MICHIGAN NSDI CAP GRANT
POST MEETING NOTES & COMMENTS
MAY 10, 2010

This document is a listing of comments and additional information submitted after the conclusions of the five regional listening sessions.

NG9-1-1 AND GIS

Received from Michael T. Muskovin, Data/Radio Systems Manager, Ottoaw County Central Dispatch Authority

I'd like to take the time to describe, in very limited detail, what I began to reference at the meeting. Internationally, 9-1-1 is approaching a fundamental change in the way that callers are reaching their local Public Safety Answering Point (PSAP).

Today, 9-1-1 calls are routed to the appropriate PSAP by way of the Master Street Address Guide (MSAG). The MSAG is a database of address ranges and their associated emergency response zones. The MSAG is referenced by the caller's telco in order to determine where to route the 9-1-1 call. While the MSAG can be verified against centerline data for purposes of QA/QC, the two are not synonymous. The MSAG, along with other call delivery and detail information, form Enhanced 9-1-1 (E9-1-1). With an E9-1-1 system, PSAPs may optionally deploy mapping systems that will plot the location of calls and incidents. In this way, GIS is a secondary or tertiary system for the operation of a PSAP.

In order to receive calls and location information from non-traditional devices, the 9-1-1 community is developing a system called NG9-1-1. Next Generation 9-1-1 (NG9-1-1) is changing 9-1-1 on a level as primary as call routing. In an NG9-1-1 system, telcos send a 9-1-1 call to an Emergency Services IP Network (ESINet). The ESINet is an IP network that may or may not be operated by a telco. Once the 9-1-1 call enters the ESINet, it is routed to an array of servers providing a multitude of services such as Location Validation Function (LVF), Location to Service Translation (LoST), and Emergency Services Routing Proxy (ESRP); all completely GIS-driven. The GIS systems within the ESINet makes it possible for 9-1-1 calls to be routed to the appropriate PSAP with supplemental data information that will assist first responders in locating and acting at the scene. In this way, GIS is a required primary system for the routing and deliver of 9-1-1 calls.

I'm afraid that the GIS community is not aware of this requirement for the operation of NG9-1-1. The level of accuracy required for this to function at the level needed by PSAPS is near 100%. It will take a monumental effort on the part of both 9-1-1 and GIS communities to make NG9-1-1 and accurate call-routing a reality.

To quote Lew Nelson, Law Enforcement Solutions Manager at ESRI, "GIS has traditionally been the paint job on the car. Now it is becoming the chassis." His words ring clear as the chassis for NG9-1-1 is GIS!

Additionally, the Center for Shared Solutions should be made aware of pending legislation to make matching funds available to build a statewide GIS system for the express purpose of providing routing of calls within the ESINet. While

no detail has been including to identify the form or means by which this dataset should be developed, it is logical that CSS be involved if not tasked with this endeavor. House Bill 5622 (specifically page 4, line 6) can be found at http://www.legislature.mi.gov/(S(ldpybnb5yc1l2x45haeskhn4))/mileg.aspx?page=GetObject&objectName=2009-HB-5622

For more information regarding NG9-1-1 and its GIS components, see the NG9-1-1 Project page on the National Emergency Number Association (NENA) website http://www.nena.org/ng911-project

NEEDED USER FORUM

The following comments were submitted via e-mail by A Benjamin Barker, GIS Cartographer, Commonwealth Associates, Inc.:

The idea is to have a user forum similar to what is run through ESRI's User Forum. I noticed people who normally wouldn't talk to each other, because of varying reasons, were starting to discuss ideas and solutions with each other. If we had a discussion board/user forum specifically geared towards the MGF and its users, we, as users, could collaborate better. For example, imagine if Ottawa County 911 is having issues geocoding their rural addresses. They could create a post, or look to see if others are having the same issue. Ingham County's GIS Dept. may have a solution to the problem and can go online and post the solution. Often parties can be reluctant to share data but this way they could possibly get a solution to their specific problem without necessarily touching the data. A bonus with this proposal is solutions can be shared by the "haves" and the "have-nots" alike.

COORDINATING COMMITTEE NEEDED

Comment received from Steve Perry, Senior GIS Specialist, Southeast Michigan Council of Governments:

There needs to be an effort to create a Statewide Coordinated body that represents all facets of the geospatial community in Michigan.

