

Meeting Description: Michigan Geographic Framework Users Meeting

Date: October 3, 2002

Time: 10:00 a.m.

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

I. Approval of September Meeting Minutes

Rob Surber, Center for Geographic Information (CGI), commented that CGI has been busy and not able to fit the minutes into the schedule. Will do the October meeting minutes and will backfill September when we can.

II. Geographic Framework Program

A. Version 2 Delivery

Rob Surber, CGI, distributed a status map.

Everett Root, CGI, reported that the shape files were put on CGI Data Library early in September and there have only been a few phone calls with questions.

Rob Surber, CGI, added that CGI is interested on how it is serving Geographic Information System (GIS) users in the state.

Everett Root, CGI, added that a lot of the questions to this point have been non-framework related. They have to do with other layers.

Rob Surber, CGI, commented that the Michigan Department of Transportation (MDOT) GIS Global Position System (GPS) team is using it as part of rating of the roads and they are pleased with GPS location of the roads related to their GPS drive lines.

Valdis Kalnins, Allegan County, stated that they found issues with the repositioning in Allegan County, but on the whole it looked really good.

B. Act 51 Reconciliation Update

Rob Surber, CGI, distributed a status map. Twenty-nine counties are currently in process. The quality control has begun for 9 counties and it takes 3-4 days for each county. The Michigan State Industries (MSI) review is still being worked out.

Scott Hodges, Michigan State Industries (MSI), commented that they are working on the first county as sample to be sure comes out right.

Rob Surber, CGI, added that MSI has found a few things as part of their review that need to be corrected.

Everett Root, CGI, explained that MSI is comparing names on Act 51 and if differs it will be noted. They will review if things were left out and also the legal system.

Rob Surber, CGI, added that CGI has a control quality and MSI is the second pass. The new part of what they are doing is the name check. A fresh set of eyes is a good thing especially since this is going to be legal documentation. Framework will be updated to support this process. Maps are due to be released in January. As a part of the release, the cartographic documents that go out for signature, CGI will create a Version 3. New roads are being added during this part of the process.

Everett Root, CGI, clarified that CGI gets the geography as is on map or photo (if it is more recent). The road is tagged as to what the position source was. If some roads get added that didn't have photography, will update when newer photography is available.

Rob Surber, CGI, added that there have been 500 new physical reference (PR) numbers in Oakland County – that is not 500 new streets. Washtenaw County had a lot of new roads as well. Macomb County is well on its way.

Gordon Rector, U.S. Census Bureau, asked if the Act 51 asked for private roads.

Rob Surber, CGI, responded that it is county preference, it is not a requirement.

Everett Root, CGI, added that the new maps, the legal documents, would only show certified roads. CGI will include reference map for each township that will show roads where CGI length measurement differs from townships. The reference maps may also show all private roads and will be color. The legal document maps will be black and white. The reference map will show possible discrepancies and possible uncertified roads that possibly should be certified. Those will be labeled with names.

Rob Surber, CGI, added that the Act 51 maps being used in the reconciliation process have boundaries current as of November 1, 2001 annexations approved by State of Michigan. Sixty-five communities have been touched and will be incorporated into Version 3 framework, which will go out to all communities. This is a database generated by Michigan Department of Transportation (MDOT) Act 51 staff.

Everett Root, CGI, commented that these are official changes that have been certified by the Great Seal and have been approved by the engineers at MDOT. This is the same group that the Census Bureau works with.

Rob Surber, CGI, distributed an example of Act 51 map. It has not been finalized yet. The county maps were often done by township. They have intersection to intersection measurements of the road system on the maps. Because of scale, a lot of insets are needed. CGI and MDOT decided to go with larger map and eliminate insets. Major roads have mileage to 2 places to the right of the decimal. Dead-ends are done in feet. The dead-in measurement comes directly from Act 51 and where there is discrepancy, it will be indicated on the reference maps.

Everett Root, CGI, added that if there were a 100 feet difference between the GIS length and the Act 51 a separate arc would be created to identify it.

Jeroen Wagendorp, Allegan County, commented that the maps will go back to the road commissions and they will have to argue why they think it may be different.

