

# HAZARD MITIGATION PLAN for Superior Township

October 2004



**SUPERIOR CHARTER TOWNSHIP  
WASHTENAW COUNTY, MICHIGAN  
3040 North Prospect, Ypsilanti, Michigan 48198**

At a regular meeting of the Township Board of Trustees of Superior Charter Township, Washtenaw County, Michigan, held at the Township Hall of said Township on October 18, 2004, at 7:30 p.m. Eastern Standard Time, the following resolution was offered by Schwartz, and supported by Caviston.

**SUPERIOR CHARTER TOWNSHIP  
WASHTENAW COUNTY, MICHIGAN  
OCTOBER 18, 2004**

RESOLUTION ADOPTING THE HAZARD MITIGATION PLAN FOR SUPERIOR TOWNSHIP, AUTHORIZING THE ANNUAL REVIEW OF THE PLAN WITH AN UPDATE OF THE PLAN EVERY FIVE YEARS AND DESIGNATING THE TOWNSHIP SUPERVISOR TO BE RESPONSIBLE FOR IMPLEMENTING THE PLAN AS FUNDING AND STAFF RESOURCES PERMIT

WHEREAS Michigan has experienced disasters that have resulted in injury or loss of life, damaged properties, displaced citizens and business, closed streets and bridges and presented general public health and safety concerns; and

WHEREAS as of November 2004 the Federal Emergency Management Agency (FEMA) requires that communities have an adopted Hazard Mitigation Plan as a requirement for receiving funding under certain FEMA programs, and

WHEREAS the Hazard Mitigation Plan for Superior Township (plan) ranks hazards for the community, and identifies goals, objectives and strategies to reduce overall damage and impact from natural and technological hazards; and

WHEREAS Superior Township worked with Washtenaw County to prepare the Plan by participating in the planning process and providing comments with respects to hazards, vulnerable areas and strategies, and

WHEREAS residents, community officials, business owners, educational institutions neighboring jurisdictions and the Michigan State Police Division of Emergency Management have had the opportunity to review the plan and their comments have been incorporated,

NOW THEREFORE BE IT RESOLVED that the Hazard Mitigation Plan for Superior Township is hereby adopted as an official plan for Superior Township; that the Plan will be reviewed annually by the Township Board and updated every five years as required by FEMA; and that the Township Supervisor shall be responsible for implementing the plan as funds and staff resources permit.

Roll call vote:

Ayes: McFarlane, Williams, McKinney, Caviston, Lewis, Phillips,  
Schwartz

Nays: None

The motion carried.

THE RESOLUTION WAS DECLARED ADOPTED.

CERTIFICATION

I, Kay Williams, the duly qualified Clerk of the Charter Township of Superior, Washtenaw County, Michigan, do hereby certify that the foregoing is a true and correct copy of a resolution adopted at a regular meeting of the Superior Charter Township Board held on October 18, 2004.

Kay Williams, Superior Charter Township Clerk

# Superior Township

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- Attachment 1: County Hazard Plan
- Attachment 2: Federal and State Funding Sources

# Superior Township

# Superior Township

## 1.0 INTRODUCTION

Hazard Mitigation is defined as any action taken before, during or after a disaster to permanently eliminate or reduce risks to human life and property from natural, technical or societal hazards. Superior Township has experienced hazards at varying degrees, and can expect to encounter hazards in the future. The value of a Multi-Hazard Mitigation Plan (Plan) lies in reducing future emergencies to events; by implementing mitigation strategies set forth in this Plan, the expectation is for hazard occurrences to result in fewer deaths and injuries to people, and lessened damage or destruction to structures and the environment. Response and recovery costs should also be reduced.

The Federal Emergency Management Agency (FEMA) provides assistance to local units of government when faced with disasters through the Robert T. Stafford Disaster Relief and Emergency Assistance Act (the Stafford Act). Recognizing that planning for hazards is an important component of hazard preparedness, response and recovery programs, the Stafford Act was amended in 2000 to require governments to have an adopted Hazard Mitigation Plan as condition of receiving financial assistance through the FEMA Hazard Mitigation Grant Program by November of 2004.

### 1.1 Purpose

There are three purposes of this Plan: 1) to identify and rank hazards in Superior Township; 2) to analyze areas particularly vulnerable to hazards; and 3) to identify feasible mitigation strategies that can be acted upon after adoption of the Plan. The mitigation goals and strategies should also be incorporated into the Superior Township General Development Plan, and other plans, as applicable.

## 1.2 Plan Organization

This Plan was prepared by Washtenaw County on behalf of Superior Township. Individual plans were prepared for each local unit of government in recognition of their unique circumstances and potential differences in priorities, goals and mitigation strategies. General information, such as community profile data and hazard descriptions, is contained in the County plan (Attachment 1).

