 15 seconds. Focusing any longer on a site image will make the footage monotonous and unnecessarily long.)

For **PHOTOGRAPHIC IMAGES,** the photographer should assign a number to each site, and record that number and site location in a notebook. For example: **Site 1:** Smith Street Bridge, over the Green River; **Site 2:** Maple Drain culvert under River Road; **Site 3:** Oak Street Senior Center, Pine City; etc.

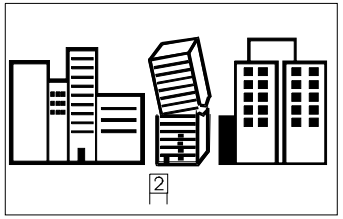
A small cardboard sign (approximately 6" X 6" in size), attached to a wire or wood stake, with the site number clearly marked in black permanent marker, should be placed in the ground at the edge of the site so that it is visible within the camera image frame. This sign will clearly identify the site in the photograph. The sign should be placed in such a manner that it will be in reasonable focus in the final photograph. Each site should be numbered chronologically in this manner, not each image. In other words, all images at site XYZ should be labeled with the number 1, all images at site PDQ should be labeled with the number 2, and so on. Numbering should be continuous, rather than starting over again at number 1 for each roll of film shot.



Each disaster site should be shot from a minimum of 3 different positions to ensure proper image documentation:

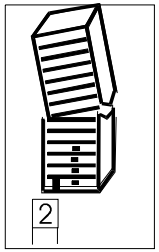
STEP 2: CONTEXT IMAGE

The context image will show the damaged site in relationship to other surrounding structures and land uses. In other words, this image would be shot from a distance such that the site in question, plus the immediate surrounding properties, can be easily viewed within the frame. Such an image would provide the "big picture" of where the site sits in relationship to everything around it. For example:



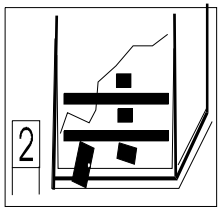
STEP 3: CURBSIDE IMAGE

The curbside image will show the damaged site as it would appear if you were standing in front of it in the street. The site should fill the image frame from edge to edge. For some sites, it may be necessary to stand a little further back than curbside to obtain the proper edge to edge image, but the principle remains the same. This image should contain only the site, and not the surrounding properties. This image will provide a mid-range view of the damage at the site. For example:



STEP 4: CLOSE-UP IMAGE

The close-up image will show the damaged site, or portion of the site, as it would appear if you were standing directly in front of it, approximately 5' - 15' away. This image would be particularly useful in highlighting specific details of the damage, such as focusing on a damaged doorway to a building or a hole in a roadway. In some cases, more than one close-up image will be necessary to adequately portray the damage. For example:



Attachment I: Situation Report Forms

(The following hardcopy forms should be used ONLY if E Team is inaccessible or not available. Otherwise, all assessment reports should be filed electronically through E Team. The hardcopy forms have been modified slightly from the E Team online forms.)

Note: All E Team forms depicted in this document are based on E Team Release 2.3.

The line designators (Line 1, Line 2, Line 3, etc.) in each information box are for LEIN and radio / telephone transmittal purposes only. They will not be found in the E Team online report form.

Attachment I: Jurisdiction Situation Report Form – Page 1

(Fields may be subject to change.)

Jurisdiction Situation Report – Hardcopy (Notes: * = required field; see page 45 for field selections)

***Jurisdiction:** (Line 1)	***Overall Status:** (Line 2)

City: (Line 3)	**County:** (Line 4)

Geographic Area: (Line 5)	**State:** (Line 6)

Related Event/Incident/Activity: (Line 7)

SITUATION SUMMARY

(Line 8)

Current Objectives: (Line 9)

Projected Objectives: (Line 10)

Concerns/Problems: (Line 11)

Jurisdiction Situation Report – Hardcopy (Note: see page 45 for field selections)

WHAT EMERGENCY DECLARATIONS HAVE BEEN MADE?

	Local (Municipal)	Intermediate (County)	Gubernatorial	Presidential
Date Requested: (L-R, Lines 12-15)				
Date Granted: (L-R, Lines 16-19)				

WHAT INFORMATION CAN YOU PROVIDE REGARDING NUMBER OF CASUALTIES

	Estimated	Confirmed	Comments
Fatalities: (L-R, Lines 20-22)			
Injuries: (L-R, Lines 23-25)			

WHAT DAMAGE INFORMATION CAN YOU PROVIDE

	Destroyed	Major	Minor	Estimated Cost
Residences: (L-R, Lines 26-29)				
Business: (L-R, Lines 30-33)				
Government: (L-R, Lines 34-37)				
			Total Estimated Cost: (Line 38)	
Est. % Insured – Residences: (Line 39)				
Est. % Insured – Business: (Line 40)				
Est. % Insured – Government: (Line 41)				

PUBLIC ASSISTANCE (PA) DAMAGES (Note: Categories A & B – exclude normal operating costs)

		Number of Sites	Estimated Loss
CAT A: Debris Removal and Disposal	(L-R, Lines 42, 43)		
CAT B: Emergency Protective Measures	(L-R, Lines 44, 45)		
CAT C: Road and Bridge Systems (non-federal)	(L-R, Lines 46, 47)		
CAT D: Water Control Facilities (levees, dams & channels)	(L-R, Lines 48, 49)		
CAT E: Public Buildings and Equipment	(L-R, Lines 50, 51)		
CAT F: Public Utilities (water and power, etc.)	(L-R, Lines 52, 53)		
CAT G: Park/Recreational/Other:	(L-R, Lines 54, 55)		
TOTALS:	(L-R, Lines 56, 57)		

Jurisdiction Situation Report – Hardcopy (Note: see page 45 for field selections)

WHAT EVACUATION INFORMATION CAN YOU PROVIDE

Number of People Evacuated: (Line 58)
Number of People in Shelters: (Line 59)
Comments: (Line 60)

WHAT ADDITIONAL INFORMATION CAN YOU PROVIDE

Comments: (Line 61)

ATTACHMENTS

Supporting Files/Documents Attached:

Attachment I: Jurisdiction Situation Report Form – Field Selections
(**DO NOT** SUBMIT THIS PAGE)

Jurisdiction Situation Report - Hardcopy

***Jurisdiction:**
List jurisdiction by name

***Overall Status (select only one):**
Black – Major Assistance Required
Red – Assistance Required
Yellow – Under Control
Green – Normal Conditions
Gray – Unknown
Blue – Closed

Geographic Area:
List MSP District in which incident occurred

Related Event/Activity:
List name of related event (if any) that caused this incident

What Emergency Declarations Have Been Made?
Local (Municipal) – date/time that declaration was made by local municipality
Intermediate (County) – date/time that declaration was made by county
Gubernatorial – date/time that state declaration was requested and/or granted
Presidential – date/time that federal declaration was requested and/or granted

What Damage Information Can You Provide (estimated cost of damaged residences, businesses, government facilities):
List the estimated costs for repairing/replacing the residences, businesses and government facilities damaged or destroyed in this incident

Public Assistance (PA) Damages: Indicate the number of sites damaged and estimated loss figures ($) for each category of public facilities

Category A: Debris Removal and Disposal – include figures for clearing debris from public roads/streets, other public property, and private property (when cleared by government forces to protect public health and safety).
Category B: Emergency Protective Measures – include figures for performing emergency temporary repairs to remove or reduce immediate threats to public health, safety or property, emergency flood protection activities, security/traffic control measures, search and rescue operations, shelter/feeding, etc.
Category C: Road and Bridge Systems (non-federal) – include figures for repairing damage to non-federal highways, roads, streets, bridges, and normal right-of-way elements such as culverts, curbs, gutters, public sidewalks, shoulders, embankments, drainage ditches, signage, lighting, and traffic signals. **(NOTE: THE E TEAM DEFAULT FORMAT ONLY ALLOWS ENTRY OF NON-FEDERAL FIGURES; HOWEVER, FEDERAL AID FIGURES SHOULD ALSO BE INCLUDED IN THE REPORT, AS APPROPRIATE. THE FEDERAL AID FIGURES CAN BE LISTED IN THE "WHAT ADDITIONAL INFORMATION CAN YOU PROVIDE" SECTION, IN THIS MANNER: PUBLIC ASSISTANCE DAMAGES, CATEGORY C – FEDERAL AID ROAD AND BRIDGE SYSTEMS: NUMBER OF SITES = 20; ESTIMATED LOSS = $8,495,000.)**
Category D: Water Control Facilities – include figures for repairing damage to levees, dams, publicly-owned drainage channels and irrigation works, etc.
Category E: Public Buildings and Equipment – include figures for repairing or replacing damaged public buildings and equipment, including building contents, vehicles, public mass transportation systems (i.e., bus, light rail, ferry), publicly-owned railroads and railroad facilities, publicly-owned ports and port facilities, and publicly-owned airports and airport facilities.
Category F: Public Utilities – include figures for repairing damage to publicly-owned utility systems such as storm sewers, sanitary sewers, sewage treatment plants, public water facilities, water treatment plants, light/power facilities, etc.
Category G: Park/Recreational/Other – include figures for repairing damage to public parks, publicly-owned recreational facilities, and other publicly-owned facilities not covered by any other categories (such as cemeteries and improved/maintained beaches).

What Additional Information Can You Provide:
Describe other incident related impacts, including but not limited to:

- Unresolved and/or emerging public health/safety threats;
- Impacts on essential public services and facilities;
- Major roads/bridge closures;
- Impacts on specific community groups (e.g., the elderly, young children, non-English speaking, the homeless);
- Cities, townships and villages affected;
- Socio-economic impacts and other pertinent impacts (e.g., environmental, historical, political, psychological).

Attachments:
Indicate what documents, if any, are attached to this situation report (e.g., damage map, photography, declarations/declaration requests)

Attachment I: Agency Situation Report Form – Page 1
(NOTE: THIS FORM IS FOR STATE AGENCY REPORTING ONLY! Fields may be subject to change.)

Agency Situation Report – Hardcopy (Notes: * = required field; see page 49 for field selections)

WHAT IS THE OVERALL SITUATION?

***Agency:** (Line 1)	***Jurisdiction:** (Line 2)
***Operational Readiness:** (Line 3)	**City:** (Line 4)
County: (Line 5)	**Geographic Area:** (Line 6)
State: (Line 7)	**Related Event/Incident/Activity:** (Line 8)

SITUATION SUMMARY

(Line 9)

Current Objectives: (Line 10)

Projected Objectives: (Line 11)

Concerns/Problems: (Line 12)

Agency Situation Report – Hardcopy (Notes: * = required field; see page 49 for field selections)

WHAT IS YOUR ACTIVATION STATUS?

***OP Center/ECC Activated (Yes/No):** (Line 13)
If Yes, indicate hours of operation (12-hour only or 24-hour, round-the clock): (Line 14)

WHAT ARE YOUR CAPABILITIES?

