

**Meeting Description:** Michigan Geographic Framework Users Meeting

**Date:** December 6, 2001

**Time:** 10:00 a.m.

**Location:** Michigan Information Center, George W. Romney Building, 10th Floor, Conference Room

I. Approval of November Meeting Minutes

The 'FINAL' copy of the minutes will be posted on the Michigan Information Center home page ([www.state.mi.us/dmb/mic](http://www.state.mi.us/dmb/mic)).

II. Geographic Framework Program

A. Version 1a/b Discussion

Rob Surber, Michigan Information Center (MIC), reported that the MIC is currently in the process of finalizing Version 1b. MIC is working with the Michigan Department of Transportation (MDOT) on quality control for Wayne and Oakland County.

Joyce Newell, MDOT, added that the work on Oakland and Wayne Counties is practically done. The plan is to merge the 4 counties together for the Metro Region and do the regional check. The checks are going well. Oakland County went fast because of the work that Michigan State Industries' (MSI) did for MDOT.

Rob Surber, MIC, commented that MIC's turnaround will be quick.

Joyce Newell, MDOT, stated that MDOT is planning to be done by the end of the year.

Everett Root, MIC, stated that it takes half a day to put the changes in and 2-4 days to do the statewide checks.

Tracy Aichele, Michigan State University (MSU) Center for Remote Sensing and GIS, added that she has communicated with Everett Root, MIC, about corrections to city, township, and county polygons that might be in Version 1b. This might also extend the time. The label is switched left and right and needs to be changed before the final version.

Everett Root, MIC, commented that these corrections will be put in now.

Ann VanSlembrouck, SEMCOG, asked if there is documentation to explain the differences between Version 1a and Version 1b.

Rob Surber, MIC, stated that the metadata will be sent out with Version 1b.

Everett Root, MIC, added that MIC could prepare a separate paragraph summary.

Rob Surber, MIC, commented that this data will be put on the web site. There is no difference in referencing between Version 1a/1b. All referencing, identification numbers, roads, and columns are the same - except values of a couple columns may change.

B. Repositioning Update

Rob Surber, MIC, distributed a repositioning status map as of December 3, 2001. The unit of work has been the Digital Ortho Quarter Quad (DOQQ) for the statewide product. Over 70% of the DOQQs have been looked at and the road features and half of the Physical Reference (PR) roads statewide have been adjusted. MIC has been doing specific project planning and estimating. The MIC is on schedule for February and has been putting more staff on the project. 500-hours/week total is being spent on the project. Since partnerships to provide centerline products, there is a different process for Wayne and Ottawa Counties. MIC has developed a process to use Wayne County's centerlines to capture spatial position. It has been tested and is now ready for production. MIC is estimating that at the current rate it will take 5.5 months to finish Wayne County, which will not meet the February deadline. But with the new process MIC is anticipating 1-1.5 months to complete. PRs and node IDs are being used. MIC is using an "intersection approach process" – for every intersection the number of approaches in each file is counted and where the approaches are the same, can provide a link to the file.

Tammi Shepherd, Wayne County GIS, stated that they have a program they use to assign node Ids and does the same thing and they have scored the nodes on how well they match the MIC file.

Rob Surber, MIC, added that they will save all of the differences and categorize them for future work. There may be differences in standards. Some of the same tools are being used for Ottawa County, which is a little easier because they started adjusting and realigning with a final version.

Version 2 will contain the realigned roads, updates in city boundaries, and minor trunkline changes, but no local road updates.

Dave Tijerina, Lansing City Assessor, asked how accuracy improved from Version 1 to now.

Rob Surber, MIC, responded that they are looking for a more accurate measure. Have been using DOQs - some are 1:1,200 and some are 1:12,000. MIC started with the framework process at about +/- 60-70. They are confident that they will be below +/- 20 for statewide centerline. MIC's goal is to get it on the road somewhere. The centerline represents the road - not curbs etc. This should be good for most applications. The two quality control measures are position and length measurements. A lot of work has been done.

