

Nebraska GIS Steering Committee

Meeting Minutes -- November 12, 1998

Present were (authorized to vote +):

| | | |
|---------------------|---|--|
| Mahendra Bansal | + | Natural Resources Commission |
| Jim Brown | + | State Surveyor |
| Dennis Burling | + | Department of Environmental Quality |
| Lash Chaffin | + | League of Municipalities |
| Blaine Dinwiddie | + | OPPD |
| Scott Gaines | + | Property Tax Division |
| Dick Genrich | + | Department of Roads |
| Erik Hubl | . | Lancaster County Assessor's Office |
| Ed Kelley | . | Nebraska Department of Roads |
| Mele Koneya | + | Game and Parks Commission |
| Mark Kuzila | + | Conservation and Survey Division, UNL |
| Jim Langtry | + | Lancaster County Engineer's Office |
| John Miyoshi | + | NRD |
| Yvonne Norton-Leung | + | Policy Research |
| Scott Richert | . | Lancaster County Assessor's Office |
| Marcia Roberts | . | Milestone Solutions |
| Bill Sheldon | . | Milestone Solutions |
| Steve Schafer | . | DAS - Intergovernmental Data Services |
| Stu Sutherland | . | Professional Surveyor's Association of Nebr. |
| Mike Thompson | . | Nebraska Department of Water Resources |
| Cliff Welsh | + | NACO, Keith County Commissioner |
| Paul Yamamoto | . | Department of Environmental Quality |
| Larry K. Zink | . | Coordinator, GIS Steering Committee |

Complete Meeting Agenda

MAJOR MEETING TOPICS

Governmental Units - Priority Databases

Hydrology - Priority Database

PLSS Pilot Project

1999 GIS Symposium

Nebraska Online - Geospatial Clearinghouse

Next Meeting Date

Transportation - Priority Database

Land Cover/Land Use - Priority Database

Exec. Cmte. - Annual Report

GIS/LIS Association Planning Committee

NDOP and NAPP Survey

Voting Record

Orthoimagery & Elevation - Priority Databases

Geoid Model

NACO Annual Conference

Federal Agencies Meeting and Forum

Health and Human Services Membership

NOTICE OF MEETING: A public notice of the meeting, pursuant to Section 84-1411 R.R. S. 1943, was published in the Lincoln Journal-Star on November 5, 1998.

ROLL CALL: Vice Chairperson Lash Chaffin called the meeting to order at approximately 1:10 p.m. and requested a call of the roll. Nine duly authorized representatives were present at the time of the roll call. Therefore, a quorum was present to conduct business.

MINUTES: Vice Chairperson Lash Chaffin requested approval for the October minutes. Mahendra Bansal moved to approve the minutes as submitted. Jim Langtry seconded. The motion passed (see vote #1).

FOLLOW-UP ON PRIORITY DATABASE ADVISORY COMMITTEES:

Governmental Units: Larry reported that Val had hoped to get some support from the Legislative Research Office but that did

not come through. Val has direct responsibility for a number of these databases, he plans to develop and complete a survey for those he is in charge of. This will allow him to get a feel for what to do for the databases he is not responsible for. They concluded it does not make sense to convene a larger subcommittee until they have done some basic research on the currently existing databases.

Transportation: Dick Genrich moved to adopt the resolution creating an advisory committee on transportation databases. John Miyoshi seconded. The motion passed (see vote #2). Roads has begun to assemble a list of potential candidates to serve on a subcommittee.

Larry introduced Scott Gaines who will represent the Property Tax Division in lieu of Bob Martin.

Digital Orthoimagery - Elevation Databases: Mahendra reported that 98% of the DEM's have been completed and 75% of the DOQ's are complete. The NRC has called a meeting on November 18 to look into the production of the next generation of DEM's and DOQ's.

At this time, they are planning on moving the DEM's from level 2 to level 3. Level 2 is 30-meter intervals. Level 3 elevations are at 10-meter intervals and have better controls. They are planning on updating the DOQ's in gray scale. A later generation of the DOQ's would be to have aerial photography at a lower level photograhly.

Larry suggested that this Advisory Committee look into the activities of local government, both city and county, with respect to lower level flights, especially in urban areas. While there is no way to know specifically how much is being invested here, there is speculation that the amount could be considerable. There may be a way to integrate those efforts with the Committee's.

