



Statewide Digital Mapping Initiative

Summary:

Government, military, and commercial operations need accurate digital base maps to meet their missions. Alaska's Statewide Digital Mapping Initiative (SDMI) is an interagency program to produce high-resolution, digital base maps of the entire state. Existing topographic maps of Alaska are more than 40 years old, and inaccuracies of up to a quarter-mile exist in places. Alaska is the only state in the nation without current digital imagery and elevation maps at nationally accepted standards.

Why The Maps Are Needed:

- Accurate high-resolution imagery and elevation maps are critical for identifying and monitoring changes to Alaska's landscape due to climate change, such as coastal erosion, permafrost degradation, and vegetation changes.
- Digital maps are essential for responsible management and development of the state's natural resources, helping to minimize costs and risks while ensuring effective stewardship of the resources.
- Updated imagery and elevation maps would allow scientists to create reliable models for responding to such natural hazards as coastal storms and flooding, wildfires, tsunamis and volcanic eruptions. The military and homeland security also would benefit from digital base maps.

Progress To Date:

- The Alaska Legislature approved a \$2 million general fund appropriations for the initiative in FY07 and FY08, demonstrating the state's support for the project and its understanding that the initiative requires a cost-sharing commitment by the state in order to succeed. A request for \$2 million in FY09 is pending. Project sponsors are actively building funding partnerships.
- The present focus is to deploy a ground receiving station in Alaska to capture SPOT satellite data in partnership with NOAA-NESDIS and to map the state at a resolution of 2.5 meters (~1:12,000) over a five year period. In addition to State of Alaska funding, the University of Alaska has contributed \$1 million, and NOAA-NESDIS is contributing \$3 million in equipment and services. Contract negotiations for the receiving station are near completion.
- The initiative provided funding to the Kenai Watershed Forum in support of acquiring digital elevation data for the Kenai Peninsula. The funding effectively leveraged \$250,000 of state money into \$1.5 million of work product through collaboration with federal and borough partners.
- The SDMI initiative has implemented a web portal showing high-resolution imagery and elevation models that exists for Alaska, and will add to the Web site as more material becomes available. <http://www.alaskamapped.org>.
- To ensure broad involvement, the initiative's executive committee has contracted with HDR Inc. to support planning and communications, and help create an advisory and outreach committee comprised of stakeholders representing a range of disciplines and interests. A user survey will be distributed to gather input in March 2008.
- To manage the undertaking, the Alaska Department of Natural Resources, Department of Military and Veterans Affairs and University of Alaska in January 2006 signed a Memorandum of Agreement, setting up an Executive Committee of high-level staff to direct the Statewide Digital Mapping Initiative, and Technical Committee to execute operations. Other agencies have signed a Memorandum of Endorsement.

SDMI Executive Committee:

- Ed Fogels, Director, OPMP, Dept. of Natural Resources (907) 269-8431 Ed.Fogels@alaska.gov
- Dr. Buck Sharpton, Vice Chancellor of Research, UAF (907) 474-6663 Buck.Sharpton@alaska.edu
- John Cramer, Deputy Commissioner, DMVA (907) 428-6881 John.Cramer@alaska.gov