

Meeting Description: Michigan Geographic Framework Users Meeting

Date: July 11, 2002

Time: 10:00 a.m.

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

I. Approval of June Meeting Minutes

When approved, the minutes will be posted on www.michigan.gov/cgi click on Outreach & Promotion, MI Geographic Information Users Forum, Meeting Minutes.

II. Geographic Framework Program

A. Version 2 Update

Rob Surber, Michigan Center for Geographic Information (CGI), reported that CGI has started to cut Version 2 releases. A lot of work has been done on sufficiency. Version 2 with metadata is going to be made available on the web site, but if a file is needed before then, let CGI know. A copy will be sent to Randy Fusaro, U.S. Bureau of the Census and a copy was given to SEMCOG at the meeting.

B. Act 51 Update

Rob Surber, CGI, reported that CGI is beginning to work on Version 3. They plan by the end of the calendar year to have completely reconciled framework to Act 51 file. CGI has 28 people assigned to that process. CGI has completed training and all are either finishing up or working on Delta Township, which is the test training area. Everybody has to end up with a product with the exact Act 51 standards. There are team leaders to work on fielding questions, each has 4-5 people. The group leaders meet daily. Everybody will have to do most if not all aspects of the process, including 10 stages. As part of the process, CGI is finding private roads submitted via the Qualified Voter File (QVF) and are capturing them. All production tools have been developed and have been tested. Envision that after the reconciliation process, the ongoing process will be catching roads at least once a year. Will be getting information from other sources throughout the year. The Act 51 will probably become an attribute of certification on those roads. It will be the last check at the end of the year – a safety net to make sure all new roads have been entered.

Bill Enslin, MSU, asked if the vintage this time around is 2001 certified roads.

Rob Surber, CGI, responded that it is as of December 31, 2001. That is not to say that other roads have been added since that time. That will be the annual cycle. In the future framework users can anticipate a new version after the end of each year. There is discussion of shortening the process of turn around for Act 51 based on technology.

Joyce Newell, Michigan Department of Transportation (MDOT), commented that MDOT is supposed to get the feedback by April or May of a given year. Now it takes the remainder of year to edit and get to framework. It was doing the work 2 times and this will eliminate several months. There are counties that want to send their updates more often to get them in sooner. This is fine as long as they are not tagged for certification.

Rob Surber, CGI, added that the certification process is a once-a-year process, but they can submit throughout the year. The reconciliation work must be done to produce maps in December. Version 3 will be approved at the end of this process.

Joyce Newell, MDOT, stated that MDOT's policy is to mail the maps of the previous year out in January. Must have records to finance by July or August.

Rob Surber, CGI, commented that boundaries can change up to December 31, before the maps are sent out.

C. Digital Ortho Update

Sherm Hollander, Michigan Department of Natural Resources (MDNR), distributed status maps of digital orthophoto quadrangles (DOQ). The 1998 Series color infrared coverage has been added to the web site for the counties of Delta (entire), Alger (all but Laughing Fish Point), Chippewa (all but column of quads along west boundary), Mackinac (east half), Cass (all but column of quads along east boundary), and Berrien (entire). Production work is in-progress for 1998 Series DOQs for Ontonagon, Gogebic, Marquette, and Luce Counties. Full coverage of the Upper Peninsula in the 1998 Series is expected to be available by the end of the year. Production work is also in progress that will complete 1998 Series coverage of Emmet, Cheboygan, Charlevoix, and Roscommon Counties. 1998 series DOQs being produced by U.S. Forest Service (USFS) for the national forests in Michigan are based on mosaics rather than the standard single image. Seam lines are visible in varying degrees. Concerns about the quality of the mosaic work have been forwarded to U.S. Geological Survey (USGS). Work continues to bring 1992 Series DOQ coverage up to MDNR archive standards. Revision work was completed for the counties of Grand Traverse, Wexford, Crawford, Lake, and Mason.

Ann VanSlembrouck, SEMCOG, reported that they had a meeting to discuss SEMCOG coordination of the spring 2005 DOQ with 7 counties within the region. There was good representation including the USGS and the U.S. Army Corps of Engineers. They need to figure out specifics.