Rob Surber, CGI, responded that they would have an opportunity to provide input.

Joyce Newell, MDOT, commented that they would have 3 months time to respond. The road commission is usually concerned about total miles.

Rob Surber, CGI, CGI will set up a 'help desk' to take calls. Version 3 will have lot of new roads including private roads.

Everett Root, CGI, added that this is made using ArcMAP. CGI will create templates and staff will go through and make township maps.

Jeroen Wagendorp, Allegan County, asked if the Image Viewer would change because of Version 3.

Bill Enslin, MSU Center for Remoter Sensing and GIS, commented that MSU would time an update release a few weeks after CGI release of Version 3.

Jeroen Wagendorp, Allegan County, commented that they are trying to decide whether to hold on to Version 2 and begin work with Version 3.

Rob Surber, CGI, stated that they might be able to get rolling and get familiar with the product. Version 2 work CGI circled problems but did not do a lot of topology edits except on trunklines. As far as timing of releases, CGI is open to what works for the users unless hear that it is a problem.

Jeroen Wagendorp, Allegan County, wondered if they could go back and forth from ESRI platform without loosing data integrity.

Rob Surber, CGI, stated that is something to test. MSU and CGI are looking for ways for feedback.

Jeroen Wagendorp, Allegan County, added not sure what framework does to AutoCAD map dynamic segmentation. When go back to E00 is it still intact? If this is a problem, it becomes a one-way valve from CGI to locals and they cannot give updates.

Rob Surber, CGI, stated that CGI is willing to explore a mechanism to provide certified information whether this something else. It may depend on type of information sent back – paved versus unpaved.

Valdis Kalnins, Allegan County, commented that at some point at the county level the roads layer will diverge from the framework layer. Need to determine a cut off to provide feedback to CGI on changes that effect the framework.

Rob Surber, CGI, stated that the tools (Image Viewer, RoadSoft) would be the critical pieces. The tracking of id's and record keeping of changes. Also need to determine roles and responsibilities of organizations-county level, state level. No reason to wait a year to get roads into framework during the certification process. Hoping the road commission will be vehicle to provide information. CGI will work with counties interested if working on the information flow.

C. Digital Ortho Update

Sherman Hollander, Michigan Department of Natural Resources (MDNR), reported that 700 units in various stages of production and anticipate delivery the end of this month through the end of the year. This will complete the Upper Peninsula with color infrared with 1998 Series imagery. There are four counties (Emmet, Charlevoix, Presque Isle, Cheboygan) in the northern Lower Peninsula that will also be finished with group. It will be close to full coverage for Roscommon County and a good portion of Montmorency County.

D. National Hydro Dataset (NHD)

Rob Surber, CGI, reported that there is no word on the Innovative Partnership (IP) agreement. CGI was told that those not accepted have received a rejection letter and CGI did not get one - so this is good news. The IP is a 3-year IP partnership proposal for funding assistance to create a statewide hydro product. CGI continues to work on production techniques and tools and workflow issues. CGI has guidelines to reposition and adjust line work prior to NHD conflation effort that are being tested. Now they are going through the Upper Peninsula CUs, which will be sent to the Forest Service contractor. The contractor is trying to get 12 CUs done this year and CGI is trying to stay ahead of that schedule and provide better line work. NHD production is beginning after the Act 51 completion in December. Will need to work closely with Institute of Fisheries Research who is testing conflation tools in the AuSable and Manistee rivers.

Jeroen Wagendorp, Allegan County, stated that he got a request from MDOT in Lansing for all the county drainage assessment districts because they are checking MDOT road right-of-ways and geography in those assessment districts to be sure not over- or under-assessed. MDOT is digitizing all watersheds and will put on a server. Jeroen suggested that they talk with CGI.

Rob Surber, CGI, commented that part of this project is to work with interface between the drain information and the rest of the hydro into the state product. Need to track down and coordinate with the person at MDOT. After Version 3 is released, CGI staff will continue with general maintenance and address updates.

Jeroen Wagendorp, Allegan County, asked if CGI is using Memphis Postal Service dataset.