Sherm Hollander, Michigan Department of Natural Resources (MDNR), added that the DOQs have scale accuracy of +/- 30-40 feet, which is the national standard. Considering the lack of topography for the state, it is probably better than that.

Rob Surber, MIC, stated the plan is to get a sample of center of intersection control points by county.

Joyce Newell, MDOT, commented that MIC has discussed this with MDOT and they hope to set up standards and collect points in the summer to get a measure of how accurate it is county by county.

Rob Surber, MIC, it is a credibility thing and is an important service to the GIS community.

#### C. Digital Ortho Update

Everett Root, MIC, reported that the process is that the digital ortho's arrive at MDNR from the United States Geological Survey (USGS), are converted and reprojected to Michigan GeoRef. MDNR makes a copy for MIC servers, which are then available to MIC staff for repositioning.

Rob Surber, MIC, added that MDNR adjusted their production and the delivery rate to match MIC's work rate.

Sherm Hollander, MDNR, distributed 1992 Series DOQ and 1998 Series DOQ status maps. MDNR is working with pre-validation copies (have not been validated by USGS) of the 1998 Series. Past experience shows that contractor produces acceptable products and they have passed the USGS validation. The information on maps may vary from information on web site product (which only shows DOQs that have passed USGS validated). MDNR is concentrating on processing the 1998 Series and will complete the 1992 Series as time permits. In the process of negotiating with USGS for completing the 1998 Series, they hope to get into production next fiscal year but will depend on funding sources. Planning to complete the Upper Peninsula and southern half of the Lower Peninsula by the end of next year with funding that is firm.

#### D. National Hydro Data (NHD) Update

Rob Surber, MIC, has, in the past, reported to the group about the pilot project. MIC held off on repositioning hydro in hopes that what they learn from it can be folded into a more comprehensive statewide effort.

Steve Miller, Michigan Department of Environmental Quality (MDEQ), stated that a key person, Eric Ivanovich, left the Fisheries Institute but they continue to work on high resolution hydro while they try to hire someone. Eric developed the conversion program from framework data to what is needed to input into USGS processing. This has not been done.

Rob Surber, MIC, stated that the United States Forest Service (USFS) is also doing work.

Steve Miller, MDEQ, commented that the USFS was to contract with the areas the Fisheries Institute did not. There are a lot of efforts going on out there. Oakland County is starting an ultra-high hydrography. Work is also being done in the Upper Peninsula by Indian tribes. There is a hodge-podge of activities. It will be interesting to see the results of all these efforts and how they come together.

Rob Surber, MIC, added that he will see if he can get a current status report.

Steve Miller, MDEQ, commented that it has been suggested that the group establish a web site to share data. Steve will get links from Charley Hickman, USGS.

Rob Surber, MIC, stated that the MIC wants to plan for next year and needs to know what is planned so that they can take steps.

Dave Tijerina, Lansing City Assessor, asked if this effort has anything to do with topo maps.

Steve Miller, MDEQ, responded that the National Hydro Data Set is an attempt to build networks with all the rivers. USGS was using data, Environmental Protection Agency (EPS) was using Reach files and they were inconsistent data sets. There is a national effort to pull those together at a 1:100,000 scale. The group wants to take the data set and that resolution and bring it down to a high-res data set, which is an equivalent to topo sheets. There are efforts to use other information that is higher res. The depiction of the stream network is derived from the topo maps.

#### E. Address Range Updates

Rob Surber, MIC, reported that this work has been put on hold because of road system work. MIC has begun work to develop routine to capture new address range information from TIGER files or centerline products from counties. The goal is to quickly get in as much as possible without conflicting with existing addresses. Users will not have to wait a long time to get data. MIC staff are familiar with working with address ranges are working on the automation rules. Because of the TIGER Modernization Effort, the census bureau is interested in TIGER updates and making it better next time. An advantage is the direct ties MIC has to the state Qualified Voter Files (QVF), which is a statewide voter registration list and MIC gets updates daily.