Steve Perry, Wayne County, commented that there are a number of planes flying at the same time. That is a waste of resources. In the past there were issues of resolution projection and could not coordinate this effort. Now they are getting down to coordinate the common denominator for resolution and topography. Every 5 years SEMCOG will play the role of coordinating a 7 county regional flight. The resolution project scale is 6-inch pixel, state plain NAD 83. Knowing that every 5 years there will be photography and will have one request for purchase (RFP). This is counties more than cities. Photography is a big item that membership communities need. With budget cuts, SEMCOG was unable to put a plane up this spring and don't see it going up next year. Concerned those communities will do their own flights. That is the worse case scenario, because the cost is through the roof. If one plane flies 7 county region, the cost will drop dramatically. By 2005 technology will change so that digital cameras will probably be available to vendors. They have 1-½ years to get this project together. The goal is get all players who have a need together and do some cost sharing. This will provide baseline photography. There are 2 counties that do not have digital terrain model (DTM) to support 6-inch pixel resolution. This is a time when they can step up and create DTMs or they may be able to use the USGS version. The ultimate goal is to coordinate at the state level. They want to make sure that MDNR knows that southeast Michigan is trying to do this in 2005.

Rob Surber, CGI, stated that there is a lot of interest within the state to do a coordinated approach as well. There is a vested interest to not have planes crossing. There have been discussions about pooling resources at the state level.

Steve Perry, Wayne County, added that they sell photography as a revenue base but not making money off it. If state or federal money and this becomes public domain information that is fine with Wayne County.

Rob Surber, CGI, stated that other options could be to resample what is distributed out at the state level. As long as the better photography can be used for internal use.

Steve Perry, Wayne County, added that they may be able to resample at 1 foot pixel and the counties could sell the 6 inch pixel high resolution.

Rob Surber, CGI, commented that whatever money is taken in from doing that area, could be thrown into the pot. The state can coordinate a schedule to meet everybody's needs. There is no reason to do something totally different. From state's perspective like to hear that there is some

unity at the region or local level. That does not put CGI in an awkward position to have to pick whom to partner with. It seems that 6 inch pixel should support even city work.

Sherm Hollander, MDNR, asked which measurement unit was agreed on.

Steve Perry, Wayne County, responded that it is international feet.

Rob Surber, CGI, asked if there has been a discussion of high growth sites between the 5-year cycle.

Steve Perry, Wayne County, responded in between the 5-year cycle, it is the individual counties' responsibility to fly. They could fly every 2 years or supplement with satellite image. At that time, it will depend on a data sharing agreement relationship with SEMCOG.

Rob Surber, CGI, stated that this is a baseline and there is a lot of high growth in Wayne and Oakland and that would be picked off every other year. There is a cost gain in the baseline product.

Steve Perry, Wayne County, added that everybody is gaining. To fly Wayne County it would cost about \$325,000. If spread across 7 counties it will be substantially cheaper.

Rob Surber, CGI, stated that there was a meeting with stakeholders to get a sense of where people are and there is a definite agreement to come up with common standard baseline and a way to document and track what is going on. There are every day photogrammetric needs that cannot wait for the baseline product. In the past, they have been tucked away in project files and nobody knew where they were. One of the key things to focus on as part of imagery program is to get in common format, common metadata, library resource and a server resource. There are a lot of flights in the corridor studies. And they would be of value to a lot of people. There are a couple of areas that the state is looking at right now. Have not gotten to the point of how the federal government works into this. One item agreed on, is to come to local units of government and say that this is where the state is and see if can interface. Is there a way to contribute state dollars and do more. The state plans to do it at some standards at some scale.

Ann VanSlembrouck, SEMCOG, commented that she has been talking with Charley Hickman, USGS, about a way to partner with the federal government and if so, which program would it be with.

Steve Perry, Wayne County, stated the goal is to have it work for everybody. If USGS wants to get involved, it is better for everybody. It is important to keep on schedule, which is big thing. Counties will fall out if they can't count on it.

Rob Surber, CGI, added the sooner relationships are established, the better.

Steve Perry, Wayne County, stated that his goal is that at this time next year to have a RFP.

Rob Surber, CGI, added that state wants to be coordinated enough that people will know what the state is going to do for standard product development without local or regional involvement and with them it could be better.

Ann VanSlembrouck, SEMCOG, commented that Charley Hickman, USGS, said that New York State has a good example of partnering. And Southeast Wisconsin Regional Planning Commission has been doing a regional effort for a few years.

