



# GEOHAZARD MITIGATION

Geohazard identification, monitoring and mitigation is critical to protecting assets throughout their life-cycle. Inclusion of annual and multi-year geohazard inspection in asset integrity programs provides an additional level of safety to the asset, the environment and the public.

Through the identification of geohazards and the subsequent development and execution of mitigation programs, Vertex can support the operation of assets in a variety of industries including pipeline, utilities, and transportation infrastructure.

At Vertex, desktop surveys are used to identify changes to infrastructure and to review aerial survey data for indications of ground movement and anomalies in vegetation. Field investigation will identify evidence of erosion, slopes and landslide hazards, and construction or subsistence hazards. Classification of all identified geohazards will lead to development of ongoing monitoring programs and additional investigation to provide geohazard mitigation analyses and designs.

Vertex uses mobile applications to collect georeferenced metadata, including field measurements and photographic evidence of geohazards, to ground truth potential areas of concern in a systematic and efficient manner. Application outputs include summary reports and mappable metadata for our clients to implement into their existing integrity databases.

## Services

### Geohazard Program Plans include:

- Aerial Surveys: LiDAR & Drone Imagery
- Desktop Reviews of Client-Provided & Public Information
- Field Surveys, Right of Way Inspections & Depth of Cover Assignments
- Geohazard Classification & Risk Assignment
- Geohazard Mapping & Reporting
- Mitigation Program Development & Execution

