



Lieutenant Governor Mead Treadwell
STATE OF ALASKA

July 18, 2011

Letter of Support for Alaska Statewide Digital Mapping Initiative

I am writing this letter of support regarding a critical project for my home state, and ultimately our nation, that will require the coordination and cooperation of numerous federal agencies.

Alaska is a vast, complex and strategically significant land. It is 586,400 square miles in size and possesses 44,000 miles of coastline; its land falls into five major climate zones; its landforms include islands, glaciers and the 14 tallest mountains in North America; its weather hazards range from tsunamis to wildfires; and it contains a major supply of the world's most coveted resources including oil, gas and rare earth minerals, as well as the infrastructure to extract them. Yet it is the only state in the United States that has not been digitally mapped on a statewide basis.

Currently, the US Geological Survey (USGS) topographical maps of Alaska are over 40 years old, inaccuracies of up to a quarter mile are commonplace, and these maps do not meet National Map Accuracy Standards. To emphasize, image maps derived from satellite imagery and rectified to existing topographical data show rivers flowing uphill, and even Mars has been more accurately, more extensively and more recently mapped than Alaska. To resolve this inadequacy, the State of Alaska began a Statewide Digital Mapping Initiative (SDMI) several years ago and has completed the first collection of elevation data (representing 10% of the state) toward this goal.

To support the SDMI effort, I hosted a May 26 meeting of state and federal executives to discuss the planning and progress of the initiative, as well as inter-agency partnership strategies. The State of Alaska is prepared to fund a prorated share of the work and has pledged to match funds representing its 27% interest in Alaska lands under state control. Our FY 2012 budget includes \$1.75 million in general funds for elevation acquisition. Prior funding in SFY06, SFY07 and SFY08 totaled \$6 million.

We are seeking support from federal agencies to fund the remainder. The project total is expected to cost \$48 million. All federal agencies in attendance at the May meeting expressed support for SDMI, and the USGS, National Park Service and National Resources Conservation Service are already planning to provide funds toward the initiative.

As a former chair of the United States Arctic Research Commission, I oversaw the compilation of the report, *Goals and Objectives for Arctic Research 2009-2010*, which included baseline mapping of the Arctic as a major recommendation for the improvement of Arctic civil infrastructure. I continue as the state's liaison to the commission. Maps provide essential data necessary to conduct scientific research in support of civil

infrastructure. With changing Arctic conditions, baseline imagery is critical to monitoring change, identifying trends and predicting variables as we consider the opportunities of potential shipping lanes and plan for deep water port sites.

In addition, a reliable base map is necessary to control all geospatial layers used across all disciplines. Essential public services such as emergency response, disaster mitigation and recovery are significantly impacted by the lack of an accurate base map. Alaska's current map does not and cannot support modern information management practices and analysis required to make informed policy decisions.

An accurate base map of Alaska would benefit many important initiatives and core services including, but certainly not limited to, the following:

- Aviation safety
- Coastal resource shore zone mapping
- Coastal erosion monitoring
- Change detection
- Global warming studies and response planning
- Fire hazard mapping for critical and high value protection areas
- Forest resource mapping in Southeast, Northern and Southcentral regions
- Tsunami and storm surge analysis
- Land cover and terrain for major state parks
- Land planning; corridor analysis and statewide land sales program
- Land use permit authorizations with commercial recreation permits
- Oil and gas infrastructure management and monitoring
- Arctic deep water port planning
- Oil spill response
- Emergency response
- Search and rescue operations

Due to Alaska's vast lands, dynamic terrain, changing conditions, hazardous coastal environment, natural resource developments, and its strategic significance for military operations and Arctic access, I believe that an Alaska Statewide Digital Mapping Initiative deserves your Agency's participation and I urge your support of this initiative for the benefit of Alaska and, indeed, the nation.

Sincerely,



Mead Treadwell
Lieutenant Governor