Building Structures Data Stewardship for *The National Map* and the NSDI Project

**Interim Report #1**

**Date:** 12/1/08

**Agreement Number:** 08HQAG0062

**Project Title:** Minnesota Structures Collaborative – An Initiative to Support the National Map and NSDI

**Interim Report:** 6/1/08 through 12/1/08

**Organization:** Minnesota Land Management Information Center

**Principal Investigator:** John Hoshal, LMIC GIS Services Supervisor, Land Management Information Center (LMIC), Minnesota Dept. of Administration, 658 Cedar St., Suite 300, St. Paul, MN  55155, Tel: 651-201-2482, E-mail: john.hoshal@state.mn.us, Web: [www.lmic.state.mn.us](http://www.lmic.state.mn.us)

**Collaborating Organizations:** **Principal Organization:** Minnesota Governor’s Council on Geographic Information - Emergency Preparedness Committee (GCGI-EPC), GCGI-EPC Co-chair: Steve Swazee, C/O Land Management Information Center (LMIC), 658 Cedar St., Suite 300, St. Paul, MN  55155, Tel: 651-456-5411, E-mail: sdswazee@earthlink.net, Web: [www.gis.state.mn.us/committee/emprep](http://www.gis.state.mn.us/committee/emprep)

**Other Organizations:** Minnesota Department of Public Safety – Homeland Security and Emergency Management Division, ([www.hsem.state.mn.us](http://www.hsem.state.mn.us)), MetroGIS ([www.metrogis.org](http://www.metrogis.org)) and the Department of Natural Resources – Firewise Program ([www.dnr.state.mn.us/firewise](http://www.dnr.state.mn.us/firewise)).

**USGS Geospatial (State) Liaison:** Ronald Wencil, USGS - National Mapping Division, 2280 Woodale Dr., Mounds View, MN  55112, Tel: 763-783-3207, E-mail: rwencil@usgs.gov

**Data themes:** Structures – Minnesota schools, hospitals/clinics, police stations and fire stations

**Project Narrative:** The Minnesota Land Management Information Center (LMIC) and its project partners will develop strategic partnerships and the technical capacity for the statewide collection, publication and long term, sustainable maintenance of four types of structures: schools (public/private), hospitals/clinics, police stations and fire stations. The outcomes of the project will include: identifying existing public/private GIS data resources in Minnesota for structures data; identifying custodians of the most accurate and complete versions of schools, hospitals/clinics, police stations and fire station locations; determining the minimum attribution requirements for each data type; ensuring that data is documented using FGDC and Minnesota metadata standards; harvesting available data and assess its resolution, accuracy, completeness and currency; crafting a stewardship program for each custodian of each structure type that will ensure its yearly update, long-term maintenance and availability; publishing the structures data for public consumption through existing federal and state data clearinghouses, portals and web services.
Accomplishments: To date LMIC staff and GCGI-EPC members have focused their time on promoting the statewide collection of structures data through for CAP grant. As noted below, numerous presentations about the grant have been made before state, county and local GIS practitioners and policy makers. Their reaction to the project has been very positive. For example, support for the project from the director of the Minnesota Department of Public Safety’s Homeland Security and Emergency Management Division will help us connect with county and local emergency managers and public safety officials. Minnesota’s GIS community recognizes the importance of having accurate, comprehensive and up-to-date structures data. At a recent MetroGIS forum on geospatial applications and web services needs, attendees representing federal, state, local governments and the private sector identified the creation of a critical infrastructure data and distribution services as a top priority. To that end, MetroGIS Emergency Preparedness committee members (representing cities and counties in the Minneapolis / St. Paul metro area) are in the process of assessing their structures data in anticipation of delivering schools, hospitals/clinics, police stations and fire stations for the grant.

Significant Meetings:

4/10/08 – Minnesota Governor’s Council on Geographic Information – Emergency Preparedness Committee / Data Workgroup: Included an overview of the CAP grant and discussion of data sources, potential participants, etc. Solicited membership for CAP grant sub-committee.

5/8/08 to 5/13/08 – Hoshal attended NSGIC Mid-year conference in Annapolis, MD where there was a great deal of discussion about structures data, HSIP, HSIP Freedom, data distribution, data maintenance, etc. NSGIC and LMIC covered travel costs.

5/9/08 – FGDC CAP Grant Review: WebEx session with CAP Grant Category 5 recipients to discuss grant requirements

9/16/08 – Minnesota Governor’s Council on Geographic Information – Emergency Preparedness Committee – CAP grant sub-committee: Members from several state agencies, USGS and counties met to discuss project, identify procedures for collecting and verifying data, discussed data model, data sources, etc.

10/23/08 – At the request of the MetroGIS Policy Board, Randy Johnson (MetroGIS), Laurie Beyerkropuenske (State of Minnesota – Information Policy Analysis Division) and John Hoshal (LMIC) met to discuss barriers to sharing emergency management data. Barriers include data pricing, restrictive license agreements, etc. These barriers may impact the collection and distribution structures data.

10/29/08 – CAP grant project review and planning session with GCGI-EPC Data Work Group co-chairs Randy Knippel (Dakota County) and John Hoshal (LMIC)

11/26/08 – Minnesota Governor’s Council on Geographic Information – Emergency Preparedness Committee members - Steve Swazee (co-chair GCGI-EPC), Randy Knippel (Dakota County) and John Hoshal (LMIC) met with Kris Eide, Director, Department of Public Safety’s Homeland Security and Emergency Management Division (HSEM) to discuss the CAP grant and HSEM’s role. Kris agreed to ask HSEM regional managers to promote the project and work with the GCGI-EPC to ensure its success. HSEM regional managers work closely with city and county emergency management officials and public safety officers. Kris will also ask HSEM’s Critical Infrastructure team to work with the GCGI-EPC.
Publications Prepared Regarding the CAP Project (Hoshal):


Presentations Made Regarding the CAP Project (Hoshal):

3/26/08 – Minnesota Governor’s Council on Geographic Information – full council
4/10/08 – Minnesota Governor’s Council on Geographic Information – Emergency Preparedness Committee
4/23/08 – MetroGIS Policy Board
5/8/08 – State Agency GIS Managers (SAGIS)
10/3/08 – Minnesota GIS/LIS Consortium Annual Conference – Session 27

Upcoming:

12/18/08 – Minnesota Government Information Technology Symposium

Issues, Difficulties, and Challenges Encountered:

- LMIC staff and GCGI-EPC members were not able to dedicate as much time to the project during this reporting period as hoped for. Both groups were focused on providing GIS support to HSEM and federal agencies during the Republican National Convention which was held in St. Paul in early September. However, we learned a great deal from the experience including the importance of having comprehensive, up-to-date structures data readily available.

- As the Iowa Geographic Information Council noted in their interim report for Category 5, data standards for structures data is virtually non-existent. The data model offered by USGS et al. ([http://bpgeo.cr.usgs.gov/model/](http://bpgeo.cr.usgs.gov/model/)) is overwhelming! A more compact, easy-to-explain, easy-to-complete model will be needed if we hope to engage local governments in data development / stewardship partnerships. Help!

- Overlapping data collection efforts by the private sector (for HSIP and HSIP Freedom) is a concern, though perhaps an opportunity. License restrictions limit our use of their data, e.g. we cannot use their it as a base reference which could then be verified by local authorities. Suggestions from USGS or others?