

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

**Date:** October 8, 1998 **Time:** 10:00 a.m.

**Location:** Lewis Cass Bldg., 6th Floor, North Wing, Dept. of Management and Budget, Director's Conference Room

Scheduled Time			Actual Time		
Start	Stop	Total Hours	Start	Stop	Total Hours
10:00 a.m.	12:00 p.m.	2	10:00 a.m.	12:00 a.m.	2

## MEETING MINUTES

### I. Geographic Framework Project

#### A. MIC Project Update

##### 1. MALI to GIS Conflation (Phase 2a) Status

Rob Surber, MIC, reported that the MIC is putting the linear referencing system on the base map and fixing all of the road features. There are 21 counties in progress and 9 counties have reached an identity point with all of the current version of MALI represented on the map. Because the last 5 % of the data takes quite a bit of time to finish off, the MIC has instituted a new procedure of finishing off counties. They have developed a 'swat team' of people to finish off counties and to deal with the remaining problems. This seems to be working well and they expect to have Emmet and Manistee counties done by the end of the week. They are trying to work on a two-county per week basis. The MIC has been working with MDOT on establishing priorities for the delivery. They are also looking at potentially bringing on more people to match the needs of MDOT's delivery schedule.

##### 2. Barry County

Rob Surber, MIC, reported the MIC has completed the address updates for Barry County. In doing the work, they found that the source maps and ordinances don't always match. They are trying to resolve some of these problems.

Alden Leatherman, MIC, displayed the Barry County status map, which shows the amount of work that was done, how many segments actually were updated with addresses, and the unresolved issues where source materials disagree.

Rob Surber, MIC, commented that the MIC is collecting official contact persons in each county area in the state. He hopes these contact people will be interested in the discrepancies being found in their source materials provided for the framework project and that they would want to be involved in the final review. The Barry County map product displayed at the meeting indicated how much work had been done to clean up this addressing from what was in TIGER. The original TIGER file sometimes would show an address on the wrong side of an intersection or in the wrong block or jurisdiction. The Census Bureau is going to want to tie into this updated version. The goal is to make sure people are assigned correctly because of the impact on funding for some of the rural townships that rely on accurate census locations.

Eric Swanson, MIC, added that the MIC can point out the differences in the sources, but the local contacts are the ultimate authority. There is a lot of local interaction and they are working very hard to come to a reconciliation.

Rob Surber, MIC, stated that the MIC is finding that this effort and the fact that there is a common theme the agencies are working on, has brought different agencies (mapping center, equalization office, 9-1-1, police, traffic) together. We provide the topic for discussion, but the counties actually get it going. Rob also stated that all data edits and source materials are documented in the Metadata on the file. The MIC is writing procedures, based on their work on Barry County, which will help guide other counties who may want to partner in the future.

## B. Framework Update and Maintenance

### 1. Livingston County 9-1-1

Rob Surber reported that he met with Livingston County. The county is starting a 9-1-1 program and they are interested in getting a street centerline file for their system. They also will be partnering with the Clemis 9-1-1 system in Oakland County. The main goal is to discuss how to share the current framework data with ongoing projects around the state. In this case, Livingston County needs the data faster than the MIC can provide the Phase 2 part of the project. The County will take the current SEMCOG file and start working on it with their vendor. The MIC is interested in making sure the vendor sets standards so the MIC can use anything that is added to the file and incorporate back into the data base. Rob is hopeful that by partnering in this way they will be able to cut cost and make this a better product faster. The MIC will be sharing source materials (QVF maps, close maps, and etc.) with them. Livingston County is also establishing a county GIS system which ties into 9-1-1. The system will involve all major mapping offices in the county. They want to establish a base map that will support all of their business needs. This is a good thing for the framework, because any partnership with framework would be more comprehensive and integrated in nature. Rob is hopeful that an ongoing partnership will make the framework in this county top notch.

## C. SEMCOG

Steve Perry, SEMCOG, distributed a current status of southeast Michigan portion of the framework project. For the next two weeks, Deena MacIntosh will be available to answer questions.