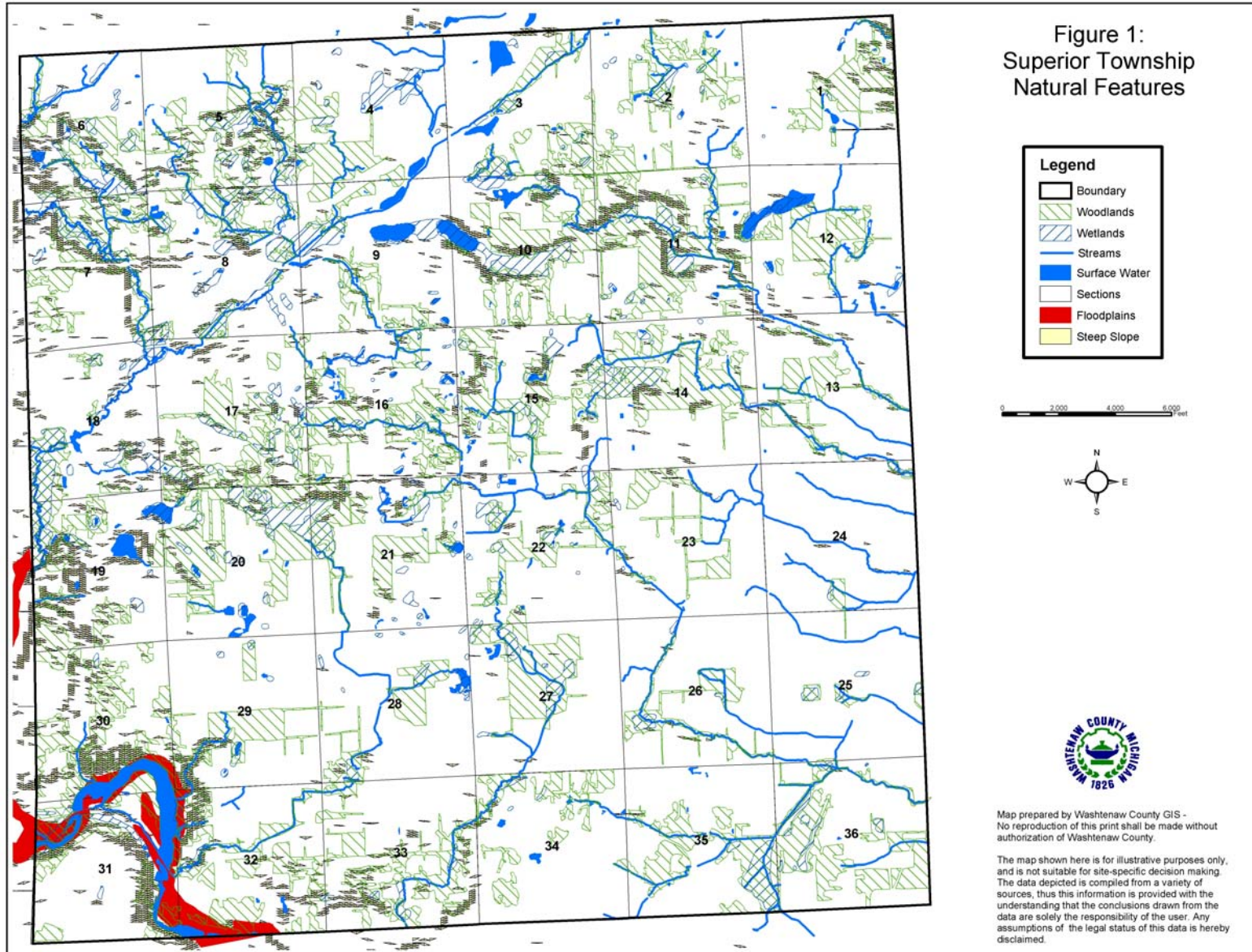
## 1.3 Public Participation

Representatives from Superior Township worked with the Washtenaw County Emergency Management Division and Department of Planning and Environment to draft the hazard mitigation plan. An opportunity for the citizens of Township to comment on the draft plan was provided in June of 2004, when five regional planning workshops were held at various locations around the county in conjunction with the Comprehensive Plan for Washtenaw County. Another workshop was held on June 9, 2004 for commission, board and council members from every community. The draft plan was introduced and copies were available for review at every workshop. Regional workshops were advertised in the local newspapers.

The Township Board of Trustees also provided an opportunity for public comment prior to adopting the plan on October 18, 2004.

Continued public participation is encouraged through Washtenaw County through website postings, emails, and general contact with local governments. Any comments received by the County on the plan concerning Superior Township will be shared with the Township.

# Superior Township



# Superior Township

## 2.0 Community Profile

### 2.1 Historic Overview

Superior Township was established in the early 1830s. The main attraction to early settlers was the fertile soil and water resources. Four creeks watered every part of the township, with the Huron River crossing through the southwest corner. The Township remained an agricultural community for many years, with concentrated settlement occurring at the western edge of the Township.

Superior Township and the surrounding area experienced significant growth in with the introduction of the Willow Run bomber plant and the Willow Run airport in 1941. Infrastructure south of Geddes Road came with the war-time housing, which was later demolished and replaced with new subdivisions and apartments.

### 2.2 Natural Features

Superior Township owns small lakes, which are located in the northern portion of the area. Along the Huron River, in the southwest corner of the Township floodplains can be found.

The Groundwater Recharge Areas are located along the southern, western and northern peripheries. Woodlands and Wetlands are located throughout the community. The Topography of the area can be described as gently rolling.

The majority of soils have severe septic limitations. Erodible soils tend to be located diagonally through the center of the Township (northeast to southwest).

### 2.3 Land Use Patterns

Superior Township consists of approximately 36 square miles in area. Geddes Road runs east-west along the southern portion of the Township and separates service and non-service areas. Accordingly, agricultural lands, 24% of the land area, are located to the north, and provide for agriculture as well as single-family residential uses, 16% of total land area. Pockets of commercial uses are scattered throughout the Township; industrial uses are also located in various areas of the township, but tend to be at the periphery. Open spaces and wetland and woodland areas account for 45% of Township lands.

There are two mobile home parks located in the southeast corner of the Township. Multiple-family residential is located in the south-central portion, adjacent o the Willow-Run neighborhood of Superior Township.

### 2.4 Transportation Network

The transportation network consists of principle and minor arterials, major and minor collectors, local street and roads, and gravel roads. M-14 runs east-west along the northern portion of the Township, providing access at Curtis and Godfredson (Salem Township) Roads. Route 153 and Geddes Road are two other east-west access roads. Prospect and Gotfredson Roads provide north-south access. There are no railroads or airports in the Township.

The Ann Arbor Transportation Authority provides the public transportation for the area. It is also available to seniors and persons with disabilities.

# Superior Township

## 3.0 HAZARDS

Superior Township is susceptible to a variety of natural, technological, and societal hazards. The purpose of this section is to rank the hazards for Superior Township, analyze the risks for each hazard, and identify vulnerable areas for the Township, and appropriate goals and mitigation strategies for certain hazards.

### 3.1 Hazard Ranking

The ranking of hazards for Superior Township is presented as Table 1. The ranking of hazards was determined on a county-wide basis, and adjusted based on input from Local Units of Government. The ranking order was developed by the Washtenaw County Emergency Management Division using a program provided by the Michigan State Police Emergency Management Division. The model takes into account worst-case scenario data for frequency of occurrence, likelihood of occurrence, significance of impact/threat, potential size of geographic area impacted and total population impacted.

### 3.2 Hazard Assessment

The purpose of the hazard assessment is to map out where hazards exist and gain information about their frequency of occurrence, and potential for harm using worst-case scenario estimates. Different levels of risk analysis are performed, depending on the significance of the hazard for the community:

- **Cursory:** A short statement explaining why the hazard is not a threat, prepared for hazards that have little impact or are unlikely to occur.
- **Standard:** An explanation of concerns with limited quantitative research, prepared for hazards likely to occur and impact our communities.

