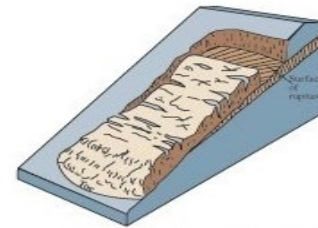


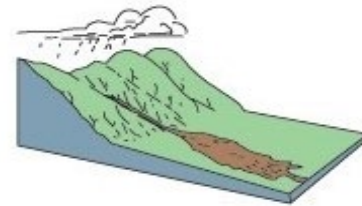
# TYPE OF LANDSLIDE

Landslide hazard identification uses modeled landslide susceptibility to identify where landslides are likely to occur and the relative probability of occurrence. Landslide risk assessment is the systematic approach to identifying how landslides impact the environment. In hazard mitigation planning, landslide risk assessments serve as the basis for mitigation strategies and actions by defining the hazard and enabling informed decision making. In West Virginia, there are several common general landslide types, including:

**Slide** – Translational or rotational movement of material downslope. Slides travel at a range of rates, displacing forests and infrastructure as they move. Quite common in West Virginia, large slides are readily identified using LiDAR data.



**Debris Flow** – Failures saturated with water, where transported material moves downslope as a slurry of rock, soil, and debris. Flows may move quickly and cause loss of property and life far downslope from their source. Debris flows are common in mountainous areas of West Virginia but can be difficult to map using LiDAR data. The **Multiple Failures** classification consists mostly of debris flows.



**Lateral Spread** – Lateral movement of rock blocks across relatively shallow slopes. Spreads move slowly compared to most other landslides. Spreads composed of large blocks are obvious in LiDAR imagery. Spreads are not identified in Jefferson County, but exist in nearby Loudon County.



**Fall** – Free-fall of material from a steep slope or cliff face. Falls often occur with little warning. Most falls are very difficult to map using LiDAR data because they are either promptly mitigated or consist of rock fragments too small to be identified.



Diagrams by [USGS](https://www.usgs.gov/)

**Undetermined Slope Failure** – A contingency category consisting of slope failures in which available data are insufficient to assign failure material or mode.

\*In WV landslide reports, the general term “landslide” refers to all slope failure types unless specifically stated.