Rob Surber, CGI, commented that it is not real geographic – doesn't contain lefts-rights and froms-tos. ZIP+4 and the nine digits are very geographic, but there is a question about new USPS to TIGER 2000 Linkage Product. Can CGI buy the product or go through the U.S. Census Bureau.

Jeroen Wagendorp, Allegan County, added that Allegan County has 70-90% owner-occupied housing and can plug in rental addresses with their info to fill in the gaps.

Rob Surber, CGI, commented that the 11 digit actually get you to the house (last 2 digits of house number) - 9 digits gets you to the sector segment (i.e. side of a city block).

Jeroen Wagendorp, Allegan County, added that he would like to know all the delivery points.

Rob Surber, CGI, added that he doesn't know how much is available to be public.

Gordon Rector, U.S. Census Bureau, stated that the Census Bureau has an agreement with USPS every 3-month to provide a Delivery Sequence File that has changes in it. Census Bureau uses that to plug in addresses to TIGER and where they don't plug, the Census Bureau gets them from the local level office.

Jeroen Wagendorp, Allegan County, stated that the county has added benefit of photos and current parcel maps. The ultimate objective is for 9-1-1 purposes.

Rob Surber, CGI, asked if there is a way to funnel the county process to CGI and they will funnel to the Census Bureau.

Jeroen Wagendorp, Allegan County, responded that it is possible once they know where the houses are and might have to put in points so that averaging works out.

Rob Surber, CGI, stated that if the county is going to that level of detail and working with the postal service, it is worth looking at.

Valdis Kalnins, Allegan County, commented that the postmaster said that he could do that.

Rob Surber, CGI, stated that CGI is interested in exploring for part of partnership.

Jeroen Wagendorp, Allegan County, asked if Gordon Rector, U.S. Census Bureau, has access to a product he could share.

Gordon Rector, U.S. Census Bureau, stated that unless under LUCA Program they cannot give out individual addresses. But they can take lists from local governments themselves.

Rob Surber, CGI, added that the state would keep ranges in the system. If Jeroen learns anything, CGI will be interested to know about it. There may be a process to share for others to follow.

E. Framework Editor Update

Rob Surber, CGI, reported that ESRI is going forward with additional work for the editing of framework. CGI creates a complete reference version of MALI from framework that goes to a lot of state level programs and also RoadSoft. This is done as a post-process in a database engine. ESRI will be folding this into the ArcGIS product to run with CGI's sequel server and create new version of MALI; working on modified MALI generation tool to handle deletes during splits; an automatic system to generate unique PR values statewide as add new roads; create a length change tool; add reverse support to MALI generation tool; update beginning point and ending point node tool; will research methodologies to perform basic sequel queries inside the ArcGIS with data; and add sub-type column to mile point feature class. This will all be made available to ArcGIS users if they are interested. CGI considers these basic tools to build on.

Ann VanSlembrouck, SEMCOG, asked if they are doing programming for CGI.

Rob Surber, CGI, responded that they are doing lot of ArcObject programming. This is not final product but tools and functions that CGI needs for commenting editing tasks.

Ann VanSlembrouck, SEMCOG, asked if CGI has an idea when they will deliver in a geo database. CGI will drive SEMCOG's schedule.

Rob Surber, CGI, responded that CGI can put into a geo database as a 'Read Only' file, but not to be managed in an editing environment. The goal is in a year to have complete editor environment. This work will provide tracks to get there. Will have a parallel editing process for a while. If CGI is comfortable with the editing and it is in the geo database, CGI can give a prerelease version for viewing.

Bill Enslin, MSU Center for Remote Sensing and GIS, commented that MSU wants to put a staffer into an introductory class Arc Objects programming for Visual Basic. This is scheduled for January. It is a specialized class and it is good to get interest going.

Rob Surber, CGI, responded that there are staff people interested in January. Alden Leatherman, CGI, would like to go back for a refresher. It will create a specialized job - it opens up door to new capabilities. Have come out with new manual, which is helpful. CGI will probably have 4 people that will attend.

