OPEN FILE REPORT 74-274
UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

Prepared in cooperation with the
APPALACHIAN REGIONAL COMMISSION

BRIDGEVILLE QUADRANGLE
PENNSYLVANIA
7.5 MINUTE SERIES (TOPOGRAPHIC)
SE/4 CARNEGIE 15' QUADRANGLE

EXPLANATION

Additional information is contained in a leaflet accompanying this map.

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 5 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.

RELATIVELY STABLE GROUND
Most slopes have little susceptibility to landsliding unless 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 floggy 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 150 ft high.

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".

GROUND WITH HIGHLY VARIABLE SLOPE CONDITIONS
On the ticked side of the dashed line, ground has been widely disturbed by past and present cut-and-fill operations related to residential and commercial development and (or) surface mining of coal. Thin complex zones of soil and weathered rock mantle the area. These conditions combine to make uncertain the classification of slopes on the basis of conspicuous or relatively minor soil creep.

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.

SPECIAL PRINTING
Contours and woodland symbols omitted

Base by U.S. Geological Survey, 1969.
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SCALE 1:24 000

CONTOUR INTERVAL 20 FEET
DATUM IS MEAN SEA LEVEL

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 PART OF THE BRIDGEVILLE 7 1/2' QUADRANGLE, ALLEGHENY COUNTY AND VICINITY, PENNSYLVANIA

by
William E. Davies

U.S. Geological Survey
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