## D. Other Framework Initiatives

### 1. DEMs

Mark Zweifler, MDNR, reported that they have been working with Rob Surber, Gary Bilow, and Roger Gauthier, and Mark Coppersmith and M.S.U. to develop consistent high quality DEM database for the state of Michigan. Mark brought a status maps displaying 4 categories in the state. Level 2 data is the highest quality DEMs produced by U.S.G.S. and is produced at 2 resolutions both 30 and 10 meters. Level 2 indicates data that is available on the web site. Level 1 is available in a different type of format, is not available on the web site and is available for purchase. Mark understands that Dr. Dave Lusch, MSU, plans to spend approximately \$1400 to acquire the DEMs.

Rob Surber, MIC, distributed a description of the DEM classification levels from standards section of the U.S.G.S. web site.

Mark Zweifler, MDNR, stated that the Army Corps of Engineers is contracting to produce approximately 150 additional DEMs which are due to be completed the end of October. There are approximately 125 quads that have not been produced at all.

Mark suggested that it is easier to produce county mosaics of the DEMs, since most people know where to find 83 counties in Michigan. But when you do that you often get a patchwork of the Level 2 versus Level 1 DEMs, which are significantly different. This makes it difficult to do any regional modeling. The goal is to get costs and time estimates for producing a consistent DEM database. The first option would be the Level 2 - 30 meter data. Mark estimates \$100,000 if they go through U.S.G.S. This figure is based on creating Level 1 for the remaining 125 quads and then upgrading them to Level 2 - 30 meter. Mark stated that they would like to consider other options and potential funding.

Roger Gauthier, U.S. Army Corps of Engineers, indicated that he may have up to \$50,000 – \$100,000 for a project such as this.

Rob Surber, MIC, asked if there were talk of the U.S.G.S. putting the non-SDTS areas into GIS format.

Mark Zweifler, MDNR, responded yes, but that it is difficult to get a timetable. He doesn't feel that the non-SDTS area will take long to do and it should be fairly easy to get up on the web, because the contractor should be producing them to certain spec.

Rob Surber, MIC, stated that of course a timetable would be real helpful when trying to plan. These are in STDS format and IMAGIN can bring them in. There is also a viewing and conversion software that can be downloaded off the Internet, which the MIC has done and it works well.

Mark Zweifler, MDNR, commented that Dr. Dave Lusch has produced several county mosaics. Frank Sapio developed a batch process for bringing the DEMs into a useable format.

Rob Surber, MIC, asked what the file size is.

Mark Zweifler, MDNR, responded that he was unsure, but guessed maybe 5-8 megs.

Rob Surber, MIC, commented about the DEM Standards Page that was distributed, which discusses accuracy, differences between Level 1 and Level 2 and Level 3. This document is helpful in understanding terms when talking about DEMs.

Dave Gerczak, Army Corps of Engineers, asked about the DEMs up in the northwest part of the state that are unavailable, there has been DOQ production in that area and the DEMs may be available through U.S.G.S., Water Resource Division, in Ann Arbor. The Corps is planning to create DOQs along the lakeshore in the U.P. When they did a project with U.S.G.S. to create Level 2 DEMs in the lower peninsula, it was his understanding that U.S.G.S. was going to complete the upper peninsula. The Corps wanted to complete the DEMs along Lake Michigan, where they have the Lake Michigan Initiative, but the U.S.G.S. said these DEMs were going to be completed with the rest of the state within the next year.

Mark Zweifler, MDNR, commented that this is a snapshot and he feels good about the status as of September. It is going to be constantly changing. They need to decide whether to wait for U.S.G.S. to do it or to can consider an initiative to partner with U.S.G.S. and get it done on a timely basis. They need to figure out what the costs of waiting are.

Dave Gerczak, Army Corps of Engineers, responded that they could do a cost share. He is project manager. Dave and Mark agreed to talk later.

