



The National Map - Lake Tahoe Area Pilot Project

The Nation Needs *The National Map*

Governments depend on a common set of geographic base information as a tool for economic and community development, land and natural resource management, and health and safety services. Emergency management and defense operations rely on this information. Private industry, nongovernmental organizations, and individual citizens use the same geographic data. Geographic information underpins an increasingly large part of the Nation's economy.

Available geographic data often have the following problems:

They do not align with each other because layers are frequently created or revised separately,

They do not match across administrative boundaries because each producing organization uses different methods and standards, and

They are not up to date because of the complexity and cost of revision.

The U.S. Geological Survey (USGS) is developing *The National Map* to be a seamless, continuously maintained, and nationally consistent set of online, public domain, geographic base information to address these issues. *The National Map* will serve as a foundation for integrating, sharing, and using other data easily and consistently.

In collaboration with other government agencies, the private sector, academia, and volunteer groups, the USGS will coordinate, integrate, and, where needed, produce and maintain base geographic data.

The National Map will include digital orthorectified imagery; elevation data; vector data for hydrography, transporta-

tion, boundary, and structure features; geographic names; and land cover information. The data will be the source of revised paper topographic maps.

Many technical and institutional issues must be resolved as *The National Map* is implemented. To begin the refinement of this new paradigm, pilot projects are being designed to identify and investigate these issues. The pilots are the foundation upon which future partnerships for data sharing and maintenance will be built.

The Lake Tahoe Area Pilot Project

Several local, regional, and utility agencies in the Lake Tahoe area use and produce geographic information to accomplish their work. However, their individual missions do not include responsibility for making all of the region's datasets compatible, offering them publicly online, and maintaining them in relation to one another. The agencies are seeking a mechanism for making their data more accessible and useful as well as acquiring new data where there are gaps.

The USGS has significant research programs in the Lake Tahoe area that also depend on the availability of core geographic information. Ongoing projects include decision support-system studies and an assessment of the impacts of urban growth and land use change. Core base-map data, such as imagery and elevation, are required input to these studies. In the past, research data needs were addressed on an individual basis. By aligning research and other needs with *The National Map* vision, we will progress from duplicative, single-purpose data acquisitions toward true multiuser, multipurpose shared assets.