F. Critical Infrastructure Protection Initiative (CIPI) Homeland Security Pilot Project

Rob Surber, CGI, reported that this is an Open GIS Consortium (OGC) project. CIPI 1 goals is to collaborative with organizations at local, county, state, and federal groups to look at a real project on homeland security scenario to use GIS as a basic tool to look at the transportation component of homeland security. CIPI 2 will look at government services. CIPI 1 is transportation focused and will be centered in Detroit and Windsor at a border-crossing incident. The scenario is a tanker truck that is highjacked in Oakland County by terrorists. How do government agencies come together to respond. Rob and other state representatives attended a meeting at Wayne State University to work on setting scenario to make real. The idea is to deliver an operational system to turn over to communities. Windsor, Ontario, Canadian governments; United States federal government; provincial government; Wayne County; Wayne State University, City of Detroit Police Department and State of Michigan. The next step is to work on specifics of scenario information. CGI will provide transportation data through framework.

Jeroen Wagendorp, Allegan County, stated that at the county level working on hazardous mitigation plans. They are looking at landing sites in and out; location of cell phone towers; and dam locations.

Rob Surber, CGI, added that CIPI 3 would be a hydrological pilot. They will be looking at spatial infrastructure data. A lot happens at local level, but then what happens after that.

Eric Nischan, Michigan State Police (MSP), added that state emergency management gets involved when local government gets overwhelmed.

Jeroen Wagendorp, Allegan County, stated that they made maps for a SWAT team. They didn't match the ones that were being used by the GIS team. Need to ask what the state standard is and what should be used.

Eric Nischan, MSP, added that they are now talking about getting it down to the police officer level. There has been a lot of supporting infrastructure and data that needed to be developed. MSP is sticking to the framework standard of using Michigan GeoRef. But different people use different things and it is tough to coordinate.

Rob Surber, CGI, stated that this is what came out of the CEPI meeting. Police in Windsor need to have very detailed information but many times they all have to work together and collaborate is not just one answer. Data from disparate sources need to be brought in to solve the problems. SEMCOG could have data on server that is in MapInfo but have to establish a link ahead of time and people will have rights in the case of emergency. This is the only place in country this pilot is being held. There is a lot of opportunity for the State of Michigan to show data collaboration that is already happening. Don't have specifics of next steps. U.S. Department of Transportation (USDOT) is involved and very interested in framework as a state model. They want to establish seaming standards so federal government can have seamless product nationwide. Rob had long talk with a vice president of OGIC, who will be working with CGI to get more data. All open GIS agencies are involved and much financial resources are behind this effort. Asked Eric Nischan, MSP, about the relationship between Homeland Security and the Emergency Management Division and do they want to be involved in this.

Eric Nischan, MSP, responded that Homeland Security is a section within Emergency Management Division that just got up and running within the last couple of weeks. Eric is sure that they want to be involved but they are still getting their feet wet. The major difference is that Homeland Security has more of intelligence and law enforcement component that Emergency Management. They were not at this meeting and don't have lot of background on GIS.

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

Sherm Hollander, MDNR, nothing else to add.

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

Joyce Newell, MDOT, reported that MDOT presented framework to the Pennsylvania Department of Transportation. They were impressed. They will be back in Michigan next year and MDOT will present more at that time. MDOT is working with how to move from Version 1 to Version 2 knowing that Version 3 is coming soon. Waiting for Act 51. The Asset Management Council has been appointed now and representation is broad. It will determine data to be collected statewide on all public roads, starting with federal aid development roads and then will move to all roads. The data will reside in one database on a non-state agency site and will determine if more funding is needed to keep roads up-to-date. Framework will be the basis to collect data. MDOT has 2 people on the council. The data will have to be collected by the agency that owns roads and submitted to the agency that holds the data. Beginning October 1, 2003, every city, county, and village that own roads will have to submit a 3-year plan for road improvements.

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

Rob Surber, CGI, commented that MDEQ doesn't have a representative since Steve Miller retired.

VI. Michigan State Police (MSP) Projects and Activities

Eric Nischan, MSP, reported that they are still geocoding Super-fund Amendment and Reauthorization Act (SARA) Title 3 Section 302 hazardous material sites.