Rob Surber, CGI, added that what SEMCOG is doing could be done in other areas of Michigan and would be of benefit.

D. National Hydrography Dataset (NHD) Update

Rob Surber, CGI, reported that they are working to finalize an innovative partnership proposal to USGS. CGI is working through budgetary issues. CGI is proposing to have complete NHD River Reach coding conflated to all of the non-Forest Service areas in Michigan to be done at CGI production work. U.S. Forest Service (USFS) areas conflation is being done at the USGS through USFS coordination and the Institute of Fisheries Research. That is going to come as input and CGI will be funded to be sure it is part of the complete state product. One of the components of the proposal is to look at the idea of local update and maintenance. There will

be research and development components for this project and CGI is asking for money to help support that. This will be primarily focused on county and local units of government who are involved with drains or local hydro features. It has to be tied into local update cycle across governmental agencies in Michigan. Maintenance updates will occur mainly at the local level if they can get a good system in place. A 3-year proposal draft was sent out. CGI did send out summary of the standards for repositioning and cleanup of hydro features. There was a lot of input at the April 15 meeting as to what repositioning should be done to the MIRIS product.

Bill Enslin, MSU Center for Remote Sensing and GIS, asked if CGI will be putting this on the web site

Rob Surber, CGI, said yes. These standards are detailed as we think we can go and stay within budget. Most needs are being met.

E. Census Bureau Meeting Recap

Rob Surber, CGI, reported that the Census Bureau met with CGI to discuss how framework can be integrated into the national TIGER Modernization effort. This continues a discussion. CGI and Wayne County had with the Census Bureau. The Act 51 process with official local 'sign-off' is capturing things that the Census Bureau cares about. At the meeting, they went through all the steps that the state is doing.

Gordon Rector, U.S. Census Bureau, stated that the Bureau is working with a vendor, Harris Corp., who has done a lot of work with the Federal Defense Agency. The contractor will take any local files (in Michigan it is framework files) and reposition TIGER to bring within 3 meter accuracy. The Bureau wants to use the framework files to reposition TIGER and bring in additional attributes and features that are not in TIGER. This statewide system seems to meet their needs.

Rob Surber, CGI, stated that CGI will send the new version to the Bureau. The important point is that CGI thinks this should help the 'local to county to region to state to federal' processes of data sharing and update. This should create better communication and coordination between the GIS offices and the road commissions.

Gordon Rector, U.S. Census Bureau, commented that they are still a ways from taking digital framework files, but there are some interim things that they can do.

Rob Surber, CGI, added that the Act 51 process is in the same position. But the Bureau is creating map products out of the digital files. Rob proposes that the Bureau adopt the identification numbers that state uses. This would be a better way to share information. Randy Fusaro, U.S. Bureau of the Census, showed interest but is concerned about the technical issues. Funding is an issue, but from content standpoint the meeting covered a lot of ground. From the state's perspective, the things that makes all look bad is when a local clerk has to pencil in roads that their local GIS office has. It will be an improvement if we can work toward consistency.

Gordon Rector, U.S. Census Bureau, commented that to some local clerks, the state and the federal government are the same.

Rob Surber, CGI, added that there is value in working together, we will all benefit.

Tammi Shepherd, Wayne County, asked if the first phase to get topology repositioned and corrected and a later phase to take attributes from digital files.

Gordon Rector, U.S. Census Bureau, responded that even in the earlier phase, the proposal is that Harris Corp. will look at taking attributes, especially in some of the larger counties. There will probably be more than one go-around of this throughout the decade. This contract goes at least through 2007.

Rob Surber, CGI, added that the Census Bureau was surprised that topologically seamless statewide.

Gordon Rector, U.S. Census Bureau, commented that the Bureau did earlier studies before awarding the contract – headquarters took county files and found that was a major part of it.

In other states where a county doesn't have a file, and know that a file is coming down the road they might put the county on the back burner; if there is a major city that has a file, they will look for those; and if there has been recent photography, they will try to get that. If worse comes to worse, as part of the American Community Survey, field enumerators are being trained with a laptop version of TIGER and they will use Global Position System (GPS) to reposition. There may be some rural areas where 3-meter accuracy is a 'pie in the sky'. There was a study done in several counties in Ohio without local digital files, and the Census Bureau used aerial photo to reposition TIGER.