		Availability	Mission Capability
Responders:	(L-R, Lines 15, 16)		
Administrative Staff:	(L-R, Lines 17, 18)		
Facilities:	(L-R, Lines 19, 20)		
Communications:	(L-R, Lines 21, 22)		
Consumables:	(L-R, Lines 23, 24)		
Vehicles/Equipment:	(L-R, Lines 25, 26)		
Comments:	(Line 27)		

WHAT DAMAGE INFORMATION CAN YOU PROVIDE:

PUBLIC ASSISTANCE (PA) DAMAGES (Note: Categories A & B – exclude normal operating costs)

		Number of Sites	Estimated Loss
CAT A: Debris Removal and Disposal	(L-R, Lines 28, 29)		
CAT B: Emergency Protective Measures	(L-R, Lines 30, 31)		
CAT C: Road and Bridge Systems (non-federal and federal)	(L-R, Lines 32, 33)		
CAT D: Water Control Facilities (levees, dams & channels)	(L-R, Lines 34, 35)		
CAT E: Public Buildings and Equipment	(L-R, Lines 36, 37)		
CAT F: Public Utilities (water and power, etc.)	(L-R, Lines 38, 39)		
CAT G: Park/Recreational/Other:	(L-R, Lines 40, 41)		
TOTALS:	(L-R, Lines 42, 43)		

Agency Situation Report – Hardcopy (Notes: * = required field; see page 49 for field selections)

CRITICAL RESOURCE RECAP (LIST ONLY YOUR TOP FIVE MOST CRITICAL RESOURCES)

Type	No. Deployed	No. Available
(Line 44)		
(Line 45)		
(Line 46)		
(Line 47)		
(Line 48)		

ATTACHMENTS

Supporting Files/Documents Attached:

Attachment I: Agency Situation Report Form – Field Selections
(**DO NOT** SUBMIT THIS PAGE)

Agency Situation Report - Hardcopy

***Agency:**
List agency by name

***Jurisdiction:**
List agency name again

***Operational Readiness (select only one):**
(Indicate the current ability of the agency to respond to the incident.)
Red – Not Operational
Yellow – Degraded Operations
Green – Normal Operations
Gray – Unknown

Geographic Area:
List MSP District in which incident occurred

Related Event/Activity:
List name of related event (if any) that caused this incident

Situation Summary:
Provide a detailed summary of the overall current situation from the agency's perspective. Describe incident related impacts such as unresolved and/or emerging public health/safety impacts; impacts on essential public services and facilities; major road/bridge closures; impacts on specific groups/population segments; socio-economic impacts; and other pertinent impacts (i.e., environmental, historical, political, psychological).

Current Objectives:
Indicate immediate agency objectives, including critical issues and priorities

Projected Objectives:
Indicate projected agency objectives, including critical issues and priorities

Concerns/Problems:
Indicate any specific concerns or problems your agency is dealing with

***OP Center/ECC Activated:**
Indicate whether your agency's Operations Center (Emergency Coordination Center – ECC) is activated (YES or NO); if YES, indicate the hours of operation (12-hour or 24-hour, round-the-clock)

What Are Your Capabilities?
Indicate your agency's availability and capability to respond to this incident. **Availability Key** (select only one): Unknown; 0%; 25%; 50%; 75%; or 100%
Mission Capability Key (select only one): Unknown = Not Enough Information to Report; Red = Not Mission Capable; Yellow = Partially Mission Capable; Green = Mission Capable

Public Assistance (PA) Damages:
Indicate the number of sites damaged and estimated loss figures ($) for each category of public facilities

Category A: Debris Removal and Disposal – include figures for clearing debris from public roads/streets, other public property, and private property (when cleared by government forces to protect public health and safety).
Category B: Emergency Protective Measures – include figures for performing emergency temporary repairs to remove or reduce immediate threats to public health, safety or property, emergency flood protection activities, security/traffic control measures, search and rescue operations, shelter/feeding, etc.
Category C: Road and Bridge Systems (non-federal) – include figures for repairing damage to non-federal highways, roads, streets, bridges, and normal right-of-way elements such as culverts, curbs, gutters, public sidewalks, shoulders, embankments, drainage ditches, signage, lighting, and traffic signals. **(NOTE: THE E TEAM DEFAULT FORMAT ONLY ALLOWS ENTRY OF NON-FEDERAL FIGURES; HOWEVER, FEDERAL AID FIGURES SHOULD ALSO BE INCLUDED IN THE REPORT, AS APPROPRIATE. THE FEDERAL AID FIGURES CAN BE LISTED IN THE "WHAT ADDITIONAL INFORMATION CAN YOU PROVIDE" SECTION, IN THIS MANNER: PUBLIC ASSISTANCE DAMAGES, CATEGORY C – FEDERAL AID ROAD AND BRIDGE SYSTEMS: NUMBER OF SITES = 20; ESTIMATED LOSS = $8,495,000.)**
Category D: Water Control Facilities – include figures for repairing damage to levees, dams, publicly-owned drainage channels and irrigation works, etc.
Category E: Public Buildings and Equipment – include figures for repairing or replacing damaged public buildings and equipment, including building contents, vehicles, public mass transportation systems (i.e., bus, light rail, ferry), publicly-owned railroads and railroad facilities, publicly-owned ports and port facilities, and publicly-owned airports and airport facilities.
Category F: Public Utilities – include figures for repairing damage to publicly-owned utility systems such as storm sewers, sanitary sewers, sewage treatment plants, public water facilities, water treatment plants, light/power facilities, etc.
Category G: Park/Recreational/Other – include figures for repairing damage to public parks, publicly-owned recreational facilities, and other publicly-owned facilities not covered by any other categories (such as cemeteries and improved/maintained beaches).

Critical Resource Recap:
Enter information for the five (5) most critical resources your agency has activated for the incident.
Type: List the resource activated (i.e., radiological monitoring teams, water tankers, front end loaders)
No. Deployed: Enter the number of each resource deployed for the incident
No. Available: Enter the number of each resource that remains available for deployment

Attachments:
Indicate what documents, if any, are attached to this situation report
(i.e., damage map, photography, memoranda)

Attachment J: Damage Assessment Reporting Forms: Comparative Matrix for Data Entry

INITIAL INCIDENT REPORT

The information you placed here… **Will now go here…**

Old Form – Flash Report (EMD-22)	New Form – E Team Incident Report
Basic contact information (in box @ top of form)	**"Contact Info" box**
Line 1: Type of condition, emergency or disaster	**"Incident Type" box**
Line 2: Date and time of occurrence	**"Date & Time" box**
Line 3: Describe the area affected (county, twp., etc.)	**"Location Name" box; "Location" boxes (9)**
Line 4: Describe road conditions	**"Personnel and Infrastructure – Road Damage" box; "Situation Summary" box**
Line 5: Estimated deaths, injuries, stranded, sheltered	**"Personnel and Infrastructure" boxes (3); "Mass Care and Shelter" box; "Casualties" box**
Line 6: Estimated number of homes damaged	**"Fire and Rescue - # of Homes Destroyed / Threatened" box**
Line 7: Estimated number of homes destroyed	**"Fire and Rescue - # of Homes Destroyed / Threatened" box**
Line 8: Estimated number of businesses damaged	**"Fire and Rescue - # of Commercial Destroyed / Threatened" box**
Line 9: Estimated number of businesses destroyed	**"Fire and Rescue - # of Commercial Destroyed / Threatened" box**
Line 10: Describe damage to public buildings	**"Personnel and Infrastructure – Building Damage" box; "Situation Summary" box**
Line 11: Describe damage to utility systems	**"Personnel and Infrastructure – Utilities Damage" box; "Medical Health" box (2 lines); "Situation Summary" box**
Line 12: Describe local actions to be taken	**"Situation Summary" box; "Other – Action Plan" box; "What Additional Information Can You Provide" boxes (Law Enforcement, Medical Health, Mass Care and Shelter, Fire and Rescue, Hazardous Materials)**
Line 13: Describe outside assistance needed	**"Incident Status" box; "Situation Summary" box; "Emergency Management Administrative" box (hardcopy form only – not available on electronic E-Team form); "Attachments" box (attach assistance request)**
Line 14: Has a local state of emergency been declared	**"Situation Summary" box; "Emergency Management Administrative" box (hardcopy form only – not available on electronic E-Team form); "Attachments" box (attach local emergency declaration)**
	Additional information boxes include: Incident Status; Incident Prognosis; Lead Agency; Related Event; Severity; Action Plan; Weather Information; Supporting Agencies; ICP Established (Y/N); Geo Location & Mapping

DETAILED ASSESSMENT REPORT

The information you placed here… **Will now go here…**

Old Form – Damage and Injury Assessment Report (EMD-2)	New Form – E Team Situation Report
Individual Impacts: A. Deaths and Injuries	**"What Information Can You Provide Regarding Number of Casualties" box**
Individual Impacts: B. Assistance Rendered	**"What Evacuation Information Can You Provide" box**
Public Damage: C. Debris Clearance	**"Public Assistance (PA) Damages" box – Category A: Debris Removal and Disposal line**
Public Damage: D. Emergency Protective Measures	**"Public Assistance (PA) Damages" box – Category B: Emergency Protective Measures line**
Public Damage: E. Roads and Bridges	**"Public Assistance (PA) Damages" box – Category C: Road and Bridge Systems line**
Public Damage: F. Water Control Facilities	**"Public Assistance (PA) Damages" box – Category D: Water Control Facilities line**
Public Damage: G. Public Buildings and Equipment	**"Public Assistance (PA) Damages" box – Category E: Public Buildings and Equipment line**
Public Damage: H. Publicly-Owned Utility Systems	**"Public Assistance (PA) Damages" box – Category F: Public Utilities line**
Public Damage: I. Parks / Recreation Facilities	**"Public Assistance (PA) Damages" box – Category G: Park / Recreational / Other line**
Public Damage: J. Schools	**"Public Assistance (PA) Damages" box – Category E: Public Buildings and Equipment line**
Public Damage: K. Private Non-Profit Facilities	**"Public Assistance (PA) Damages" box – Category G: Park / Recreational / Other line**
Private Damage: L. Homes	**"What Damage Information Can You Provide" box – Residences line**
Private Damage: M. Businesses	**"What Damage Information Can You Provide" box – Business line; "What Additional Information Can You Provide – Comments" box (for number of persons unemployed)**
N. Budget Information	**"What Additional Information Can You Provide – Comments" box (provide budget information in narrative format)**
O. Community Impacts	**"What Additional Information Can You Provide – Comments" box (provide impact information in narrative format)**
	Additional information boxes include: Overall Status; Related Event / Incident / Activity; Current / Projected Objectives; Concerns / Problems; What Emergency Declarations Have Been Made

Attachment K: Federal Disaster Assistance Programs

The Robert T. Stafford Disaster Relief and Emergency Assistance Act (PL 93-288, as amended) provides the greatest single source of Federal disaster assistance. A Presidential major disaster declaration is required to activate the full range of disaster assistance programs available under the Stafford Act.

