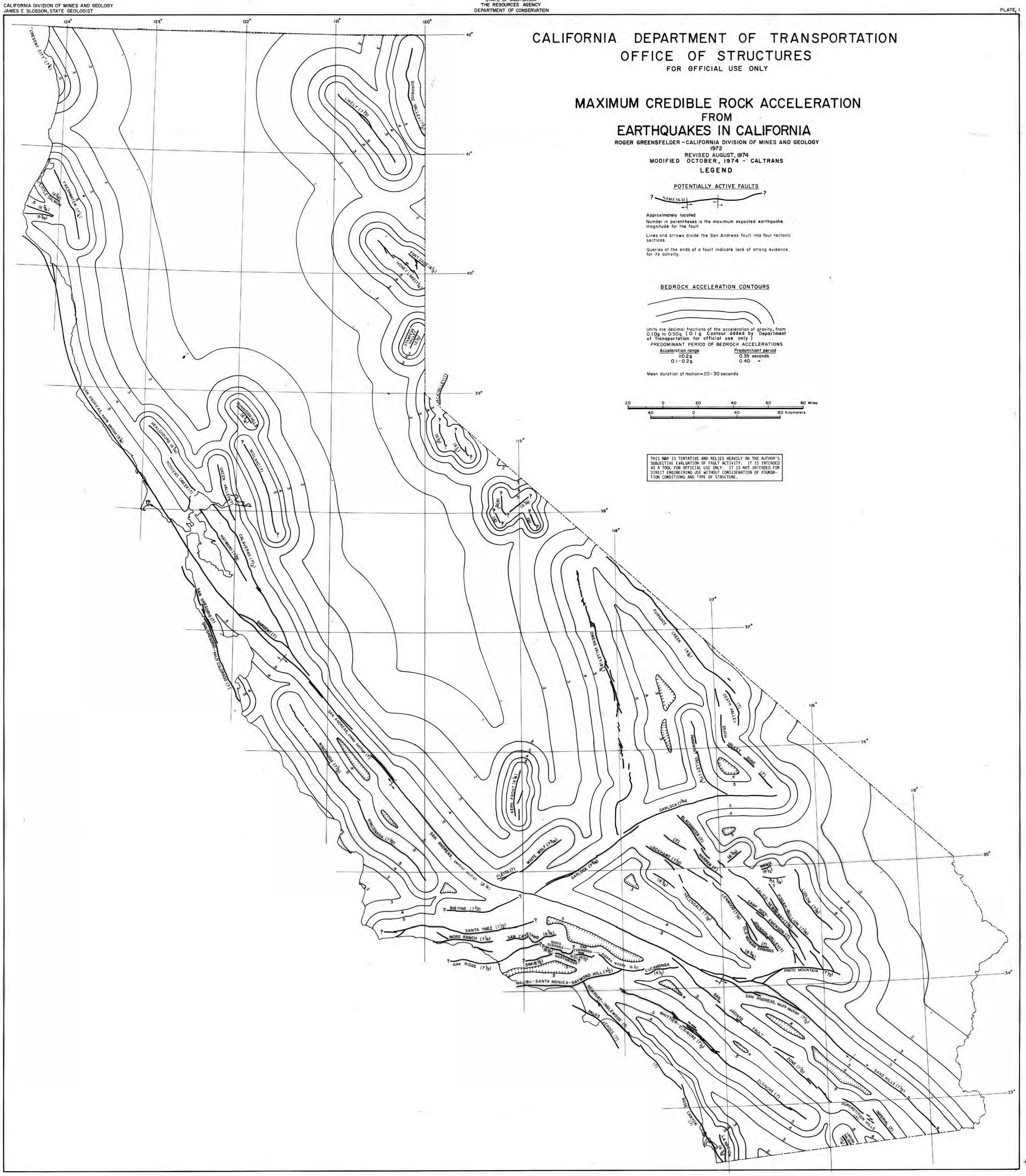
CALIFORNIA DEPARTMENT OF TRANSPORTATION
OFFICE OF STRUCTURES
FOR OFFICIAL USE ONLY
MAXIMUM CREDIBLE ROCK ACCELERATION
FROM
EARTHQUAKES IN CALIFORNIA
ROGER GREENSFELDER - CALIFORNIA DIVISION OF MINES AND GEOLOGY
1972
REVISED AUGUST, 1974
MODIFIED OCTOBER, 1974 - CALTRANS
LEGEND
POTENTIALLY ACTIVE FAULTS
NAME (6.5)
Approximately located
Number in parentheses is the maximum expected earthquake magnitude for the fault.