F. Framework Geodatabase Update

Rob Surber, CGI, reported that CGI is working with ESRI on partnership to come up with a way to manage framework and all its components in the geodatabase. CGI has met with ESRI and had a productive meeting. They dealt with important components to framework topology and see a way to deal with and handle it. See some fundamental things to handle an editing environment by building transaction tables. Next meeting is August 9, 2002. CGI is not having ESRI develop custom finalized tools. CGI just needs tracks to run on – CGI will do their own programming, but up to this point could not get out of the gate. Now it is looking better.

Tammi Shepherd, Wayne County, asked if the implementation of basics is in 8.2 or did ESRI develop it to show CGI that it can be done.

Rob Surber, CGI, responded that they did ArcObject development. CGI wants to look at code, see what ESRI is doing because CGI has to have building blocks to work with.

Steve Perry, Wayne County, asked if CGI is looking at developing a highbred of the Unitrans model.

Rob Surber, CGI, responded that it is not what CGI needs. CGI needs basic topology stuff. With the new release, ESRI came up with the top 5 or 10 most needed topology issues and CGI's needs were not on list. CGI wants smart tools that can automate what it can but will prompt user for some input during the process. CGI works with behind the scene topology in a data form through SQL statements – want access to ESRI data to run SQL statements. ESRI will work on a way to get to the behind the scenes data in the geodatabase from the topology standpoint.

Ann VanSlembrouck, SEMCOG, clarified that most of it is ArcObject development and hopefully these suggestions will be added to the next model. Most of the improvements ESRI is doing now are polygon topology for parcel updates.

Rob Surber, CGI, responded yes.

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

Sherm Hollander, MDNR, had nothing more to report.

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

Joyce Newell, MDOT, reported that they sent the Census Bureau Urban Area Boundaries to different areas to be updated to Federal Aid Urban Areas to make more transportation friendly boundaries. Areas must coordinate with the county they reside in, because it may make them eligible for more funding. Also have been working with Michigan State Industries (MSI) on the 'As Built' and ways to retrieve project information done on roadways. Also put together a non-GIS package for people. Waiting for feedback from Highway Bureau of what system would be most useful for them. MDOT used to keep track of control sections on the state trunkline system in a kind of strip map format and underneath, listed by segments, were the projects that took place. This was kept up manually on the linens, copied and sent to the districts. This process was discontinued in that 1980s. MDOT is thinking of having them scanned so they are not the sole keepers of the linens and they will be available for people to review and might be quick reference to job numbers or 'As Built' projects. Will probably send to MSI. For strip maps by

control section can locate on map. The Asset Management Bill passed. It will impact MDOT and the way they keep data for all Michigan roads. It has to do with having a common source for all roads to better decide funding by need.

Rob Surber, CGI, stated that the bill was supported by MDOT and the County Road Association of Michigan (CRAM) with an oversight council with representatives of locals.

Joyce Newell, MDOT, added that a call for members has gone out for representatives. Details of whom will be charged with maintaining the common database is up in the air. The referencing portion of framework and physical reference (PR) system will be pushed.

Steve Perry, Wayne County, asked if MDOT has images in database.

Joyce Newell, MDOT, responded that they have an image catalog on the Internet.

Steve Perry, Wayne County, stated that they have paper maps all over place and may want to scan them also.

Joyce Newell, MDOT, stated that the MDOT is trying to purchase a new plane, which would be available for flights. They are willing to have other state agencies make flights when they are not busy.

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

Nobody present.

VI. Michigan State Police (MSP) Projects and Activities

Nobody present.

VII. Michigan State Industries (MSI) Projects and Activities

Scott Hodge, MSI, reported that they are working on 3 projects. The PR Finder is 2/3 done and expects completion the end of September. The Act 51 mileage project is 80% completed. Delivered Wayne, Oakland, and St. Clair counties today. Scott is picking up Oakland County today.

Rob Surber, CGI, explained that MSI is scanning the Act 51 maps and registering them so that they can be used as backdrops. They are doing that for the whole state.

Joyce Newell, MDOT, added that they have scanned December 2000 maps. The 2001 maps will be created from the framework.

Scott Hodge, MSI, said that he will pick up Macomb County today, then just have the last two regions and will be finished with that project. The 'As Built' project problems have been resolved and can now be used by MDOT. Delivering AML menus for that project to MDOT today.