## 2. Hydrography / Reach

Rob Surber, MIC, reported there has been an informal group meeting to discuss pooling resources and mapping the EPA River Reach codes for identification on the framework base as an additional set of attributes. There is also talk of adding more attribute breaks associated with ecological areas and changes along with the hydrography features. Mark Coppersmith, U.S.G.S., sent information including the standards for the DLG 1:100,00 mapping of the Reach system. They have the data on the lines, but they are going through quality control. Mark Coppersmith was unsure when the work would be done. The hydrography group came up with a plan to go forward with pilot areas and then talk to U.S.G.S. and see if they can get the Reach DLG information for those pilot areas. The group is trying to decide which drainage basin would be best for the pilot areas. The U.S.G.S. has been coding the HUC 8 Watershed level, so the group was looking at the west side of the state and possibly the River Rouge area. Rob spoke to Charlie Bristol, of the River Rouge project, and he will be meeting with Rob next week to get an update on the framework project. Charlie is interested in possibly volunteering his group to do some work. DEQ has also expressed some interest in doing work in the Macatawa area on the west side of state. The group is searching for an area that could tie into the existing work so that they don't have to fund a pilot project. The idea is that conflation would be done by hand onto the rivers so that they would know all the rules, decision points, and decision making conditions. Any tools that could be developed for the production would be fairly straight forward once the rules, conditions and standards are established. The real issue now is getting a scope of the project, how much money it might cost, what the standards would be, and then sending it back to U.S.G.S. for comment and possibly for future partnership. The innovative partnership program is changing – there used to be an open window any time during the year when you could discuss an innovative partnership, but now there will be a designated time period to apply. The group is hoping to start the pilot and then hit the window some time in the future for an ongoing cost share to complete the state on the Michigan framework. This would work well with the framework in terms of production for finishing off the counties to avoid any holdup on actual delivery of current production of the transportation base. Paul Seelbach will write a basic proposal, advise all agencies of where the group is currently, what the group hopes to do, and see if there is interest in participating in a working group to look at establishing a pilot project. It will require a lot of expertise from the users' side as well as the framework side to see that it gets off on the right foot.

Dave Gerczak, Army Corps of Engineers, stated that the Corps would have Lake Macatawa color infrared DOQs available by December. They are creating DOQs for all of Ottawa County and one quad south of there.

Eric Swanson, MIC, commented that Roger Gauthier, Army Corps of Engineers, indicated that the Corps would be putting a tremendous amount of effort on Ottawa and Allegan counties this year.

Mark Zweifler, MDNR, commented that another potential partner is the U.S. Forest Service. They were selected for a contract to do something similar in the Manistee National Forest.

Jerry McKane, USDA, Forest Service, stated that they were looking at using the route system on the hydrology coverage.

Dave Gerczak, Army Corps of Engineers, asked what scale is being looked at for pilot project.

Rob Surber, MIC, responded that the idea is to take conflation of the 1:100,000 Reach attributes and possibly add some more Ecosystem attributes and put to the

1:24,000 scale centerline data.

Mark Zweifler, MDNR, asked how the issues that Jerry McKane is concerned about (i.e. centerline threads in lakes and double-sided rivers) would be dealt with.

Rob Surber, MIC, responded that there are a lot of similarities with not only the conflation that was done with the transportation base, TIGER to MIRIS, but also with respect to the linear referencing system to make sure certain attribute rites are maintained and historical data is preserved. Lessons learned could prove to be useful in this process. There is no real timetable, although there is a lot of interest in moving as fast as possible. The pilot work is one thing and the actual production work is another. There may be timing issues that will need to be worked out because of the current priorities of the transportation base.

### 3. DOQs

Rob Surber, MIC, commented that more DOQQs have been added to the status map. Now there are 1,759 available DOQQs for Michigan and 6 counties are already on CD. The rest are sold directly as files - the price has been reduced. Approximately 1,434 remain that aren't covered under the CD county file sets. There are approximately \$10,755 for the remainder of the state. Rob is not aware of any agency that has all of the DOQQs. The MIC is interested in getting these for projects and is looking into it.

