

UC SANTA BARBARA

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## **MEETING OF MAPS AND MINDS NOW PUBLISHED ON INTERNET**

Zoom into any spot on the face of the Earth, and find out what exists there from hospitals to parks, even old photographs of the place. It's a dream that is being brought into reality by geographers from around the world.

A major step forward toward facilitating this dream took place at an international meeting in the nation's capitol and its report is now published on the Internet, thanks to researchers at the University of California, Santa Barbara.

Held at the Smithsonian Institution, the "Digital Gazetteer" meeting was funded by the National Science Foundation.

"Digital Gazetteer" is an emerging tool that gives access to vast amounts of information through place names, according to Linda L. Hill, research specialist at UC Santa Barbara. It's a way to connect place names to coordinates of latitude and longitude, to informational text, to photographs and many other types of information, she said.

Tapping into the Internet at:

[http://www.alexandria.ucsb.edu/gazetteer/dgie/DGIE\\_website/DGIE\\_homepag...](http://www.alexandria.ucsb.edu/gazetteer/dgie/DGIE_website/DGIE_homepag...) will land the viewer at the "Digital Gazetteer Information Exchange Workshop," (DGIE), a homepage where the full report on the October 99 workshop can be found. The site includes presentations, discussions, slides and reference material.

"The digital gazetteer is a tool to link place names to digital representations of those places," said Hill. "A digital gazetteer is a powerful concept in 'georeferenced' information. It 'georeferences' place names with latitude and longitude coordinates and then links them to images, data, text and many other types of information."

The digital gazetteer also categorizes places by type so that, for example, schools, hospitals, and parks can be identified in a given area, explained Hill. Gazetteers translate place names to coordinates, giving people ways to find georeferenced information using place names.

The digital gazetteer is an essential component of the federal government's Digital Earth Initiatives, according to Hill. "The concept is to pick any spot of the face of the Earth, and to be able to zoom into it, finding out all there is to know, including maps, satellite images, statistics, county plans, to environmental impact statements, historical information and even the location of area restaurants."

"We might want to know what state parks are located in Southern California," said Hill. Using 'Southern California' as a place name, a gazetteer can provide a geographic footprint that can then be used to find state parks located within that area. "It's a way to link place names with georeferenced information."

Official gazetteers for countries and states establish authorized forms of place names, she explained, while local and application-specific gazetteers document locations of local interest. Digital gazetteers are now available on the web, including those of the U.S. Board on Geographic Names (and similar gazetteers in other countries and at the state level), the Gettys Thesaurus of Geographic Names, and the Alexandria Digital Library Gazetteer (URLs for these can be found at the DGIE web site).

Gazetteer data also exists as components of on-line atlases, mapping services, and GIS datasets. Many gazetteers exist only in printed form. A goal of DGIE is to enable the interchangeable use all of this data and facilitate the building of digital gazetteers for specific applications.

The workshop was funded by National Science Foundation programs in digital government, geography, geosciences, and digital libraries. The primary contact is Larry Brandt of the digital government program. Linda L. Hill was the principal investigator ([lhill@alexandria.ucsb.edu](mailto:lhill@alexandria.ucsb.edu)) and Michael Goodchild was the co-principal investigator, both with UC Santa Barbara.

A group representing the Alexandria Digital Library at UC Santa Barbara, the National Geographic Society, the Smithsonian Institution, and a set of federal agencies including the U.S. Geological Survey, the National Imagery & Mapping Agency, and NASA convened the two-day workshop to develop an understanding of the potential of indirect spatial referencing of information resources through geographic names -- and to identify the research and policy issues associated with the development of digital gazetteer information exchange.

Participants from a wide range of communities, from U.S.

federal and state governments, commercial and academic organizations, and international organizations participated in the event. Workshop highlights include acknowledgment of the immediate opportunity and requirement to coordinate the building of shareable digital gazetteer data in the interest of digital earth applications; the importance of the temporal aspects of gazetteer data; and the need for a gazetteer service protocol to support distributed gazetteer services.

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The University of California, Santa Barbara is a leading research institution that also provides a comprehensive liberal arts learning experience. Our academic community of faculty, students, and staff is characterized by a culture of interdisciplinary collaboration that is responsive to the needs of our multicultural and global society. All of this takes place within a living and learning environment like no other, as we draw inspiration from the beauty and resources of our extraordinary location at the edge of the Pacific Ocean.