

**2007 NSDI CAP Grant – Category 3 – Fifty State Initiative
South Dakota Cooperative Cadastral Initiative
Interim Report**

Agreement No: 07HQAG0099

Report Date: October 23, 2007

Organization: Black Hills Digital Mapping Association
2050 West Main Street, Suite #1
Rapid City, SD 57702
<http://bhdma.sddenr.net/>

Contact: Jenifer Sorensen
(605) 641-2581
jenifer.sorensen@gmail.com

Collaborating Organizations:

South Dakota Bureau of Information and Telecommunications
Erik Nelson, State GIS Coordinator
Foss Building
523 E. Capitol Avenue
Pierre, SD 57501
(605) 773-4750
<http://www.state.sd.us/bit/erik.nelson@state.sd.us>

South Dakota Association of Assessing Officers
Darlene Piekkola, 2007-2008 President
90 Sherman Street
Deadwood, SD 57732
<http://www.sdaao.org>
dpiekkol@lawrence.sd.us

South Dakota Geological Survey
Tim Cowman, Natural Resources Administrator
Akeley-Lawrence Science Center, USD
414 East Clark Street
Vermillion, SD 57069-2390
(605) 677-5227
<http://www.state.sd.us/denr/tcowman@usd.edu>

City of Sioux Falls
Administration/GIS
Steven Van Aartsen, GIS Supervisor
224 West Ninth Street
Sioux Falls, SD 57104-6407
(605) 367-8600
[http://www.siouxfalls.org/
vanaartsen@siouxfalls.org](http://www.siouxfalls.org/vanaartsen@siouxfalls.org)

City of Rapid City
Growth Management Department
Don Jarvinen, GIS Analyst
300 Sixth Street
Rapid City, SD 57701
(605) 394-4120
[http://www.rcgov.org
don.jarvinen@rcgov.org](http://www.rcgov.org/don.jarvinen@rcgov.org)

Project Narrative:

The primary goal of the South Dakota Cooperative Cadastral Initiative is the production of cadastral strategic and business plans for the State of South Dakota. The Black Hills Digital Mapping Association is the lead organization to facilitate the initiative and is the recipient of the 2007 CAP grant. Assisting in this project are five other organizations: the State of South Dakota Bureau of Information and Telecommunications, the South Dakota Association of Assessing Officers, the Pennington County/Rapid City GIS Division, the Sioux Falls GIS, and the South Dakota Geological Survey.

There are **three** main objectives of the cadastral initiative:

- Under the initiative, a two-day conference with a cadastral theme will provide educational opportunities and a forum for discussion of the development of a statewide cadastre.
- A cadastral committee composed of volunteers will be established to draft and finalize cadastral and strategic business plans.
- Three half-day workshops will be held across the state to provide further opportunity for stakeholders to learn about the contents of the cadastral strategic and business plans. This will provide organizations with the opportunity to formally endorse the plans through letters of commitment.

Following completion of these three tasks, the plans will be submitted to the State of South Dakota. The cadastral committee will continue to meet beyond the completion of the grant and will be the lead coordinating agency for future efforts under the cadastral initiative.

Summary of Project Activities:

Preparation and planning for the two-day conference began in April 2007. As a way to advertise the upcoming conference, two training sessions on the Development of a Digital Statewide Cadastre were presented. On August 26, 2007, Jenny Sorensen and Dan Falbo, Black Hills Digital Mapping Association board members, presented a 90 minute talk at the North Central Regional Association of Assessing Officers annual conference in Sioux Falls, South Dakota. On August 23, 2007, the Black Hills Digital Mapping Association and Pro-West and Associates of Walker, MN, helped sponsor a day long GIS workshop for the South Dakota Association of Assessing Officers. Attendance at both meetings was high and helped to spread the word about the kickoff of the statewide cadastral initiative in September.