**Table 1. Ranking of Hazards for Superior Township**

Hazard	Ranking
Convective Weather (Severe Winds, Tornadoes, Lightning, Hail)	1
Hazardous Materials Incidents: Transportation	2
Hazardous Materials Incidents: Fixed Site	3
Infrastructure Failures	4
Severe Winter Weather Hazards (Snow Storms and Ice/Sleet Storms)	5
Transportation Accidents: Air and Land	6
Extreme Temperatures	7
Flood Hazards: Riverine/Urban Flooding	8
Petroleum and Natural Gas Pipeline Accidents	9
Fire Hazards: Wildfires	10
Fire Hazards: Structural Fires	11
Public Health Emergencies	12
Sabotage & Terrorism	13
Drought	14
Earthquakes	15
Nuclear Power Plant Accident	16
Civil Disturbances	17
Oil and Gas Well Accidents	18
Nuclear Attack	19
Flood Hazards: Dam Failures	20
Fire Hazard: Scrap Tires Fires	21

# Superior Township

- **Advanced (Vulnerability):** A vulnerability determination using probabilities, prepared for hazards that have the highest frequency of occurrence and/or the most potential to cause death, injury or damage to personal property.

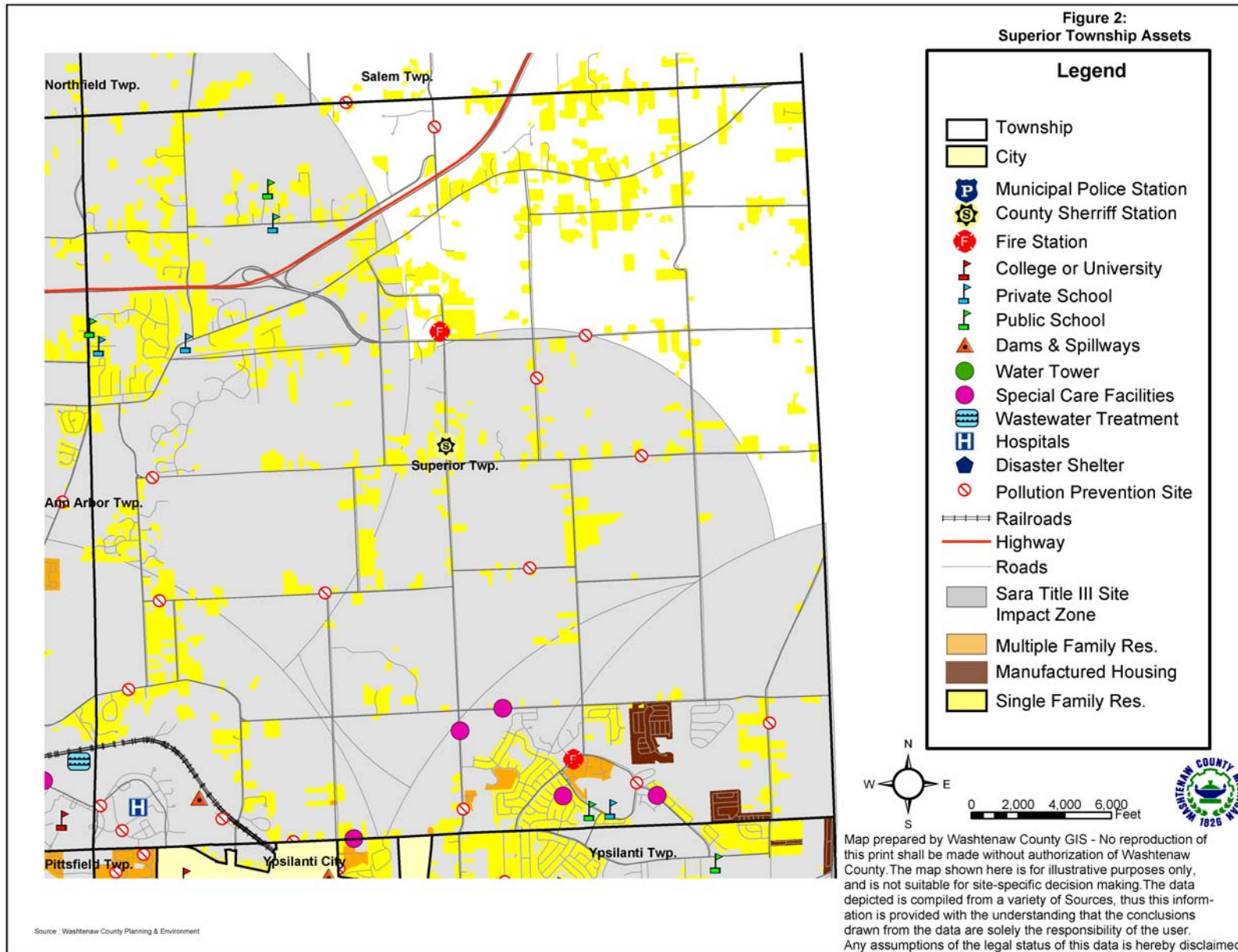
Vulnerability assessments were prepared for convective weather, hazardous materials transportation incidents, hazardous materials fixed site incidents, infrastructure failures and severe winter weather hazards. The goal is to quantitatively measure the threat experienced by Washtenaw County communities. By placing a monetary value on a hazard, a cost-benefit comparison can be made: the benefit of implementing a mitigation strategy compared to the cost of the hazard event.

Table 2 presents the results of the vulnerability assessment. The value of the vulnerability assessment is to provide a cost by which the mitigation strategies may be compared. A discussion of the determination is provided in the hazard section of the County Plan (Section 3.2). The methodology for each is presented in Appendix A of the County Plan.

**Table 2. Vulnerability Assessment Summary**

Rank	Hazard	Estimated Annual Cost
<b>#1</b>	<b>Convective Weather</b>	
	Tornado	\$5,078,755
	Severe Winds and Lightning	\$90,242,418
	Hail Storm	\$3,738,153
<b>#2</b>	<b>Hazardous Material Transportation Incidents</b>	\$6,838,963
<b>#3</b>	<b>Hazardous Material Fixed Site Incidents</b>	\$2,913,038
<b>#4</b>	<b>Severe Winter Weather</b>	\$36,191,763
<b>#5</b>	<b>Infrastructure Failure</b>	\$6,139,214

# Superior Township



# Superior Township

## 4.0 Hazard Goals and Strategies

The following sections present goals and strategies by hazard. Figure 2 presents the assets and hazards identified for Superior Township, and may be referred to in the following sections. The Goals and Strategies are not an inclusive list; rather the Goals and Strategies are those that the Township is focusing on at this time.

