Geographic Information System (GIS) and Global Positioning System (GPS)

What is GIS?

Intro to GIS by USGS http://erg.usgs.gov/isb/pubs/gis_poster/
Basics of GIS by ESRI http://www.gis.com/whatisgis/index.html
GIS Demo by ESRI (good film clip) http://gis.esri.com/esriclips/clip.cfm?ClipID=60

What is GPS?

GPS Tutorial by Trimble http://ww2.trimble.com/gps_tutorial/
What is GPS? by Garmin http://www8.garmin.com/aboutGPS/

Free GIS Software for Tribes

Federally Recognized Tribes are eligible for **free GIS software** through the BIA.
For more information, please see the BIA website http://on.doi.gov/GR4oLg or contact Micah Broderick, 877- 293-9494 or by email at Micah.broderick@bia.gov

GIS/GPS Training

The **The Office of Trust Services Geospatial Support (OTSGS)** offers **free GIS training** to federally recognized Tribes. There is no tuition cost for training; however, expenses for transportation, hotel accommodations, and meals are the responsibility of the participant.

Go to http://go.usa.gov/VKq to view the training schedule which includes course information, training dates and locations, and registration information. Sign up **right away** if you are interested in these trainings, because courses are filled on a first come first served basis.

Training courses are taught at the OTSGS Lakewood Training Facility in Lakewood, Colorado and various field locations. If you or your Tribe would like more information, please see the DOI Indian Affairs website below
http://www.indianaffairs.gov/WhatWeDo/ServiceOverview/Geospatial/index.htm#G

Or contact **Micah Broderick**, ELA Coordinator/Help Desk Analyst, GIS Specialist
Bureau of Indian Affairs
Office of Trust Services Geospatial Support (OTSGS)
Micah.broderick@bia.gov
Phone: 303-231-5228

ESRI offers in-person and on-line GIS courses and seminars throughout the year. Go to the website http://campus.esri.com/ for ESRI trainings. **Note that their courses are not free.**

GINA, University of Alaska's **Geographic Information Network of Alaska** also offers GIS courses (also not free). Go to http://www.gina.alaska.edu/learning/training/ for more information.

GIS Training Providers in Alaska

Association of Village Council Presidents
Contact: Steve Street, sstreet@avcp.org, 543-7355
AVCP partnered with UAF Kuskokwim Campus to offer a 3-day introduction to GIS with a focus on rural Alaska topics. Contact Steve about future courses.

UAF Cooperative Extension
Contact: Steve Brown, scbrown4@alaska.edu, 745-3639
Offers training in GIS/GPS Mapping of Natural Resources for projects on a budget,
The training is free but must provide transportation and lodging

Chevak
Contact: Andrew Boyscout, andrewboyscout@yahoo.com, 858-2005
Willing to travel to communities to teach GIS basics

Blue Skies Solutions
Contact: Mike Knapp, mknapp@blueskiessolutions.net, 230-4372
Will travel to regional hubs to provide GIS training
Also offer trainings in Juneau throughout the year.
http://www.blueskiessolutions.net/training.html

GeoNorth
Contact: Mark Pearson, mark.pearson@geonorth.com, 646-4539
Will travel to regional hubs to provide GIS training
Also offer trainings in Anchorage throughout the year.
www.geonorth.com/training/arcgis/alaska

Example of GIS use in Villages

Quinhagak

Photo courtesy of Deborah Mercer, University of Alaska Sea Grant Marine Advisory Program

Through an **ESRI 4-H Train the Trainer Grant** and a grant from the Quinhagak Qanirtuug Native Corporation, the University of Alaska Fairbanks (UAF) Cooperative Extension Service and the UAF Marine Advisory Program were able to conduct a three-week-long GPS/GIS course for four youth and four adults. The goal of the course was to teach participants how to collect GPS data for use with ArcGIS 10, utilizing inexpensive Garmin eTrex receivers for use in mapping important archaeological sites. Aside from documenting archeological sites, participants were also able to map river erosion that destroyed much of Quinhagak's original airport runway.

For more information about the project go to:
http://www.directionsmag.com/articles/teaching-a-yupik-eskimo-village-to-map-climate-change-impacts/208512

Or contact: Steve Brown, UAF Cooperative Extension, 745-3639, scbrown4@alaska.edu .

Photo courtesy of Deborah Mercer, University of Alaska Sea Grant Marine Advisory Program

Who To Contact with GIS Questions

Kristine Kosnik, BIA Juneau (907) 586-7149

Tim Siwiec, EPA R10 Seattle (206) 553-2147 siwiec.tim@epa.gov,
contact for environmental data

GIS Funding Opportunities

The **National Spatial Data Infrastructure (NSDI) Cooperative Agreements Program (CAP)** is an annual program to assist the geospatial data community through funding and other resources in implementing the components of the NSDI. This program is open to State, local and Tribal governments, academia, commercial, and non-profit organizations and provides small seed grants to initiate sustainable on-going NSDI implementations. The program emphasizes partnerships, collaboration and the leveraging of geospatial resources in achieving its goals. http://www.fgdc.gov/grants

The **4-H GIS Grant Program** provides GIS and geospatial technologies to young people and qualified adults involved with U.S. 4-H clubs and related state and national organizations. For more information go to: http://www.esri.com/industries/k-12/4-h/index.html

Check our website for additional funding sources: http://www.zendergroup.org/funding.html