A two-day cadastral conference was held in Rapid City, South Dakota, on September 18 and 19, 2007. The conference brochure with the program agenda is included as an attachment with this document. The conference was a success and achieved the goal of educating the South Dakota GIS Community about the need for a statewide cadastral digital data layer.

The conference agenda was organized around the idea of showing attendees the business case for a South Dakota digital cadastre. Speakers and presentations that helped to achieve this goal included:

- Stu Kirkpatrick, MT State GIS Coordinator, spoke on how Montana approached the creation of a statewide, multipurpose cadastre and who uses the data now.
- Bob Ader of the BLM talked about making the business case for a cadastral layer and discussed how the GCDB can be a tool for assisting in the process.
- Dennis Kron of Stearns County, Minnesota, spoke about how a county goes about managing digital land information and what value such data has for a county.
- Jeanne Foust of ESRI spoke on cadastral standards and interoperability considerations.
- Berne Jackson, a Senior GIS Analyst for the Coeur d'Alene Tribe in Idaho talked about how the tribe has developed and continues to maintain parcel data for all property within tribal boundaries and how it coordinates with two counties.
- Chris Liske of ESRI spoke on the technical issue of designing, editing, and maintaining a cadastral data layer.
- Hank Garie of GeoAnalytics talked about how geographic resources are a strategic asset and furthered the discussion of the business needs for cadastral data.
- David Cowen, a geography professor at USC and author of numerous publications on cadastral data development, discussed in detail the vision for national land parcel data and why it is important.
- Otto Doll, South Dakota CIO, spoke on the state's perspective of the cadastral initiative and opened the floor to questions that provided a lively discussion on the importance of a statewide cadastre and how to get there.
- Two concurrent sessions were held on the second day, with one general interest track and one cadastral track. In the cadastral track, speakers presented on local government cadastres in South Dakota, how cadastral data is used with emergency management, and how cadastral data is used for wildland fire management.

In addition to speakers, there was a panel discussion of speakers on cadastral experiences from national, state, tribal, and local perspectives, and a facilitated discussion on South Dakota cadastral experiences and perspectives.

Directly following the conference, a day and a half meeting of the cadastral committee was held. This committee was established as a volunteer organization to which all are invited and all activities are transparent. A facilitator, Cheryl Chapman of the Matrix Consulting Group in Rapid City, South Dakota, facilitated the meeting. The goal of the meeting was to draft a cadastral and strategic business plan. Gail Boddicker transcribed notes for the meeting, which will be posted on the Black Hills Digital Mapping Association website, along with all documents produced by the committee.

Three products were produced from the meeting. These are included as attachments with this document:

- Draft vision statement for the cadastral committee.
- A SWOT analysis (strengths, weaknesses, opportunities, and threats) for the cadastral initiative.
- Draft cadastral strategic and business plan for 2007 – 2009 was completed. Three main goals are outlined in the plan, with tasks and sub-tasks detailed for each goal.

Considerable progress was made during the day and a half cadastral committee meeting – about 15 people committed to the efforts of the committee and attended the meeting.

Organizations represented included:

- Black Hills Digital Mapping Association
- BLM
- ESRI
- Schneider Corporation
- The Sidwell Company
- Pro-West and Associates, Inc.
- City of Sioux Falls GIS
- Rosebud Sioux Tribe
- Rapid City GIS
- South Dakota BIT
- Brown County GIS
- USGS
- Lower Brule Sioux Tribe
- Meade County GIS
- Lawrence County GIS

Directly following the conference and cadastral committee meeting, Jenifer Sorensen of the Black Hills Digital Mapping Association attended the NSGIC conference in Madison, Wisconsin, and presented an update on the CAP grant at the Fifty States Initiative meeting on September 24, 2007.