Cliff Welsh asked if there was any continuity between the villages and municipalities or any effort to put something together. Lash explained that the municipal needs are so diverse and the interest level is so different there is not much collaboration. If the city is flying something, they are flying a specific site. There is not much interest at the municipal level. Cliff observed that for jurisdictional areas it seems like this would be a great planning tool.

Jim Langtry commented the real issue is a lack of communication. Lash added that because needs are so different, it is difficult for these groups to even realize they can coordinate. The only really common area of interest is tax assessment.

Scott Gaines said that with the seven county assessor's offices that have become state offices, Property Tax Division has a vested interest in being aware of and coordinating with local efforts rather than duplicating efforts. He suggested Property Tax would be a good place to coordinate efforts. Lash agreed considering most political subdivisions do not deal with one another, but everyone deals with the Property Tax Division.

Mahendra continued, explaining that NAPP is flown at 20,000 feet, and the resolution is 1/24,000 scale. For higher resolution photography, what is needed is flights of about 5,000 feet, with a resulting resolution of 1/2400. The cost is about sixteen times more.

Cliff asked what the difference between levels of DEM's are and what level they go to. Mahendra explained that they go up to Level-3. The contour interval on Level-2 maps is 10 feet and elevations are calculated at 30-meter intervals. The resolution of a Level-2 map is half the contour interval. A Level-3 map would have a resolution of one-third the contour interval and the elevations are calculated at every 10-meter interval. However, Level-3 DEM's require additional control points at abrupt ground elevation changes.

Larry asked if there was agreement that the question of collaboration between cities and counties regarding aerial photography should logically fall to this Orthoimagery and Elevations Advisory Committee.

Bill Sheldon from Milestone suggested a website where this type of information could be posted. Larry agreed it is a good idea but expressed concern that many of the people who need to be reached do not check the web regularly. Larry asked if NACO has a way to notify people, perhaps through their newsletter or some other means. Cliff was not sure.

Lash offered to add a column in their publications about cost sharing activities. The biggest issue here is a time lag. This would at least raise cost sharing consciousness.

John Miyoshi requested Lash place the individuals NRD's on the mailing list because the NRD's sometimes do flights.

Hydrology: Mahendra reported that at this time, two coverages are available as part of the hydrology database. One is the watershed units and the other is selected streams of Nebraska. There is a need expressed to add a hydrography database, 1/24,000 to meet the national standards. This is a major effort and NRC has not done it and are not planning to cover it at this time. There is

a meeting on November 18 at 9 am to look into what databases are needed in this area.

Land Cover/Land Use: Larry said that Jim Merchant would be working more on this after the end of the semester.

Geoid Model: Jim Brown reported that he has spoken with the NGS about this. They would like to improve the geoid model on a nationwide basis. The reason for this is if they can get an improved geoid model, it allows them to use GPS equipment for actual level work. The current geoid models are not accurate enough to do that.

Originally, Jim thought they would need to do gravimetric study, but the NGS said that was no longer necessary. What they would like to do is have some accurate GPS, level 2, which requires a reading on two separate days, on some of the vertical control points in Nebraska. They are willing to form a partnership and make the adjustment if the SSO is willing to take the GPS readings.

Jim has asked the NGS to design the project for them so they can find out how many readings will be necessary and what parts of the state they need to be from. He has talked to the NRC and intends to talk to Lancaster County and some of the other counties as well as Roads.

He is not ready for the Steering Committee to approve this yet because he wants to see the plan that comes from the NGS. That should be ready by the next meeting.

Geoid refers to the shape of the earth. The earth is neither round nor ellipsoid; there are waves or movements. The shape of the earth must be approximated but there is no mathematical formula to approximate it. GPS points or readings must be taken to form a shell that approximates the shape. They are looking at getting vertical readings accurate within 2 cm.

This should not be a very difficult project and it is one that the federal government is very interested in right now.

Erik Hubl observed that an additional benefit is obtaining more horizontal control.

Jim said that there is a new balancing coming out in the year 2000.

PLSS PILOT PROJECT: Jim Brown reported that they have considerably stepped up efforts to complete this project. They are fairly well finished with Adams County. It has been sent back to Adams County for the inclusion of more modern survey data. They have forwarded it to Milestone who is working with Adams County. They are creating new cadastral maps and he is hoping they will find this information useful in their efforts.