FEMA administers the President's Disaster Relief Fund under the Stafford Act. In the event of a Presidential major disaster declaration, FEMA coordinates the disaster assistance activities of all federal agencies, whether authorized under the Stafford Act or their own authorities.

In those situations where the full range of assistance available with a Presidential major disaster declaration is not required, the President may declare that an "emergency" exists. An emergency declaration provides assistance to supplement state and local efforts to save lives and protect property, public health and safety, or to avert or lessen the threat of a disaster. The purpose of such a determination is to make available emergency assistance which, because of the pressures of time or because of the unique capabilities of a federal agency, can be more readily provided by the Federal Government. It is specialized assistance to meet specific needs.

Assistance Available with a Presidential Major Disaster Declaration

Following is a summary of the major assistance programs available with a Presidential major disaster declaration under the Stafford Act:

INDIVIDUAL ASSISTANCE (IA)...programs that assist individuals, families and businesses in recovering from a disaster.

Individuals, families and businesses may be eligible for federal Individual Assistance if they live, own a business, or work in a county declared a Major Disaster Area, incur sufficient property damage or loss, and (depending on the type of assistance) do not have the insurance or other resources to meet their disaster recovery needs. Most, but not all, federal Individual Assistance is in the form of low interest loans to cover expenses not covered by state and local programs or private insurance. Individuals that do not qualify for loans may be able to apply for a cash grant.

The **Farm Service Agency (FSA) / U.S. Department of Agriculture** and the **Small Business Administration (SBA)** offer low interest loans to eligible individuals, farmers and businesses to repair or replace damaged property and personal belongings not covered by insurance:

FSA Emergency Loans. The FSA can provide up to $500,000 in emergency loans to farmers, ranchers, and agriculture operators that have suffered at least a 30% loss of crops or enterprise. These loans are intended to cover losses resulting from a natural disaster, to help return the operation to a financially sound position. Two types of loans are available – physical loss loans and production loss loans. These loans may be used for such things as repairing or replacing damaged or destroyed farm property, improving buildings, buying machinery / equipment, and paying farm operating debt. Application is made at the appropriate FSA County Office. A Presidential major disaster declaration (or Secretary of Agriculture emergency declaration) is required to activate the program. (NOTE: The FSA requires a county to

have sustained a minimum of 30% qualifying physical loss or crop loss county-wide to qualify for a Secretary of Agriculture emergency declaration.)

SBA Disaster Loans. The SBA can provide both direct and bank-participation low-interest disaster loans to qualified homeowners and businesses to repair or replace damaged or destroyed private property. This loan program is activated when a Presidential major disaster declaration is issued, or (in cases where the damages are less extensive) when the SBA Administrator declares a "disaster loan area" (SBA administrative declaration) under the SBA's own statutory authority. These loans can be used to cover uninsured personal property damage (this portion is also available to renters), real property damage, or both. Small businesses suffering economic losses as a result of a disaster may also be eligible to receive economic injury loans in addition to the physical damage loans. The loan interest rate varies depending upon the applicant's ability to secure credit elsewhere. Actual interest rates are published at the time of the disaster. Following is a summary of the various loan provisions.

Recipient	Maximum Loan	Purpose
Homeowner	$200,000*	Real Property
Homeowner	$40,000	Personal Property
Renter	$40,000	Personal Property
Business	$1,500,000*	Business Property
Business	$1,500,000**	Economic Injury

*Physical damage loan amounts may be increased by up to 20% for implementation of mitigation measures that protect damaged real property from possible future disasters of the same kind.

**Economic injury loans are available to provide necessary working capital to small businesses suffering economic losses as a result of a disaster. The maximum amount a business and any affiliates may borrow for any one disaster is limited to $1,500,000 for both physical damage and economic injury combined.

To qualify for an SBA administrative declaration for **physical damage**, the following minimum criteria must be met:

(1) A minimum of 25 businesses and/or homes (primary residences) in one county have sustained uninsured losses equal to 40% or more of their estimated fair market replacement value. Example: A home valued at $100,000 would have to sustain at least $40,000 in damages not covered by insurance in order to be counted. Each apartment in an apartment building is considered a separate residence. (Residences used for seasonal / recreational purposes, whether secondary homes, condominium units, cabins, camps, lake homes, etc., are not included in the count.)

- OR –

(2) A minimum of three businesses have sustained uninsured losses equal to 40% or more of their estimated fair market replacement value and, as a direct result of the damages, 25% of the work force in the community would be unemployed for at least 90 days.

To qualify for an SBA administrative declaration for **economic injury**, the following minimum criteria must be met:

(1) The Governor certifies that at least 5 small businesses in a disaster area have suffered substantial economic injury as a result of the disaster and are in need of financial assistance not otherwise available on reasonable terms.

- OR –

(2) The Secretary of Agriculture designates an area as an agricultural disaster area. The SBA will make Economic Injury Disaster Loans to small business concerns and small agricultural cooperatives in the designated counties without credit available elsewhere.

- OR –

(3) The Secretary of Commerce makes a commercial fishery failure or fishery resource disaster under Section 308(b) of the Interjurisdictional Fisheries Act of 1986.

Assistance to Individuals and Households. The Individual and Households Program (IHP) provides cash grants to meet disaster-related necessary expenses or serious needs of individuals or families not provided for by other programs (including SBA loans), insurance or other means. The IHP provides Housing Assistance and Other Needs Assistance, which cover the following:

Housing Assistance

- Lodging expenses reimbursement (for a hotel or motel)
- Rental assistance (cash payments for a temporary rental unit or a manufactured home)
- Home repair cash grant
- Home replacement cash grant
- Permanent housing construction (in rare circumstances)

Other Needs Assistance

- Medical, dental and funeral costs
- Transportation costs
- Other disaster-related needs

The IHP is administered by FEMA with liaison in Michigan provided by the EMD/MSP and the Michigan Department of Human Services (MDHS). Housing Assistance is funded at 100% federal share. Other Needs Assistance is funded on a 75% federal / 25% state cost share arrangement.

Veterans Benefits. The Department of Veterans' Affairs provides death benefits, pensions, insurance settlements and adjustments to home mortgages for veterans.

Tax Refunds. The Internal Revenue Service (IRS) allows certain casualty losses to be deducted on federal income tax returns for the year of the loss or through an immediate amendment to the previous year's return.

Unemployment Benefits. Disaster unemployment assistance and job placement assistance may be provided to persons unemployed as a result of a major disaster who are not eligible for other unemployment compensation benefits. This program is administered by the Michigan Employment Security Agency (MESA), in cooperation with the U.S. Department of Labor.

Crisis Counseling. Professional counseling services may be available to assist affected individuals in relieving grief, stress or other mental health problems caused or aggravated by the disaster or its aftermath. These short-term services are funded by FEMA and provided by local mental health agencies in the form of counseling services, community outreach, consultation and education services, and training of disaster workers. The crisis counseling effort in Michigan is coordinated by the Michigan Department of Community Health (MDCH).

(Note: Individuals that may require this service should inquire about it while registering for disaster assistance, or they may contact FEMA's toll free Helpline number (1-800-621-FEMA / TTY 1-800-462-7585) to find out where service can be obtained. Information may also be available at Disaster Recovery Centers (DRCs) if they are established for the disaster. Crisis counseling services may also be offered by the American Red Cross, the Salvation Army and other voluntary agencies or religious organizations.)

Legal Counseling. Free legal advice may be available to low-income individuals who require legal services as a result of a major disaster. This program is coordinated by FEMA and services are provided by the Young Lawyers Division of the American Bar Association.

NRCS Emergency Conservation Grants. The Natural Resources Conservation Service (NRCS) / U.S. Department of Agriculture has a program to provide cost-sharing grants to farmers and ranchers to perform emergency conservation measures to rehabilitate severely damaged farmland following a natural disaster. County committees establish levels of cost-sharing for each practice. The NRCS share may be 64%, 40%, or 20% of the cost of restoring the loss. Application is made at the appropriate NRCS Office.

National Flood Insurance. Homeowners and business owners that incur flood damages and that have a flood insurance policy under the National Flood Insurance Program (NFIP) may be eligible for payments to assist in repairing or restoring their damaged property. (A Presidential declaration is not required to activate this assistance – only a qualifying flood event.)

HUD Disaster Recovery Assistance. The U.S. Department of Housing and Urban Development (HUD) has several programs that can provide critical housing and community development resources to aid in the recovery from a Presidentially declared disaster:

FHA Mortgage Assistance
The Federal Housing Administration (FHA) will activate programs that 1) make available mortgage insurance for individuals / families whose homes were destroyed or substantially damaged, 2) relax certain home mortgage provisions for disaster victims, and 3) place a temporary moratorium on foreclosures for properties directly affected by a disaster.

GNMA Mortgage Assistance
The Government National Mortgage Association (GNMA or "Ginnie Mae") will 1) encourage all single-family, manufactured housing, and multi-family GMNA issuers to provide forbearance to mortgagors in declared areas, and 2) authorize issuers of GNMA loan pools to buy loans on damaged properties for the remaining principal balance of each loan – thereby assisting affected homeowners from becoming delinquent on their loan and possibly being subject to default and foreclosure.

Public and Indian Housing Assistance
HUD will authorize public housing authorities to reprogram certain housing funds to address damage to public housing property caused by the disaster. HUD can also provide emergency funding to public housing authorities from a special reserve fund for such purposes.

Community Development Block Grants
HUD will provide statutory and regulatory waivers to allow grantees (metropolitan cities, urban counties and states) to reprogram Community Development Block Grant (CDBG) and HOME Investment Partnerships for disaster recovery activities.

FEMA, the EMD/MSP and other involved agencies will disseminate information on these and other aid programs for individuals, families and businesses through radio, television, newspapers, mass distribution of pamphlets, outreach teams, and telephone hotlines. Disaster victims can register for most of the various aid programs via a toll-free telephone number to one of FEMA's National Processing Service Centers (1-800-621-FEMA / TTY: 1-800-462-7585).

Public Assistance (PA)…assists in the repair, replacement or restoration of damaged public and certain PNP facilities.

The Public Assistance Grant Program (PAGP) under the Stafford Act provides supplemental grant assistance for the repair, replacement, or restoration of disaster-damaged, publicly owned facilities and the facilities of certain private non-profit (PNP) organizations. The federal share of assistance under the PAGP is not less than 75% and in extreme cases may be increased above 75%. In Michigan, the 25% non-federal share is typically split on a 12.5% state / 12.5% local cost share basis, although financial circumstances at the time of the disaster will ultimately determine the level of the State's contribution.