Jeroen Wagendorp, Allegan County, asked if there are any confidentiality issues between address ranges and voter registration file.

Rob Surber, MIC, responded that the MIC does not work with names just address range information. When the voter addresses are real and if there are missing addresses, it is a good quality control check.

#### F. Center for Digital Government Award

Rob Surber, MIC, reported that the state received an award from the Center for Digital Government, Government Technology magazine. In the Geographic Information Systems (GIS) and transportation category Michigan got 5th place.

Eric Swanson, MIC, added that the survey came out to all states. This monthly meeting was recognized as highly productive for coordination within the state. Online access to GIS information - sighting the MDNR's Spatial Library, MDEQ's internal sites (soon to be public), and MIC's clearinghouse efforts. The transportation side was dealing with the intelligent transportation systems online. Michigan is a leader in this effort, but it is not fully implemented at this time.

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

Sherm Hollander, MDNR, has nothing further report.

#### IV. Michigan Department of Transportation (MDOT) Projects and Activities

Joyce Newell, MDOT, reported that they have been working on publishing a Control Section Physical Referencing (PR) Atlas of the state trunkline. This is to assist anyone referring to Michigan roadways for project information. Considering putting data on their intranet and even on the internet. Federal funding requires a route number be assigned to every road that qualifies for federal funding – MDOT is using the PR numbers. MSI assigned PR numbers to all current projects in the MDOT database. MDOT is providing maps and a PR Finder Tool for Regions and Transportation Service Centers (TSC) to find PRs and mile points. The new framework referencing system into Transportation Management System (TMS). MDOT has authorized release of Version 1a and preliminary Version 1b to RoadSoft Users Group so they can prepare geographic files and software for Michigan counties, except for Oakland and Wayne. They may have to rewrite for Wayne County so that it can use Oracle. Considering rewriting RoadSoft to handle larger areas and make more multi-user friendly. RoadSoft has a number of management systems to monitor traffic, road conditions, guard rails, and pavement markings, and culvert markings. MDOT is pushing for Asset Management to include not only trunkline, but all roads in Michigan so that money will be allocated properly and can be allocated to unit that owns the road. That is the point of Asset Management.

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

Steve Miller, MDEQ, reported that MDEQ is moving into the new Constitution Hall building in Lansing. Half of the department is there now. The total move is to be complete by the first of March. The computer services are also in transition. There are mapping on-line issues - firewalls and getting things through it. The Spatial Database Engine (SDE) will go through but some other information has not been successful. They plan to move to the new version of SDE that handles rasters and the new version of ArcIMS next month and want to upgrade applications in conjunctions with getting them on the new server. John Clark, MDEQ, is working on the subject profilers and the address ranges. Trying to make it consistent for a facility to see permits and interactions of the department. The consultant working on this recognizes that the spatial aspect is important. Tracy Aichele, MSU Center for Remote Sensing and GIS, is working the MDEQ Well Log project. All state Well Logs have been scanned into a PDF format. There is an internet application to download files. If want to purchase a CD, MDOT has contracted with MSU and a site is online now.

Tracy Aichele, MSU, added that it can be ordered. It is the Well Logs in PDF version organized by section.

Steve Miller, MDEQ, stated that all USGS records (700,000). MSU Center for Remote Sensing and GIS developed a nice viewer and county map.

Tracy Aichele, MSU, stated that they are creating PDF showing basic feature of county and township section corners that will go out with the Well Log viewer. This is on the internet: Wellogs.crs.msu.edu The application is not up.

Steve Miller, MDEQ, commented that the site has many applications because MDEQ has much data stored by section, town, and range in PDF format. The other component for Well Logs is that they are trying to get them in digital form along with history Statewide Ground Water Database and Well Key and now rewritten into Well Logic (which has 250,000 records that are digital). The goal is to get all records from January 2000 in digital form. The program allows well drillers to enter data directly. That data is on their IMAP application and in a SQL database.

