

REMOTELY SENSED IMAGERY: SHARING THE RESOURCES

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Publically available mapping venues (e.g. Google maps, Bing maps) are a driving force in remotely sensed imagery acquisition and dissemination. NeoGeographers of all forms are exploring the landscape through vertical, oblique, and street-side images, shifting this geospatial technology from a specialized profession to a mainstream expectation. At present, the public conveyance of remotely sensed imagery is largely limited to visualization tools (e.g. pan, zoom, etc.). However, skilled users and enhanced technology (i.e. bandwidth, processing speed, archival capacity, etc.) are expanding the functionality and making way for robust cartographic and analytic capabilities.

This poster will illustrate the changing landscape of publically available remotely sensed imagery, using as its example, the Michigan Imagery Portal (MIP), developed at Michigan State University for the public consumption of raster datasets. This portal pushes the continuum between visualization and analysis by providing users enhanced access capabilities (i.e. clip, zip, and ship functionality), the ability to pull imagery into existing websites and GIS environments through Web Map Service (WMS) technology, and the tools to display and comparatively analyze multi-temporal datasets.

Fundamentally, the MIP was developed to meet pragmatic needs – limit the costs of data redundancy, promote shared resources, and protect historic datasets through digitization. Adhering to the “build once, serve many” model, over a terabyte of imagery is served from a centralized location, providing a cartographic and analytic foundation for numerous applications.

Operationally, the MIP has become an evolving technology prodded by citizen scientists, educators and geospatial practitioners. This poster will feature several examples including (1) current, high-resolution imagery used to assist in emergency management of a local oil spill, (2) multi-temporal image sets dating to the 1920's used to support asset management and historic preservation, (3) integration of public/private data sources to promote economic gardening, land assessment, and natural resource management, and (4) a variety of participatory GIS surveys wherein vector data is interactively created and analyzed along with raster data.

The continued advancement of web-based, remote sensing technologies, as evidenced by the MIP, will lead to greater creativity, functionality, and employment of these resources across the spectrum of users.