

Meeting Description: Michigan Geographic Framework Users Meeting

Date: October 6, 2005

Time: 10:00 a.m.

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

- I. Approval of Meeting Minutes
- II. Geographic Framework Program
 - A. Framework Activities and Updates
 - B. Digital Ortho Update
 - C. NHD Update

A. Framework and Activities

Krisanne McConnell, Center for Geographic Information (CGI) the shape files have been posted to the Geographic Data Library. Framework unlocked and editing began on a few authorized projects. We're working on the ACT 51 updates for the last year, plus the rail PR (Physical Reference numbers) postings and we are cleaning up the State park roads into the Framework.

B. Digital Ortho Update

Rob Surber (CGI) the Ortho project is moving forward. We've been entering into partnerships with many of the counties around the state. There are around 20 counties that we have partnered with for 2004-2005 timeframe. We do have a scalable architecture in place. We are working on data access programs and modules both for inside and outside state government. One of the requirements of the USGS (United States Geological Survey) is to make it available through the National Map at a certain resolution. It will be a consistent data set for the state. We will be getting a project manager in place and we have a contracts person working solely on the contracts and MOU's (Memorandum of Understanding) with the counties. We are working with some of the State agencies, and they are continuing to gain additional funding. At the end of 5 years we should have a complete picture of the entire state.

We are also working with the Michigan State University (MSU) group that is coordinating the NAIP (National Agriculture Inventory Program), that is the 1 – meter product that is being flown over the summer with the Farm Services and the NRCS (Natural Resource Conservation Service). We will probably have some of the data available by the end of the year.

C. NHD Update

Everett Root (CGI) – (passed out handouts) had a NHD (National Hydrologic Data) meeting yesterday. We were working through the tools, the production of the NHD the conflation of the 1 – 100,000 reach codes to the 1 - 24,000 framework. The Ottawa

Stony watershed has been submitted to the USGS (United States Geological Survey) in Rolla, Missouri for quality control and the Huron River watershed is being worked on. We will be training two staff to work on the process; the Clinton and the Flint rivers will be next. On your handout, the green colored watersheds are for the 2004 fiscal year funding that we received from the USGS. The six in the blue are from the additional 2005 fiscal year money that we received. We got a little more money at the end of the year that will go for three more watersheds yet to be determined. The USGS has indicated funding for the fiscal year 2006 will lean more toward maintenance, rather than data creation. So, we will be looking at possible ways for funding to finish this project. We are also looking at checking into having an NHD workshop here in Lansing, MI. If we get the workshop scheduled we will let people know.

III. MDNR Projects and Activities

No representative present

Rob (CGI) we are partnering with MDNR and are in the final stages of a Park's Infrastructure project. It is a complete asset management project for all of state parks. Their information plan is for a GIS web based tool to be able to look at, monitor and report on park's infrastructure including roads, facilities, and other types of information about them.

IV. MDOT Projects and Activities

Joyce Newell, Michigan Department of Transportation (MDOT) regarding state park roads - it was MDNR's hope to have that in the next version of Framework so that they can then go out and get condition information about state park roads like we do with Asset Management for Federal Aid roads. We have 27 counties completed for Asset Management this year. We are doing this on an annual basis. This is the third year. The reasoning is to go out on an annual basis to find out how rapidly the roads are deteriorating. The first year was a learning experience. There are some questions as to whether the first year is accurate. Last years data was validated by some independent checks and quality control and it looks like it is much more consistent, better quality and accuracy. They are hoping to have another year to throw off the first year for the curve. Another effort is the Highway Performance Monitoring System (HPMS), which is basically a Federal reporting system. We have to report condition of roadways by sampling different categories of roads. You have to put all the roads into different "buckets" according to their characteristics and then from each bucket you have to pull certain segments for samples to represent all the other roads in that bucket. One of the things you have to report to Federal Highways is the annual vehicle miles traveled in Michigan. The data that we have been using for a number of years is from the 1982 Need's Study where we asked the cities and counties to give us information about all their roads and to tell us what the traffic was on each of those roadways. When we use growth factors to bring that update to the traffic levels today, we really just have a rough estimate. We are not happy with our final estimates and the Federal Highway tells us we need to get better traffic data. So, we have started to work with the planning regions and

MPO's (Metropolitan Planning Organizations) to put together counting programs. The first step of that will be to go out with workshops to define traffic segments. Then establish count locations and over the next 5 years count each traffic segment so that we have enough data for a traffic count for each of those roadways. The first workshop is scheduled for the 17th & 18th of October. It will be in St. Ignace to cover the 5 planning regions in the North. The 2nd meeting will be in Lansing for the remaining planning regions and MPO's. Also, related to that, in order to define the segments, we have to know the number of lanes and whether it is a one-way street and which direction it goes. This will be on the Federal aide system. We have put together a GIS product that shows the traffic segments; count locations, and who is responsible for collecting it and what year they plan to do it.