They have completed all of the data input in Dawson County. It is waiting for a last look and balance.

They are down to about three townships in Merrick County.

He believes Hall County will not be completed due to other commitments in Fremont and Dodge County. This project is winding down and three counties will be completed, farther than was originally anticipated.

John Miyoshi asked what the SSO is doing in Dodge County.

Jim explained that they will be creating a PLSS layer in that county and will scan in their existing cadastral tax maps. They will vectorize those maps and try to fit them into the PLSS layer to come up with a new cadastral map for the rural areas of that county. Basically, this is taking the pilot project one step further, to find an economical way to bring the cadastral map into the tax assessor's world.

Scott Gaines commented that this would have had to be done with paper maps soon anyhow and the timing was good.

They are going to take their cadastral mapping and build a mosaic over the PLSS layer. The polygons will have a partial identifier with a hook left out there for the assessor's database to attach to.

Cliff asked if there were standards in the Property Tax Division for cadastral maps. Scott said there were standards. Cliff asked if the PTD had plans to upscale the standards for all the counties. Scott did not believe the PTD would force a higher standard on all the counties.

Larry commented that they have been talking with Cathy Lang about working with the Advisory Committee on guidelines and how to interface those with regulations.

John asked if Jim knew how they would convert the scanned image to a georeferenced one. Jim said they planned to scan the tax documents in. There is a lot of software that will move the lines that are now on the maps to convert it from raster graphics to vector. Then they create the PLS layer and get the section corners down to the 80 acre tracts. Then they take the scanned image and make them fit. All the cadastral maps at least have section lines on them. Those are then laid on top of the DOQ's and it becomes a tax map. The final product will be no more accurate than the original maps were; they will simply be georeferenced into the real world. They plan to leave the tools available so that accuracy can be increased as new tracts are created.

The plan is to create a digital product in the same time frame and at a cost that does not exceed what counties already pay for a new set of cadastral maps.

One issue is that someone has to be trained to maintain this once it is set up.

Yvonne Norton-Leung asked if this was a model used elsewhere. Jim did not know if it had been done elsewhere. Yvonne then asked if Jim was planning to extensively document each step of the process. Jim said that they were aware that the methodology had to be standard.

Larry noted that the Annual Report lists the Adams County pilot project as successful in increasing the section corner coordinates from 800 to 9000. The average error is 16 feet with a maximum of 42 feet. It is anticipated that accuracy can be increased substantially as modern survey measurements are put into place.

One area of the project was not very successful. The model of trying to get multiple government agencies to cooperate and actually do the work jointly did not work well. In part, Larry feels this is because of a lack of staff to provide follow-up coordination and Jim feels the agency staff available lacked the necessary technical expertise.

Jim commented that the personnel in Adams County were energetic and technically oriented. Some of the other counties lacked either the commitment or the technological understanding. A work-share agreement is only as good as the commitment and expertise involved. There is a certain amount of understanding of measurement theory that the participants need to have to make good evaluations of the quality of the measurements, and that cannot be taught quickly. In addition, the training to allow people to make the first adjustment is too intense to teach a lot of people. After the PLS layer has been created, training someone to do the small amount of additional input that will be required is not difficult.

The Property Tax Division will need someone with the training and experience to handle the entire system, but the outlying counties do not. The State Surveyor's Office, in keeping with LB924, will keep someone on staff to make balances and assist the counties in training people to input changes. Another option is to hire and train consultants.

John asked if the data will be held at the courthouse. Scott said it would depend on the county. Larry added that in addition to the locally maintained database, there have been discussions about developing a central access point for a combined statewide PLSS database. There is no current action in this direction, but it is a goal to aim for.

Jim Brown commented that it is difficult to comprehend how many parcels of land are actually falling through the cracks such that people are not paying taxes on them. Once it is laid out on a map, then one can see what is missing and a lot of property ends up back on the tax rolls.

EXECUTIVE SUBCOMMITTEE REPORT: Larry reported that the Executive Committee met and did a quick review of the Annual Report. Larry noted that Tom Lambertson had expressed the concern that the Legislature will not read the Annual Report in the form it is in because it is too big. The consensus was to distribute this document to the Clerk of the Legislature and other officers and to prepare a summary document to distribute to all the members of the Legislature that includes the Steering Committee's specific recommendations and a summary of the other information.

