GIS Resources for K-12 Educators

State of Minnesota – Department of Education (MDE)

Through a GIS Licensing agreement between the Environmental Systems Research Institute (Esri) and the State of Minnesota, the Department of Education provides an educational portal for information and resources. Access to ArcGIS software, ArcGIS Online registration codes and Virtual training classes are FREE for Minnesota K-12 educators, administrators and formalized clubs, both public and nonpublic.

Questions about this agreement should be directed to MDE's SchoolTechPlan Email box.

Esri GIS Information

Getting started with ArcGIS Online:

5 activities you can do in 5 minutes (no login required)

Mapping with ArcGIS Online is an Esri site providing a collection of videos, tutorials, online courses and relevant blogs

ArcGIS Online strategy page describes different AGO account types

Tutorials

Information for teachers and students. Includes information on Esri's education community, educator introductory materials (demos, literature and books), student access to information about GIS (Map Book Gallery, Case Studies, demos, literature and books).

Education Community

Education Community Blog

http://www.esri.com/industries/k-12

Esri GIS for Schools website

YouTube video on Why GIS

GIS and Careers

State of Minnesota Geospatial Data Resources

The state's most prominent data catalogs are available at the following locations:

DNR Data Deli

MnGeo Clearinghouse

MnDOT Basemap Data

The state also offers up some Web Map Service end points. These are web pages which can be loaded directly into ArcGIS with no additional work involved

MNIT SERVICES

Minnesota Department of Education

Minnesota Geospatial Information Office

MN.IT @ MnGeo Image Service.

MN.IT @ Department of Agriculture REST endpoint Services.

MN.IT @ Department of Agriculture Emerald Ash Borer Service.

MN.IT @ Department of Natural Resources has a set of available Web Services.

MN.IT @Minnesota Pollution Control Agency has a set of services exposed to the public. These are mostly in support of our watershed data integration project and provide information about water bodies and watersheds.

MN.IT @ Department of Transportation provides a transportation access point.

Additional Data Resources

MAGE The Minnesota Alliance for Geographic Information (MAGE) is a group of educators who advocate for geographic literacy. Their mission is to be the premier collaborative organization on the forefront of geographic education by providing resources for teachers, opportunities for networking and experiences that motivate and inspire teachers for the benefit of students.

Fred's Finds can be found at the MAGE website above and has dozens of web mapping sites that can be used in the classroom.

Geo Tech K-12 Wiki – Sara Damon (Stillwater Middle school Social Studies Teacher) Wiki has K-12 resources around Internet Map and Image Servers, GIS Education Resources, GIS activities, Google Earth activities and MAGE (Minnesota Alliance for Geographic Education) workshops.

National Historical Geographic Information System: free of charge, aggregate census data and GIS-compatible boundary files for the United States between 1790 and 2011.

U.S. Census TIGER (**T**opologically **I**ntegrated **G**eographic **E**ncoding and **R**eferencing) GIS data.