The repetition of strategies reflects the need for their implementation, not the duplication of services. For example, distribution of educational materials should not be performed several times, throughout the year per hazard, rather one mailing regarding family preparedness kits would address all hazards for which this strategy is listed.

### 4.1 Non-Hazard Specific Goals and Strategies

Goal: Integrate mitigation strategies into the Township General Development Plan.

Objective: Amend plan goals, objectives and policies to include mitigation strategies.

#### Mitigation Strategy: Plans

- Establish a committee charged with amending the General Development Plan to include hazard mitigation goals and strategies, as applicable.

### 4.2 Hazard Specific Goals and Strategies

#### **Convective Weather**

##### Vulnerable Areas

Although all of Superior Township is vulnerable to convective weather events, there are some facilities in the Township that are more of concern during a convective weather event. Such facilities include St. Joseph Hospital, and special care facilities Fairfax Manor, located on North Prospect, and Superior Woods, located along Geddes Road.

*Hazard Mitigation Plan  
October 2004*

Goal: Reduce the Township's vulnerability to convective weather storm hazards, minimize loss of life and injury, and damage to public property.

Objective: Increase the ability to warn Township residents of pending convective weather events.

#### Mitigation Strategy: Warning Sirens

- Secure funding for installation of warning sirens. Currently only portion of the Township is covered by a warning siren Figure 3. The siren is located in the northeast area and would reach approximately 59% of the Population Township, or 6,292 people. New sirens should be strategically located to cover residents as well as key facilities (schools, hospitals, businesses, special care facilities).

A warning siren is a high priority for Superior Township. The location that would provide the most benefit is at the new Fire Hall (intersection of Ford and Prospect).

#### Mitigation Strategy: Emergency Generators

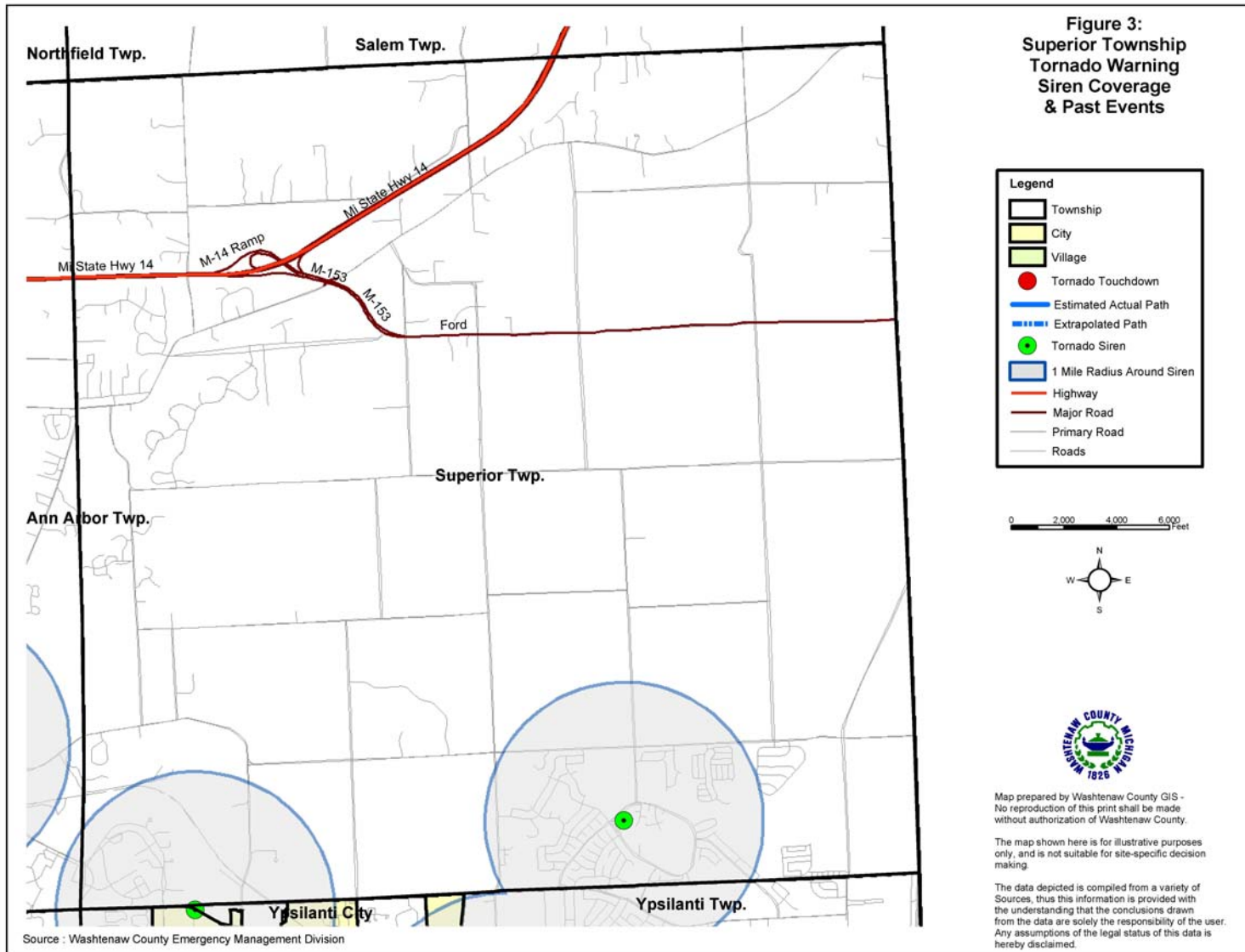
- Secure funding to install emergency generators. **The Township Hall, Fire Stations and special care facility Superior Woods are equipped with generators.** The Township is in the process of purchasing a portable generator. A permanent emergency generator is needed for Fairfax Manor, the only vulnerable facility without a back-up power supply.

#### Mitigation Strategy: Public Education

- Distribute Emergency Preparedness materials to Township residents, informing them on actions to take during an event, or actions to minimize damage caused by an event (see Family Preparedness Kit information box).