Yvonne moved to approve the Annual Report. Dick seconded it.

Dennis Burling expressed concern about typographical errors in the report and asked if anyone had read it thoroughly to correct these errors. In addition, he requested a copy of the 6-7-page summary as discussed in the Executive Committee be distributed before voting to approve the Annual Report. His understanding of Tom Lambertson's position is that the entire document needs to be completed and presented to the Steering Committee before approval can even be considered. He strongly objected to approving a document that has not been written yet.

Larry expressed his understanding that Tom had not expected the summary document to be ready for the Steering Committee meeting. John pointed out that there would not be time to send the Annual Report back to Larry to draft the summary document and bring it back to the Steering Committee for approval. Larry stated that his understanding of the Executive Subcommittee's ultimate decision was to request approval of the Annual Report in its current form, and to then review a legislative summary

version of the document during its next Executive Subcommittee meeting. This understanding was supported by the other members of the Executive Committee who were present in the meeting.

Dennis asked when the summary would be completed. Larry said he wouldn't have time to work on it until after the Federal Agencies meeting on November 18. Dennis reiterated that he can not approve something that will be changed later.

Lash asked if the statutes allow the Steering Committee the authority to delegate the responsibility of approving the Annual Report to the Executive Committee. Dennis said that the statute requires the Annual Report to be approved by the Steering Committee.

John and Yvonne maintained that this report needs to be approved today. Yvonne said that the Annual Report is a separate document from the legislative summary. The Annual Report is the actual document that is coming from the Steering Committee.

Lash called for the vote. Larry clarified that this vote is to approve the Annual Report, allowing for editorial changes. The motion passed (see vote #3).

EDUCATION SUBCOMMITTEE:

NACO Annual Conference – Larry said that the Steering Committee discussed and approved having a booth at the NACO Annual Conference this year. The Steering Committee has a booth reserved next to the State Surveyor's, Jim Brown. Mahendra for the NRC and Duane Stott have agreed to be a part of that booth. If anyone else has any interest in putting something else up, contact Larry. Currently, the plan is to illustrate some of the projects the Steering Committee is involved in. The conference will be in Omaha at the Holiday Inn on December 3-4.

1999 GIS Symposium – Larry said there is a group continuing to meet. It is a combination of the symposium planning committee and the GIS/LIS planning committee.

Under the current understanding, any profits that are generated from the symposium will go to the Professional Surveyors Association of Nebraska (PSAN) because they are underwriting the financial risk of the conference. In the past, they have split the profits and returned half to the Steering Committee. It is the understanding of the committee that is planning the symposium, that if there are profits from the Symposium to be shared by PSAN, that those shared profits will be used to help underwrite the new Nebraska GIS/LIS association for the first year. The people who pay the fee and attend the conference will be de facto members of the new association. Beginning in the year 2000, they will have to pay dues.

Larry indicated that the planning committee felt that it was important to check once again with the GIS Steering Committee to confirm that the planning committee's understanding the profit sharing plan was consistent with the GIS Steering Committee's understanding. Because they are underwriting the financial risks, any profits made from this symposium will go to PSAN first and they will make the decision whether to share it or not. No concerns were expressed regarding the understanding that any profits shared by PSAN would go to help underwrite the new GIS/LIS association.

Larry said that they are attempting to solicit co-sponsorships from other organizations and asking for financial contributions as part of that. It is their intention to share with any interested organization that part of this effort will be to underwrite the formation of the new association.

Jim Langtry mentioned there is some question of what to do with the profits from the last symposium. A suggestion has been made that some of those funds could potentially be contributed to the new association as well. Larry said that would be very difficult now because those funds are now in the State's coffers. Jim Brown said that the new non-profit group will be formed at the symposium. The symposium profits will be retained by PSAN, also a non-profit organization, until the new group is chartered and becomes a corporation. The transfer will be made directly from one non-profit group, PSAN, to another non-profit group, the new GIS/LIS association. The funds will never have to go through the state.

GIS/LIS Association Planning Committee - Jim Langtry reported that Jim Lacey and Scott Richert are putting together some bylaws and other information to set up the association.

