

# Somerset County Emergency Operations Plan

## ATTACHMENT I - EARTHQUAKES

### I. NATURE OF THE HAZARD

An earthquake is a sudden, violent shaking or movement of part of the earth's surface caused by the abrupt displacement of rock masses, usually within the upper 10 to 20 miles of the earth's surface. Historically, Maine has had regular occurrences of earthquakes; however, none of them have ever caused significant damage. A very large percentage is too small to even be felt. There have been no active faults identified, however, the possibility of a destructive earthquake occurrence cannot be totally discounted.

The earthquake hazard may consist of ground motion, a ground surface fault rupture, and liquefaction of the ground, landslides, and tsunamis. An earthquake can cause structural and utility damages, dam failure, vehicle accidents and hazmat incidents.

Although discussed and considered in the Somerset County All-Hazard Mitigation Plan they were not rated or profiled.

### II. RISK AREA

An earthquake is possible anywhere in the State of Maine. However, both modern and historical records indicate somewhat higher activity in the eastern, central, and southwestern parts as shown in Figure 1. This would indicate that the communities in western Somerset County had experienced more earthquake activity in the past than the rest of the County. The State has a 2% chance of a magnitude 6.0 earthquake to occur anywhere in Maine in the next 50 years.

### III. DIRECTION AND CONTROL

Each municipality will be responsible for conducting damage assessment in their communities and reporting this information to the Somerset County EOC. The County EOC will consolidate the reports and transmit this information to the State EOC.

This information is needed to determine the severity and extent of injuries and damages. The data

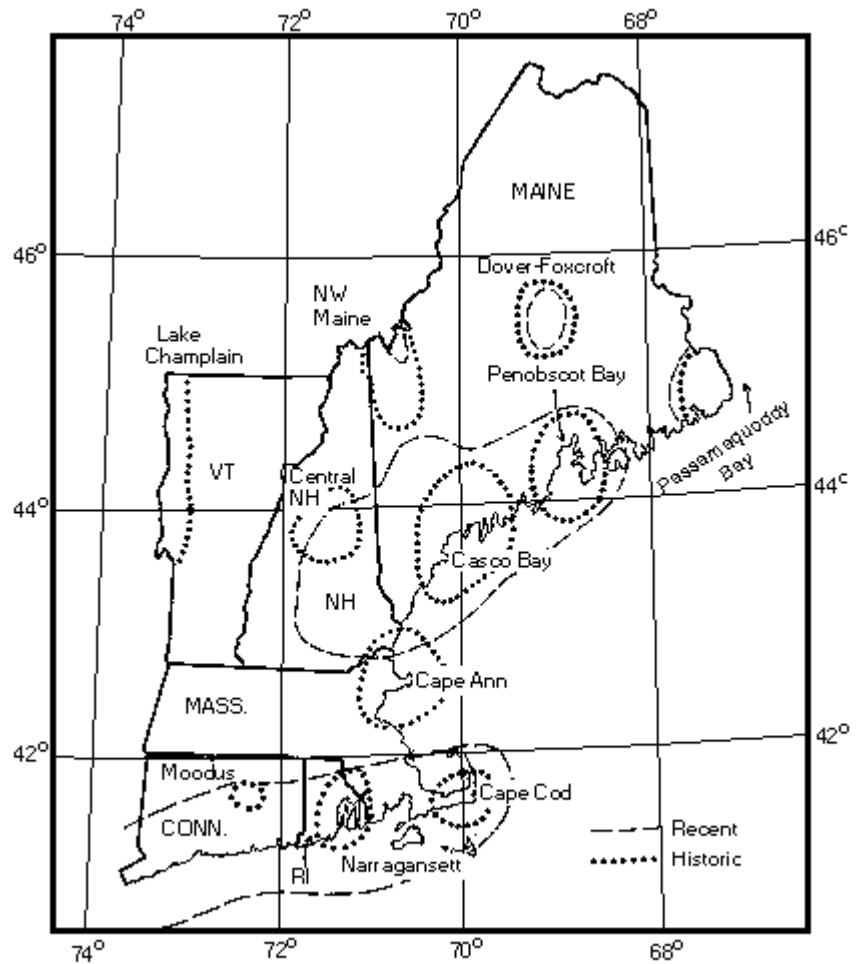


Figure 1. Map showing interpreted areas that have experienced somewhat higher earthquake activity in historical times (1747-1975) and in recent times (1975-1982). (modified from Ebel, 1989)

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gathering effort should provide much of the information the municipal, County and State EOCs will need to implement and prioritize response actions for search and rescue activities, entry control to impacted area, debris clearance, restoration of utilities and transportation repairs, and the inspection, condemnation, and or demolition of buildings and other structures.

### IV. COMMUNICATIONS

Communications will be maintained between the Somerset County Emergency Operations Center (EOC), the Incident Commander, the first responders and the Municipal EOCs. A destructive earthquake could effect telephone, cell phone, television and radio transmission capabilities. Communications may need to be completed by HAM radios or by couriers.

### V. WARNING

An earthquake will occur without any prior warning.

### VI. EMERGENCY PUBLIC INFORMATION

The flow of accurate and timely emergency information is critical to the protection of lives and property immediately following a major earthquake.

If it is functioning, the news media will be the public's primary source of information, from both official and other sources, over the course of the emergency. The Somerset County EOC Public Information Officer will immediately establish a Media Center and contact the television stations in Bangor and local radio stations. Information to safeguard the public from the current hazards will be made available for transmission to the public.

The Public Information Officer will:

1. Survival tips for people on what to do during and immediately after an earthquake.
2. Warnings and advice on the continuing threat of fire, unsafe areas, building collapse, aftershocks, and other hazards.

### VII. EVACUATION

A major evacuation from an area in Somerset County that is hit by at least a magnitude 6.0 earthquake is not likely due to the topography and types of buildings in Somerset County. Even a severe earthquake will not likely cause a ground surface fault rupture or landslides and there are very few tall buildings in the County. Localized areas, such as downtown Ellsworth, a department store, or a collapsed home may need to be evacuated. Individuals may need to relocate from their homes if the homes are structurally unsound. This limited individual evacuation will not cause traffic congestion anywhere in the County. However, roads could be blocked with debris.

### VIII. MASS CARE

None of the mass care shelters in Somerset County have been evaluated by structural engineers for their ability to resist a major earthquake and should not be used during such an event unless they are evaluated.

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### **IX. RESOURCE MANAGEMENT**

Municipalities will contact the County EMA office when requesting resources