*Superior Township-7*

# Superior Township



# Superior Township

- Methods to disseminate the information include: an on-line link to Washtenaw County's Emergency Management Division website or FEMA's website; mention within an existing newsletter; a FEMA brochure as a separate mailing; or an enclosure in an annual Township mailing (e.g. tax bills).

## **Hazardous Material Transportation Incidents**

The most vulnerable areas for a hazardous material incidences in the community are M-14 and M-153. Both routes are located in the northern portion of the Township. In addition to motorists, residences and sensitive environmental areas located near these highways are vulnerable. The Township contracts with the Sheriff's Department for enforcement of MDOT regulations for hazardous material transportation.

Goal: Reduce the risk of damage, loss of life, and other costs resulting from hazardous material transportation incidents

Objective: Increase safety to cars and adjacent residents

### Mitigation Strategy: Road Regulation Enforcement

- Continue diligent enforcement of weight and travel restrictions through the Washtenaw County Sheriff's Department.

### Mitigation Strategy: Training

- Continue to train, equip and maintain a Hazardous Material Response teams. Superior Township belongs to the Western Wayne County and Washtenaw County Hazardous Materials Response team. The Township also supports training of its own Fire Department.

### Mitigation Strategy: Public Education

- Distribute emergency preparedness information. See strategy under Convective Weather for further discussion.

## **Family Preparedness Kits**

1. Have Emergency Supplies at the ready:
  - A three-day supply of water one gallon/person/day and food that won't spoil
  - One change of clothing, footwear, and blanket/sleeping bag per person
  - First aid kit including family prescription medications
  - Tools: flashlight, battery-powered radio and extra batteries
  - Extra car keys, credit cards, cash or travelers checks
  - Sanitation supplies
  - Special items for infant, elderly or disabled family members
  - Extra pair of glasses
  - Locate the fuse box water service main and natural gas main and learn how to turn on and off.
2. Create a disaster plan where to meet, contact numbers, who will take care of the family pet, take first aid, learn how to use a fire extinguisher, etc.
3. Practice the Plan and maintain supplies!

If having electric power is extremely important to you, consider having a qualified electrician install an emergency generator before a disaster strikes!

For more information, see FEMA's website at <http://www.fema.gov/pdf/library/yfdp.pdf>

# Superior Township

## **Hazardous Materials Fixed Site Incidents**

The SARA Title III Sites and the Pollution Prevention Sites (defined in the County Plan and shown on Figure 2 of this Plan) are potential areas of concern with regard to fixed site incidences in Superior Township (Figure 2).

Goal: Reduce the risks of hazardous material fixed site incidents in the Township

Objective: Increase public safety during and after a fixed site incident.

### Mitigation Strategy: Training and Support

- Continue to train, equip and maintain a Hazardous Material Response teams. Superior Township belongs to the Western Wayne County and Washtenaw County Hazardous Materials Response team. The Township also supports training of its own Fire Department.
- Encourage businesses to work with the Washtenaw County Pollution Prevention Program.
- Continue to participate in the Washtenaw County Emergency Action Guidelines.

### Mitigation Strategy: Emergency Generators

- Secure funding to install emergency generators. See strategy under Convective Weather for further information.

### Mitigation Strategy: Public Education

- Distribute emergency preparedness information. See strategy under Convective Weather for further discussion.

## **Severe Winter Weather Hazard**

Above ground power supply, coupled with mature trees can be a disaster when heavy snows or freezing rain occurs. The

weight of the frozen precipitation causes tree limbs to fall on power lines, causing power outages, which is a significant problem. Loss of power in the winter generally means loss of heat for citizens. Falling tree limbs also damage property, block emergency routes and roadways, endanger lives and are very costly to clean up and remove.

Goal: Reduce the damage and impacts caused by severe winter weather hazards continue to reduce the impact of such an event on the community.

Objective: Increase public safety during and after a severe winter weather event.

### Mitigation Strategy: Maintenance

- Distribute annual reminders to ground utility providers, encouraging them to keep power lines clear of trees and tree limbs, specifying addresses and locations of problem trees.

### Mitigation Strategy: Public Education

- Distribute Emergency Preparedness information to residents. Include information on location of warming shelters in the community. See strategy under Convective Weather for further information.

### Mitigation Strategy: Warming Shelters

- Work with the Red Cross to designate the Township Hall and Fire Station, currently equipped with emergency generators, as warming facilities for residents in the event of heat loss. The Township Hall would be an ideal location to use as a warming shelter in the event of a severe winter weather hazard that places at-risk residents without heat for an extended period of time.

# Superior Township

## **Infrastructure Failure**

In the event of an infrastructure failure, the entire Township would be impacted. A particularly vulnerable area is Fairfax Manor, as it is a special care facility without back-up power.

Goal: Decrease the Township's vulnerability to infrastructure failures

Objective: Increase safety to residents during an infrastructure failure event

### Mitigation Strategy: Emergency Generators

- Secure funding to install emergency generators. See strategy under Convective Weather for further discussion.

### Mitigation Strategy: Maintenance

- Distribute annual reminders to ground utility providers, encouraging them to keep power lines clear of trees and tree limbs. Exact locations and addresses should be specified. This would reduce the chance of electrical power failure for Townships residents and businesses.

### Mitigation Strategy: Public Education

Distribute emergency preparedness information. See strategy under Convective Weather for further discussion

## **Petroleum and Natural Gas Pipeline Accidents**

There are gas pipelines located in the Township. Those areas in close proximity to the pipelines would be the most vulnerable areas.

Goal: Reduce the potential harm from petroleum and natural gas pipeline accidents.

Objective: Ensure that responders are well prepared to respond to incidences.

### Mitigation Strategy: Training

- Continue to train, equip and maintain a Hazardous Material Response teams. Superior Township belongs to the Western Wayne County and Washtenaw County Hazardous Materials Response team. The Township also supports training of its own Fire Department.

### Mitigation Strategy: Enforcement

- Support and enforce buffer distances from pipelines by ensuring that such distances are clearly marked, to minimize the population impacted in the event of a Petroleum and Natural Gas Pipeline Accident. Residential development near the location of petroleum and natural gas pipelines is a growing issue.

### Mitigation Strategy: Public Education

- Develop programs targeted specifically at elementary school children, senior citizens and neighborhood watch groups.
- Continue to maintain the "Juvenile Fire setting Counsel", Fire Prevention Week activities and the annual open house.

