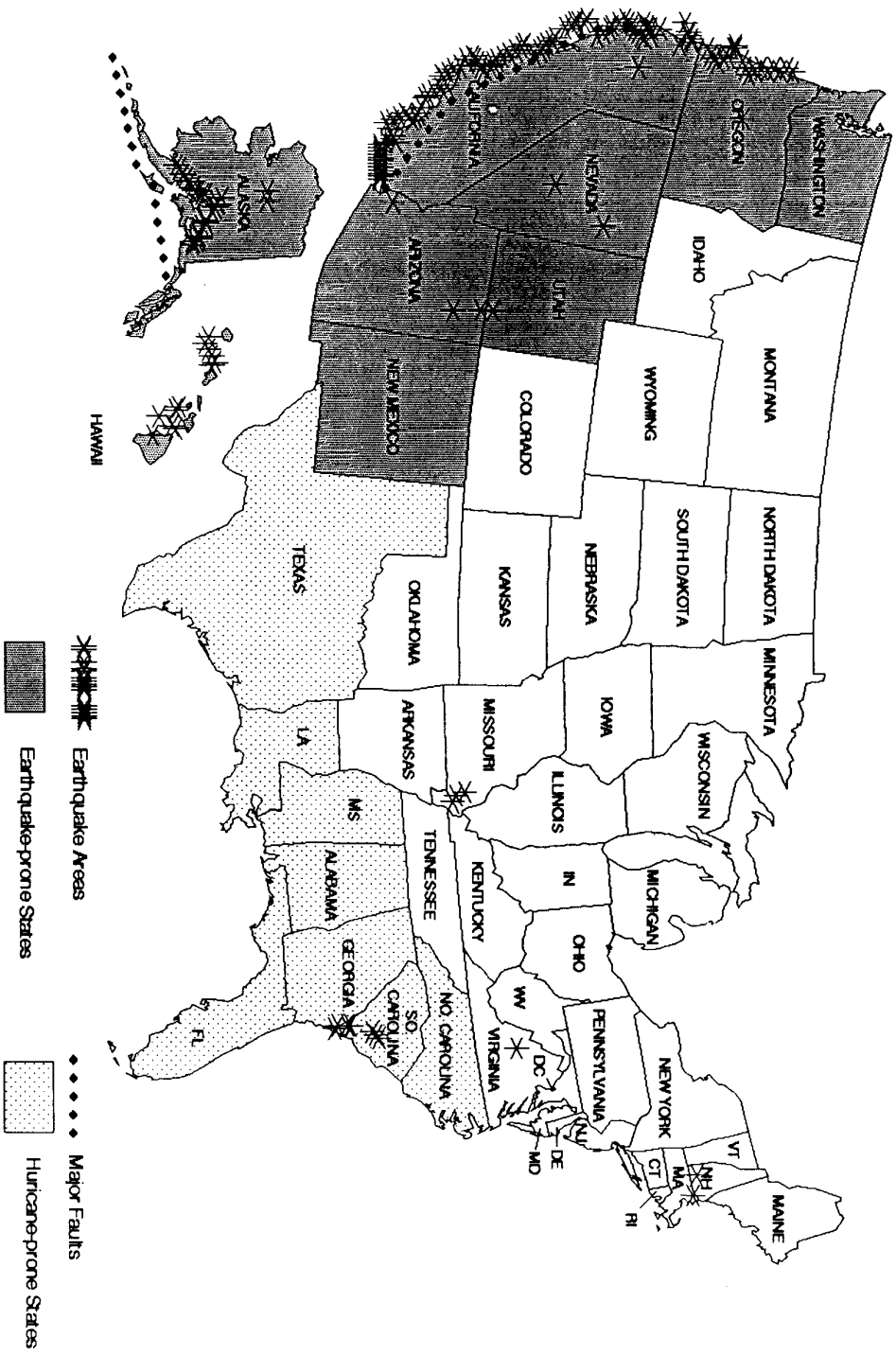


These figures follow :

1. Earthquake and Hurricane– prone areas of the U.S.A.
2. The PML model
3. "Attenuation Factors" used in intensity modelling. The greater the number the greater the intensity of an earthquake of particular magnitude.
4. Map of the Los Angeles Region, showing predicted Mercalli intensities for an earthquake of 6.5 on the Richter scale
3. Flow diagram showing predictive process.
4. A seismicity map of the Eastern United States, showing intraplate earthquake source zones such as the New Madrid Region.