STATE LAWS TO SUPPORT GIS AS CRITICAL DIGITAL INFRASTRUCTURE

Comment from Andrew J Hartwick, GIS Director, St. Joseph County:

My understanding is when Michigan's governmental GIS was in its infancy it got pigeon holed in with whatever department was attempting to champion it. Now that GIS has become more prevalent in everyday life, the desire for other departments to control it has increased (i.e. more data, more revenue, more personnel, etc). Some of these departments use the "its not a mandated service" to either keep them from becoming their own department or to attempt to place additional controls on them. This becomes a problem for governmental GIS practitioners because the majority of their time can be spent doing specific Equalization or Central Dispatch assignments, never getting to see its

full GIS potential come to fruition. I believe State Law should be enacted to aid in the establishment and maintenance of local governmental GIS as a critical digital infrastructure.

FOCUS OF CENTER FOR SHARED SOLUTIONS

Comment from Andrew J Hartwick, GIS Director, St. Joseph County:

Also with the new name of Center for Shared Solutions I believe that they should focus more on "solutions" to usability rather than "solutions" of obtaining/creating/maintaining data that is already available through local governments. The State has the ability to create applications that are useful to local government and citizens of the State. This I did not see mentioned in the notes (perhaps I missed it). Software solutions could be the best leverage in getting a real data standard in place which local governments will want to use. An issue with creating data standards is that if you don't need them for your daily use, why do so when everything is working fine here? For example if there were a 911 mapping application housed at the State where locals could upload their datasets into and have the local dispatchers utilize these data, there would be a large desire to have standardized attributes and geographies throughout the local GIS departments. This could also relieve some of the burden of data maintenance at the State because participation from cities and counties who have no incentive to participate to get involved would start doing so. Applications like a centralized 911 mapping system could pave the way for other user friendly for-public consumption online dynamic maps.

COMMENTS FROM THE US DEPARTMENT OF INTERIOR (NATIONAL PARK SERVICE)

United States Department of the Interior

NATIONAL PARK SERVICE
Great Lakes Network Office
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Providing Inventory & Monitoring services to: Apostle Islands National Lakeshore, Grand Portage National Monument, Indiana Dunes National Lakeshore, Isle Royale National Park, Mississippi National River and Recreation Area, Pictured Rocks National Lakeshore, Sleeping Bear Dunes National Lakeshore, St. Croix National Riverway, and Voyageurs National Park.

4/13/2010
Michigan Center for Shared Solutions and Technology Partnerships
GIS Business Planning and Framework Stewardship Meetings

The National Park Service maintains three park units in Michigan, Isle Royale National Park, Pictured Rocks National Lakeshore, and Sleeping Bear Dunes National Lakeshore. We are very interested in cooperating on acquisition, maintenance and archival of spatial data layers in Michigan. The Great Lakes Network is a relatively new program within the NPS, and our mission is to conduct long term ecological monitoring in and adjacent to National Parks.

All of our Network monitoring programs rely on spatial data, thematic data layers, aerial photography, roads and parcel data, and others in carrying out this mission. In particular, the land cover monitoring program is primarily based on remote sensing techniques, and we currently budget for acquisition of high resolution aerial photography on a six year rotation for each of our parks.

We strongly support efforts to bring together various public and private funding mechanisms to provide for greater efficiency in acquisition of spatial data, in particular, aerial photography, providing for data availability to a broader user community. These efforts also build stronger working relationships for voicing our related data needs, development of data standards, as well as sharing of resulting analysis, information, and reports. NPS funding is committed to ensuring these datasets are available in the public domain, recognizing that the public should have access to data paid with public dollars.

Our primary need for aerial photography is spring, leaf-off imagery, preferably at 0.15 – 0.2m (6 – 8 inch) resolution. We also find the NAIP imagery to be of value, and we support acquisition of all four image bands when flown with digital camera. This year, we provided funding to a state-wide program in Wisconsin (Wisconsin Regional Orthophoto Consortium – WROC), rather than as an individually contracted flight, and believe efforts such as this provide for the best use of public funding to the larger user community.

I would appreciate being informed on any on-going efforts in developing data sharing opportunities, and we are in a position to contribute funding for aerial photography acquisition pertinent to our park areas.

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