The EMD/MSP, as recipient of the federal grant funds, administers all subgrants provided to eligible applicants in accordance with the provisions set forth in the "State of Michigan Administrative Plan for the Public Assistance Grant Program." Following a Presidential declaration involving public assistance, an Applicant Briefing is conducted jointly by FEMA and the EMD/MSP to inform potential applicants of the assistance available under the PAGP, and the means by which funds will be provided for eligible public assistance projects.

Eligible applicants for the PAGP include states, local governments, Indian tribes and certain PNP organizations. Eligible PNP facilities must be open to the public and perform essential services of a governmental nature. Eligible PNP facilities generally include the following:

- Medical facilities such as hospitals, outpatient and rehabilitation facilities.
- Custodial care facilities that provide institutional care for persons who require close supervision and some physical constraints in their daily activities.
- Educational facilities such as primary and secondary schools, colleges and universities.
- Emergency facilities such as fire departments, rescue squads and ambulance services.
- Utilities such as water, sewer and electrical power systems.
- Museums, zoos, community centers, libraries, homeless shelters, senior citizen centers, shelter workshops and facilities which provide health and safety services of a governmental nature.

To be eligible, all work must be required as the result of the disaster, be located within the designated disaster area, and be the legal responsibility of an eligible applicant. Work that is eligible for supplemental federal grant assistance is classified as either emergency work or permanent work, as follows:

Emergency Work

- Debris removal from public roads and rights-of-way, as well as from private property when determined to be in the public interest.
- Emergency protective measures performed to eliminate or reduce immediate threats to the public or to property, including search and rescue, warning of hazards, and demolition of unsafe structures.

Permanent Work

Work to restore an eligible damaged facility to its pre-disaster design. The work may range from minor repairs to replacement. Categories of permanent work include:

- Roads, streets, bridges and normal right-of-way elements such as culverts, curbs, gutters, shoulders, ditches, lighting and signs. Note: Permanent repair of Federal Aid System (FAS) roads is not eligible under the PAGP. Permanent repair of FAS roads is funded by the Federal Highway Administration (FHWA) Emergency Relief Program.
- Water control facilities (e.g., dikes, levees, irrigation works, drainage channels, pumping facilities). Note: permanent repair of flood control works is the responsibility of the U.S. Army Corps of Engineers (USACE) and the Natural Resource Conservation Service (NRCS).
- Public buildings and related contents and equipment, including public mass transportation systems.
- Public utilities (e.g., water treatment and delivery systems, power generation facilities and distribution lines, sewage collection and treatment facilities).
- Public parks, recreational facilities, and facilities such as playgrounds, swimming pools, cemeteries, and improved / maintained beaches.

Hazard Mitigation Assistance (HMA)…provides funds to implement measures to reduce the loss of life and property.

FEMA currently has three hazard mitigation grant programs: the Hazard Mitigation Grant Program (HMGP), the Pre-Disaster Mitigation Program (PDMP), and the Flood Mitigation Assistance Program (FMAP). The PDMP and FMAP are annual, pre-disaster grant programs, while the HMGP is only implemented subsequent to a Presidential major disaster declaration.

Section 404 of the Stafford Act establishes the Hazard Mitigation Grant Program (HMGP) to fund state and local post-disaster mitigation measures which help reduce the risk of future damage, hardship, loss, or suffering caused by a major disaster. The HMGP allows mitigation measures to be implemented during the immediate recovery period of the disaster when the “window of opportunity” is often greatest due to increased public concern and attention.

Under the HMGP, FEMA may contribute up to 75% of the cost of hazard mitigation measures in the declared area. In Michigan, the 25% non-federal share is the responsibility of the applicant. Total federal contributions under the HMGP cannot exceed 7.5% of the estimated aggregate amount of Individual Assistance and Public Assistance grants to be made for the disaster (less any associated administrative

costs) under the Stafford Act. The EMD/MSP administers all subgrants provided to eligible applicants in accordance with the provisions set forth in the "State of Michigan Administrative Plan for the Hazard Mitigation Grant Program."

Eligible applicants for the HMGP include states, local governments, Indian tribes and certain PNP organizations. Eligible PNP facilities must be open to the public and perform essential services of a governmental nature. Eligible PNP facilities are generally the same as those that are eligible under the Public Assistance Grant Program. (Refer to that section for details.) Individual homeowners and businesses may not apply directly for HMGP funds; however, a community may apply on their behalf. ***(Important note: applicants for any of the three mitigation grant programs must have or be covered by a federally approved and locally adopted hazard mitigation plan in order to receive grants.)***

HMGP funds must be used to fund projects that will permanently reduce or eliminate the long-term risk and losses from future disasters. For example, the elevation of a flood prone home provides a long-term solution and reduces the risk of future flood damages, as opposed to simply buying sandbags and pumps to fight the flood. In addition, a project's potential savings must be more than the cost of implementing the project. For example, it would make no sense to spend $750,000 on a project that might only result in $200 in benefits per year. HMGP funds may be used to protect either public or private property or to purchase property that has been subjected to, or is in danger of, repetitive damage.

Additional information on the HMGP, PDMP and FMAP can be found in EMD/MSP Publication 207 – "Local Hazard Mitigation Planning Workbook," 920, and EMD/MSP Publication 920 – "Hazard Mitigation Grant Handbook."

Fire Management Declaration

Fire Management Assistance Grant Program (FMAGP)…provides funds to mitigate, manage and control wildfires.

The Fire Management Assistance Grant Program (FMAGP) is available to states, local and tribal governments for the mitigation, management and control of fires on publicly or privately owned forests or grasslands, which threaten such destruction as would constitute a major disaster. The Fire Management Assistance declaration process operates on a real-time basis, during which the State submits a request for assistance to the FEMA Regional Director while the fire is burning uncontrolled and a "threat of major disaster" exists. The declaration process, which typically involves representatives of the EMD/MSP, the Michigan Department of Natural Resources (MDNR), the U.S. Forest Service and FEMA, is accomplished on an expedited basis and a FEMA decision is rendered in a matter of hours.

The FMAGP is funded on a 75% federal / 25% state cost sharing arrangement. Before a FMAGP grant can be awarded, the State must demonstrate that total eligible costs for the declared fire meet or exceed FEMA's individual fire cost threshold (which is applied to each fire) <u>or</u> FEMA's cumulative fire cost threshold, which recognizes numerous smaller fires burning throughout the state. Eligible firefighting costs covered under the grant may include expenses for:

- Field camps;
- Equipment use, repair and replacement;

- Tools, materials and supplies;
- Mobilization and demobilization activities;
- Emergency work (evacuations and sheltering, police barricading and traffic control, arson investigation);
- Pre-positioning of federal, out-of-state, and international resources for up to 21 days;
- Personal comfort and safety items for firefighter health and safety; and
- Temporary repairs of damage caused by firefighting activities.

The EMD/MSP and the MDNR jointly manage the FMAGP process, from initial assessment activities through final grant closeout.

Other Major Assistance Programs

Debris Removal / Public Facility Restoration. The Department of Defense (DOD) may be able to provide assistance for debris removal and temporary restoration of essential public facilities and services. Normally, such assistance is provided only during the immediate aftermath of an incident which, in all likelihood, will result in a Presidential emergency or disaster declaration, and then only when threats to life and property are present which cannot be effectively dealt with by the State or its local governments. Department of Defense emergency assistance is normally limited in duration to a maximum of 10 days.

Flood Protection and Recovery. The U.S. Army Corps of Engineers (USACE) can provide flood protection and recovery assistance, which, depending on the disaster circumstances, could consist of: 1) flood emergency preparation; 2) flood fighting and rescue operations; 3) emergency repair and restoration of flood control works; and 4) emergency repair and restoration of any completed federally-authorized flood or shore protection project threatened or damaged by abnormal wind, wave or water action. The Corps emergency response authority also allows for emergency channel and bridge debris removal following a flood. However, the Corps is not authorized to participate in a general, widespread debris removal unless the material is certified as an imminent public health hazard. Generally, Corps emergency work provides only the minimum necessary actions to restore essential public services and preserve life and property. It is not intended to take the place of or eliminate the necessity of subsequent general clean-up, debris removal, and recovery work done through the federal PAGP.

Repair / Restoration of Federal Aid Highways. The Federal Highway Administration (FHWA) can provide assistance for the repair and restoration of roads, bridges and standard right-of-way elements on the Federal Aid System (FAS). The FHWA emergency relief funds are coordinated through the Michigan Department of Transportation (MDOT), although all funding decisions are made by the FHWA. This assistance does not specifically require a Presidential major disaster declaration, although it is frequently activated when such a declaration is granted.

Search and Rescue. Depending on the situational circumstances, the U.S. Coast Guard or U.S. Armed Forces units may be able to provide assistance with search and rescue operations.

Health and Sanitation. Either by mission assignment under the National Response Plan (NRP) or under its own statutory authorities, the U.S. Department of Health and Human Services (HHS) may be able to provide supplemental emergency health and sanitation assistance in order to mitigate, manage and control immediate threats to public health and safety. All such assistance would be coordinated through the affected local health departments and the Michigan Department of Community Health (MDCH).

Attachment L: Application for Disaster Assistance (Section 19, 1976 PA 390, as amended)

EMD-19 (9-94)
MICHIGAN STATE POLICE
EMERGENCY MANAGEMENT DIVISION

APPLICATION FOR DISASTER ASSISTANCE

(Under Section 19, Act 390 PA 1976 as amended)

1. Applications may be submitted by a county or municipality.
2. Local units submitting applications shall appoint an agent to act on their behalf.
3. In accordance with Rule 4, this application shall be accompanied by a resolution of the governing body (see reverse side).
4. Applicant completes unshaded parts of this form.

1. POLITICAL SUBDIVISION	**2. APPLICANT'S AGENT**	INTERNAL USE ONLY
Name	Name	Date Received
Address	Title	Date Reviewed
	Address	Incident No.
Population		Telephone ( )

3. ELIGIBLE DISASTER EXPENDITURES AND COSTS ***(See Rule 6 of the Administrative Rules)***

Overtime for police department		Equipment repair costs for disaster	
Overtime for fire department		Volunteer costs	
Overtime for public works department		Costs to repair damage to public facilities or road systems caused by disaster	
Overtime for county road commission			
Overtime for emergency medical services		Other (name each)	
Overtime for other employees			
Salaries of added employees			
Contracts with other jurisdictions			
Fuel for equipment used			
Shelter supplies for disaster		TOTAL	

NOTE: Normal or day-to-day expenses; any costs reimbursed by a federal, state or local agency; any costs reimbursed by insurance; or any capital outlay expenditures are not eligible.