Dave Gerczak, Army Corps of Engineers, stated that they have hundreds that they made of the southwest shoreline, which Dave will be delivering to Sherm Hollander, MDNR, after the meeting. The DOQQs include the townships along the shoreline in Berrien County all the way to Muskegon. The state was to be flown in 1997, but Kodak couldn't come up with color infrared film, but a contractor had film and flew that area. Dave has a set of 40 CDs which come with DEMs and are TFWs in Michigan NAD 83.

## II. MDNR Projects and Activities

Gary Bilow, MDNR, reported that they have been working on a 40 acre grid coverage for the entire state based on MIRIS section lines. They think they have all of the bugs worked out of the process and will go into production – will probably be ready in couple months. They are cleaning up grid lines so they conform to rules of the general land office survey as much as possible. There is no shoreline – if there is any kind of land in a particular 40, then the whole 40 will exist. They will not superimpose any shoreline on it. It is polygon base and will be attributed with town range and section (will be in typical text form of T01 and assigned integers) and quarter quarter sections. Realistically it will be QAQC and will probably be available by the end of the year.

Rob Surber asked how they are seamed together.

Gary Bilow responded that there would be section lines and 40 lines (for lack of a better term.) They will be all seamed together by township and county lines and there shouldn't be any slivers. It is in Michigan GeoRef. There will not be duplicate sections. They will do a proximity check on the polygons that represent the sections to make sure that correct sections are adjacent to section numbers they are checking. They have an ongoing project to create French claim coverage, some are bounded by rivers which is a problem. Next thing they would like to do, but don't have funding for, is to attribute coverage and add it to the government lot designations that are on the original general land office survey plats.

Bill Enslin, MSU Center for Remote Sensing and GIS, commented that they wrote a program to take GLOs and construct the lots around them. They got information from an Indian tribe in the state.

### III. MDOT Projects and Activities

Gil Chesbro, MDOT, reported that they have been approached by Wayne County, Public Works and Transportation Dept., to look at a current proposal contracted to TransMap to drive the roads in Wayne County. They are going out with a GPS system in a truck with inertial guidance and mapping centerline and also taking digital photographs every 35 feet with stereo cameras. From this with their software, they are able to create a database of roadside attributes, i.e. traffic signs. Wayne County approached MDOT to see if they would pick up cost of doing state trunklines.

Joyce Newell, MDOT, added that it would mainly involve the freeways because most of the other trunklines have been picked up by other agencies. They have four cameras. They are aiming two of them at 45 degree angles off the roads.

Joyce Newell, MDOT, reported that they are currently working on attribution of the first two counties they got back from framework that are supposed to be up to 1997 certification. They are finding a few discrepancies, but these may be because Act 51 is not always accurate. They are trying to add a comment field to note the discrepancies and avoid making any changes to the map so that when it is returned to MIC, it can be verified. If they discover a road that was not on the basemap, they would add it to a different layer for information so the mileage will be available. They will not be editing the actual framework base. There are situations where there are certified roads indicated, but they could not possibly be traveled. They will not ask MIC to add these roads to the base map, but MDOT does need a record of them.

Eric Swanson, MIC, commented that as the framework goes into production in the business application, this scrubbing will find things because of different applications. Hopefully, as the information is brought into a maintenance schedule it will be semi easy to keep up to date.

Joyce Newell, MDOT, stated that another issue related to maintenance is that around April there will be a national functional reclassification of all roads in Michigan. So when they are finished with attributions, there will be a need to update the national functional class. They have also begun the unique identification of the bridges.

### IV. MIC Projects and Activities

Rob Surber, MIC, reported that the MIC is now starting project to map cancer cases around state for the Dept. of Community Health. They are interested in relating cancer cases geographically to other sorts of issues. This is a confidential data set which will be done through the framework and will be an ongoing project for the next few months.

Rob Surber, MIC, reported that the MIC created a mapping program for the governor's office, the Secretary of State's office, and legislative leader's offices to print district maps for the Census 2000 Enhanced Access (Redistricting) project.