Would like to talk about what we are doing with bridges. We have taken a look at interchange diagrams. The mechanism that we have for putting it on the web is no longer maintainable by the people doing it. We are trying to work out a method for doing that. Maybe in our PR (Physical Reference Numbers) finder we can have the interchange diagrams available coming directly through the Framework.

Kevin McKnight (MDOT) we are trying to develop a file on top of the bridge nodes that we have representing the bridges now. Sometimes there is more than one node representing a bridge and we are developing a linear line that is going to be oriented properly to the length. We are also going to try to add width, so that we can develop an icon layer or graphic file for mapping purposes. We are using the bridge inventory or else the TMS (Transportation Management System) database to get any information. We are also looking at specs and blueprints and aerial photography to get something fairly accurate.

Joyce (MDOT) we have done some ground truthing. They have a meeting this afternoon to determine how much to continue. Basically, going out with GPS (Global Position System) units and GPS-ing the center of intersections and then comparing it to Framework.

Rob (CGI) part of this came out of the TIGER (Topologically Integrated Geographic Encoding and Referencing) modernization program when we had a few counties that were rejected through that process. We get local data sets that come in and they say this is better than what we have. We would like to have an independent opinion that warrants the changes to be made.

We are in the final push to get the Asset Management Council Internet Investment collection tool up and running to report on road improvements. That application will be using GIS on the web to monitor location as well as the attributes about what was done. We are looking to tie into what the regions report, the TIP and some of the road improvements through the planning regions.

V. MDEQ Projects and Activities

David Slayton (MDEQ) we have formed an IT planning committee to work with MDIT (Michigan Department of Information Technology) to coordinate funding and

application, the right platforms and to review things. It will be a good form for prioritizing and coordinating efforts by not duplicating things. We will have an application coming out very soon for our storage tank database. It is also going to include remediation redevelopment division sites called a part 201.

Another thing we have been working on is the MITAPS. I just spoke with John Baer regarding a meeting they are setting up to talk about Geographic Validations within the MITAPS. We are also getting the Map Image Viewer loaded up on all of the desktops. John Esch (MDEQ) we are working on a water quality database project between the MDNR and MDEQ. It is a mapping application for water quality and with fish, sanitation, and biological data – BIOTA. It is a large project.

MSU has collected and scanned hundreds of reports on water quality to find more info go to: www.gwmap.rsgis.msu.edu.

Rob (CGI) we do have, along with MDEQ and USGS (United States Geological Survey) an opportunity to meet with NASA (National Aeronautics and Space Administration). NASA is putting out some money to look at ways of remote sensing, they might be able to assist with some of the USGS monitoring and other business with hydrologic and hydrographic issues. We are coordinating with MDEQ for the meeting next week with key stakeholders in the water areas of the state as well as the USGS. We are part of 13 states that NASA wants to work with. We have a chance to be a part of the ground floor of creating new opportunities for using remote sensing data. We might be selected as a pilot state.

VI. MSP Projects and Activities

No representative present

VII. MDCH Projects and Activities

No representative present.

VIII. MSI Projects and Activities

No representative present

IX. CGI Projects and Activities

Rob (CGI) most everything has been discussed.

X. MSU Remote Sensing and GIS Research and Outreach Services Projects and Activities

Bill Enslin, Michigan State University (MSU) we are all settled into our new Geography building now. We do have the fall classes going on now. There is an air photo application class and mapping. All of this is accessible from the RSGIS web site.

XI. County/Local Projects and Activities

Valdis Kalnins, Allegan County – we are dealing with the budget. Looks like things will be all right. We have been working with the drain office because we have a parcel layer.

There is a new drain commissioner. We have been trying to put a more scientific and objective slant on the whole process. The issue now is trying to figure out how to assign proximity values to parcels. We are providing more visual tools for people to look at. We are going to try and graph out the individual curve. There are different curves for agriculture property and personal property. If they can see that they are on a curve here and someone with a larger parcel is on a curve here, it will prove to them that someone is trying to be objective.

Rosemary Anger, Barry County -we are adding an IT professional to our GIS IT Department. It should divert some of our ability to do some of the application development, using some sort of web base tool.

