

## **British Columbia Technical Working Group on Indian Residential Schools (BC TWG IRS)**

The use of GIS is often mentioned as a way of managing information about where missing children are located. This document outlines what GIS is and how it is used with ground searches, archival results, and survivor testimony.

### **What is GIS?**

Geographical Information Systems are computerized tools for managing spatial information such as maps. GIS creates a virtual model of the earth into which information can be placed, much like online map tools on cell phones. GIS allows search teams to collect, store and compare information from different sources, such as old maps, air photos, satellite images, **GPR** results and survivor testimony.

### **What Role Can It Play in Identifying Missing Children?**

The search for missing children combines a lot of different information about places that have changed over time. GIS allows us to collect information about landscapes at different times by adding information from historic maps and documents, air photos, and survivor knowledge. GIS lets us place this information in the correct location and then compare different kinds of information. For example, a survivor may know where a building was located and can point to this in a historical air photo. With GIS we can find where that build was on the modern landscape.

GIS also lets us locate new information, such as results from **GPR**, **LiDAR** or archival analyses. These results can be located precisely and then compared to other information such as historic maps. GIS acts like a spatial database, but it also allows us to create models and ask questions of the information. Most archival research and survivor testimony is in the form of stories. GIS allows us to turn this into maps and pictures. These results are necessary to locate missing children and can be helpful in making sense of archived documents. GIS maps can also help survivors recall places and then record their knowledge about those places.

### **What Are the Challenges of GIS Analysis?**

GIS is a specialized technology that requires a computer and specific software. The information that is added to GIS comes from many sources and needs to be both collected and then converted into a form that fits into the GIS. As a form of digital information, GIS needs to be secure and protected following **OCAP** principles. GIS users need special training to compile information, look for patterns, and produce maps for survivors and their communities.