Jeroen Wagendorp, Allegan County, stated that they just completed the Allegan County SARA Title 3 Section 302 stuff and will send the Eric.

Rob Surber, CGI, asked if this would be public information.

Eric Nischan, MPS, responded that there are restrictions. Thinks that you can give locations publicly but cannot list chemicals, consequences, or effected populations because of terrorism. But in the community you want to know what is up the street.

VII. Michigan State Industry (MSI) Projects and Activities

Scott Hodge, MSI, reported that they have completed the Physical Reference (PR) Finder Map Objects Program and the Control Section 1 scanning and are proceeding with Act 51 Part 2. Expect to have Eaton County done in a week.

Joyce Newell, MDOT, asked if MSI plans to get back to 'As Builts' or if that project has been put on hold.

Scott Hodge, MSI, responded that the 'As Built' Project is on hold.

David Keith, MSI, reported that MSI has confirmed the move of their GIS Factory to Detroit. They also clarified that a supervisor will do the city of Detroit road level. The only concern is in the vicinity of the prison itself. Construction will begin when approvals are received.

Rob Surber, CGI, asked how that would fit in with the current workflow for production.

David Keith, MSI, responded that once they are physically moved they would be able to put more workstations in.

Joyce Newell, MDOT, asked if the current workers would be moved.

Scott Hodge, MSI, added that they have 8 prisoners now who are working on the MDOT projects.

Carmine DeWaters, MSI, commented that the new location is a huge building that was built for laundry. Since this never worked out they put computers for schools in there. They are excited about having the GIS program as part of the school. It is a wonderful thing for the Detroit area for the prisoners to learn these skills.

Rob Surber, CGI, commented that CGI is on a tight deadline. Will this happen before the end of the year.

Dave Keith, MSI, responded that it might be possible. The physical move will take a couple of days. There will not be long term interruption.

Joyce Newell, MDOT, asked if there is computer staff with the knowledge of GIS.

Dave Keith, MSI, responded not at this point. There will be training staff in December. They will hire somebody already trained in GIS.

Joyce Newell, MDOT, suggested that they do Detroit before they move.

Dave Keith, MSI, commented that that is a good idea.

Rob Surber, CGI, stated that CGI would like to be kept up-to-date as to when things will happen so that CGI can plan accordingly.

VIII. CGI Projects and Activities

A. Department of Information Technology (DIT) Transition

Rob Surber, CGI, reported that the DIT transition has been forming its organizational structure. CGI moved into DIT and continue the same functions that they always have. As part of the transition 15 new staff from the Michigan Department of Natural Resources (MDNR), Michigan Department of Environmental Quality (MDEQ), and Michigan Department of Transportation (MDOT) were added to CGI. Nobody has been physically moved into the CGI office yet. Now are working on DIT-to-Agency agreements that outline the services that are expected from DIT. DIT is enterprise wide and so they are working on the services that will be provided - web GIS services, server, data services, and day-to-day agency services.

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

Bill Enslin, MSU Center for Remote Sensing and GIS, reported that they have secured Kellogg funding for doing mapping for 26 townships this year and 26 next year. It is a 50/50 split and a \$2,000 effort - \$1,000 from townships that want to participate and \$1,000 from Kellogg Funds. It is using procedures developed in the past. Interpret the 1998 color infrared (CIR) images and revisiting the 1979 imagery to take care of issues so the change analysis can occur. There will be stuff soon on that partnership program. It will be on a first come first serve basis. MSU is still working on getting the official release of Version 2 Map Image Viewer. Computer that does their CD writing died and they replaced it and ordered a new CD writer and labeler that has DVD capability as well. They made changes to metadata so that there is only one form. They are trying to cast metadata in XML documents and have permission from ESRI to use their style sheets. Can hit tab button that display frequently asked questions. Added line and polygon digitizing into the viewer as well as points. No editing is available now, just adding or creating new files. Will be starting production on image mosaics next week. They installed a new version of ER Mapper. MSU revisited the DRG statewide mosaics and will add islands. Have done quality control on that and discovered 2 problems. Whiskey Island, Charlevoix County, is mis-positioned and in Monroe County there is a spit of land that has not been recorded. By the end of next week they will have an official version of DRG mosaic. They have discovered about 40 counties of original U.S. Geological Survey digital ortho quads (DOQs) at the university. They can start mosaicing next week. The mosaicing is only a couple of hours per county but there is more time involved in copying the originals onto archive DVD. There will be two versions of 1992 black and white so there is history version and mosaic either totally 1998 or CIR photography possibly. They are planning to do a 10:1 compression ratio for the archival version as well as a 50:1 web version. The output will be ER Mapper (ECW) compressed files that can use direct in GIS products with plug in from mapper and can convert to polygon tile system for TIFF or JPEG for SDE.