VIII. CGI Projects and Activities

Rob Surber, CGI, had nothing to report.

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

Bill Enslin, MSU, reported they have an excel file for MDEQ tank data and converted to shape files. There are 27,000 points in it and there is a category for aboveground and underground. The underground tanks will be commonly available through the viewer and as downloads from the CGI site. The aboveground tanks will only go to Health Departments and MDEQ collaborators only. The conversion went well except for 2 wells. They are finalizing the naming conventions for fields. That will be coming out in conjunction with Version 2. Allegan County is looking at a way to get county data to townships through the Map Image Viewer. Ottawa County is looking at this as well. The last item is updating of mosaicing DOQs for several images for Ingham County for color balance, mosaicing, and compressing individual

DOQ images into a county file and eventually building up into regions for the state. They are still evaluating the color process. The process is being done in ER Mapper. MSU has Tech Week is coming up August 12-16. There will be 2 sessions each day and topics range from basic GPS, rectification of images, census data, ArcGIS, ArcIMS, Map Image Viewer, and general information on public available imagery. It is not intended to be training sessions but general knowledge.

X. County / Local Projects and Activities

Tammi Shepherd, Wayne County, reported that they are moving ahead with maintenance and are talking about a long-term reconciliation plan between the two files. CGI will review the first round and then Wayne County will review. Will start now that Phase 2 is in place.

Rob Surber, CGI, added that now CGI has Act 51 maps and the Wayne County file.

Tammi Shepherd, Wayne County, commented that CGI and DPS might have to communicate about getting the Act 51 attributes. Wayne County is starting to look at maintenance, topology, and tools. Wayne County has node ids and PR ids so when review topology it won't conflict with anything CGI has.

Rob Surber, CGI, stated that mainly it will occur around state trunklines. CGI is working on process for parallel work issues.

Tammi Shepherd, Wayne County, added that they are thinking about talking to different departments about attributes to coordinate

Rob Surber, CGI, added that addresses on the roads are another issue that needs to be explored.

Tammi Shepherd, Wayne County, stated that Wayne County is waiting for confirmation of money for Wayne Area Justice Information System (WAJIS), a project available to communities in Wayne County for their computer aided dispatch. It will be the police departments working with GIS files to improve their 9-1-1 dispatching. That means that there will be funding to look at each community's addresses. This set of attributes is one of highest priorities because all of the end users except GPS use it for address matching. Communities are either CLEMIS (centralized dispatch in Oakland County) or WAJUS.

Steve Perry, Wayne County, added that Wayne County provides the base for the line work. It is for all communities in the county. This gives them contact with people who know the local names. Detroit has a huge project for their own dispatching system. Steve's goal is that all work off the same line work.

Tammi Shepherd, Wayne County, commented that there are a lot of individual initiatives that they would like to turn into overall maintenance on files. They are currently working on conflation cleanup simple attributes and PR structures where there are gaps. Then will assign new PRs to new streets. They have a sample process because of their high scale of accuracy.

Bill Enslin, MSU, asked if there are any Homeland Security activities.

Steve Perry, Wayne County, responded that they are establishing a full backup system. It is a 'real time' network installation. Their goal is to have infrastructure put in place so that they are ahead of the game for future funding.

XI. Regional Projects and Activities

Ann VanSlembrouck, SEMCOG, displayed a status map of their land use update. They started doing the update 1985-90, 1995-2000 to show actual change. Then in the interest of time, they decided to just do 1990-2000 and in the future they may go back. They are still putting 2000 block attributes on framework and have 5 counties done. They haven't done finalization to close polygons because of repositioning.

Rob Surber, CGI, stated that framework uses the Wayne County line work, other than model differences.

XII. Federal Projects and Activities

Gordon Rector, U.S. Bureau of the Census, nothing more to report.

XIII. Other Issues

XIV. Next Meeting Date

August 1, 2002, 10 a.m. until 12 p.m., Michigan Center for Geographic Information, George W. Romney Building, 111 S. Capitol, 10th Floor, Lansing, MI 48933

** If any changes or corrections are to be made to these minutes, please contact the Michigan Center for Geographic Information at (517) 373-7910. Changes and corrections will be noted on the final copy to be post.