4. DISASTER BURDEN ***(See Rule 3(d) of the Administrative Rules)***

Dates of Consecutive 5-day period From TO	Normal budget funds for listed agencies during 5-day period
One (1) percent of listed agencies! annual general kind operating budget	Amount of actual expenses for listed agencies during 5-day period
List of activated disaster-related agencies:	

5. PREVIOUS OPERATING BUDGET ***(See Rule 8 of the Administrative Rules)***

Applicants total operating budget for preceding fiscal year	Ten (10) percent of the amount at left

6. SIGNATURE OF APPLICANT'S AGENT

Signature	Date

7. DISTRICT COORDINATOR REVIEW

	Yes	No	N/A		Yes	No
Application and resolution complete				Applicant eligible		
Copy of local emergency declaration				Amount claimed		
Exhaustion of local effort				Amount eligible		
Emergency Management Program				COMMENTS:		
Work Agreement Form						
Annual Exercise						
Current Plan Standard						
Adequate Plan Standard						
Plan Implementation Standard						
Support Plan (if applicable)						
Substation of Claims Standard				District Coordinator's Signature	Date	
Damage Assessment Standard						

DIRECTORS RECOMMENDATION

Grant approval recommended ☐	Grant amount recommended	Grant disapproval recommended ☐
Reasons for disapproval		
Signature		Date

STATE DISASTER CONTINGENCY FUND GRANT
RESOLUTION

BE IT RESOLVED BY _____ (1) OF _____ (2),

WHEREAS, _____ (2), Michigan, is a political subdivision within the State of Michigan with an official Emergency Operations plan in compliance with Section 19 of the Emergency Management Act, Act 390, Public Acts of 1976, as amended.

WHEREAS, _____ (2), sustained severe losses of major proportions brought on by the _____ (3) resulting in the following conditions: _____

_____

_____ (4)

WHEREAS, _____ (1) certifies that the _____ (5) Emergency Operations Plan was implemented at the onset of the disaster at _____ (6) and all applicable disaster relief forces identified therein were exhausted. _____

WHEREAS, as a direct result of the disaster, public damage and expenditures were extraordinary and place an unreasonably great financial burden on _____ (2) totaling _____ (7).

NOW, THEREFORE BE IT RESOLVED THAT _____ (1) requests the Governor authorize a grant to the _____ (2) from the State Disaster Contingency Fund pursuant to Section 1 9, Act 390, Public Acts of 1976, as amended.

FURTHERMORE, _____ (8) is authorized to execute for and in behalf of _____ (2) the application for financial assistance and to provide to the State any information required for that purpose.

Action taken and incorporated in the minutes of a meeting of

_____ (name of governing body)

on _____ (date)

Attest; _____ (name of clerk)

NOTES:
(1) Insert name of governing body (City Council, County Board of Commissioners, Township Board, etc.)
(2) Insert name of political subdivision (City of _____, _____ County, Township of _____ . etc.)
(3) Insert the type of disaster (tornado, flood, explosion, etc.)
(4) Insert a brief description of the effects of the disaster on the community.
(5) County governments and municipalities under 10,000 population insert the term "county"; municipalities over 10,000 population insert the term 'municipal' if they maintain a separate plan; or the term "county/municipal" if they are included in the county plan.
(6) Insert the time and date the plan was implemented.
(7) Insert the total dollar value of eligible disaster expenditures and costs (from Section 3 of the application).
(8) Insert the name of the applicant's agent who is authorized to act for and on behalf of the political subdivision.

Attachment M: Assessment Protocols for Weapons of Mass Destruction Attacks

A prompt and comprehensive assessment at the scene of a WMD attack is necessary to protect the health, safety and welfare of emergency responders and the general public. When planning and conducting assessment operations in a WMD environment, assessment personnel should consider these factors:

- There may be a variety of public safety, health and environmental hazards and risks present at suspected, threatened and actual sites of terrorist attacks.
- The hazards at the scene may not be apparent to emergency responders.
- The hazards may pose significant short- and long-term health, environmental, physical and economic consequences on-site as well as off-site.
- The assessment process will involve the gathering of pertinent information through observation, investigation, and the use and application of technical knowledge and resources.

Role in a WMD Attack. Depending on the situational circumstances, damage assessment teams could be called upon to provide early assistance in assessing the nature, scope, magnitude, and extent of damage and impact of a WMD attack. While damage assessment teams generally do not have the expertise or equipment to identify particular agents that might be used in a WMD attack, they certainly could help determine actual / potential damage and impacts once the appropriate response elements (e.g., biological laboratories, hazardous material teams, regional response teams, etc.) identify the agent involved and the scene is stabilized. (Specialized federal response and support assets are available to assist local and state agencies in identifying the particular type of agent used in a WMD attack. Refer to the WMD Attack Procedures in the Michigan Emergency Management Plan – EMD/MSP Publication 101 – for a listing of these federal resources.)

In the event of a WMD terrorist attack where there are mass casualties and/or significant property damage has occurred, assessment teams will conduct assessment operations with the assistance of the technical experts from various state and federal agencies as described above, and likely the Michigan Rapid Impact Assessment Team (MRIAT). The assessment teams and the support elements / MRIAT will conduct appropriate sampling and monitoring operations to ensure public (and responder) safety and to address on- and off-site environmental concerns. The assessment process will generally consist of these six components:

- Identification of any substance in the air (e.g., toxic, corrosive, asphyxiant) that may be immediately dangerous to the life and health (IDLH) of emergency responders and/or the public.
- Identification of any other hazards in the area that could endanger emergency responders and/or the public (e.g., structural hazards, potential explosives, flammable materials, etc.).
- Potential or actual off-site consequences of the identified hazard(s).
- Characteristics of the site (e.g., geography, topography, meteorology, development patterns, etc.) that may impact response and recovery operations and/or the safety of the public.
- Identification of facilities, infrastructures, critical systems, community groups, essential services, etc. that may be (or have been) affected and the level of damage / impacts.
- Information that may assist in identifying the type of tactics, hazards and risks confronting responders and those involved in recovery operations.

Reporting. Damage assessment information will be reported to the EMD/MSP using the E Team Incident Report and Situation Report (Jurisdiction and Agency formats), as described earlier in this document. However, for security reasons the EMD/MSP may require that damage assessment reports for WMD attacks be submitted via the LEIN or other secure means. (The EMD/MSP will provide guidance regarding secure submittal of information as needed.)

Self Protection in a WMD Attack. Assessment teams would not normally be considered a "first responder" at the scene of a WMD attack and therefore would not enter affected areas until the scene had been somewhat stabilized. However, even with a secondary response role it is likely that assessment teams would still have to operate in potentially hazardous conditions which may include dust, dirt, hazardous / contaminated debris, smoke, and possibly the residual effects of the WMD agent employed in the attack. For that reason, it is essential that adequate self protection measures be taken to protect all members of the assessment team while conducting assessment operations.

Basic self protection measures taken at a WMD attack would be similar to those used at any other hazardous material incident and involve **time, distance, shielding and decontamination:**

- **Time** as a self protection action simply refers to minimizing the amount of time spent in the hazard area. Entries into the hazard area for assessment purposes should be done in a rapid, organized manner to minimize the duration of exposure. Less time spent in the hazard area reduces the chance for injury or illness. It is difficult to suggest a universal time limit for assessment activities at a WMD attack scene because each incident has unique circumstances. However, the Incident (Unified) Command should establish guidelines for duration of assessment operations within the hazard area and those guidelines must be strictly followed by all assessment personnel. Minimizing time in the hazard area also helps preserve criminal evidence.

- As with hazardous material incidents, first responders must maintain a safe **distance** from the hazard area unless they have been authorized to enter the area and have employed appropriate protection measures. The Incident (Unified) Command will provide guidance to assessment teams regarding safe distances from the incident scene. If potentially hazardous conditions still exist at the incident scene at the time of assessment operations, it may be necessary for assessment activities to be conducted remotely with the aid of binoculars or other enhanced viewing devices, or they may have to be conducted at a later time when the scene has stabilized.

- Assessment teams must use appropriate **shielding** to protect against the hazards that might be present at the incident scene. The Incident (Unified) Command will determine the appropriate level of shielding that must be employed by assessment personnel based on the hazards present. In general, shielding may consist of buildings and vehicles as well as personal protective equipment (PPE) such as chemical protective clothing.

- Assessment personnel exposed to potentially hazardous substances at the WMD attack scene must employ immediate and effective **decontamination** measures to minimize the effects of the substances and to prevent their spread from the hazard area. Decontamination must be considered and planned for prior to entering the hazard area. The Incident (Unified) Command will establish decontamination procedures for all persons working in the hazard area. Decontamination procedures will be determined based on the substances present at the scene, the duration of exposure and the type of personal protection employed. In general, decontamination will consist of the following steps:

- Washing with water
- Removing and properly disposing of contaminated clothing
- Flushing with water again (if needed)
- Exposure to some chemical or biological agents may require more extensive decontamination at the scene

WMD Attack Hazards. Terrorist WMD attacks may involve one or more of several types of agents / devices, each creating its own set of unique problems which must be addressed with distinct tactical considerations and response procedures. These include:

- Biological agents
- Nuclear / radiological devices
- Incendiary devices
- Chemical agents
- Explosive devices

- **Biological agents** are divided into three types – bacteria and rickettsia, viruses, and toxins. Toxins are strong poisons produced by living organisms, while bacteria, rickettsia and viruses are disease causing organisms. Biological agents can be dispersed by aerosol means (through the air), by oral dissemination (through food, water, etc.), or dermal exposure (through direct contact or injection). Although various biological agents cause different symptoms in humans, some of the more common ones include itchy skin, fever, shortness of breath, bloody sputum, headaches, rash, diarrhea, gastric bleeding, lesions, fatigue, cyanosis, chills, brain inflammation, vomiting, paralysis and pulmonary congestion.

- **Nuclear / radiological terrorism** could be carried out in one of three ways. The first is by detonating a device such as an atomic bomb (nuclear fission), although this method is not likely due to the complexities involved in building such a bomb and the tight security surrounding existing nuclear devices. The second and most likely possibility involves the packing of radiological material around a conventional explosive device. When the device is detonated, the radiological material is dispersed into the air, contaminating everything it comes in contact with. This device is commonly referred to as a “dirty bomb.” The third method requires the detonation of a large explosive device in close proximity to a target containing large quantities of radiological material such as a nuclear power plant or nuclear research facility.

- **Incendiary devices** utilize fire to cause extensive physical damage, injury and loss of life. They may be triggered by either chemical reaction or electronic / mechanical ignition and delivered as a stationary device, hand thrown, propelled, or self-propelled. Incendiary devices require an ignition source, a filler material that is combustible, and a container to hold the filler. Many common materials can be used to construct these devices including flares, light bulbs, household chemicals, compressed gas cylinders, electrical devices, gasoline, matches, fireworks, plastic pipe and bottles / cans.