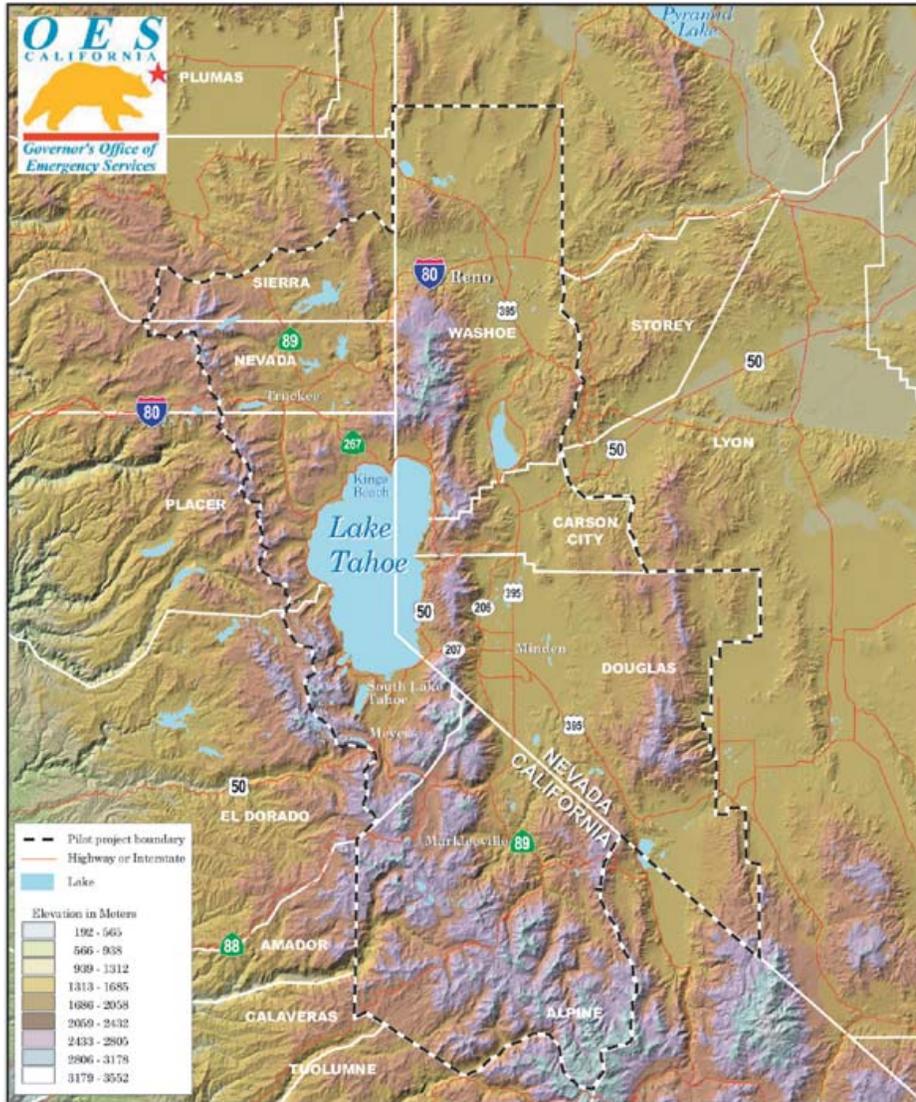
These USGS projects, together with the work that is being done by the State of California to promote data coordination,

represent a unique opportunity to develop a pilot for *The National Map* in the Lake Tahoe area that will make significant advances toward State and national goals.

The Lake Tahoe area is a remarkable setting that will allow the USGS and its partners to test many of the building blocks of *The National Map*. It will address the institutional and technical challenges of integrating data from two States, nine counties, several cities, and private and public organizations. The pilot will leverage existing coordination and engage local governments, the Tahoe Regional Planning Agency, utilities, universities, and State and Federal agencies. The Lake Tahoe area has numerous volunteer groups, and the desire of citizens to help conserve and maintain their environment provides a good opportunity to test the capability of obtaining data updates from volunteer groups.



The Lake Tahoe Area Pilot Project will build upon the President's 1997 executive order that established a formal interagency partnership charged with ensuring coordination and efficient management of Federal projects and activities within the Lake Tahoe Basin. Under this initiative, the Lake Tahoe Data Clearinghouse was developed to provide access to USGS geographic data



More Information About The Lake Tahoe Area Pilot Project

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More Information About *The National Map*

We welcome your comments on *The National Map* mission and strategies. You can view and download the full report at nationalmap.usgs.gov. Please share your thoughts about the vision with the USGS by e-mail at nationalmap@usgs.gov or by mail to USGS-National Map, MS 511 National Center, 12201 Sunrise Valley Drive, Reston, VA 20192.

(see tahoe.usgs.gov). This Web site serves as a first step toward construction of the pilot.

Strong ties across the California and Nevada State line unite the area into a cohesive cultural and economic region. Area agencies have specified that the pilot must include the Lake Tahoe Basin, major watersheds around it, and the trade corridor that spans Reno through Minden, Nevada, south to the Markleeville, California, area. The Sierra Nevada crestline represents both the watershed and the regional boundary on the west. County and 7.5-minute quadrangle boundaries define the remaining project limits.

Next Steps

The USGS is connecting with Lake Tahoe area agencies to discover and document existing datasets that may serve as input to the pilot. Other steps include integrating the diverse data sources and building an online map server that will be available to the general public. Lessons learned in developing the system will be applied to the implementation of *The National Map* nationwide.