

74-282

EXPLANATION
Additional information is contained in a
leaflet accompanying this map.

RECENT LANDSLIDES
Dominantly earth slumps
and earth flows, typically
recorded or charac-
terized by fresh scars.
Small landslides enclosed
by triangles.

DEBRIS SLIDES
Slides in steep narrow val-
leys, primarily rock, soil
and vegetation debris.

PREHISTORIC LANDSLIDES
Dominantly earth slumps
and earth flows charac-
terized by hummocky topog-
raphy and slump benches,
relatively stable in natural
state but can be reactiv-
ated by saturation, loading
and changes in ground and
surface water conditions.
Includes some probable re-
cent landslides not covered
by records examined.

**SLOPES WITH CONSPICUOUS
SOIL CREEP**
Clayey soils, generally
less than 5 ft. thick, com-
monly underlain by
weathered shale; charac-
terized 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 sus-
ceptibility to landsliding
unless extensively modified
by man; slight soil creep
common on undisturbed
slopes.

**STEEP SLOPES
SUSCEPTIBLE TO ROCKFALL**
Dominantly thick-bedded
sandstone and limestone,
1 to over 10 ft. thick, sub-
ordinate 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 150 ft. high.

MAN-MADE FILL
Heterogeneous soil and rock
material; variable suscep-
tibility to slope failure de-
pending on nature of ma-
terials, foundation condi-
tions, design and construc-
tion. Fills in older urban-
ized areas mapped only
where associated with re-
cent landslides. Fills too
small to be shown by let-
ter "F".

NOTE
Variations in slope sensitivity may oc-
cur at any specific point within a unit.
Boundaries largely are inferred and in-
formation given is intended as a gen-
eral 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 engineer-
ing investigations of specific sites.



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

U.S. Geological Survey
OPEN FILE MAP 74-282
This map is preliminary and has
not been edited for conformity
with Geological Survey standards
or nomenclature.

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

by
William E. Davies

Map based on 1973 aerial photographs,
field reconnaissance, 1973-74; soil
surveys by U.S. Dept. Agriculture Soil
Conservation Service, and existing geo-
logic data. This map has not been
edited or reviewed for conformity with
Geological Survey standards and no-
menclature.