- **Chemical agents** can be used by terrorists to cause significant numbers of injuries and deaths through a variety of means. These materials are classified by the military as nerve agents, blister agents (vesicants), blood agents, choking agents, and irritants (riot control).

Although many of these agents cause common symptoms such as difficulty breathing or vomiting, each also attacks the body in a different manner:

- Nerve agents attack the central nervous system and are very toxic in both liquid and vapor states. Death can result within minutes.
- Blister agents (vesicants) primarily affect the eyes, airway and skin, although absorption of these materials can affect other body systems as well. Victims may indicate a prominent garlic odor.
- Blood agents (cyanides) can result in seizures, respiratory arrest, and cardiac arrest. These substances have the same effect as asphyxiation, but more sudden.
- Choking agents cause airway irritation, dyspnea (difficulty breathing), tightness in the chest and pulmonary edema after inhalation of vapors.
- Irritants are used for riot and crowd control as well as individual incapacitation and cause temporary pain, burning, discomfort on exposed skin and mucous membranes.

- **Explosives** are the most commonly deployed terrorist WMD (involved in 70% of terrorist incidents) and may be used to disperse chemical, biological, incendiary, and nuclear / radiological agents as well as cause widespread physical destruction. The primary effects of explosives include blast pressure, fragmentation and thermal impacts. Common explosive devices include pipe bombs (generally small and providing limited destruction), satchel bombs (which consist of nails, glass, etc. packed along with explosives inside a bag or satchel), and vehicle bombs (large, powerful devices that are detonated remotely or by timer). Other types of homemade or improvised explosive devices may include grenades, land mines, and projectiles. A major concern when responding to a terrorist WMD attack involving explosives is to ensure that no unexploded or secondary devices are in the area. Terrorists often use multiple bombs to target responders when they arrive at the scene.

Protective Equipment Needs. In almost every WMD attack scenario, it is a safe assumption that assessment teams will need some level of personal protective equipment (PPE) in order to conduct assessment field operations. This PPE may range from nothing more than a dust mask and coveralls (Level D protection) up to a basic level of chemical protective clothing with mask and respirator (Level C protection). (Note: Level A and B PPE require specialized training and certification as well as fit testing in order to be properly used. Most assessment operations, however, can be conducted with a minimal level of PPE equivalent to Level C or D protection.) The type and level of PPE required is entirely dependent upon the situational circumstances and conditions at the time the assessment operation is being conducted. The Incident (Unified) Command will determine the type and level of protection required in order to safely conduct field assessments.

Assessment teams should have available sufficient PPE to outfit the number of personnel that will likely be required to conduct assessment activities in a post-WMD attack scenario. Although it is difficult to determine exact equipment needs because of the myriad scenarios that could occur, at a minimum teams should have basic chemical resistant protective suits (splash suits) or protective coveralls, dust masks, hard hats and rubber gloves and boots for each team member, along with sufficient quantities of duct tape or equivalent for sealing the suits. It is unlikely that these materials will be available from other response units at the time of the incident unless such provisions have been made ahead of time. Therefore, it is incumbent on each assessment team to have sufficient inventories of PPE to outfit each team member to conduct one or more field assessments in a post-WMD attack environment.

Other Equipment Needs. In addition to the basic PPE required to conduct post-attack assessment operations, assessment teams should also have available sufficient quantities of the following items in their equipment cache:

- Plastic bags of various sizes (freezer, garbage, etc.) for securing personal items and clothing of team members, for removal of PPE during the decontamination process, and for protecting cameras and other devices while in the field.
- Disposable cameras to photographically document damage, field operations, and potential criminal evidence.
- Several large bottles of water for drinking and for small-scale decontamination.
- Binoculars (small and inexpensive) to view damaged areas from a distance, if required.
- Disposable clipboards, pens, pencils, notepads, etc. for recording information while in the field.
- Wire flags or plastic flagging tape for marking potential criminal evidence or other significant items / locations.

WMD Training. At a minimum, assessment team members should have attended the "Terrorism Awareness: First Responder" or equivalent course offered by the EMD/MSP, or received an expedient version of the same course prior to being deployed into the field. Team members should also have attended the EMD/MSP "Damage Assessment Workshop" and/or be very familiar with local and state damage assessment procedures. A highly trained assessment team is much more likely to conduct assessment operations in a safe, efficient and effective manner – highly desirable when working in a post-WMD attack environment. Poorly trained individuals are much more likely to make mistakes in the field or unnecessarily prolong the assessment operation, possibly endangering themselves and others in the process.

Field Operations. The assessment operation should begin at the Incident (Unified) Command Post, staging area or other designated location where incident-specific information and instructions can be given by the Incident Commander or his/her designee and the team can properly suit up in PPE and ready its field survey equipment. In general, the smallest possible team should be used to conduct the field assessments – especially if hazardous conditions exist – and assessments should be conducted in the most expedient manner allowable given incident circumstances.

Depending upon the situational circumstances, field assessment operations will be conducted from one of three incident management "zones." The "hot zone" includes the immediate incident scene and is the location where the most hazardous substances are likely to be located. Because of the specialized knowledge, training and equipment required to operate in this environment, it is unlikely that assessment activities would be allowed within this hazardous area unless the assessment team is trained and equipped to a very high protection level (Level A or B). The "warm zone" is the area immediately adjacent to the "hot zone" and is used as a buffer between the hazardous area and the areas not directly affected (the "cold zone"). The warm zone is the location where safe entry and exit is made from the hot zone, and where decontamination operations occur (see "Decontamination Process" section on the following page). If assessment operations are conducted from the warm zone then assessment team members will have to wear PPE and be decontaminated at the conclusion of the operation. Assessment operations conducted from the cold zone will not require special precautions for personnel or equipment.

For hot or warm zone operations, disposable cameras, binoculars and other hand-held equipment should be placed in protective clear plastic bags (freezer bag or equivalent) and properly sealed for use in the field. This will protect the equipment from contamination but still allow it to be used. (Any equipment not protected in this manner will have to be decontaminated using soap and water – which would ruin many items.) Disposable clipboards, pens / pencils, notepads, etc. that cannot be sealed in plastic must be used unprotected but then will normally be discarded at the end of the assessment operation as part of the decontamination process.

Field survey information can be recorded on the damage survey worksheets, damage maps, and E Team Incident Report and Situation Report as described earlier in this guidance document. Photographs of damaged / impacted areas should be taken in accordance with the guidelines prescribed in Attachment H.

Evidence Preservation. Assessment team members should take special care when conducting field assessments, making sure that the incident scene is not disturbed any more than is absolutely necessary. It is possible that the assessment team may discover additional criminal evidence that may aid in the identification and capture of the terrorists responsible for the attack. It is also possible that secondary / undetonated explosive devices may be uncovered as team members traverse the incident scene. Remember, even the most ordinary looking item may turn out to be evidence or an explosive device. In all cases, any item thought to be potential criminal evidence or an explosive device should be left alone but flagged / marked and photographed as is for appropriate follow up action by authorized law enforcement officials. DO NOT ATTEMPT TO TOUCH OR MOVE THE ITEM – EVEN FOR MARKING AND PHOTOGRAPHIC PURPOSES! When in doubt, leave it alone, mark / photograph it, and immediately notify appropriate law enforcement officials through the Incident Command Post or other designated location.

Decontamination Process. Once the field assessment operation has been completed, it may be necessary to go through a decontamination process if hazardous substances were present at the locations where field assessments were conducted. This will help minimize the effects of the substances and prevent their spread from the hazard area. A designated decontamination area will normally be established in proximity to the incident scene to allow for the decontamination of all persons and items that went into the hazard area. The decontamination area is generally located in the area known as the warm zone which is between the hot zone (the contaminated incident scene) and the cold zone (the secure area where no special precautions are required). Assessment operations conducted in the hot or warm zone will require decontamination of persons and equipment; those conducted in the cold zone will not.

The decontamination process is dictated by the agent(s) employed in the attack and the hazardous substances present at the incident scene. Generally, decontamination is accomplished by thoroughly washing down the team member and any unprotected equipment with water, having the team member remove all PPE (with the assistance of another properly outfitted team member) and place it in a plastic bag for proper sealing and disposal. Cameras, binoculars, etc. that were properly sealed in plastic bags can simply be removed and the protective bag discarded along with the PPE. Any paperwork, clipboards, pens / pencils, etc. used to record field observations will have to be discarded as well. The paperwork can be placed in a clean, clear plastic bag, properly sealed, and then photocopied to maintain a permanent record. Once photocopied, the original paperwork and the plastic bag must then be properly discarded. Any vehicles or other large equipment that were involved in the assessment operation must also be decontaminated by properly washing with water.

Post-Operation Debrief. Once the incident response has been completed – including assessment operations – a debriefing session should be held shortly thereafter to allow all involved participants to compare notes regarding what transpired, to receive any information that might be required regarding potential medical or health issues, and to bring closure to the event. Approximately a few days to one week after the post-operation debrief, a follow up response critique should be held to evaluate what went wrong and right with the incident response, to more closely examine the “lessons learned,” and to formulate any after-action adjustments that might be required in the areas of training, plans / procedures, equipment, or intra- / inter-agency coordination.

Attachment N: Sample Damage Assessment Standard Operating Procedure Format

Damage Assessment Standard Operating Procedures (SOPs) support the damage assessment function in the Emergency Operations Plan (EOP) / Emergency Action Guidelines (EAG) and provide the implementing mechanism necessary for carrying out assigned tasks and responsibilities. The following format guidance is provided to assist the Planning Section Chief and support staff, and the Emergency Manager, in developing a set of SOPs for the damage assessment function within the Planning Section in the Emergency Operations Center (EOC).

This guidance is intended only to provide a sample format for use in developing SOPs. To be useful and effective, it must be tailored to fit the unique organizational structure and needs of the community.

(NOTE: SOPs do not need to be lengthy to be comprehensive and effective. In fact, lengthy documents are often less effective due to the mountain of material that the user has to pour through in order to find the desired information. The key is to find a balance between length and comprehensiveness. It is important to include all necessary information, but the information included should be presented in the most concise manner possible. Checklists are an effective tool to use, especially if the steps are written in chronological order. Text should be kept to a minimum, unless it provides necessary background information to assist the user in implementing a task.)

Sample Damage Assessment SOP

(The following SOP was initially developed by the EMD/MSP for the Planning Section within the State Emergency Operations Center. It is provided as an example to use in developing a Damage Assessment SOP. The names, titles and text elements have been altered in most cases to remove specific details related to SEOC operations.)

TASK: Organize and coordinate the damage assessment function within the Planning Section in the SEOC.

AUTHORITIES: 1976 PA 390, as amended (The Michigan Emergency Management Act).

