

# Maine Municipal Technology Conference 2017

## MEGUG GIS Track

### Concurrent Session 1

#### **Airborne Topo-bathy LIDAR**

Drew Meren, Quantum Spatial (30 min.)

Airborne Topo-bathy LiDAR has become more widely used in recent years to assist in the management of water (coastal and river) projects either for maintenance, like floodplain mapping, or incident response, like in the wake of Hurricane Sandy. We will discuss what Topo-Bathy is, how it is acquired, and what datasets can be generated to assist your municipality.

#### **The 3D Elevation Program (3DEP)**

Dan Walters, USGS, National Map Liaison for ME, MA & RI (30 min)

The primary goal of 3DEP is to systematically collect enhanced elevation data in the form of high-quality light detection and ranging (lidar) data over the conterminous United States, Hawaii, and the U.S. territories over an 8-year period. Interferometric synthetic aperture radar (IfSAR) data will be collected over Alaska. A 2015 USGS Broad Agency Announcement (BAA) established a competitive solicitation procedure for partnering with federal agencies for lidar acquisition. So far 3DEP has provided funds in partnership with 54 projects yielding over 200,000 sq. mi. of high-quality elevation products. This portion of the presentation will describe the 3DEP program, review its impact on the northeast and highlight the tools used to make the program successful.

### Concurrent Session 2

#### **Accessing Spatial Information from MaineDOT Data (30 min)**

Tom Lynch, Maine DOT

Have you ever had a need to use spatial transportation information in your job, but didn't know where to find the most current information? People have many uses for spatial transportation information including local planning, freight management and economic development. There is probably some use of spatial transportation information you could apply to your position. This talk will review the different ways any user can access public information available from the Maine Department of Transportation. We will cover access via Open Data Portals and custom mapping applications with live demonstrations that all attendees will be able to utilize in their own work as needed.

#### **VETRO FiberMap - a broadband GIS platform**

Will Mitchell, NT Solutions, Portland, ME (30 min.)

VETRO FiberMap is a new broadband network mapping solution for small and mid sized ISPs and their partners planning and deploying fiber optic networks. This web-based mapping platform was launched in 2016 by NBT Solutions of Portland, and is being adopted by ISPs around the US as well as here in Maine. The platform delivers robust network design, engineering, and inventory tools for network engineering, coupled with market planning, reporting and ROI analysis, and sales qualification features. Company co-founder Will Mitchell will present an introduction to the platform and share some experiences relating to mapping data for local broadband planning.

## **Concurrent Session 3**

### **The National Hydrography Requirements and Benefits Study**

Dan Walters, USGS, National Map Liaison for ME, MA & RI (30 min)

The National Hydrography Requirements and Benefits Study (HRBS) was performed to establish a baseline understanding of national business uses, needs, and associated benefits for national hydrography data, and to inform the design of an enhanced future program that balances requirements, benefits, and costs. The study was sponsored by U.S. Geological Survey (USGS) and the U.S. Department of Agriculture's Natural Resources Conservation Service and was completed in May 2016. Study participants included 21 federal agencies, non-profits, private and commercial entities, and local, state, and tribal governments from across the 50 states, Washington, D.C., and American Samoa. An analysis of the results found that an improved national hydrography program has the potential to help users realize an estimated \$602.5 million in annual program benefits if all reported requirements were met. This half of the presentation will provide a review of the HRBS and USGS plans for using the results.

### **Maine GeoLibrary Data and Programs**

Joe Young, Maine Office of GIS and Jon Giles, Maine Geolibrary Board (30 min)

Low Cost Imagery for Maine Towns, high resolution topographic data, hundreds of other data layers are available from the GeoLibrary and Maine office of GIS. Learn how to access the data and participate in the programs to acquire high resolution data for your community. There will also be a discussion of the current bond proposal to support the development of geospatial data.

## **Concurrent Session 4**

### **GIS, Mapping, & Spatial Awareness for Your Fire Department**

Vicki Schmidt, Maine Fire Instructor Training Officer, Buckfield FD (60 min.)

Driver training, mapping detours, and identifying target hazards are just a few of the endless functions offered by modern mapping technology. But many firefighters, chief officers and fire official may find these technologies perplexing. This talk demystifies the options and showcases ideas for utilizing spatially-based GIS and mapping services.

## **Luncheon Speaker**

### **Why Geography Matters?**

#### **Judy Colby-George, Spatial Alternatives**

How often do you wonder what the impacts of various policy options would be on your community? Have you thought there must be a better way than a spreadsheet to tell the story of the work that you do? Or felt that the data you collect must be able to tell you more about what is going on in your community? Have you had to photocopy three tax maps and tape them together and color them in order to explain the possibilities of a particular location? Then you have been thinking about geography. We will discuss how you can use principles of geography to leverage the data municipalities deal with every day to provide better service and enhance understanding of policy choices within the community.

Judy Colby-George is the owner of Spatial Alternatives, a GIS consulting firm in Yarmouth, Maine. She has been providing GIS services to municipalities in Maine for the past 25 years. She has worked with a large number of communities to help them use geospatial tools to enhance services and engaging the public in complex policy issues, including environmental decisions and land use policy.