OPEN FILE REPORT 74-273

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Prepared in cooperation with the
APPALACHIAN REGIONAL COMMISSION

BRADDOCK QUADRANGLE
PENNSYLVANIA
7.5 MINUTE SERIES (TOPOGRAPHIC)
NE/4 PITTSBURGH 15' QUADRANGLE

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EXPLANATION

Additional information is contained in a leaflet accompanying this map.

HIGHLY SENSITIVE TO DISTURBANCE BY MAN

RECENT LANDSLIDES
Dominantly earth slumps and earth flows; historically recorded or characterized by fresh scars. Small landslides enclosed by triangles.

DEBRIS SLIDES
Slides in steep narrow valleys; primarily rock, soil and vegetation debris.

PREHISTORIC LANDSLIDES
Dominantly earth slumps and earth flows characterized by hummocky topography and slump benches; relatively stable in natural state but can be reactivated by excavation, loading and changes in ground and surface water conditions. Includes some probable recent landslides not covered by records examined.

SLOPES WITH CONSPICUOUS SOIL CREEP
Clayey soils, generally less than 3 ft. thick, commonly underlain by weathered shale; characterized by shallow, slow but distinct, downslope movement that can be greatly accelerated by overloading from fills or structures.

OUTCROP AREA OF THICK "RED BEDS" AND ASSOCIATED ROCKS
Rock weathers rapidly on exposure; weathered rock and related soil commonly result in soil creep and landslides; cuts and fills in "red beds" generally not stable.

RELATIVELY STABLE GROUND
Most slopes have little susceptibility to landsliding; uplands extensively modified by man; slight soil creep common on undisturbed slopes.

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STEEP SLOPES SUSCEPTIBLE TO ROCKFALL
Dominantly thick-bedded sandstone and limestone, 1 to over 10 ft thick; subordinate flaggy sandy shale and interbedded shale; highly fractured and locally undercut by weathering of shale; in steep natural and cut slopes and cliffs, 15 to over 100 ft high.

F MAN-MADE FILL
Heterogeneous soil and rock material; variable susceptibility to slope failure depending on nature of materials, foundation conditions, design and construction. Fills in older urbanized areas mapped only where associated with recent landslides. Fills too small to be shown by pattern identified by letter "F".

NOTE

Variations in slope sensitivity may occur at any specific point within a unit. Boundaries largely are inferred and information given is intended as a general guide and should not be construed as applicable to all localities within the area shown. This map cannot be used as a substitute for detailed engineering investigations of specific sites.

Base by U.S. Geological Survey, 1969. Research sponsored by the Appalachian Regional Commission under contract no. 74-31.

SCALE 1:24 000

1 MILE

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 KILOMETER

CONTOUR INTERVAL 20 FEET
DATUM IS MEAN SEA LEVEL

UTM GRID AND 1969 MAGNETIC NORTH
DECLINATION AT CENTER OF SHEET

PENNSYLVANIA
QUADRANGLE LOCATION

Map based on 1973 aerial photographs, field reconnaissance, 1973-74; soil surveys by U.S. Dept. Agriculture Soil Conservation Service, and existing geologic data. This map has not been edited or reviewed for conformity with Geological Survey standards and nomenclature.

LANDSLIDE SUSCEPTIBILITY MAP OF THE BRADDOCK 7 1/2' QUADRANGLE, ALLEGHENY COUNTY AND VICINITY, PENNSYLVANIA

by

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U.S. Geological Survey
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