Everett Root, CGI, asked if these would go into the data library?

Bill Enslin, MSU, responded at some point. As they are done, will replace the TIFF images on MSU server. The extraction process is worked out for the statewide mosaics.

Jeroen Wagendorp, Allegan County, asked Bill Enslin if he would be able to start dealing with request from townships and counties the end of next week.

Bill Enslin, MSU, commented that is what they are shooting for. They have automated the process to extract shape files and also doing Central Michigan Health District and MDEQ delivered the Source Water Assessment reports for Type 2 Water Supply Wells and this has been incorporated to the installs for the Public Health Department.

Jeroen Wagendorp, Allegan County, commented that he has layers ready for the Michigan Township Association. Has talked to a board member would like product prior to conference so that he has the ability to concur.

Bill Enslin, MSU, explained that the Michigan Township Association has a January annual conference and Bill will present the Map Image Viewer as a tool for townships.

Jeroen Wagendorp, Allegan County, asked if the linear enhancement on color balancing is on the back burner.

Bill Enslin, MSU, stated that this is part of the DOQ thing. It will be accelerated now and will start production next week.

Jeroen Wagendorp, Allegan County, commented that he has promised the Sheriff's Department that for their SWAT team exercise rather than using DRGs with Vector contours that Jeroen would use their own Vector contours and color infrared photos because they are more current. The U.S. Army Corps of Engineers flew Allegan County in 1997.

Bill Enslin, MSU, stated that they are ready to start working with one township to get the whole process developed.

Jeroen Wagendorp, Allegan County, added that tomorrow he is giving a talk to planning officials about GIS and wants to promote the Map Image Viewer for planners who are active at the municipal level.

Bill Enslin, MSU, suggested that they confer on some of that. Bill is scheduled to give a presentation to Midland County. A private planning consultant is setting it up to show what is available. Training materials are being prepared for the Division of Water at MDEQ. Hopefully this coming year there will be more documentation and training materials. Want to get course stuff developed for MDEQ that can be used anywhere.

X. County / Local Projects and Activities

Jeroen Wagendorp, Allegan County, reported that they have too many projects and cannot meet the demand.

Michael Hass, Branch County, reported that they are testing web GIS started hook up service. They are running on a Pentium 2 server. This is primarily a demonstration to show that they need to buy server. Will provide parcel id and library page.

XI. Regional Projects and Activities

Ann VanSlembrouck, SEMCOG, reported that they are putting 2000 census block attributes on framework. Still working on 2000 land use update. They have been working with local governments, county governments, land conservancies, Huron Clinton Metropolitan Authority, and the state and now are compiling into one layer. The SEMCOG Environment Department is working with the Wildlife Habitat Council on this project and the data will also be used to forecast when SEMCOG is looking for vacant buildable land.

XII. Federal Projects and Activities

Gordon Rector, U.S. Census Bureau, has nothing to report.

Rob Surber, CGI, asked if Gordon could find out information about Postal Service to TIGER equivalency file. Can the Census Bureau provide it or does CGI need to go to the Postal Service. They had established a relationship file.

XIII. Other Issues

Rob Surber, CGI, reported that CGI received 2 new Epson 9600 plotters and they plot at half the time of old ones. They were half the price, double the speed, and double the resolution.

XIV. Next Meeting Date

November 7, 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