Eric Swanson, MIC, added that the MIC put computers and plotters in each legislative leader's, governor's, and Secretary of State's offices. This is a non-partisan project where the MIC is producing the census mapping database. The name was changed from Redistricting to Census 2000 Enhanced Access. The data is housed on a server. All offices have copies of ArcView and the MIC will train them how to use it to manipulate data and maps. Ultimately aspects of the project are 10 years worth of general election data (1990-2000) to the precinct level; 1990 and 2000 demographic data including total population and race characteristics aggregated to general election precincts; general elections precinct boundaries for 1990 through 2000. This is a four-year project running through 2000.

### V. MDEQ Projects and Activities

Nothing to report.

#### VI. SEMCOG Projects and Activities

Steve Perry, SEMCOG, reported that they are spearheading Metadata creation for SEMCOG. They are looking at various tools, for example DataLogr. They want to be in compliance with MIC and have a compatible format. This is a prelude to putting on-line.

Rob Surber, MIC, is going to SEMCOG today to talk about initial data captures for surveys that will be going out. He is hopeful that they can keep in touch with what Imagin will be working with.

#### VII. Tri-County Regional Planning commission Projects and Activities

Nothing to report.

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

Bill Enslin, MSU, reported that they started a new project assembling historic land cover land use data from 1978-79 MIRIS land cover use, which was assembled for the whole state. They are working with MIRIS on the IMAGIN program to clean up the files to use polygon coverages – ever since then they have existed as township layers. They have had a request from Ag Engineering who is working with PA116 maps. Ag Engineering wants to do analysis of the statewide land data use coverage. The Center is using the machines in the training lab to take the original township coverages in CMAP, and converting into ArcInfo to assemble into township and county files to eliminate slivers. This historic data set could be important if ever there is a need to look at land use changes on a statewide basis.

Bill Enslin reported that Imagin had an election for new board members. Three seats were filled by new individuals. Bill encouraged people to attend county conference in Crystal Mountain, MI, October 26-27.

#### IX. County / Local Projects and Activities

Dave Tijerina, Lansing City Assessor, reported that MSI digitized the city's maps. They got quarter sections digitized, but are having a problem tying them all together. They just got their Mylar maps back in their office and now need to tie those maps together.

#### X. U.S. Census Bureau Regional Office TIGER Update

Nothing to report.

#### XI. Federal Projects and Activities

Jerry McKain, USDA Forest Service, touched on the water and land ownership layers that they are working on right now. The Huron side is done and they hope to finish the Manistee side this year. This has taken quite a bit of time.

Dave Gerczak, U.S. Army Corps of Engineers, mapped Detroit River last year using 1996 photos. They have created digital orthos of the Detroit River. They have close to 15 gig of digital ortho photography of the river and will hopefully bring it down to 1 CD. They currently have 10 files of the Detroit River, 11 gig of data, which they brought down to a 90 meg file. They expect it to be completed by December. Ottawa County DOQQ coverage should be completed by December. They did land use updates along coastal townships from Berrien to Muskegon. They are now doing quality assurance on them.

Stuart Eddy, Great Lakes Commission, stated that they have scheduled an on-line GIS workshop in December in Chicago. Facility only holds 75 people, therefore it is by invitation only. Looking forward to getting some better contacts with people working with Internet dispersion of GIS data.

## XII. Michigan Utilities Projects and Activities

Nothing to report.

## XIII. Other Issues

Nothing to report.

## XIV. Next Meeting Date –

Thursday, November 12, 1998, 10 a.m. until 12 p.m., Lewis Cass Building, 320 S. Walnut, Lansing, MI 48933, 6th Floor, North Wing, Dept. of Community Health, Director's Conference Room. For directions, call the Michigan Information Center at (517) 373-7910.

 Note - A hard copy of the "PERSONS ATTENDING" portion of the minutes will be mailed quarterly to those who receive the minutes by U.S. Mail.

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