

Meeting Description: Michigan Geographic Framework Users Meeting

Date: December 9, 1999 **Time:** 10:00 a.m.

Location: Lewis Cass Bldg., 6th Floor, Dept. of Community Health Large Conference Room

I. Approval of November Meeting Minutes

II. Geographic Framework Program

A. Michigan Information Center (MIC) Project Update

1. Phase 2 Status

Rob Surber, MIC, distributed a framework status map. Phase 2 Complete means that the MIC has completed all of their work on these counties. Phase 2 Complete and Michigan Department of Transportation (MDOT) Attributes Reintegrated means that the MIC has completed their work and Dept. of Corrections has completed the MDOT attributes. Several counties have been completed since last month; plan to complete work on Bay County within a week; then begin work on Saginaw and Barry Counties. The MIC has been working on the county line data issues. Historically the county line data has been populated from both sides by both counties. The MIC is half way through the seaming work in Upper Peninsula. When seaming is completed, all data will be consistent. Rob will be putting more people on this project. All programs are written to handle mileposts along county lines. Rob's estimates completion of Phase 2 some time this spring. Plan to assign enough staff to complete county seaming at the same time Phase 2 work is complete. Work on Livingston County has not been started due to work being done at SEMCOG. SEMCOG is reintegrating work that was being done by a vendor for Livingston County on the 9-1-1 project. About 1,000 segments were added to the base map. Rob expects to begin work on Livingston County by end of the month. The Metadata field is in there and can be populated at some point. In the future, that field will be feature by feature as it is edited. Some global position system (GPS) roads are available, but that information is not available statewide. The MIC is partnering with several counties on basemap work. Ottawa County is working on a 9-1-1 project and would like to incorporate framework base. The MIC is setting up meeting with Ottawa County to discuss how to do data exchange. Wayne County is starting conflation. The MIC will meet with Steve Perry, Wayne County, to make sure that there is a good process to do transactional updates. Wayne County has a need for a good centerline product. Macomb County is doing a request for purchase (RFP) and wants to incorporate work with the framework project to take advantage of the links to data at the state level. Macomb County is patterning their work after Livingston County's effort to get framework to their vendor. A lot of lessons were learned from work with Livingston County and want to avoid some problems in the future. The MIC sent specs to REGIS on the project.

2. Repositioning

Rob Surber, MIC, stated that the MIC is starting a repositioning pilot with digital ortho photo with entire base and plan on first having staff internally work on because of all the data issues and make sure to protect investments that have done so far. Then plan on pulling together a technical standards group of interested individuals from around the state to review product and provide input. Plan to come up with final specs regarding how to approach, costs, and time frame. Repositioning is important job and the MIC is committed to it. Rob stated that he would have more information in January.

Mark Zweifler, Michigan Department of Natural Resources (MDNR), commented that MDNR is also interested in the repositioning process. There is a model in the Upper Peninsula based on a survey of section corners. They are interested in using global positioning system (GPS) control points rather than looking at the digital ortho quarter quads (DOQQs).

Rob Surber, MIC, added that he has talked to Gary Bilow, MDNR, regarding the fact that not all section corners are on centerline of roads. This is something to explore.

3. Digital Ortho Photo Processing

Rob Surber, MIC, reported that the MIC has purchased all the available digital ortho photos at the quarter quad level from United States Geological Survey (USGS).

Everett Root, MIC, reported that the MIC received the October digital ortho quarter quads (DOQQ) purchase. He has reprojected the DOQQs to Michigan GeoRef and restored to CD and is now doing the same process to some of the county products that MIC has purchased - Monroe and Clinton Counties. Everett brought a map showing status of quarter quads and there are a few more that can be bought. MIC has Emmet and Charlevoix Counties that Vargis produced for Consumers Energy but doesn't have rights to share.

Rob Surber, MIC, stated that there is an innovative partnership (IP) with USGS to fill in the gaps so we will have a complete set for the state.

Everett Root, MIC, added that the Space Imaging Corp. has a satellite that is taking 1 meter black and white and they are the holders of Board of Water and Light photos that the MIC will try to get a copy of. The Space Imaging Corp. will send a catalog of basic products that are available. They are in first hundred days of testing.

Mark Zweifler, MDNR, commented that the map project that the MDNR is involved in, there is evaluation of the digital airborne sensors. There is piloting of 3 different sensors in the Grand Traverse County pilot area and one may be possible substitute for photography. There will be an initial report due in January, which can be made available to this group. They are trying to create an almost seamless product.