The other thing is that we wanted to report by the MiCAMP Conference that we had acquired a spot image for a 2005 Land use, land cover update. We ran into a problem in that there was nothing available for 2003, 2004 or 2005 because of the cloud cover. So, we rolled back what we were looking at and are waiting for the LANDSAT (Land Satellite from NASA) imagery to be processed for the summer and see if we can come up with something for 2005. Other than that, there is an entire growing season set available for most of the southwest portion of Michigan on the LANDSAT Satellite that we would be able to get for April – September for 2003. There will be some opportunities for other counties or regional areas that want to look into doing a land use raster product.

Nick Wheeler, Hillsdale County – we are kind of in lock down maintenance. We lost our GIS Coordinator a few months ago and we have partnered with MSU on a Land use/GIS agent. We have recently received a grant through Kellogg Foundation for a solely land use agent. We kind of split that tie with GIS and land use. We are looking at what we can do right now. We can't do anything to major at this point. We are looking at some aerial photography and are copying that right now. We will be working with MSU on Framework. We do have a GIS committee from several different departments that are keeping everything together.

Trevor Floyd, St. Clair County, we set up a web site to post a lot of our assessing information a number of months ago. We still haven't done a roll out of it. All of its exposure has been basically word of mouth. Just with that 1st pilot project and word of mouth spreading, the call volume in the assessor's office is down 60%. Our server has been down all week. It should be able to handle the extra load. It will be interesting to see how the amendments are getting processed now. I have put in a lot of work in creating a master plan and zoning database. When it is up and running in the system, it is tracking more than just your standard generalization or the locals component. It has been interesting to see how the locals have been using their zoning and maintaining and updating their maps with their amendments. There have been favorable responses. I want to fine-tune it where it will track the zoning from when it was first adopted. It will track a single amendment that happened. If they attempt to amend a particular area multiple times, it will track the most recent. It will show when they looked at something last, when the last change was, the resolution that made that amendment and the consultant who helped out with their plan.

XII. Regional Projects and Activities

Steve Stepek, West Michigan Regional Planning Commission –we have been working on asset management and we are doing traffic counts. I have been traveling around to our counties doing segmentation and getting updates. Once that is finished, we go on to do our bike map for the Grand region.

XIII. Federal Projects and Activities

Gordon Rector, United States Census Bureau (Census) we have been working with Harris our contractor to determine which counties Nationwide will go through our repositioning effort this coming year. For Michigan that translates into 4 more counties, which will be done this year and that will leave about 10 more; by the end of the fiscal year, most of the state will be done. We are trying to get going on our digital BAS (Boundary and Annexation Survey) partnership. We want to get those updates out of Framework, instead of having to survey every last Township and Municipality. As a pilot, we are going to provide CGI with shape-files for a few counties in Michigan that show the boundaries as we have them.

The last thing that I have is that the Census Bureau is going to start collecting the state legislative district boundaries, which is the first part of the public law 94-171, where we tabulate data from the next census by legislative district.

Steve Aichele, United States Geological Survey (USGS) we are continuing our lake water quality monitoring with LANDSAT data. We have been working with the MDEQ for 3 or 4 years now. We do have a cloud cover issue, even with LANDSAT.

We are in the middle of a QAQC (Quality Assurance and Quality Control) process of a Wetland mapping protocol that we have been developing with the National Guard to do Wetland mapping down in Fort Custer using Ikonos Imagery. Then we have our Great Lakes Aquatic Gap project that is moving slow at this point. We lost about ½ of our budget last year and then lost ½ of that again this coming year, so down considerably on our budget, but we lost our key staffer to Genesee County, so our budget was better with that issue. It doesn't help the time-line on getting the data out and publicized. We have got delineated watersheds for every breach in 1 - 100 knhd and we have about 250 attributes on those watersheds, all kinds of different land cover data, different soils and geology data, and working with IFR will be predicting fish distributions around the state and most, but not all of the fish species that occur in Michigan.

We have an IMAGIN (Improving Michigan's Access to Geographic Information) Conference coming up in May 1-3, 2006. The call for Abstracts is out. We also have a student paper competition, if anyone is interested. It is a separate event. There are cash prizes for every category. That will be held November 30, 2005 in Lansing at LCC (Lansing Community College). Also with the MSU training center, we've arranged to have a 10% discount for any IMAGIN members taking the Remote Sensing Classes.

XIV. Other Issues

Discussion of the cost effectiveness and educating at all levels the importance of GIS/Framework program.

XV. Next Meeting Date

November 3, 2005, 10 a.m. until 12 p.m., Michigan Center for Geographic Information, George Romney Building, 111 S. Capitol, 10th Floor, Lansing, MI 48933