

Virtual USA Pacific NW Regional Pilot
Oregon State Demonstration Meeting
December 1, 2009

Oregon Emergency Management (OEM) Deputy Director John Sneed welcomed attendees to the conference and led introductions. Major General Raymond F. Rees then provided opening remarks and thanked those who have worked on this project so far. The following is a summary of the day in an addition to the handouts.

OEM Director Ken Murphy discussed the purpose and outcomes from the agenda and handouts. He said that leaders and the public in general want more information as quickly as possible during disasters and there is a lot of GIS use now. OEM staff recently observed presentations from Oregon Department of Environmental Quality involving an extensive use of GIS data mapping to support their response operations, and Klamath County Commissioners shared drought analysis maps at the recent Oregon Drought Council meeting which use watershed/basin GIS data sets to help them manage drought issues. Ken wanted attendees to think about how they could use mapping – both in viewing and analysis of data. The Virtual USA project is intended to help authorities at various jurisdictional levels accomplish their missions more effectively, eventually becoming a national capability. After viewing the examples shown at the conference, Ken encouraged attendees to be thinking of applications they could use, and invited everyone to offer up their expertise and/or data. This could pertain to daily agency use or during disaster response and recovery.

Chris McIntosh from the Department of Homeland Security (DHS) Command, Control and Interoperability Division then spoke. Now working on Virtual USA, he spent time as an operations officer in Virginia's Department of Emergency Management (VDEM), which designed and operates the VIPER (Virginia Interoperability Picture for Emergency Response) system (first example on agenda) was developed. Now working on Virtual USA, he related the story of a fire conflagration event that occurred in Virginia and how VDEM staff were accessing 18 websites in an effort to develop accurate real-time situational awareness. The staff was not able to develop an effective situation map. Routinely VDEM activated full EOC staffing because there was no way to gauge manpower needs in a timely manner as situations developed.

Virtual USA is being developed by DHS as a mechanism to allow jurisdictions to share information regardless of the visualization platform being used (Google, ESRI, WebEOC etc.). DHS is sponsoring pilot programs with multiple states participating in regional information sharing exercises in order to demonstrate that varying technologies and platforms can communicate while taking advantage of emerging technologies and cost saving collaborative processes and methodologies. The southeast states just completed an initial phase to their Virtual USA Pilot with a disaster information sharing demonstration that included several states and DHS and FEMA headquarters. DHS is focused initially on identification of state needs, concerns and issues before long term regional or national technical solutions can be further developed. The White House is

actively supporting the development and success of Virtual USA in terms of information sharing and government transparency.

Next a WebEx demonstration of VIPER was shown. Bobbie Atristain, from VDEM, used a laptop with an aircard from Virginia to demonstrate the portability of the system, with Lisa Martilotta from DHS (in Washington DC) moderated a conference call with the meeting attendees and presenters. Bobbie showed various maps along with the layers available, and gave examples of what can be shown. VIPER is just a website so there is not a heavy load on their system and all databases can be referenced with few limitations. Their website is: <https://cop.vdem.virginia.gov/viper>. Anyone can access it and see what they offer. All data is able to be seen but to manipulate the data a user needs a password. The use of passwords keeps the data safe but openly available. They will provide the code for VIPER to anyone who requests it for free.

The next teleconference demonstration was from Virtual Alabama, provided by Chris Johnson with Alabama Geospatial Technologies. This program is user account/password protected and not for public use. They have 6,000 users from 1,450 agencies. The information is provided by local government agencies who keep the data updated since they have the ability to make changes immediately. Chris showed various uses of their program – monitoring of hurricane forecasts and river levels, flood stages and predictions, hazmat plume modeling, fire location and size, sex offender locations in relationship to schools, traffic speeds and congestion on state roads, and landing areas for emergencies. She demonstrated three dimensional pictures of buildings including interior cameras, and various school mapping projects. Users provide feedback and they leverage many sources of information, for example oblique imagery (side views taken from planes). Data can come from many sources such as databases, spreadsheets, Twitter, Flickr, or even pen and paper.

The next discussion was related to applicability to state, local and regional situations. John Sneed, OEM, listed the spectrum of events that may require information mapping and analysis, from the local level up to a catastrophic event like the Cascadia Subduction Zone earthquake/tsunami. He invited attendees to consider the wide range of potential uses for data to include disaster mitigation, planning, response and recovery operations.

Sean McSpaden, Oregon Deputy State Chief Information Officer, then spoke on Oregon GIS and provided an update on Oregon's information sharing capabilities. Sean gave an overview on the governance structure, current datasets and standards, existing systems and capabilities, future needs and next steps. By Executive Order there is an Oregon Geographic Information Council, which provides leadership for the GIS community in Oregon. The Oregon Geospatial Enterprise Office (GEO) is led by Cy Smith. There are 14 Framework Implementation Teams, with over 350 people working on them. Slides of existing systems (Oregon Spatial Data Explorer, Oregon Imagery Explorer, ORMAPP – Tax Lot Data, Oregon TripCheck, etc.) and existing data development and information sharing committee memberships were shown.