Gary Bilow, MDNR, stated that the MDNR got a counter proposal from USGS regarding money for IP. They are discussing government furnished materials, which are USGS's contribution to the project and how it is divided up. USGS agreed to provide materials, but they wanted that to be their in-kind contribution, but then don't add that to the cost of the project. So that means that state partners end up picking up the cost of the government furnished materials. The general range of cost to the state's contribution is \$375,000 and \$430,000.

4. Cabinet Meeting Presentation

Eric Swanson, MIC, reported that the MIC would be presenting state government GIS to the governor's cabinet (department directors) on Monday. The goal is to highlight several initiatives that are underway. Have been working with Bill Enslin, MSU Center for Remote Sensing and GIS, on generalizing the viewer technology to include and various query datasets: transportation, MDNR state-owned properties, state-owned facilities for the tri-county area, Dept. of Agriculture's pesticide locations, storage locations, Source Water Assessment Program (SWAP) data, contaminated sites, wells, State Police crash locations (isolated to deer crashes) and crime locations, MDNR parks pilot project, Sleepy Hollow Park work (campsite locations), elections as part of the redistricting effort (including precincts and geocoded voters from the qualified voter files (QVF) and characteristics on voting patterns based on the State Board of Education results), library work from Gates Foundation Grant. The goal is to demonstrate the value of integrated and available data from all agencies for cross-departmental use. Since the time is limited to 20 minutes, the presentation has to simply flow. Hope that when the department directors see this presentation, it will bring back support and endorsement to programs developing the datasets.

Bill Enslin, MSU, stated that at this time, the viewer is merely a demo. There are three viewers: statewide land database (SWLDB) to be used internally for state agencies; revision of the map image viewer for the SWAP program to be distributed to health departments and other agencies that are contributing with SWAP, and MSU has upgraded the main viewer for the LandScan viewer and will be released in the spring.

Eric Swanson, MIC, stated that 35mm LandScan photography has been embedded in the viewer. As an entity, it is moving us in the direction to make data more easily accessible.

Rob Surber, MIC, commented that the vision is to get into web area.

B. Base Map Scale Versions

Rob Surber, MIC, reported that base map scale versions has come up in several discussions since the last meeting.

Mark Zweifler, MDNR, stated that agencies create different data sets for Michigan. All units share the state shoreline and whenever trying to do overlay analysis from different groups, thousands of sliver polygons would show up, because different people use different shorelines, The discussion is how can we come up with agreed upon shorelines and scales. Mark suggests the USGS product because it is federally sanctioned at 1:1,000,000 scale. Some times a lesser resolution (1:24,000) is desirable, so there may be a need for multiple versions of datasets. Another approach is to create a statewide dataset working only with interior lines and extend exterior lines to a set point out into the lakes.

Lorri Peltz-Lewis, Michigan Natural Features Inventory (MNFI), suggested that it would be ideal to go with 1:24,000. There still will be a sliver problem with Mark's recommendation. MNFI has gone in and fixed where they need. Laurie's recommendation is to push toward 1:24,000 and get it done as good as possible and have a database that can be referenced. Agrees with going with USGS now that we have the digital raster graphics (DRGs) and can do heads-up digitizing. We should come up with a good shoreline database in respect to whatever USGS uses for shoreline.

Steve Miller, Michigan Department of Environmental Quality (MDEQ), stated that from the MDEQ perspective this is a critical issue, since they hold regulatory control over issues of Great Lake shorelines. USGS definitely has to be present at discussions. For MDEQ it is not just a display issue, it is a regulatory issue.

Lorri Peltz-Lewis, MNFI, commented that this is an issue that has affected coastal work and needs to be addressed. Suggested that everybody be made aware that line work is coded so they can rip out as needed.

Rob Surber, MIC, added that the MIC's vision would like to see the state come up with recognizable name versions. With the repositioning effort, it would be the right time to initiate this, at least for 1:24,000 framework that stores the administrative boundary information in the file. With web applications using various views and scales for quick display, Rob, would like a subcommittee of technical folks to look at the issues. Rob asked the group to think about whom within their departments should be involved and recommended that people call the MIC office with names of people to be on the subcommittee.

Eric Swanson, MIC, stated that we could announce members in next minutes in prominent place and put a notice on listserv to gather list of people and organize a group to deal with these issues. The listserv is available for everybody – www.state.mi.us/dmb/mic, click on the map and the listserv will come up.

Rob Surber, MIC, stated that data coordination is a big thing. He would like to establish a path to go down it while repositioning.

Mark Zweifler, MDNR, commented that if we come up with a group that can resolve this issue, perhaps they could explore the potential to act on other issues as well.

