


Why 'Stable Today' Does Not Mean 'Stable Tomorrow'

Slopes and ground conditions can change over time as small changes add up.

 Conditions change over time

1 Stable today

Stable-looking does not mean risk-free.



TIME PASSES

2 Conditions change



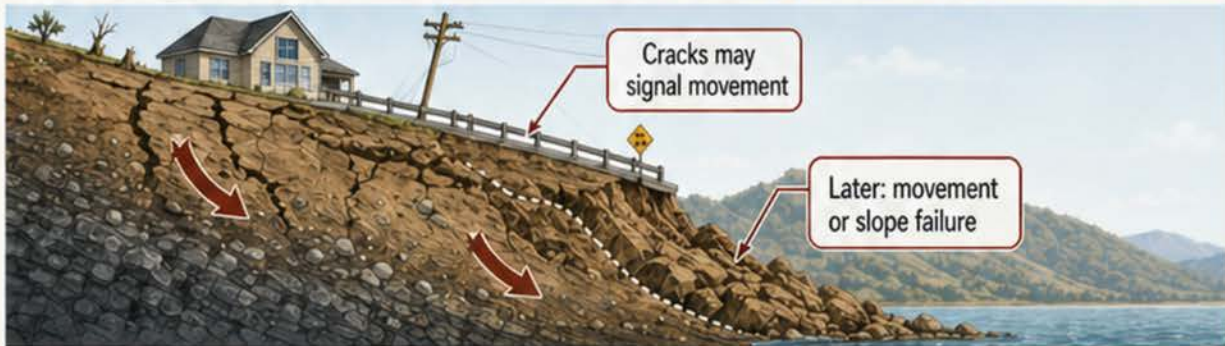
TIME PASSES

3 Added stresses reduce stability



TIME PASSES

4 Later: signs of instability



Small changes can accumulate



Weathering

+



Erosion

+



Vegetation loss

+



Added water

+



Construction / grading

+



Earthquake shaking

=

Less stability over time



Policy takeaway: Slope stability changes over time. Monitoring, maintenance, updated hazard information, drainage management, and risk-based land-use planning help communities respond before small changes become larger problems.