# Superior Township

## 5.0 Implementation, Funding and Monitoring

The purpose of this plan is to identify mitigation strategies that will be implemented before, during or after a disaster to permanently eliminate or reduce risks to human life and property from natural, technical or societal hazards. The following sections present implementation actions, funding sources, and the method for monitoring the plan.

### 5.1 Implementation

The following schedule is given for hazard mitigation strategies described in Section 4.0. Completion dates have not been included as such dates are subject to uncertain factors, and will only begin after the mitigation strategy has been approved. While all strategies are important, priority is has been given to those that may be funded by a FEMA hazard mitigation grant program (see Section 5.2). Action on strategies will depend upon staff, resource and funding availability.

#### High Priority Strategies

##### Warning Sirens

*Responsible Agencies:* Superior Township and Washtenaw County Emergency Management Division

*Estimated Cost:* \$18,000 for siren and first year of maintenance fees, \$500 annually thereafter (does not include replacement parts).

##### Assist Special Care Facilities with Obtaining Emergency Generators (As Needed)

*Responsible Agency:* Superior Township

*Estimated Cost:* \$20,000 per generator.

#### Other Important Strategies

##### Training and Education for First Responders

- Continue current support through training, equipment and maintenance for the Western Wayne County and Washtenaw County Hazardous Materials Response teams.

- Encourage residents and businesses to work with the Washtenaw County Pollution Prevention Program.

*Responsible Agency:* Superior Township

*Estimated Cost:* NA.

##### Road Safety Enforcement

- Work with WCRC and MDOT on weight and travel restrictions.
- Work with WCRC to improve site distance standards at intersections.
- Consider partnerships with surrounding communities to share weigh-master facility and patrol.

*Responsible Agency:* Superior Township (contract through Washtenaw County Sheriff's Department)

*Estimated Cost:* Staff time.

##### Maintenance Reminders to Utility Providers

*Responsible Agency:* Superior Township

*Estimated Cost:* Staff time.

##### Ensure Pipeline Easements are Clearly Marked

*Responsible Agency:* Superior Township

*Estimated Cost:* Staff time.

##### Public Education

- Continue dissemination of family preparedness information through website or newsletter.
- For pipeline and/or fire safety, develop programs targeted specifically at elementary school children, senior citizens and neighborhood watch groups.
- Maintain the "Juvenile Fire setting Counsel", Fire Prevention Week activities and the annual open house.

*Responsible Agency:* Superior Township

*Estimated Cost:* Staff time; mailings \$5,000 annually.

# Superior Township

Amend Master Plan to incorporate hazard mitigation goals, strategies

*Responsible Agency:* Superior Township

*Estimated Cost:* Staff time.

## **5.2 Sources of Financial Assistance**

Implementation of the mitigation strategies is often dependent on funding assistance from Federal and State sources. FEMA provides funding for structural projects through the hazard mitigation grant programs. These include the Hazard Mitigation Grant Program, Pre-Disaster Mitigation Assistance Program, and the Flood Mitigation Assistance Program.

FEMA emphasizes the implementation of structural mitigation strategies. The strategies that are a priority for FEMA are not a priority for Superior Township at this time. The strategies listed in this plan that qualify for FEMA funds include emergency generators and warning.

Financial support for other mitigation strategies proposed in this plan may be sought through alternative funding sources. For example, funds for public outreach, equipment and training may be obtained through the FEMA Emergency Management Performance Grant (EMPG). Projects may be implemented with the assistance of non-profit organizations, or funds secured from Community Foundations. There are many State and Federal programs that are available to local governments, as provided in Attachment 2.

## **5.3 Monitoring of the Plan**

The plan will be monitored on a regular basis, and is the responsibility of the Superior Township Supervisor. The plan will be an annual agenda item for the Superior Board of Trustees. At a minimum, during its review, the Board will discuss the monitoring of the plan, the number of projects pursued, or reasons for lack of pursuit for approved projects.

Prior to the meeting, the Washtenaw County Emergency Management Division can be contacted for updates or recommended amendments to the plan.

To assist with the annual evaluation and review of the plan, the Township may consider forming a local hazard mitigation committee. The committee could also be charged with identifying methods of obtaining public input.

Although review of the plan will occur annually, and a formal revision may not be needed each year, an update of the plan will be prepared every five years, based on annual reviews, amendments, monitoring, evaluation and accumulation of official feedback and public input. The revised plan will again be adopted by the Superior Township Board of Trustees.



**Attachment 1  
County Hazard Plan**



**Attachment 2  
Alternative Funding Sources**

# Superior Township

Funding Source	Civil Disturbance	Drought	Earthquake	Extreme Temperature	Scrap Tire Facilities	Structural Fire	Wildfire	Dam Failure	Flooding: Riverine	Flooding: Urban	Hazardous Materials Incidents - Fixed Site	Hazardous Materials Incidents - Transportation	Infrastructure Failure	Nuclear Attack	Nuclear Power Plant Incidents	Oil/Nat Gas Well Incidents	Petrol/Nat Gas Pipeline Incidents	Public Health Emergencies	Sabotage/Terrorism	Hail	Lightning	Severe Winds	Severe Winter Weather	Transportation Accidents	Tornado	Financial Assistance	Technical Assistance
<b>FEDERAL SOURCES</b>																											
Business and Industry Loans	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
CDC-Investigations and Technical Assistance																		√								√	
CEPP Technical Assistance Grants Program											√	√						√								√	√
Community Assistance Program-State Support Services Element (NFIP)								√	√	√																	√
Community Development Block Grant/Economic Development Initiative									√	√			√										√			√	
Community Development Block Grant/Entitlement Grants	√	√	√	√	√	√	√	√	√	√	√	√	√					√	√	√	√	√	√	√	√	√	√
Community Development Block Grant/Small Cities Program	√	√	√	√	√	√	√	√	√	√	√	√	√					√	√	√	√	√	√	√	√	√	√
Community Development Block Grant/State's Program	√	√	√	√	√	√	√	√	√	√	√	√	√					√	√	√	√	√	√	√	√	√	√
Community Disaster Loans	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
Community Facilities Loans and Grants	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
Community Outreach Partnership Center Program	√	√	√	√	√	√	√	√	√	√	√	√						√	√	√	√	√	√	√	√	√	√
Conservation Reserve Program									√	√															√	√	√
Cooperative Forestry Research							√																			√	
Cora Brown Fund	√	√	√	√	√	√	√	√	√	√	√	√			√	√	√	√	√	√	√	√	√	√	√	√	√
Direct Housing Natural Disaster (Very Low/Low Income Loans)							√	√													√	√			√	√	
Disaster Housing Program	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
Disposal of Federal Surplus Property (Transfers)									√																	√	
Economic Adjustment Assistance								√	√	√													√		√	√	
Economic Development Tech Assistance									√																	√	√
Emergency Advance Measures for Flood Protection								√	√	√																√	√