Earthquake and Hurricane States



Earthquake Areas

Earthquake-prone States

Major Faults

Hurricane-prone States

RESIDENTIAL

LOCATION → POSTCODE

COMMERCIAL

VALUE OF CONTENTS
NUMBER OF DWELLINGS
EARTHQUAKE CONSTRUCTION CLASS
HEIGHT
VALUE OF BUILDING

CHOOSE EPICENTER
CHOOSE FAULT
CHOOSE MAGNITUDE

CALCULATE DISTANCES FROM RUPTURE LENGTH TO POSTCODES

CALCULATE RUPTURE LENGTH



A MODEL TO ESTIMATE EARTHQUAKE PMLS

fire-falling earthquake/general liability/employers' liability not included

Some other factors: WAVES

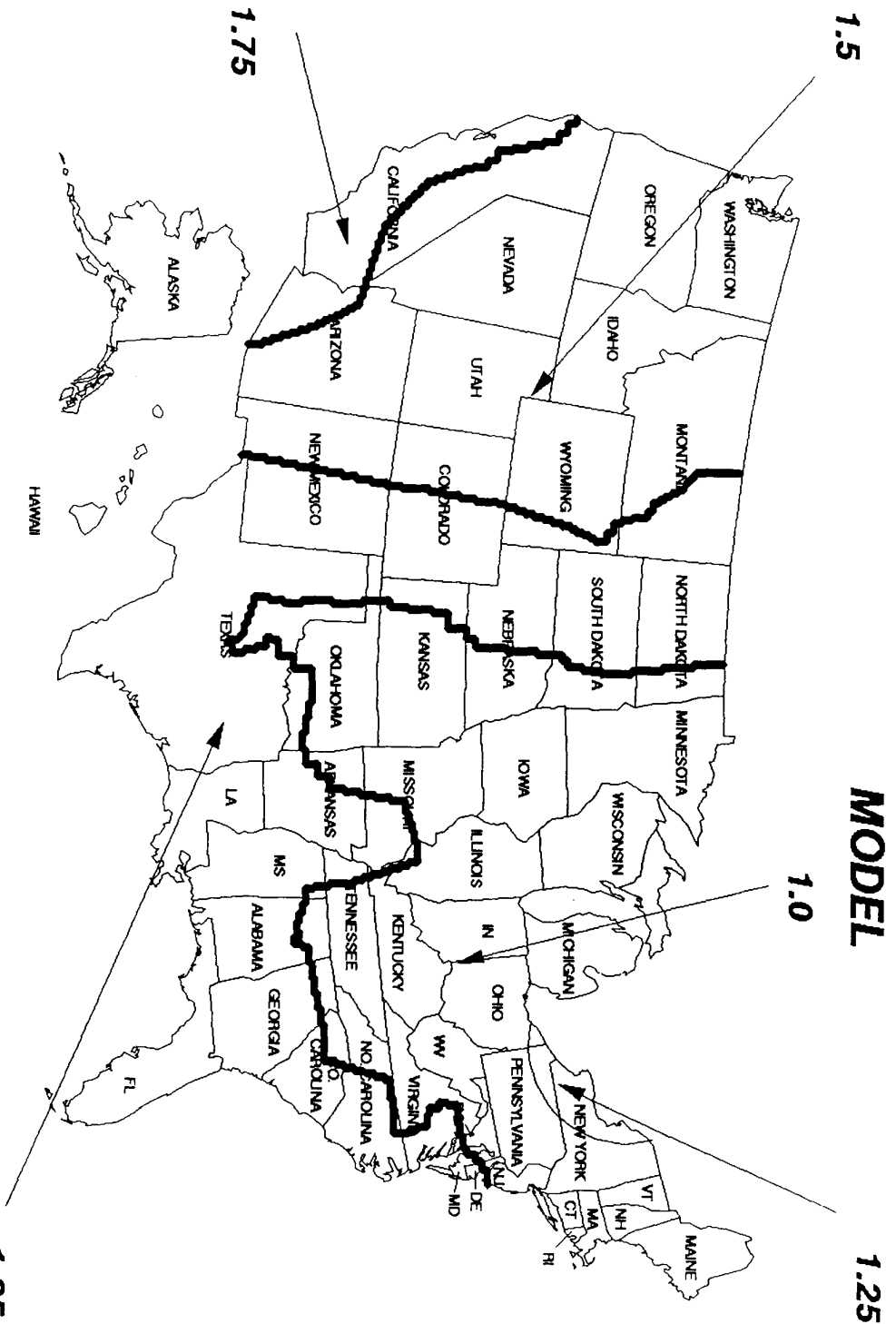