Tracy Aichele, MSU, added that the Well Logs will work with the map image viewer. There is a tool in the map image viewer to click on and it will pop up the Well Logs.

## VI. Michigan State Police (MSP) Projects and Activities

Nobody in attendance.

## VII. Michigan State Industries (MSI) Projects and Activities

Carol Woodman, MSI, reported that they have finished the Highway Performance Monitoring System (HPMS) for MDOT. They have the last section, the SEMCOG, of the All Seasons Project (attributing truck routes) to complete. They are pending on an As-Built Project to attribute plans to the framework base. The data goes back to 1950 and tied to piece of road. Thought they were finished with the PR Finder Project but understands that there is more work to be done on that.

## VIII. MIC Projects and Activities

### A. Michigan Schools Info Online Update

Rob Surber, MIC, reported Michigan School Information Online has been released publicly ([www.michigan.gov](http://www.michigan.gov) under education). There is a mapping component to search MEAP test scores by building. The plan is to have a power geo search. This project is getting a lot of press.

Eric Swanson, MIC, stated that this is MIC's first jump into ArcIMS and SDE. MSU has been getting MIC up to speed and getting the servers operational. e-Michigan has talked to MIC about other projects.

### B. New Legislative District Boundary Descriptions

Rob Surber, MIC, distributed an example of the new legislative district boundary descriptions. This will be on MIC's web site and will be linked to maps. Many local units of government have realigned their precincts. Boundaries are made with Census TIGER files with block and tract descriptions – which most people are not familiar with but they do know roads. MIC is making a few boundary map adjustments, but not statewide. Maps and legal descriptions for the senate and congress are on MIC's web site and the house will be early next year. MIC has maps for all but the initial maps did not have the boundaries labeled. They seem to be more complex this time than in 1990.

### C. Optimization of Web Maps

Rob Surber, MIC, reported that MIC developed a procedure to optimize static web maps in PDF format to reduce the file size in many cases to less than half. The printing is less than half the time. There is no reduction in quality. This is a raster file - takes it out of the vector mode. MIC is trying to streamline the process. MIC got into this because of the control section atlas. MDOT stated that the files are over ½ meg. Dan Metzger, MIC, is the contact. MIC is using a combination of software products. Can batch process. MIC staff is developing an article that Dan Metzger will present at IMAGIN Conference.

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

Tracy Aichele, MSU, reported that they are working on school online and the Well Log. They are creating a web download for the map image viewer. Tracy will be doing map image viewer training in Escanaba County in March. Hope to have Version1b data before the Source Water Assessment Program (SWAP) meeting in February.

Steve Miller, MDEQ, added that the intent is to distribute the map image viewer with the most up-to-date data. It will go all Source Water Assessment Program to the county health departments. MDEQ will be providing the viewer and the data for each county free-of-charge.

## X. County / Local Projects and Activities

Jeroen Wagendorp, Allegan County, reported that he attended the REGIS ribbon cutting ceremony Monday, which had media attendance. Ontonagon County, which is referred to as a 'frontier county', is signing a parcel mapping contract with a private company.

Rob Surber, MIC, added that 'frontier county' is a federal label for the health care profession. They try to get doctors to certain areas.

Tammi Shepherd, Wayne County GIS, reported that they are working on their regular projects; have completed the conflation project; and are starting to update address ranges to get version release, beta release. They are starting to coordinate with DPS Department about who will maintain updates and PRs and how they will work with the MIC. They will want to discuss with MIC. Their photo request for purchase (RFP) in progress for the production for last two flights and the next three flights. Now they are flying five sections to keep aerial photography up with areas that are growing. They are going to reduce to four sections. They fly something every year. Wayne County is working on a parcel project and are looking at addresses on their parcels. This might be a source in relation to address update. Tammi is working with the police departments to update address ranges for seven Courts and Law Enforcement Management Information Systems (CLEMIS) communities on the framework product down to the intersection level. Tammi thinks Macomb County is using framework also.

Steve Miller, MDEQ, asked when can others take advantage of that data.