Key Accomplishments:

1. Two-day cadastral GIS conference was held in Rapid City, South Dakota on September 18 and 19, 2007.
2. Education of the South Dakota GIS Community on the importance of a statewide digital cadastre.
3. The first meeting of the cadastral committee was held on September 20 and 21, 2007 in Rapid City, South Dakota. Products of this meeting include:
 - a. Draft vision statement.
 - b. SWOT analysis (strengths, weaknesses, opportunities, and threats)
 - c. Outline of a three year cadastral strategic and business plan with three major goals and associated tasks and sub-tasks.
4. Commitment by a cross-section of the GIS Community to participate in the initial cadastral committee meeting and to continue participation in the group into the future.

How Statewide Coordination has changed as a Result of this Project:

Progress so far toward the grant objectives has moved along well. The bulk of the work under the grant is completed – at this point the main goal is to keep the cadastral committee active through ongoing meetings and to continue to promote the cadastral initiative and the plans drawn up under this grant effort. As a result of this project, awareness by the state has increased. Through the conference, it was made clear that the South Dakota GIS Community is interested in supporting a cadastral initiative and is interested in having support from state government as well as local government. The State GIS Coordinator participated in the conference and the cadastral committee meeting and is very interested in assisting in the cadastral initiative. Reasonable goals were set during the cadastral committee meeting that all felt were achievable in the established time frame of three years.

How this Project has helped to bring New Stakeholders into Statewide Coordination:

The cadastral conference this fall provided the perfect opportunity to expand who was contacted for this event. A hard copy mailing of the conference announcement was sent to all county assessors and county commissioners. Tribal representatives from all South Dakota tribes were included with the hard copy mailing. The email list for sending out the conference announcement was also expanded to include all county assessors. Two workshops on the development of a statewide digital cadastre presented to assessors also informed stakeholders that were unlikely to attend the conference. Based on the turnout for the cadastral committee meeting following the conference and attendance at the conference (over 100 people registered), new stakeholders who have not participated in GIS data activities were recruited to attend and get involved.

Practices and Activities that led to Success:

The primary practices that have led to successes so far:

- Education/promotion of the events (conference and cadastral committee meeting) before the events occurred brought new stakeholders to the process and got them involved.
- The cadastral initiative is and plans to remain a volunteer process – there are no expectations that counties or cities must participate. The goal is to provide incentives so that local governments want to participate. In the same vein, the state’s involvement is not mandated by law, so participation at the state level is also voluntary. The goal is to have key agencies see the value in the effort and to have everyone come to the table to reach a common consensus based on shared needs. So far this volunteer process is working.
- Having a stellar group of conference speakers made a huge difference in the quality of the conference that could be offered, which helped to make the business case for a statewide digital cadastre to the GIS Community.
- Devoted volunteers have made the cadastral initiative happen. This is a grass roots effort from across the South Dakota GIS Community. The people involved have real jobs unrelated to this effort and yet continue to provide considerable assistance. Consultants are not writing the state plans; the state GIS Community is creating the plans. This allows for consensus and buy-in to the plans from the beginning and is key to the success of the project in South Dakota.

Next Steps:

Next Steps in the Project:

Next steps include:

- Continue holding cadastral committee meetings.
- Finalize the cadastral strategic and business plans.
- Publicize the efforts of the cadastral committee through three half-day workshops to be held across the state in Spring 2008.
- Apply for another CAP grant.
- Complete the grant requirements (administration duties for grant).

Attachments:

Attachments to this document include:

- “All Things Cadastral” conference brochure
- Draft vision statement put together by cadastral committee
- Draft SWOT analysis put together by cadastral committee
- Draft cadastral strategic and business plan put together by cadastral committee

Feedback on Cooperative Agreements Program:**CAP Program Strengths and Weaknesses:**

- Strength: Fifty States Initiative grant allows states at different levels of planning to participate and allows flexibility to try new approaches.
- Strength: Documents and resources available through the FGDC assist in the strategic and business planning process so that states can put these plans together themselves.
- Weakness: Funding – not the size of the grants, but how many are offered. Additional funds should be committed to this program so that more states can participate.