Larry commented that the planning committee will be looking at creating a slate of officers and they welcome anyone who is interested in taking on some of that responsibility.

FEDERAL AGENCY GIS FORUM AND MEETING: Larry said that the last time the Steering Committee met, they approved convening a meeting in conjunction with the current GIS Steering Committee meeting. Because some of the federal agency representatives expressed concern about the need to travel on Veterans Day to come to the meeting, Larry changed the federal agencies meeting date to November 18.

There was an overwhelming response. Larry had expected four or five agencies to come and twelve agencies will be here. Each agency will have 10 minutes to give a brief overview of what GIS related work they are doing, with particular focus on geospatial data related to Nebraska that they have developed or are developing and programs for projects that are good vehicles for partnerships. After those presentations, Larry is planning to try to get into some organizational discussions, exploring interest in further meetings of this type as well as asking them to select two or three possible nominees from which the governor might choose a federal agency representative.

There is a good cross section of people coming; USGS from Rolla, NRCS, Farm Services Agency, Census Bureau, EPA, Army Corps of Engineers, FEMA.

Mark Kuzila asked if this meeting has been publicized. Larry said that Jim has circulated fliers around the campus and he has posted it on the list serve.

Larry asked if there were any other issues or concerns to be brought up at the meeting. Yvonne suggested that due to the unusual nature of this meeting, making a record of these presentations would be valuable.

Larry reiterated his surprise at the large response. He feels it is indicative of the interest from higher up to form partnerships. Hopefully, this will lay the groundwork for joint projects for the future.

AGENCY UPDATES: There were no agency updates.

OTHER BUSINESS: Nebraska Online Larry said that the Legislature has clarified its intent in terms of where records go. The understanding is that state agencies are clearly authorized to enter into agreements with the State Records Board who has a contract with Nebraska Online to maintain these online services. Sam Somerhalder, Nebraska Online, contacted Larry recently to follow-up on his earlier request to finalize a formal, written agreement. According to Sam, the Steering Committee is now the only entity with data on their system that does not have a formal, written understanding with them.

Larry suggested that between now and January he would work to develop a draft agreement. He has an initial draft from them that Dennis gave Larry some feedback on. In January, this issue can be more fully addressed.

The Steering Committee's clearinghouse sits on their server. This arrangement began several years ago as part of the clearinghouse project grant. At that time, it was through the Nebraska Library Commission. That has all shifted to the State Records Board base on action by the state Legislature.

Lash asked if Sam was talking about fees. Larry said there were no fees it is just that there is nothing in writing. Yvonne clarified that all revenue generated by Nebraska Online comes from the sale of products.

Cliff asked Larry to bring a list of their fee structure and an explanation of how it works. Yvonne suggested asking Sam to come make a presentation. Larry agreed to ask Sam to the January 14 meeting. Lash commented that if they are planning to repackage the Committee's data and resell it, he would like to know it. Larry said that there is no indication that they are planning to do that at all. Yvonne clarified that ultimate control of information must stay with the agency in question. The main reason the State can afford to do it this way is because of the revenue generated by the sale of DMV records.

NDOP and NAPP Survey: Larry said that he had emailed a survey from Ted Koch, representative to the National Digital Orthophoto Program from the NSGIC (National States Geographic Information Council), to all the Steering Committee members. The NSGIC is in the process of giving the DOQ program a long-term look to see where it is heading in terms of technology changes and also different levels of requests for higher-level resolution imagery. Mahendra was the only one who replied to the survey. Larry asked if the Steering Committee wanted to forward Mahendra's response as the Steering Committee's response. Cliff asked if anyone had a different response. Jim Brown suggested adopting Mahendra's response as the Steering Committee's official reply. Larry agreed to forward this response.

Health and Human Services: Larry explained that the director of HHS has expressed interest in participating in the GIS Steering Committee. They have developed some GIS capabilities through cooperation with the NRC and are interested in expanding that. As a part of that, they have expressed some interest in representation on the Steering Committee. They indicated that they may take the issue to the Legislature. Larry requested coordination between HHS and the Steering Committee. HHS said that they would be willing to take this forward or to allow the Steering Committee to take the lead.

