

U-Spatial Facilities Statement

U-Spatial is nationally recognized as a leading model for how universities can successfully integrate spatial data, visualization, analysis, and spatial thinking. U-Spatial has supported over 2,000 researchers across 150 departments and centers through a help desk, training, consulting, and events. While we collaborate with large research centers and programs, U-Spatial seeks to serve researchers working in the so-called “long tail” of the scientific enterprise. These are often smaller projects that may not be able to support full-time spatial research staff, but with help from U-Spatial, cumulatively help to enable and advance the many missions of a land-grant university and offer disproportionately great benefits.

U-Spatial is home to 14 professional staff and three to six undergraduate and graduate student research assistants with expertise in geographic information systems (GIS), remote sensing, and spatial computing. Staff design and develop full stack solutions, which may include database hosting, as well as server and client-side applications such as web-based maps and decision support tools. Staff often leverage the Esri infrastructure for project development efforts, but are also skilled in drawing from open source solutions where projects would benefit from such an approach. U-Spatial co-supports with the U of M Libraries a Spatial Data Curator whose job it is to ensure that all spatial data contains full and appropriate metadata.

U-Spatial is physically located on two U of M campuses, the Twin Cities and Duluth. U-Spatial labs have dedicated desktop computers, and staff utilizes a robust centrally managed virtual infrastructure to provide its spatial software and databases. Dedicated development and database hosting options are available to U of M research for a reasonable cost.

The University of Minnesota has an extensive site license with Esri (a leader in GIS software), which gives all students, faculty, and staff access to nearly all of Esri’s enterprise resources for teaching and research, including ArcGIS Online, desktop software, database software, and extensive data resources. Over 20,000 students, faculty and staff have an ArcGIS Online account through the University. U-Spatial provides and supports broad access to other geospatial applications including LAStools and Planet Imagery, and participates in the Open Geospatial Consortium and University Consortium for Geospatial Information Science.