

NHGCC

# Building GIS Resources for New Hampshire

The  
New Hampshire GIS  
Conservation Collaborative  
at work

## What is NHGCC?

The New Hampshire GIS Conservation Collaborative is a cooperative effort of nonprofit, education, government, business, and grantmaking organizations that are concerned about conservation and land-use planning issues in New Hampshire.

## Why do we exist?

The Collaborative's mission is to provide leadership, coordination, and support for GIS and related technologies to enable sound land-use planning and accelerate the pace of conservation in New Hampshire.

Broadly stated, our goals are to improve GIS resources in the state; broaden access to and use of GIS data; expand training opportunities; and increase public awareness and support for GIS.

## Why increase our investment in GIS?

New Hampshire is experiencing growth that is creating pressure on the land base throughout the state. Consider that between 1982 and 1997 the amount of land developed in New Hampshire increased by 55%—more than twice the population growth during the same period (24%).

GIS technologies are critical tools for helping municipalities prepare for and manage this level of growth. State agencies, private organizations, and individuals rely on data-driven GIS maps to decide where to steer growth, which lands to protect, and how to safeguard water supplies and balance other competing needs.

To provide the best possible support for land planning, the state's GIS systems and the underlying data must keep pace with the changing technology and the ever improving quality and quantity of information available.

## GIS in New Hampshire

New Hampshire citizens and organizations are successfully using GIS technology for information, planning, and resource protection and management purposes.

The foundation of much of this GIS capacity is the State's GRANIT (Geographically Referenced ANalysis and Information Transfer) System. Housed at the University of New Hampshire, GRANIT is a collaborative effort of state, regional, municipal, non-profit, university, federal, and

private partners to deliver GIS data, maps, technical tools, and training to users in the state and the region. However, increased public and private investment in GRANIT is critical to expand capacity to address important resource management issues facing the state.

## The work ahead

Now we need to strengthen New Hampshire's GIS capacity to meet current challenges. Growth and change are inevitable, but New Hampshire citizens need to be able to make informed choices about land use and conservation.

## A tool for planning

Technologies such as Geographic Information Systems (GIS) and Global Positioning Systems (GPS)

are critical tools for making informed decisions. These "geospatial technologies" greatly enhance the ability of agencies, organizations, and individuals to protect natural resources and practice wise land use planning.

## Investing for the future

We believe that comprehensive, accurate, and current data—complemented by state-of-the-art GIS tools and training—are critical for making future land planning decisions. NHGCC is committed to helping New Hampshire improve its GIS resources to meet these challenging demands.

## What is GIS?

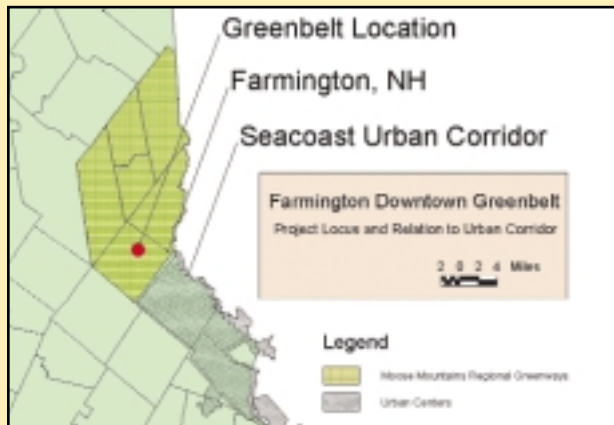
A Geographic Information System (GIS) is a computer-based tool for mapping, managing, analyzing, and displaying data that has a spatial or geographic dimension. It serves as the foundation of an array of geospatial technologies, allowing the integration and mapping of information from various sources.

In application, GIS and related technologies are among the most powerful decision-making tools available to communities, conservation organizations, state agencies, and individuals.

# How New Hampshire has used GIS for planning and conservation

## Land Conservation

The GRANIT Conservation Lands Viewer is a web-based tool that allows users to interactively display and query maps of protected parcels in the state. Users can view locations of interest and display parcels based on the type of managing agency (federal, state, local, private), the type of protection (ownership, easement, etc.), the management status, or the protection level. The resource is widely used by organizations and individuals inventorying currently protected lands as well as those developing strategies for future land protection efforts.



## Planning for Greenways

Moose Mountains Regional Greenways (MMRG) has developed an internal ability to use GIS tools in support of its mission. MMRG has used GIS technology in diverse applications—from analyzing wetland impact factors in a major three-year study of more than 60 wetlands, to embedding mapping in land conservation funding applications. In all cases, MMRG's GIS has extended the organization's ability to communicate effectively, provide critical services to its member towns, and prioritize land conservation efforts.



## Training Community Leaders

Making GIS technologies accessible to community decision makers and natural resource professionals is an important part of a successful GIS strategy. UNH Cooperative Extension and others offer a variety of training programs to provide direct access to this important technology.

## GIS has also been used in New Hampshire to:

- Inventory the transportation network and monitor current travel conditions;
- Predict areas where elevated radon levels may be expected;
- Support emergency dispatch operations;
- Develop effective forest management tools;
- Generate local hazard mitigation plans;
- Support planning, assessing, engineering, public works, and economic development in communities.

## Members of the New Hampshire GIS Conservation Collaborative

NHGCC members are on the front lines of conservation and land-use planning in New Hampshire and have documented time and time again the growing demand for data and information in the public, private, and nonprofit sectors, as well as among the general public.

## State & Regional Agencies

NH Dept. of Environmental Services • NH Dept. of Transportation • NH Fish & Game Dept. • Office of Energy and Planning • Rockingham Planning Commission

## Educational & Non-profit Organizations

Appalachian Mountain Club • Audubon Society of NH • GRANIT/UNH Complex Systems Research Center • The Jordan Institute • Moose Mountains Regional Greenways, Inc. • New England Environmental Finance Center at Univ. of Southern Maine • NH Technical College • North Country School to Work Regional Partnership • Society for the Protection of NH Forests • The Nature Conservancy • Prescott Conservancy, Inc. • UNH Cooperative Extension

## Foundations & Businesses

Geographic Data Technology, Inc. • Grants Management Associates • Lyme Timber Company • New England Grassroots Environment Fund • New Hampshire Charitable Foundation • Orton Family Foundation • Samuel P. Pardoe Foundation • Sweet Water Trust

We welcome your participation.

## For more information about NHGCC, contact:

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