Don Pettit from Oregon DEQ discussed Oregon IRIS (Incident Response Information System). It was funded by a grant through the Oregon State Fire Marshal's Office. Data is put on an external hard drive that is then distributed. It was built using PSU (Portland State University) students and DEQ staff. Several examples were shown, including: information on streams with fish runs in the case of a hazmat spill; the ability to locate chemical/contaminant sources and their potential impact on drinking water; and, the ability to identify land owners (including Tribal Emergency Response groups) that would need to be brought together to respond to an incident.

Milt Hill, Oregon State GIS Framework Data Coordinator, then presented Oregon Hazards Explorer, a website developed by the Oregon Department of Administrative Services Geospatial Enterprise Office (GEO), Oregon University Libraries, and the Institute of Natural Resources. It is a public domain website/system. The Hazards Explorer provides basic and advanced access (as well as view, print, download capabilities) for key Hazards data on static and interactive maps of Oregon. (All website information mentioned at the conference was given out on a handout and is available online at: <http://www.oregon.gov/DAS/EISPD/GEO/VirtualUSA.shtml> .

Sean then talked about a recommended set of next steps. Ken Murphy, OEM, is the lead on re-energizing Oregon's Preparedness Framework Implementation Team and is seeking volunteers. Ken is partnering with Ian Madin from DOGAMI, who serves as the lead on Oregon's Hazards Framework Implementation Team. Milt Hill, DAS GEO, will be the contact person for both groups.

Lunch Break

Chris McIntosh, DHS, spoke about the cost/benefit/timing to do Phase 1 of the Pilot. Costs will depend on what Oregon wants and needs with our specific requirements driving the ultimate cost of the system. Simple viewing of data can be close to free, but using data for decision support in more sophisticated ways will involve costs. VIPER in Virginia was free at first – done on their own time. DHS can help in finding funding opportunities that are available and can provide some level of technical support. Most of the time needed is working on data sharing and operating agreements. September of 2010 is the timeline for a Pacific Northwest demo.

Lessons Learned from the SE Regional Operations Platform Pilot (ROPP): Chris highlighted the need for selling the pilot as a win-win for partners with open collaboration being the key to saving all jurisdictions time and money. The cultural shift will be harder than the information technology components of the pilot. Data sets and databases should be kept at local level to keep them accurate.

Virtual USA respects the sovereignty of each jurisdiction by encouraging the storage and provision of data at the local source and by providing secure website services and various frameworks.

Next Steps: John Sneed, OEM, shared how Oregon representatives attended a meeting in Tacoma, Washington in September with the five involved states: Montana, Alaska, Idaho, Oregon and Washington in which the five states' leaders agreed to go forward with the pilot. John highlighted the fact that (in partnership with DAS) Oregon's Virtual USA website was in place and that the purpose of the data inventory spreadsheet posted on the site was to gather information that would help us prioritize needs and wants of the jurisdictions. John discussed the quarterly Pilot phases and goals, and explained that the five northwest states have agreed to participate in a NW regional disaster information sharing demonstration in September 2010 using a winter storm scenario.

Ken Murphy, OEM, then spoke on the regional committees and working groups that needed to be formed, which are mostly assigned. The state working groups (particularly at the operational level) are where help is needed.

Regional Executive Steering Group – MG Rees, Oregon Homeland Security Advisor, is Oregon's representative.

Regional Steering Group – Ken Murphy and John Sneed (OEM), Sean McSpaden (DAS) and MAJ Martin Plotner (OMD) will serve initially as Oregon representatives on the regional steering groups.

State Working Groups:

General Oversight – Initially Ken Murphy, John Sneed, Sean McSpaden and Marti Plotner will serve as the state general oversight group.

Operational – In January 2010 we will hold an initial meeting of a state Operational working group and invite representation from city, county, special district and state agency levels of government. Currently we have the following volunteers: Mike Harryman from State Public Health and Roger Stevenson of the City of Salem.

Technical – Recommend the Hazards & Preparedness FIT groups fulfill the overall technical roles. Will still do need some expertise that can look at the hardware and software issues. Meeting schedules will be published.

Chris from Virtual USA indicated that his team was available to assist Oregon workgroups move forward, but that they should not drive the process. It was suggested to look for counterparts in the other states and see what they did. Further, meeting participants asked how information about the Virtual USA Pilot would be communicated more broadly in the future. Ken said that he is getting the word out via OEMA (Oregon Emergency Managers Association) and additional existing groups like EPIC (Emergency Preparedness for Infrastructure and Commerce).

General Rees closed by saying he thought this pilot project is exciting, makes common sense, and can have an enormous return. It is a challenge and an opportunity. He thanked DHS and Oregon DAS for their help, and all participants for attending.

ADDENDUM: Questions asked during conference with answers given:

- What is DHS giving to this pilot? Expertise, and leads to grants and grant writing.
- Where would funding come from? Grants are an option.
- How long did VIPER take to put together? Four months.
- What kind of access control is there in place? States can decide.
- How is data shared? Various means from mail to technology.
- What if Internet goes down? No single points of failure – many sources of data.
- Who has saved money? Virginia saved \$250,000 on each EOC activation by using less staff to monitor EOC, etc.
- What is the accuracy of the data? Metadata is critical to show how and when it was created. There would need to be a way to make sure that all data accessed has been vetted in some way.