INITIATION: When the SEOC is activated, the EMD/MSP Commander (or his/her designee), acting as Incident Commander for SEOC operations, will determine the extent to which the Planning Section will be activated for damage assessment purposes. The Planning Section Chief (or his/her designee) will notify other members of the Planning Section from established call lists.

CONTACT PERSONS:

Planning Section Chief: Jane Doe
Emergency Management Division
XXX-XXXX

Asst. Section Chief: Bob Jones
Emergency Management Division
XXX-XXXX

Damage Assessment Unit Leader: John Smith
Emergency Management Division
XXX-XXXX

Asst. Unit Leader: Sue Lane
Emergency Management Division
XXX-XXXX

PROCEDURE: Damage assessment duties and responsibilities of each individual member of the Planning Section are as follows:

Planning Section Chief / Asst. Planning Section Chief:

- Direct / manage damage assessment activities.
- Direct / manage the message control process.
- Supervise staff involved in the various damage assessment and message control functions.
- Make recommendations to SEOC staff regarding specific actions or assistance needed, based on assessment information collected (strategic planning).
- Provide liaison to FEMA ESF 5 and the Michigan Rapid Impact Assessment Team (MRIAT).
- If circumstances warrant, recommend to the Incident Management and Operations Sections that the MRIAT be activated to provide supplemental assessment capability to affected local jurisdictions.
- Handle any of the tasks / responsibilities of the following positions in lieu of activating the necessary support staff.

Damage Assessment Unit Leader / Asst. Damage Assessment Unit Leader:

- Coordinate overall functioning of the Damage Assessment Unit and statewide assessment system.
- Ensure that the Assessment Unit has the appropriate maps, logs, forms, handbooks, display boards, computer equipment and related materials, and work space necessary to perform its duties.
- Determine work / shift assignments based on the needs of the situation.
- Coordinate Damage Assessment Unit activities with the other Units within the Planning Section, as well as the Incident Management, Operations, Logistics and Finance Sections in the SEOC. Ensure that each Section is receiving the necessary information to make key operational decisions. Provide verbal updates for other SEOC staff as requested by the Operations or Incident Management Section Chiefs.
- Ensure that local jurisdictions are contacted when discrepancies are discovered in assessment information submitted (i.e., incomplete or conflicting data, no map included, incorrect form / format used, etc.)
- Ensure that logs, maps, display boards, etc. are kept current at all times so that decision-making can be based on the most comprehensive portrayal of events, actions, and damage possible.
- Ensure that incoming data is compiled as quickly as possible and provided to other SEOC staff on a regular basis.
- Coordinate with the EMD/MSP and State Public Information Officers to verify the accuracy of assessment figures included in press releases.
- As necessary, dispatch an individual (or inspection team) to the affected area to verify and/or clear up discrepancies in data submitted.
- As necessary, handle telephone inquiries from local jurisdictions, state agencies, FEMA, public officials, etc. regarding the collection, compilation or processing of assessment information.
- Prepare regular status reports on the major events and actions that have occurred, using the prescribed format found in Supplement 15 to the EMD/MSP Disaster Assignments and Standard Operating Procedures. Provide copies to the Incident Management Section Chief for review and approval for dissemination to SEOC staff and the JPIC.
- Assist the Planning Section Chief in drafting Governor's declarations (initial declaration, plus amendment / termination declarations) using the format prescribed in Supplement 12 to the EMD/MSP Disaster Assignments and Standard Operating Procedures.

- If a Presidential declaration is being requested, serve as liaison to FEMA officials in conducting a Preliminary Damage Assessment (PDA).
- Assist the Planning Section Chief, other Unit leaders and FEMA officials in collecting and compiling the necessary socio-economic data and incident-specific information necessary to draft the Governor's declaration request letter. The format found in Supplement 13 to the EMD/MSP Disaster Assignments and Standard Operating Procedures should be used in drafting the letter.
- In conjunction with the EMD/MSP and State Public Information Officers, assist with preliminary work on an after action report following the format prescribed in Supplement 15 to the EMD/MSP Disaster Assignments and Standard Operating Procedures.

Data Compiler(s):

- Compile incoming assessment data using standard Microsoft Office programs (Word and Excel). Data should be compiled for each affected emergency management program; in addition, a running total of damage in all affected jurisdictions should be maintained at all times.
- Provide copies of compiled data to the Damage Assessment Unit Leader for approval by the Planning, Incident Management and Operations Section Chiefs, for display in the SEOC, and for public dissemination by the EMD/MSP and State Public Information Officers.
- Double-check incoming data for mathematical errors. Notify the Damage Assessment Unit Leader of any discrepancies in the data received.
- Retain a hardcopy of all documentation for each jurisdiction, in separate files, for future reference.
- Assist the Damage Assessment Unit Leader, Data Analysts and Data Researchers in compiling the necessary socio-economic data for the Governor's request letter for a Presidential declaration.

Data Analyst(s):

- Review incoming data for accuracy, completeness, and legibility. Coordinate with the Damage Assessment Unit Leader to resolve problems. After thoroughly reviewing the data, pass it on to the Damage Assessment Unit Leader for approval, and then to the Data Compiler(s) for processing. (If the data is received via hardcopy or telephone rather than E Team, enter the data into an E Team Incident Report or Situation Report (Jurisdiction or Agency, as appropriate) to ensure a permanent record within the E Team system. Ensure that the Message Recorder / Controller assigns an incoming message number and properly registers the data report.)
- Assist the Data Compiler(s) in preparing special damage assessment reports, as requested by the Incident Management or Operations Sections.
- Assist the Damage Assessment Unit Leader, Data Compiler(s) and Data Researcher(s) in compiling the necessary socio-economic data for the Governor's request letter for a Presidential declaration.
- Assist the Damage Assessment Unit Leader in preparing regular status reports on the major events and actions that have occurred, using the prescribed format found in Supplement 15 to the EMD/MSP Disaster Assignments / Standard Operating Procedures.
- Assist the Damage Assessment Unit Leader and EMD/MSP / State Public Information Officers with preliminary work on an after action report using the format prescribed in Supplement 15 to the EMD/MSP Disaster Assignments and Standard Operating Procedures.

Data Researcher(s):

- Conduct necessary background research for Presidential declaration request.
- Assist in developing narrative, maps, charts, graphics, photos, etc. for inclusion in the request letter.

Financial Analyst(s) – Finance / Administration Section:

- Coordinate with the Operations Section, Logistics Section and Planning Section (Damage Assessment Unit) to track and record all disaster-related costs (personnel, equipment, supplies, services, expenses) incurred by state response agencies. Compile and maintain these records for possible future reimbursement.
- Assist in compiling all necessary financial data for inclusion in the Governor's request letter for a Presidential declaration.

Resource Analyst(s):

- Coordinate with the Operations Section representatives in tracking resource availability and resources committed from agency inventories, as well as resources obtained from outside entities. (Note: Individual members of the Operations Section are responsible for tracking the availability and use of resources under their own jurisdiction.)
- Assist the Incident Management and Operations Sections in obtaining needed resources.

Status Recorder / Plotter:

- Record pertinent information on the hardcopy status board, maps and other appropriate displays, including:

    - Boundaries of the disaster area;
    - Declaration information (i.e., jurisdictions included, type of declaration, major provisions, etc.);
    - Deaths / injuries;
    - Property damage;
    - Resources expended / committed;
    - Impact on public facilities / services;
    - Evacuation status (as appropriate);
    - Status of transportation system;
    - Actions taken / being taken;
    - Reception centers / shelters open;
    - Weather data / impact on response and recovery;
    - Locations / status of disaster facilities (i.e., JFO, EOCs, command posts, etc.); and
    - Other information as appropriate.

- Review data for accuracy and completeness (secondary filtering / quality control mechanism).
- When the hardcopy status board has been filled with information, take a photograph of it to provide a permanent record of the information recorded. Give the photograph(s) to the Damage Assessment Unit Leader for inclusion in the permanent disaster file.

- As necessary, assist the Geographic Information System (GIS) specialists in plotting information on maps / other displays. (Note: most mapping and image displays in the SEOC are done electronically by the GIS specialists, based on E Team inputs. However, occasionally the electronic mapping / information display must be supplemented by hardcopy maps and display boards.)
- Upon approval of the Planning, Operations and Incident Management Section Chiefs, post status reports and related materials on the EMD/MSP web site for public viewing and downloading.

Message Recorder / Controller:

- Log incoming / outgoing messages (maintain message log and assign message numbers) via E Team (primary) or computer / hardcopy log (alternate).
- Review incoming messages for SEOC routing.
- Review outgoing messages for accuracy, completeness and proper authorization (quality control function).

Message Control – Facsimile Operator:

- Operate facsimile machines (send / receive messages).
- Troubleshoot problems with machines.
- Send LEIN messages as required.
- Maintain facsimile message log.

Message Control – Clerical:

- Photocopy messages.
- Troubleshoot problems with copiers.
- Maintain needed supplies.

Message Control – Runner:

- Distribute logged messages to various SEOC Sections.
- Pick up outgoing messages and deliver to Message Control staff for logging in and distribution.

Technical Analysis:

A Technical Analysis Unit may be activated if specialized expertise is required to assess disaster damage and impact (i.e., radiological assessment for nuclear accidents, field assessment and sampling for hazardous material incidents, floodplain analysis for severe flooding, etc.) In some instances, personnel from other state agencies may be requested to serve in the Technical Analysis Unit. Participation by other state agencies may be part of an overall incident field assessment conducted by the MRIAT, or it may involve technical analysis functions within the SEOC. Requests for state agency technical analysis personnel will be made by the Incident Management Chief (based on the recommendation of the Planning Section Chief) to appropriate agency director, through the designated agency emergency manager.

DAMAGE ASSESSMENT MESSAGE ROUTING: Assessment data coming into the SEOC (via E Team or hardcopy) will be routed through the Planning Section in accordance with the chart in Figure 2 of Supplement 7 to the EMD/MSP Disaster Assignments / Standard Operating Procedures.

RESOURCES:

Maps / Graphics. The types of maps / graphics used for SEOC display will depend on the nature, scope and magnitude of the disaster or emergency being addressed. With few exceptions, all mapping and image display in the SEOC will be done electronically through the SEOC GIS, which has a large selection of mapping and information display resources available for ready use. Refer to the appropriate hazard-specific appendix to the EMD/MSP Disaster Assignments / Standard Operating Procedures for more detailed information on map / graphic use. In some cases, it will be necessary to replace or supplement electronic mapping and displays with hardcopy maps and display boards. In those situations, the needed hardcopy maps and information resources can be found in the following locations:

Generally, maps / graphics for nuclear power plant accidents are located in the *(location suppressed)* of the SEOC. These materials are stored by plant. Maps / graphics for all other disaster types are located in the *(location suppressed)* of the SEOC. The following types of maps / graphics are available:

- General highway maps for each Michigan county;
- Geological Survey (USGS) 7.5 minute quadrangle maps for all areas of the state;
- Large-scale (1:250,000+) USGS maps covering the entire state;
- Additional / specialized nuclear power plant maps;
- Nuclear attack target maps for Michigan;
- Michigan school districts map;
- Michigan high hazard dams map;
- Floodplain maps for most major watersheds in the state;
- General cultural / natural features map of the state (wall mounted in the SEOC);
- Standard Federal Region V railway map;
- Michigan Department of Transportation highway maps (quantities available).