III. Michigan State Government Geographic Information Policy Council

Rob Surber, MIC, reported that the policy council met end of October. The MIC continues work on the clearinghouse site development. The MIC is partnering with IMAGIN on this. IMAGIN is getting postcard mailing to send to all contacts from several mailing lists. The postcard, which will be sent after Christmas, is designed to get contacts that the survey. This is

not only a collection of core Federal Geographic Data Committee (FDGC) compliant metadata but also metadata about the organization, projects, activities, contacts, and perhaps even how to partner with each other, live reporting based on themes, maps, reports, when latest digital orthos were flown, and detail metadata. Also have a paper version as well as a web version, but hope that most people will fill out the web version. SEMCOG has also played a role in the development.

IV. Michigan Department of Natural Resources (MDNR) Projects and Activities

Gary Bilow, MDNR, reported that they continue to work on the state park pilot project doing GPS work to try to pick up things not visible on the photos – manholes, etc. They are working with the Land Records and Tax Reversion Section and the Mineral Lease Management Section of the Land and Mineral Services Division to revise the Real Estate Information System (REIS) data base by comparing the tabular data base to a computer added design (CAD) version. They have been through one county and found 550 discrepancies between the tabular data and the real estate maps. There were a combination of errors in the database and the maps. The majority of the errors were found on the maps - 10% of total errors are actually database errors. It is taking longer to do corrections than they anticipated – about 1 county per month right now. MDNR had a meeting with MNFI and will start working on more state parks.

Lorri Peltz-Lewis, MNFI, stated that they have series of needs where they need the boundaries on state parks. They are working prioritizing and are looking at focusing on each of the parks. That is cascading into the natural areas.

Gary Bilow, MDNR, stated that they are still working on getting ortho photos for the all of the parks. MDOT did photography, but do not have time to do the ortho photo preparation, so have a project with the Corp of Engineers for 20 parks. Have approval to spend \$100,000 this year to get orthos made out of the MDOT copy from last spring.

Mark Zweifler, MDNR, stated that there is a major effort funded at the departmental level at the MDNR to redesign the forest inventory system. The major components are the remote sensing component, a design of the on-ground inventory system, an existing system managed by forest system called FIA and development of a support tool. The project is divided into 5 phases. There should be prototype desktop application to look at in January.

Rob Surber, MIC, commented that we should get the forest inventory system on the agenda in February or March to show this group

Mark Zweifler, MDNR, commented that there is some discussion about getting the spatial data library on the Internet. This is MDNR's way of distributing GIS data on the Intranet. There is some discussion about putting some subset of that data on Internet.

Rob Surber, MIC, added that the State of Michigan in general is moving toward some coordinated effort of warehousing data. That effort will at some point converge, possibly through the Michigan State Geographic Information Policy Council.

V. Michigan Department of Transportation (MDOT) Projects and Activities

Joyce Newell, MDOT, shared information regarding an Intranet Web Mapping Application Seminar, December 20, 1999 3rd Floor, Transportation Building, 2 p.m. North/South Conference Room.

Rob Surber, MIC, stated the seminar could stimulate ideas of ways to handle information exchange.

Joyce Newell, MDOT, stated that MDOT is looking at attributing all-season roads and to use the framework to get PR mile point information. They will probably attribute reintegrated counties, but may not be able to wait until they are all seamed. All-season roads have to do with Category D funding and the roads must take various size trucks all seasons of the year for

commercial use. There is an interest to make sure the roads are developed and keep track of inventory. The data set would be maintained by MDOT and would not be on framework. Work will begin in January. MDOT continues to work on attribution of highway legal system, roadway ownership, national highway system, national functional classification, and bridge identification.

VI. Michigan Department of Environmental Quality (MDEQ) Projects and Activities

Steve Miller, MDEQ, reported that the word is getting out to the counties about their application. They will be distributing Bill Enslin's, MSU, viewer February 16 to all counties. On the CD will be the framework data, LandScan aerial photos, and the Well Key information. When people see this, Bill will have to answer questions about how much to sell it for. Have a new program written for Well Key, which is not 2000 compliant, called Well Logic on Intranet and Internet. There are firewall issues right now, but they have permission to test. The new version will roll out January 15. If interested, MDEQ will demo to the group. It is a web browser application on Internet Explorer 5.0, so there is no software. The advantage is that changes can be made to program – it directly ties into SQL database. John Clark, Land and Water Management, has a new server and is posting all state watershed data. Also working with a consultant on the Wetlands Program to capture xy coordinate locations – might also demo this in the future. Field personnel can bring up digital elevation models (DEMs) and the MIC data and basically can capture xy location and bring back into database. It will show the wetland permits that have been issued in the area. Bill Enslin, MSU, will be writing a DLL to capture data back into Michigan GeoRef to populate point data in lat and long. Because this is consistently captured with the same methodology and accuracy will have same metadata for it.