Lines and arrows divide the San Andreas fault into four tectonic sections.
Queries at the ends of a fault indicate lack of strong evidence for its activity.
BEDROCK ACCELERATION CONTOURS
Units are decimal fractions of the acceleration of gravity, from 0.10g to 0.50g. (0.1 g Contour added by Department of Transportation for official use only)
PREDOMINANT PERIOD OF BEDROCK ACCELERATIONS
Acceleration range — Predominant period
≥0.2g — 0.35 seconds
0.1-0.2g — 0.40 "
Mean duration of motion≈20-30 seconds
20 0 20 40 60 80 Miles
40 0 40 80 Kilometers
THIS MAP IS TENTATIVE AND RELIES HEAVILY ON THE AUTHOR'S SUBJECTIVE EVALUATION OF FAULT ACTIVITY. IT IS INTENDED AS A TOOL FOR OFFICIAL USE ONLY. IT IS NOT INTENDED FOR DIRECT ENGINEERING USE WITHOUT CONSIDERATION OF FOUNDATION CONDITIONS AND TYPE OF STRUCTURE.
124° 123° 122° 121° 120° 119° 118° 117° 116° 115°
42° 41° 40° 39° 38° 37° 36° 35° 34° 33°
CRESENT CITY (7 1/4)
LITTLE SALMON (6 3/4)
FRESHWATER (7 1/4)
SUPRISE VALLEY (7 1/2)
LIKELY (7 1/2)
FORT SAGE (6 1/2)
HONEY LAKE (7 1/4)
SIERRAVILLE (6 1/2)
JACKVALLEY (7)
SUNNIGAN HILLS (6 3/4)
HEALDSBURG (6 3/4)
RODGERS CREEK (7)
GREEN VALLEY (7)
MIDLAND (7)
HAYWARD (7 1/2)
CALAVERAS (7 1/2)
SAN ANDREAS, north section (8 1/4)
SAN GREGORIO (7)
SAN GREGORIO-PALO COLORADO (7)
SARGENT (7)
SAN ANDREAS, creep section (7)
RINCONADA (7 1/2)
KERN FRONT (6 3/4)
OWENS VALLEY (6 3/4)
FURNACE CREEK (8 1/4)
DEATH VALLEY (7)
DEATH VALLEY ZONE (7)
PANAMINT VALLEY (7 1/4)
GARLOCK (7 3/4)
BLACKWATER (7)
HARPER (7)
LOCKHART (7 1/2)
WHITE WOLF (7 3/4)
PLEITO (7)
SAN ANDREAS, central section (8 1/4)
BIG PINE (7 1/2)
SANTA YNEZ (7 1/2)
MORE RANCH (7 1/4)
SAN CAYETANO (6 3/4)
SANTA SUSANNA (6 1/2)
SAN FERNANDO (6 1/2)
SIERRA MADRE (6 1/2)
CUCAMONGA (6 1/2)
OAK RIDGE (7 1/2)
SIMI (6 1/2)
NORTHRIDGE (6 1/2)
MALIBU-SANTA MONICA-RAYMOND HILL (7 1/2)
NEWPORT-INGLEWOOD (7)
PALOS VERDES (7)
WHITTIER-ELSINORE (7 1/2)
ROSE CANYON (7)
LA NORIA (6 3/4)
TEELENDALE (7 1/2)
LEANWOOD (7 1/4)
OLD WOMAN SPRINGS (6 3/4)
MANIX (6 1/2)
CALICO-HELENDALE (7 1/4)
CAMP ROCK-EMERSON (7)
JOHNSON VALLEY (7)
BURNT-BULLION (7 1/4)
LUDLOW (7 1/4)
PINTO MOUNTAIN (7 1/2)
SAN ANDREAS, south section (7 1/2)
SAN JACINTO FAULT ZONE (7 1/2)
ELSINORE (7)
SAND HILLS (7 1/2)
SUPERSTITION HILLS (7)
IMPERIAL (7)
LAGUNA SALADA (7 1/2)