SOIL CONDITIONS

POOR SOIL - MORE DAMAGE NEAR FAULT
 DAMAGE FARTHER AWAY FROM FAULT RUPTURE

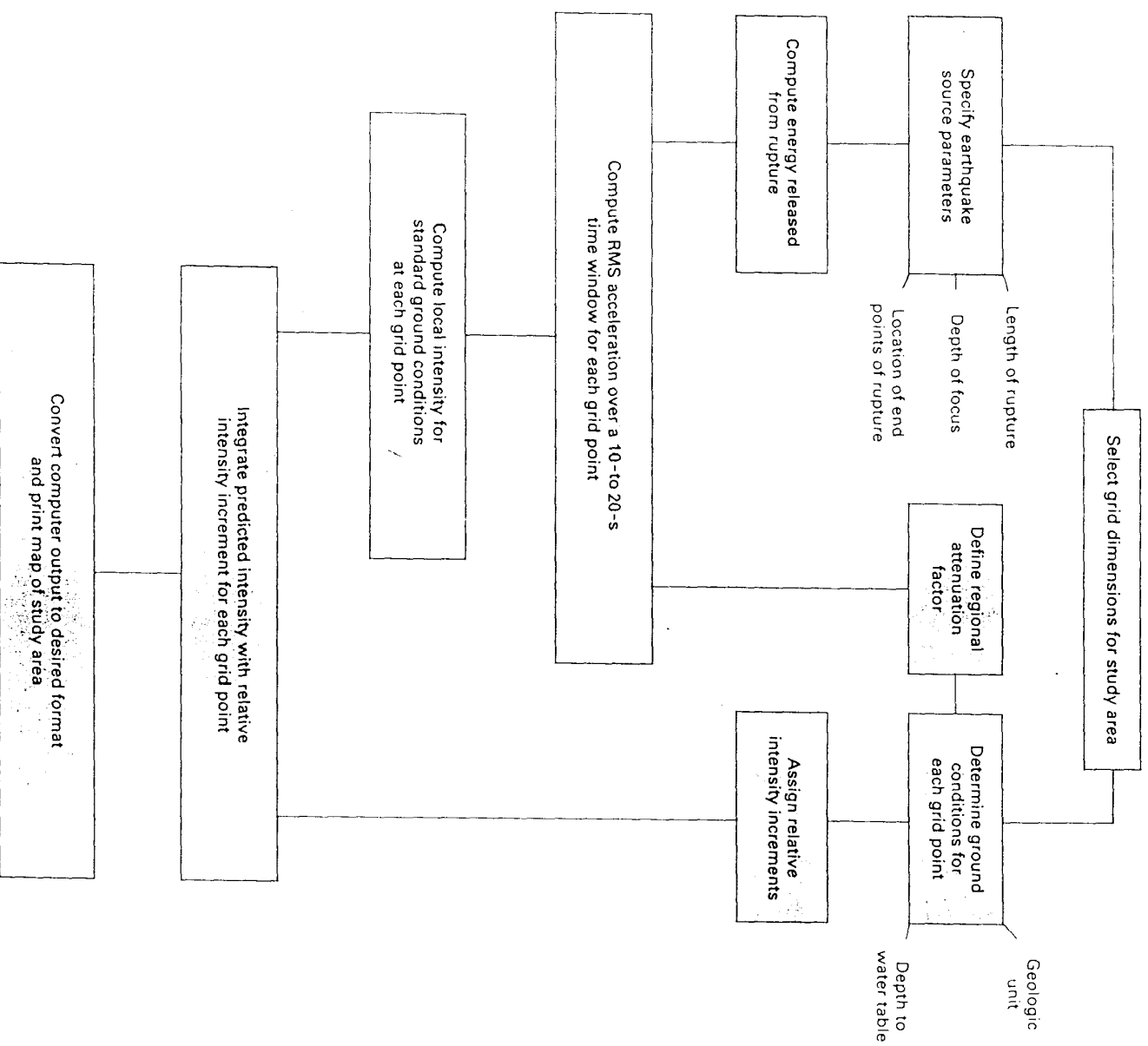
SHORT PERIOD SHARP
 STRONG SHAKING DAMAGE CLOSE TO EARTHQUAKE
 DIE OUT QUICKLY

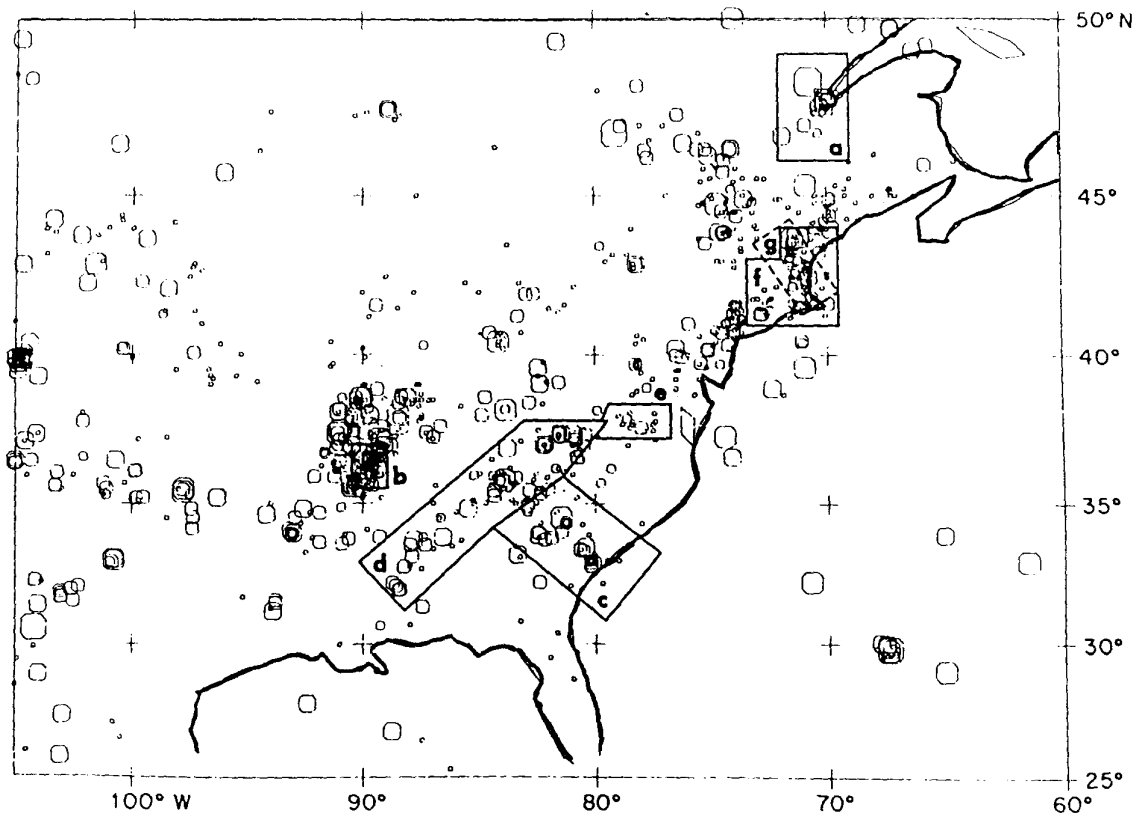
LONG PERIOD NOT AS STRONG
 RANGE OVER LONG DISTANCE
 RESONANCE RISK IF WAVE IS SAME FREQUENCY AS BUILDING

UNITED STATES EARTHQUAKE ZONES - USING INTENSITY PREDICTIVE



REFERENCE : After US Geological Survey Professional Paper 1360, US Government Printing Office, Washington DC, 1965





Seismicity map of the Eastern United States and locations of source zones in Tables 1 to 6. Source zones are identified as follows: (a) La Malbaie (Leblanc and Buchbinder, 1977); (b) New Madrid (Nuttli, 1979); (c) South Carolina-Georgia (Bollinger, 1973; Chinnery, 1979); (d) Southern Appalachian (Bollinger, 1973; Chinnery, 1979); (e) Central Virginia (Bollinger, 1973; Chinnery, 1979); (f) Southern New England (Shakal and Toksöz, 1977; Chinnery, 1979); (g) Boston-New Hampshire (Shakal and Toksöz, 1977; Chinnery, 1979; the boundaries employed by Chinnery, 1979 differ slightly).