VII. MIC Projects and Activities

A. Address Clearinghouse Exploratory Committee

Rob Surber, MIC, reported that the committee was planning to convene in December, but is not going to be able to. They plan to meet early next year. MIC is taking a lead in trying to come up with better communication and reporting vehicle for address standards throughout the state. The goal is to establish a set of basic minimal standards for addressing (not an authority of standards), a location within counties that would know who sets addresses for the county and has an official list for road names and addresses; would be a communication vehicle between the postal service and the state; and would be an arbitrator. Would like to bring the involved players (assessors associations, 9-1-1 groups, county planning) together. Would like to have this be locally generated, but are all in this together. If anybody is interested in coming to the exploratory committee, contact Rob.

B. State Police Initiative

Rob Surber, MIC, reported that the MIC signed an agreement with the Michigan State Police (MSP) on assisting them to integrate crime status on the framework base map. This is being done through the Criminal Justice Information Center (a service center providing data upon request to the general public and local police agencies around the state). They want to provide maps. MIC is providing support, then setting the map up so they can do own work, and will provide feedback. This is a positive step toward cooperation at state level and hopefully will be a benefit to criminal investigation units.

C. Statewide Land Database Facility ID Standard

Rob Surber, MIC, reported that the MIC continues to do work with land infrastructure facilities to provide a high level viewing capability for decision-makers in the state. Currently working on a facility id standard. They are working closely with FDGC facilities standard that is

on the web. Trying not to reinvent it, but do want to accommodate the needs of the state. Initially id standard is being designed for state assets. They expect that the id standard will be able to accommodate other facilities, including regulated sites and any administered area. They hope for information exchange through the policy council. They are already doing good job with MDOT in terms of road network but can take much further.

Eric Swanson, MIC, stated that this is absolutely critical. There are new accounting rules that the states must identify and depreciate all assets. It will even include outhouses in state parks.

Rob Surber, MIC, added that it includes dams. They have MDNR information for review and MDNR is interested in id standards. At this time, there is no coordination within the state. Much of the FDGC standards fit the needs of the state. One of the challenges in data modeling is to accommodate the use of facilities that come in various hierarchy levels. The initial standards should be out for review the beginning of January. They are not reinventing FGDC standards but will be adding standards to meet our needs.

D. GIS Listserv

Rob Surber, MIC, reported that the state has established a GIS listserv through Central Network Operation Center (NOC). Rob shared a welcome message that the MIC sends out for people who sign up. There is a need to have the nuts & bolts GIS users in the state to have a forum to talk about the issues that arise and the listserv can support that and want to try this approach to see if it will meet needs. The more users on it, the more discussion there will be and the better it is. Have made this open, because people can listen in if not a high tech user. Would like a listserv that focuses on Michigan issues. The listserv is moderated and e-mails will be summarized.

Mark Zweifler, MDNR, added that he was thinking of the listserv in terms of GIS support professionals that create data, but this more democratic form may be better. Will try to forward the issue about state boundaries and may get response for shoreline.

E. Regional Projects and Activities

Rob Surber, MIC, reported that there has been quite bit of participation in the Michigan GIS Users' meetings from agencies other than state level agencies. Groups around the state have commented that they would love to attend and experience the dynamics but can't. Therefore, the idea of having regional meetings at hosted sites to conduct a similar type of meeting has been discussed and would like to try. Would like to have participation from key state agencies at least and possibly MSU to present, talk, get feedback, and dialog between agencies. They are looking at next year. Would like to see if there is interest from state agencies to send staff people to about 4-5 locations around the state. Rob knows that Marquette County will host a meeting and that they have several departments that have to work with state agencies, have questions and don't have the time to get out to interact. Is there interest in coordinating meetings?

Lorri Peltz-Lewis, MNFI, added that a similar program was started in Utah and it worked well.

VIII. Regional Projects and Activities

Laura Tschirhart, Tri-County Regional Planning, reported that they have received the pilot project from HNTB for the land-use land-cover update for the tri-county (Ingham, Eaton, Clinton counties). The pilot project has been sent to the technical committee and they have been reviewing the process to be sure it is being done correctly. They will meet on December 13 to discuss the project. Maps were also sent to Delta Township, Oneida Township, and Grand Ledge. They are also looking at framework file and redlining errors and additions to be sent to MIC for review.

