

## **Bridgetown Regional Community School**

## Bridgetown, Nova Scotia Fall 2017 GNSS Data Collect

The map is the end result of map skills workshops designed and planned by COGS students and presented to the 83 Grades 9 and 10 students of the new Bridgetown Regional Community School in Bridgetown, Nova Scotia, for GIS Day 2017. In addition to workshops on map reading/interpretation and perceptual map drawing, a circuit of field data collection group work sessions were conducted whereby BRCS students participated in using Juno GNSS receivers to collect geospatial data from around the school property. A data dictionary was created during a site visit prior to the presentation day, ensuring that the various point, line, and area feature names and attributes required to adequately map the property would be recorded accurately. Principles of GNSS technology (satellite constellations, mission planning, signal trilateration, sources of error) and its worldwide impact were also explained to learners during this time.

After collection, data from the Junos was imported into Trimble Pathfinder Office, compiled, and exported into Esri shapefile format. ArcGIS for Desktop 10.5 was used to create the final map.

This event provided COGS students with an opportunity to reinforce mapping and data collection skills, while also gaining competency in teamwork, project planning, and interpersonal communication. The high school students learned basic principles of map reading and geodesy, GNSS technology, and spatial thinking while being introduced to geographic sciences as a possible future career path.