# Superior Township

Funding Source	Civil Disturbance	Drought	Earthquake	Extreme Temperature	Scrap Tire Facilities	Structural Fire	Wildfire	Dam Failure	Flooding: Riverine	Flooding: Urban	Hazardous Materials Incidents - Fixed Site	Hazardous Materials Incidents - Transportation	Infrastructure Failure	Nuclear Attack	Nuclear Power Plant Incidents	Oil/Nat Gas Well Incidents	Petrol/Nat Gas Pipeline Incidents	Public Health Emergencies	Sabotage/Terrorism	Hail	Lightning	Severe Winds	Severe Winter Weather	Transportation Accidents	Tornado	Financial Assistance	Technical Assistance
<b>FEDERAL SOURCES</b>																											
Emergency Community Water Assistance Grants		√							√		√		√					√	√							√	
Emergency Conservation Program		√							√													√			√		
Emergency Flood and Shelter National Board Program	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
Emergency Management Institute-Resident Ed Program	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
Emergency Management Institute-Training Assistance	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
Emergency Management Performance Grants	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
Emergency Management-State and Local Assistance	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
Emergency Operations Flood Response and Post-Flood Response								√	√	√																√	
Emergency Rehabilitation of Flood Control Works								√	√																	√	
Engineering Grants	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
Farmland Protection Program									√																	√	
Fire Suppression Assistance							√																			√	
Fisheries Disaster Relief		√					√	√	√	√	√	√							√							√	
Flood Insurance								√	√	√																	√
Flood Mitigation Assistance									√	√																√	
Flood Plain Management Services								√	√	√																√	√
Food Control Projects								√	√																	√	
Forestry Incentives Program																						√			√	√	
Forestry Research									√	√												√			√	√	
Grants for Public Works and Economic Development								√	√	√			√													√	

# Superior Township

Funding Source	Civil Disturbance	Drought	Earthquake	Extreme Temperature	Scrap Tire Facilities	Structural Fire	Wildfire	Dam Failure	Flooding: Riverine	Flooding: Urban	Hazardous Materials Incidents - Fixed Site	Hazardous Materials Incidents - Transportation	Infrastructure Failure	Nuclear Attack	Nuclear Power Plant Incidents	Oil/Nat Gas Well Incidents	Petrol/Nat Gas Pipeline Incidents	Public Health Emergencies	Sabotage/Terrorism	Hail	Lightning	Severe Winds	Severe Winter Weather	Transportation Accidents	Tornado	Financial Assistance	Technical Assistance
<b>FEDERAL SOURCES</b>																											
Grants-in-Aid for Railroad Safety-State Participation												√												√			√
Habitat Conservation																											√
Hazard Mitigation Grant Program	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
HazMat Training Program for Implementation of SARA											√	√															√
Health Program for Toxic Substances and Disease Registry											√							√									√
Highway Planning and Construction													√														√
Historic Preservation Funds Grants-In Aid						√			√	√										√	√	√	√		√		√
HOME Investment Partnerships Program									√	√										√	√	√					√
Hydrologic Research		√						√	√	√																	√
Individual and Family Grant Program		√	√	√			√	√	√	√																	√
Planning Grants (HazMat Emergency Preparedness Grant)											√	√															√
Motor Carrier Safety												√															√
National Dam Safety Program							√																				√
National Pollutant Discharge Elimination System Related State Program Grants																√	√	√									√
National Urban Search and Rescue Response System			√										√						√						√		√
North American Wetlands Conservation Fund								√	√																		√
Nursing Homes						√																					√
Planning (Land and Water Conservation Fund Grants)									√																		√
Physical Disaster Loans	√		√		√	√			√	√			√						√	√	√	√	√		√	√	√
Pipeline Safety																√	√										√

# Superior Township

Funding Source	Civil Disturbance	Drought	Earthquake	Extreme Temperature	Scrap Tire Facilities	Structural Fire	Wildfire	Dam Failure	Flooding: Riverine	Flooding: Urban	Hazardous Materials Incidents - Fixed Site	Hazardous Materials Incidents - Transportation	Infrastructure Failure	Nuclear Attack	Nuclear Power Plant Incidents	Oil/Nat Gas Well Incidents	Petrol/Nat Gas Pipeline Incidents	Public Health Emergencies	Sabotage/Terrorism	Hail	Lightning	Severe Winds	Severe Winter Weather	Transportation Accidents	Tornado	Financial Assistance	Technical Assistance
<b>FEDERAL SOURCES</b>																											
Project Impact: Building Disaster-Resistant Communities	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
Protection Clearing and Straightening Channels									√																	√	
Protection of Essential Highways, Highway Bridge Approaches, and Public Works								√	√																	√	
Public Assistance Grant Program	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
Public Health and Social Services Emergency Fund (Post-Declaration Only)																		√								√	
Public Telecommunications Facilities Planning and Construction																								√	√		
Railroad Safety												√												√		√	
Resource Conservation and Development		√	√	√			√		√	√																	√
Rivers, Trails, and Conservation Assistance									√																		√
Rural Business Opportunity Grants									√																	√	
Rural Development Grants									√				√													√	
Rural Electrification Loans													√									√	√	√	√	√	
Rural Housing and Economic Development	√	√	√	√	√	√	√	√	√	√	√	√						√	√	√	√	√	√	√	√	√	√
Rural Housing Site Loans and Self-Help Housing and Development Loans									√																	√	
Snagging and Clearing for Flood Control								√	√																	√	
Soil and Water Conservation		√	√	√			√		√	√																	√
State and Community Highway Safety																								√			√
State Domestic Preparedness Equipment, Support Program																			√								√
Superfund State Site-Specific Cooperative Agreements											√							√								√	
Superfund Technical Assistance Grants for Citizen Groups at Priority Sites											√															√	√
Surveys, Studies, Investigations and Special Purpose Grants											√	√			√	√	√	√								√	