Rob Surber, MIC, commented that this has been a good project – it tests the partnership philosophy and how it works. This may be a model for other regions.

Laura Tschirhart, Tri-County Planning, stated they providing 1995 photos and most of 1978 color infrared photos. They have also finished digitizing zoning for the entire tri-county region and are half way through the account plan. It is going well.

IX. MSU Center for Remote Sensing and GIS Projects and Activities

Bill Enslin, MSU, distributed a map displaying the status of the Framework Processing for SWAP. The processing of lakes and 2-bank rivers continues. There are 53 counties complete and 30 counties are remaining to be done. Monroe County is different from other counties in the SEMCOG area. The level attribute number is gone and that is an issue because the Themer Program requires that number.

Rob Surber, MIC, commented that he thinks that the MIC learned some where in the process that this had been done. There may be linkage to go and get that. Should probably discuss it.

Bill Enslin, MIC, added that MSU is getting a CD from the MIC with DOQs to look at the positions.

Everett Root, MIC, stated that several things were made more generic.

Rob Surber, MIC, commented that they might need to explore the option of linking back.

Bill Enslin, MIC, stated that there is a position available through MSU Extension Service for a GIS person to work in Branch County. There is a posting on the IMAGIN website. There is a land use meeting next Thursday involving 30 people that have been invited to look at land cover/use mapping classification schemes. There is an initial Green Book that has been revised for current use inventories, some categories have been changed. There was a Michigan Resource Information System (MIRIS) 2 classification scheme that was produced by MDNR that some agencies in the state have employed. The meeting is sponsored by IMAGIN and MSU to pull people together to address issues and procedures that are available - not only for interpretation but rectification. This will be a working group to arrive at a white paper to arrive at standards for doing consistent inventories so that in the future can piece together another land cover inventory. MSU has got 9 townships in 3 counties that they are doing preliminary work for land cover/use change analysis and will be doing Wexford County in June. There are few other agencies that are working on land cover/use and it is time to pull together and arrive at a consensus.

X. County/Local Projects and Activities

Nobody in attendance.

XI. Federal Projects and Activities

Nobody in attendance.

XII. Other Issues

Carol Woodman, Michigan State Industries (MSI), distributed status maps of their attribution work for MDOT. They delivered Monroe, Calhoun and Genesee Counties to MDOT. Have 8 counties in-house now, but just got the maps yesterday. They are writing programs for the All-Season Roads Project. Have 17 counties yet to come. They are doing a quality control program on the work and have written additional AMLs so that it will work fast. They have tried having several people working on the bigger counties, but it doesn't work out.

Mark Zweifler, MDNR, introduced the new ESRI representative, Pat Cummings, in attendance. Would also like to follow up on the status of ESRI contract.

Eric Swanson, MIC, commented that he inherited a certain role from Margaret Lee, MDEQ. Eric had to facilitate through the master contract with the Office of Purchasing for the state agencies to be able to purchase from ESRI. ESRI has been honoring the contract prices. The

contract had been sitting in the Office of Purchase for them to work out terminology over a year and Eric just saw it. The contract allows state government, including local governments and school districts, to purchase from ESRI – not only support and training, but the suite of ESRI software. This provides a contract number and cuts out a lot of red tape for purchases. The blanket purchase order (BPO) number is 071B9000613.

Mark Zweifler, MDNR, asked Pat Cummings why the new ESRI release is unable to deal with Michigan GeoRef. Some people bought that 3.2 version solely for the Michigan GeoRef utility and it is not there.

Pat Cummings, ESRI, responded that the Michigan GeoRef data didn't make the deadline cut off, but is standard in projection functions in 8.0. ESRI is talking about a 'fix' to incorporate the data into the ArcView 3.2. It is not a matter dollars and cents, but rather a functionality issue.

Rob Surber, MIC, added that he gets calls from people around the state that can't use this utility.

Mark Zweifler, MDNR, asked Bill Enslin, MSU, if the C-map is going to happen.

Bill Enslin, MSU, stated that the delay is due to priorities. They will have to do it soon for Steve Miller, MDEQ, for the DLLs. So they have to finish the codes that they have started already.

XIII. Next Meeting Date

January 13, 2000, 10 a.m. until 12 p.m., Lewis Cass Building, 6th Floor, North Wing, Department of Community Health Conference Room

** If any changes or corrections are to be made to these minutes, please contact the Michigan Information Center at (517) 373-7910.