Larry noted that if the Steering Committee's authorizing statutes were to be re-opened, one other issue to consider is the necessity to change the statutes addressing Steering Committee's lack of authority to reimburse advisory committee expenses. In response to the Steering Committee's request for co-sponsorship of the Standards Advisory Committee, NIDCAC agreed to support the

Steering Committee in pursuing autonomous authority. They passed a motion to that regard. As a part of that committee, Mike Calvert from the Legislative Fiscal Office indicated a willingness to find a legislative vehicle to carry this.

The question is, are there any objections to having HHS on the Steering Committee and further, are there any objections to allowing them to carry this through the legislature? Larry commented that one concern that had been expressed before, was that as state agencies gain more representation on the Steering Committee, the balance between state and local government is shifting.

Yvonne observed that one of the fastest moving issues is the need to identify and track the relationship between medical health issues and various types of environmental issues. GIS has taken a very high profile in this area nationally. HHS began using GIS internally and have worked closely with the NRC several years ago. The director was not willing to move in that direction at the time and they now have a new form and new directors. From her perspective, HHS is a good candidate for membership.

Lash suggested allowing HHS to draft their own bill and offer to be helpful.

Jim Brown moved to have Larry draft a letter to HHS informing them that if they have an interest in proposing this in their legislation, that the Steering Committee would support it. Jim Langtry added that Larry inform them they are welcome to attend any meeting already. Lash seconded.

Dennis pointed out that in 1993 after the floods, the Steering Committee discussed how Civil Defense would be a prime player in emergency management and use of GIS and they have not been considered at any time for membership. Dennis indicated that he does not support HHS being on the Committee just because they are the biggest, most powerful agency in the state. Dennis added that they have a lot of data that is not currently usable in a GIS.

John asked for clarification if the Chairperson could second a motion. Larry asked for a different second. John seconded.

The motion passed (see vote #4).

Return to the GIS Steering Committee Home Page

The next meeting will be **Thursday January 14, 1999 at 1 p.m.**

| Vote Tally for <u>11/12/98</u> GIS Str. Cmte. Meeting | | | | | | | | | | |
|---|-------------------|--------------|-------------------------|-------------------------|-----------------|-------|-------|-------|-------|-------|
| | Roll call | Min. #1 | Transp. Adv.Cmte. #2 | Annual Report #3 | HHS memb. #4 | .. #5 | .. #6 | .. #7 | .. #8 | .. #9 |
| DAS - Rick Becker | A | . | . | . | . | . | . | . | . | . |
| DEQ - Tom Lamberson Dennis Burling | P | + | + | — | + | . | . | . | . | . |
| CSD - Mark Kuzila Jim Merchant, Les Howard | P | + | + | + | + | . | . | . | . | . |
| NGPC - Mele Koseva Bruce Sackett | P | + | + | + | + | . | . | . | . | . |
| NRC - Dayle Williamson Mahendra Bansal | P | + | + | + | + | . | . | . | . | . |
| PRO - Yvonne Norton- Leung | A/P | . | . | + | + | . | . | . | . | . |
| PTD - Cathy Lang Bob Martin, Scott Gaines | A/P | . | + | + | + | . | . | . | . | . |
| DOR - Dick Genrich Jon Ogden | P | + | + | + | + | . | . | . | . | . |
| St.Surv - Jim Brown | A/P | . | . | + | + | . | . | . | . | . |
| LRD - Val Goodman | A | . | . | . | . | . | . | . | . | . |
| Federal Rep. | . | . | . | . | . | . | . | . | . | . |
| John Miyoshi | P | + | + | + | + | . | . | . | . | . |
| Blaine Dinwiddie Steve Larson | A/P | . | . | + | + | . | . | . | . | . |
| Cliff Welsh | P | + | + | + | + | . | . | . | . | . |
| Larry Worrell Jim Langtry | P | + | + | + | + | . | . | . | . | . |
| Lash Chaffin | P | + | + | + | + | . | . | . | . | . |
| Duane Stott | A | . | . | . | . | . | . | . | . | . |
| Dennis Wilson | A | . | . | . | . | . | . | . | . | . |
| TOTALS | 9-P / 13-P | 9 (+) | 10 (+) | 12 (+) 1 (-) | 13 (+) | . | . | . | . | . |

"P"=present, "A"=absent, "+"=voting for, "-"=voting against, "NV"=not voting