# Superior Township

Funding Source	Civil Disturbance	Drought	Earthquake	Extreme Temperature	Scrap Tire Facilities	Structural Fire	Wildfire	Dam Failure	Flooding: Riverine	Flooding: Urban	Hazardous Materials Incidents - Fixed Site	Hazardous Materials Incidents - Transportation	Infrastructure Failure	Nuclear Attack	Nuclear Power Plant Incidents	Oil/Nat Gas Well Incidents	Petrol/Nat Gas Pipeline Incidents	Public Health Emergencies	Sabotage/Terrorism	Hail	Lightning	Severe Winds	Severe Winter Weather	Transportation Accidents	Tornado	Financial Assistance	Technical Assistance
<b>FEDERAL SOURCES</b>																											
Technology Development for Environmental Management												√			√												√
Very Low Income Housing Repair Loans/Grants				√		√	√		√											√	√	√			√		√
Very Low to Moderate Income Housing Loans				√		√	√		√											√	√	√			√		√
Water and Waste Disposal System for Rural Communities									√		√		√					√	√								√
Water/Waste Disposal Loans/Grants									√		√		√					√									√
Watershed Protection and Flood Prevention								√	√	√								√									√
Watershed Surveys and Planning		√							√																		√
Weatherization Assistance for Low-Income Persons				√																							√
Wetlands Protection-Development Grants									√	√																	√
Wetlands Reserve Program									√	√																	√
Wildlife Habitat Incentive Program									√																		√

# Superior Township

Funding Source	Civil Disturbance	Drought	Earthquake	Extreme Temperature	Scrap Tire Facilities	Structural Fire	Wildfire	Dam Failure	Flooding: Riverine	Flooding: Urban	Hazardous Materials Incidents - Fixed Site	Hazardous Materials Incidents - Transportation	Infrastructure Failure	Nuclear Attack	Nuclear Power Plant Incidents	Oil/Nat Gas Well Incidents	Petrol/Nat Gas Pipeline Incidents	Public Health Emergencies	Sabotage/Terrorism	Hail	Lightning	Severe Winds	Severe Winter Weather	Transportation Accidents	Tornado	Financial Assistance	Technical Assistance
<b>STATE OF MICHIGAN</b>																											
<b>Department of Agriculture</b>																											
Energy Conservation Program									√														√			√	√
Groundwater Stewardship Program											√							√								√	√
Intercounty Drain Program (available to Drain Commissioner only)								√	√	√																	√
<b>Economic Development Corporation</b>																											
Community Development Block Grant									√	√			√													√	√
Urban Land Assembly									√																	√	√
<b>Environmental Quality</b>																											
Abandoned Well Mgmt. Program																		√								√	√
Alternate Water Supply Replacement Program									√	√	√		√					√								√	√
Brownfield Redevelopment Grants											√							√								√	√
Drinking Water Revolving Loan Fund													√					√	√							√	√
Municipal Landfill Cost-Share Grant Program																		√								√	√
Non-community Water Supply Program Grant																		√								√	√
Scrap Tire Collection Site Cleanup Grants					√																					√	√
State Revolving Loan Fund									√	√			√					√								√	√
Wellhead Protection Program									√	√								√								√	√
Wetland Program Development									√	√								√								√	√

# Superior Township

Funding Source	Civil Disturbance	Drought	Earthquake	Extreme Temperature	Scrap Tire Facilities	Structural Fire	Wildfire	Dam Failure	Flooding: Riverine	Flooding: Urban	Hazardous Materials Incidents - Fixed Site	Hazardous Materials Incidents - Transportation	Infrastructure Failure	Nuclear Attack	Nuclear Power Plant Incidents	Oil/Nat Gas Well Incidents	Petrol/Nat Gas Pipeline Incidents	Public Health Emergencies	Sabotage/Terrorism	Hail	Lightning	Severe Winds	Severe Winter Weather	Transportation Accidents	Tornado	Financial Assistance	Technical Assistance	
<b>STATE OF MICHIGAN</b>																												
<b>Housing Development Authority</b>																												
Community Development Block Grants/Housing Resource Fund						√			√	√											√		√		√	√		
Home/Property Improvement Loans						√			√	√											√		√		√	√		
<b>Department of Natural Resources</b>																												
Habitat Improvement Fund Project Grants									√																		√	
Land and Water Conservation Fund									√																		√	
Natural Resources Trust Fund						√			√																		√	
Recreational Trails Program Grants									√																		√	
Urban and Community Forestry Program																							√	√		√	√	
Volunteer Fire Assistance					√	√	√																				√	
<b>State Police</b>																												
Emergency Management Performance Grants	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	
Flood Mitigation Assistance									√	√																	√	√
Hazard Mitigation Grant Program	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√		
Individual and Family Grant Program									√	√			√														√	

# Superior Township

Funding Source	Civil Disturbance	Drought	Earthquake	Extreme Temperature	Scrap Tire Facilities	Structural Fire	Wildfire	Dam Failure	Flooding: Riverine	Flooding: Urban	Hazardous Materials Incidents - Fixed Site	Hazardous Materials Incidents - Transportation	Infrastructure Failure	Nuclear Attack	Nuclear Power Plant Incidents	Oil/Nat Gas Well Incidents	Petro/Nat Gas Pipeline Incidents	Public Health Emergencies	Sabotage/Terrorism	Hail	Lightning	Severe Winds	Severe Winter Weather	Transportation Accidents	Tornado	Financial Assistance	Technical Assistance
<b>STATE OF MICHIGAN</b>																											
<b>State Police (continued)</b>																											
Interagency HazMat Public Sector Training and Planning Grants (HazMat Emergency Preparedness Grant)											√	√		√	√	√	√									√	
Project Impact	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
Public Assistance Grant Program	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
<b>Department of Transportation</b>																											
Rail Loan Assistance Program												√	√													√	
Trans. Econ. Development Fund								√	√	√																√	
<b>Department of Treasury</b>																											
Municipal Bond Authority-Local Government Loan Program				√		√			√	√			√						√	√	√	√	√	√		√	
Municipal Bond Authority-State Aid Note Program				√		√			√	√			√						√	√	√	√	√	√		√	