Tammi Shepherd, Wayne County GIS, responded that the Wayne County file and the MIC file need to be merged.

Rob Surber, MIC, added that the process MIC is going through now will show where data is good or not good. Will know more next month and then it will be as fast as Wayne County can get it in. Many of counties haven't gotten far with centerline work and are waiting for MIC to finished their part. MIC will tag as a local update.

Tammi Shepherd, Wayne County, added that any information that any county is interested in as far as the conflation contract with vendor can be shared to any body.

Dave Tijerina, Lansing City Assessor, reported that the city has hired a new GIS coordinator, Sam Quon. The person in this position touches all departments.

Rob Surber, MIC, stated that MIC staff met with Sam Quon about standards.

Dave Tijerina, Lansing City Assessor, added that the city is trying to get the address file as accurate as possible. Worked with Census Bureau and upgraded all info – spelling, suffixes. Now the city feels they have good product.

## XI. Regional Projects and Activities

Ann VanSlembrouck, SEMCOG, reported that they have finished block attributes for Livingston, St. Clair, and Washtenaw Counties but still need to do quality control checks. When complete, will return the files to MIC.

Rob Surber, MIC, added that SEMCOG has been tagging census blocks to the framework. MIC only went with block groups statewide.

Ann VanSlembrouck, SEMCOG, stated that they are also working on their 2002 Land Use Update. They are going back to 1990 and 1985 then can show true change. In Oakland County they have one township done; in Washtenaw County they have three townships done; in Wayne County they have one township done; and the northern strip of Monroe County is complete. They are also in the process of updating their master plan layer.

Rob Surber, MIC, commented that in one of SEMCOG's reports it had a manufactured housing report and asked if this had been mapped.

Ann VanSlembrouck, SEMCOG, responded that it was mapped, but may be out-of-date.

Jeroen Wagendorp, Allegan County, stated that there is proposed legislation to keep manufactured housing mix to under 10% per county. There is one township in Allegan County that is close to 60%.

Dave Tijerina, Lansing City Assessor, added that there is also proposed legislation to assess mobile homes at market value. They are currently charged \$3 per month instead of property taxes.

Rob Surber, MIC, commented that there may be mapping interest in this area.

Abby Mueller, West Michigan Regional Planning Commission (WMRPC), reported that they are finishing job access goals. They had a planning meeting with Wade Trim and MDOT to develop a committee to help traffic development. They are working on recreation plans, land/use for Osceola County.

Laura Tschirhart, Tri-County Regional Planning Commission (TCRPC), reported that they received the Family Independence Agency (FIA) database containing 10,500 client records for address matching for a transit coordination project. The project will include FIA clients, employers, daycares and transit routes.

Tracy Aichele, MSU, commented that they are working with FIA and they talked about PostalSoft, which does address matching against GDT. Will provide Laura with contact person name.

Rob Surber, MIC, stated that MIC created a link between the state human resources database and work site locations. People interested in planning may want to know that.

Laura Tschirhart, TCRPC, stated that they are finishing their town forums today. They have done Ingham, Clinton, and Eaton Counties. The forums address regional growth and TCRPC gives alternatives and get the counties' reactions.

## XII. Federal Projects and Activities

Nobody in attendance.

## XIII. Other Issues

Llana Hines, VARGIS LLC, reported that they are the DOQ producer for MDNR. USGS awarded VARGIS for top performance. It is nice to see the states using data so quickly.

Sherm Hollander, MDNR, complimented VARGIS on the quality of their product.

## XIV. Next Meeting Date

January 10, 2002, 10 a.m. until 12 p.m., Michigan Information Center, George W. Romney Building, 111 S. Capitol, 10<sup>th</sup> Floor, Lansing, MI 48933

\*\* If any changes or corrections are to be made to these minutes, please contact the Michigan Information Center at (517) 373-7910. Changes and corrections will be noted on the final copy to be posted on the Michigan Information Center's home page ([state.mi.us/dmb/mic](http://state.mi.us/dmb/mic)).