In addition to these readily available map / graphic resources, the EMD/MSP can also obtain specialized digital and/or hardcopy maps and aerial photos from several Michigan state agencies (History, Arts and Libraries; Information Technology; Natural Resources; and Transportation); the U.S. Geological Survey; the U.S. Census; and TopoZone.com:

Michigan Department of History, Arts and Libraries
A wide variety of census data and census maps can be viewed and downloaded from the MDHAL web site (www.michigan.gov/hal).

Michigan Department of Information Technology
The Michigan Center for Geographic Information (CGI) has a large inventory of Michigan-specific maps, aerial photography and related geographic resources for viewing and downloading (www.michigan.gov/cgi).

Michigan Department of Natural Resources
USGS topographic maps and numerous other types of land and resource maps may be viewed and downloaded from the MDNR web site (www.michigan.gov/dnr).

The MDNR Aerial Imagery Archive (Forest, Mineral and Fire Management Division) has USGS digital orthophoto quadrangles (color infrared and black / white panchromatic) and MDNR aerial imagery (color infrared, black / white infrared, and black / white panchromatic) available that covers the entire state. These aerial photographs can be viewed (and many downloaded) directly from the MDNR or CGI web sites. These photos can provide a baseline ("before") picture if aerial photos are being used to aid in damage assessment.

Michigan Department of Transportation
MDOT, through its Bureau of Aeronautics and Design Division / Photogrammetry Unit, has the capability to take high-level aerial photographs. MDOT routinely photographs highway facilities from the air as part of the design and construction process. Copies of these aerial photos can be obtained upon request from the MDOT Photogrammetry Unit through the MDOT emergency manager. These photos will show the condition of the highway facility prior to it being damaged (a "before" picture) and can be enlarged at the MDOT Photo Lab or commercially.

MDOT can also provide aerial flyovers to photograph damaged areas, upon request to the Photogrammetry Unit through the MDOT emergency manager. The Photogrammetry Unit will need to know the exact flight lines it will be expected to cover prior to providing this service. The aircraft has a flight ceiling of 12,000 feet. Both color and black / white photos can be produced. Black / white photos can be processed at the MDOT Photo Lab. The maximum individual photo size available is 42 inches; however, several photos can be combined together, if needed, to produce a mural of almost any size. Color photos are processed commercially. If necessary, they can be rush-processed by several commercial firms in the region. These "after" photos can be combined with the baseline ("before") photos available from the MDNR and/or CGI (see above) to provide a highly accurate visual portrayal of the nature, extent and magnitude of damage incurred.

U.S. Geological Survey
The USGS has a wide variety of cartographic products and services available to assist in damage assessment, including aerial photos, satellite images, computerized (digitized) maps, and other standard map products. If necessary, custom map / photographic products can be produced as well. Emergency phone numbers are available (Day: XXX/XXX-XXXX; Night: XXX/XXX-XXXX; FAX: XXX/XXX-XXXX) for round-the-clock rush ordering. Descriptions of available products and services can be found on the USGS web site (www.usgs.gov).

U.S. Census
A wide variety of Michigan-specific census data products and maps can be found on the U.S. Census web site (www.census.gov).

TopoZone.com
This commercial web site (www.topozone.com) has a complete set of USGS topographic maps for the State of Michigan for viewing and downloading, in a variety of map scales.

Equipment / Supplies. The Planning Section will utilize the standard equipment / supplies provided to all SEOC staff. See Supplement 6 to the EMD/MSP Disaster Assignments / Standard Operating Procedures. In addition, it will require access to four computers: one for resource tracking purposes; one for compiling incoming assessment data and disaster-related costs of state response agencies; one for developing disaster situation reports; and one for conducting background research on and developing the Presidential declaration request. These computers will be set up in the Planning Section work area in the SEOC. Supplement 10 to the EMD/MSP Disaster Assignments / Standard Operating Procedures contains procedures for conducting resource searches and for tracking committed and available resources. Supplement 11 contains procedures for compiling assessment data using standard Microsoft Office programs (Word and Excel).

Refer to each hazard-specific appendix to the EMD/MSP Disaster Assignments / Standard Operating Procedures for more detailed equipment / supply requirements for specific disaster / emergency situations.

ATTACHMENTS: Refer to the following documents for specific information related to implementation of the aforementioned task assignments:

EMD/MSP Disaster Assignments / Standard Operating Procedures

Supplement 6: SEOC Supplies / Equipment
Supplement 7: Assessment Procedures / Resources
Supplement 10: Resource Identification and Tracking Procedures
Supplement 11: State Damage Assessment Data Base Operating Procedures
Supplement 12: Format for Governor's Declaration
Supplement 13: Format for Presidential Declaration
Supplement 15: Situation / After Action Report Formats

EMD/MSP Pub. 105 – “MRIAT Assignments and Standard Operating Procedures”
EMD/MSP Pub. 901 – “Damage Assessment Handbook”

Attachment O: Key Damage Assessment Logistical Considerations

The following logistical considerations are based on many years of experience and "lessons learned" in damage assessment planning, training and exercising activities, as well as actual disaster response and recovery operations. They are intended to aid a community in building / improving its damage assessment capabilities.

Community Baseline Information

An essential pre-incident planning activity for every Michigan community is the development of key baseline information, to include:

- A **demographic profile** that provides basic socio-economic data on the community and its residents, including business activities and patterns. This information will provide a basis for assessing the impacts of the incident on various segments of the community, and will also aid federal, state and local officials in preparing requests for supplemental relief assistance in a timely manner.

- Readily available **property and facility information**, to include 1) identification and geo-location of critical community facilities and infrastructure (both public and private) as well as major businesses and key private non-profit organizations; 2) identification of secondary / vacation homes and cabins (these are <u>not</u> eligible for federal home repair / restoration grants); 3) estimates of the amount of insurance coverage (flood and homeowners) for all areas of the community; 4) photographs of each public and private structure (to provide a "before" picture); 5) estimates of the number of public and private structures in each area of the community; and 6) community maps (preferably from a GIS) that provide a clear picture of this and other relevant community information.

It is important to note that much of this key baseline information may already exist in documents such as the community master (comprehensive) plan or hazard mitigation plan, or in regional plans / planning documents and economic development studies. It may also be available in various U.S. Census studies and data sets, but would likely have to be synthesized for the community. It is advisable to first contact community departments and agencies (i.e., planning, GIS, building, assessor) and the regional planning office to see if any of the needed information already exists before undertaking a significant baseline information collection effort.

Preparations for Hazardous Environments

In the post 9/11 world, it is important that every Michigan community have at least a <u>basic capability</u> to conduct damage / impact assessment operations in a post-WMD attack environment. In addition, damage assessment teams are often called upon to conduct operations in potentially harsh environments after certain disasters such as floods, severe storms, tornadoes and ice storms. In doing so, they may encounter hazardous conditions such as contamination, potentially dangerous debris, dust and hazardous particulates, excessive noise, flood waters, hazardous chemicals and other hazardous materials, and severe weather conditions such as snow, ice, wind, and extreme temperatures.

Nothing can impede or even stop an assessment operation quicker than the lack of basic protective equipment. Team members must be dressed for the conditions they are likely to encounter in the field. They should carry / wear (as appropriate) items such as rain gear, waders, hard-soled boots, hard hats and gloves. Depending on field conditions, it may also be appropriate for team members to wear some sort of eye protection to protect from tree branches and other "eye-level" hazards, as well as hazardous dust or liquids. If the team will be working in

a post-WMD attack environment, appropriate personal protective equipment (PPE) should be worn for the types of hazards that are likely to be encountered. (Refer to Attachment M, "Assessment Protocols for Weapons of Mass Destruction Attacks," for additional information.)

Each community must make its own determination as to how it will outfit and equip its damage assessment teams. Regardless of who provides what, the most important consideration is that those decisions be made PRIOR to an incident occurring, during the damage assessment planning process. Attempting to procure and distribute the needed protective equipment after the incident occurs is not only inefficient, but could unnecessarily slow down the assessment process and potentially put assessment team members at risk if they attempt to conduct field operations without the proper equipment and attire.

Field Equipment Kits

The same arguments that hold true for personal protective equipment also hold true for basic field assessment equipment. Again, procuring and distributing the equipment ahead of time is more desirable than waiting until after the incident occurs and then attempting to address this issue. Following is a list of basic field equipment that damage assessment teams will likely need while conducting field surveys:

- Map(s) of the jurisdiction (8 ½ X 11 in size), of sufficient scale and clarity to allow for the accurate recording of information
- Laptop computer / hand held computing device (**if** the community intends to collect and compile information electronically in the field)
- Basic recording tools (markers, pens, pencils, rulers, clipboards, etc.)
- Global Positioning System (GPS) units, set up for the disaster area (**if** geospatial data will be collected)
- Calculator
- Tape measure or small measuring wheel, as necessary and appropriate
- Damage survey worksheets
- Basic communication tools (cellular phone, radio, pager, etc.)
- Copy of EMD/MSP Publication 901 – "Damage Assessment Handbook"
- Necessary telephone lists / directories
- Badge, ID card, or other appropriate form of personal identification
- Nylon jacket or vest for field identification and protection from the elements, as necessary and appropriate
- Camera (conventional or digital) and film / computer disks and/or video camera and video tapes (with extra batteries)
- Hard hat, if conducting assessments in potentially hazardous areas
- Bug spray / sun screen (warm weather only)
- Flashlight (as necessary and appropriate for dark areas and/or night time field surveys)
- Small first aid kit
- A method of "tagging" sites that have been surveyed (e.g., plastic flagging tape, temporary pavement paint, colored Jell-O, etc.), as necessary and appropriate
- Carrying bag or plastic box for the above items

Each assessment team will need these items in order to conduct surveys, so the community must assemble one equipment kit for each team it intends to dispatch into the field. To determine how many kits might be needed, the community can look at its "worst case" disaster scenario (based on the local hazard analysis / risk assessment) and then determine the number of field teams that would realistically be needed to assess that situation in an accurate and timely manner. Because most of the items contained in the field kit are relatively inexpensive and have a long "shelf life," it is probably better to err on the side of caution and assemble the largest number of kits that might be needed. That is much easier than trying to scramble at the last minute and assemble kits when time is at a premium. At a minimum, every community should have at least two kits ready to go at all times.