

# Yukon Geological Survey: Contributions to Yukon's Wealth & Safety

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Yukon Geological Survey's mandate is to be the authority and provider of choice for the geoscience and related technical information required to enable responsible stewardship and sustainable development of the Territory's energy, mineral, and land resources. This mandate provides us with the rationale to undertake a broad spectrum of activities, ranging from "traditional" survey-style mapping to hazards monitoring to mineral deposit studies and regional resource assessments, among other things. YGS' contributions – to the economy, to public health and safety, and to society generally – can be measured by the impact that our activities have on these sectors.

How does one measure the contribution made by a geological survey's activities? One means is through feedback from users. The primary users of the information we generate are the mineral and hydrocarbon exploration and development sectors; land use planning organizations; Yukon First Nations; and Yukon Government.

What do we hear from these different client groups about the contributions YGS makes? YGS' technical committee, which comprises representatives from industry and academia, advises that investment in systematic mapping of bedrock and surficial geology is critical, as it provides the basic contextual information they need (stratigraphic, tectonic, magmatic) to make exploration investment decisions. They also inform us that geological surveys play an important role in the training of field geologists: this is a critical skill set that must be maintained in a jurisdiction whose economy is heavily dependent on resource development.

Land use planning is an area where YGS' contribution is not as significant as it could be. This is in part because the interests of land use planners and the core clients of the geological survey are often polarized, creating trust issues. An additional issue is the challenge of providing resource potential information in a form that can be understood by non-geologists, is easy to integrate with other data layers, and is clear with respect to its inherent uncertainties. Regardless of these issues, YGS input into the process is critical to ensure that land use decisions are well informed, as these decisions ultimately influence the territory's investment climate.

Finally, YGS provides information to and takes direction from Yukon's governments and citizens, who are interested in natural hazards such as landslides, permafrost degradation, earthquakes and metals in the environment. Monitoring of these phenomena helps to predict hazards and mitigate their impacts, as well as supporting environmental stewardship.

Collectively, YGS contributes both to the economic well-being of the territory, providing the basic information needed to sustain a resource-based economy, and to the welfare of Yukon's infrastructure and its citizens: we could be called a Wealth & Safety Committee.