Spring Conference

Wednesday, April 8, 2015 – Thursday, April 9, 2015

at

ESRI

35 Village Road
First Floor Conference Room
Middleton, MA 01949

Wednesday Afternoon, April 8

2:30 –3:00 pm	*Registration*
3:00 –5:00 pm	Ray Corson *Corson GIS Solutions* **ArcGIS Online Workshop** Online mapping was once reserved for only organizations with large enough budgets to either contract out web-hosting, or purchase expensive infrastructure to host themselves. Esri's ArcGIS Online platform allows organizations of all sizes to utilize online web mapping solutions in their organizations. Please join us on Thursday afternoon for an ArcGIS Online hands-on workshop with Esri ArcGIS Online Specialty Partner Corson GIS Solutions. The workshop will provide an overview of the platform, as well as hands-on experience in creating web-mapping applications. Bring your laptop and join in the fun, or just observe. ***Ray Corson, Esri ArcGIS Online Specialty Partner, Corson GIS Solutions.***

Thursday, April 9

8:00 – 9:00 am	*Registration, Vendors, and Breakfast*
9:00 – 9:30 am	Opening Remarks and Vendor Presentations
9:30 – 10:15 am	David Knudsen Boston Region Metropolitan Planning Organization **Effective Linear Feature Comparison Using ArcGIS** Comparing data records based on shape, in addition to standard text and numeric attribute values, is key to many tasks within GIS systems. Two such tasks, merging data sets or eliminating duplicate or overlapping records within data sets, rely on finding spatially equivalent records. Another task, change detection between data set versions, depends on discovering spatial differences between identically-keyed records in each version. ArcGIS supports shape comparison in off-the-shelf and custom-built tools and incorporates a customizable tolerance so that shapes need not be precisely equal to be considered identical. However, line features' shapes are not merely ordered collections of vertices having X and Y coordinates. They have direction and may also have measure and height values for each vertex. Therefore, they can meet some comparison tests while failing others. Armed with an understanding of the basis of ArcGIS shape comparison, users can choose the appropriate tools or write their own to ensure that features are compared as necessary and on their terms. *David Knudsen is a GIS Analyst for the Boston Region Metropolitan Planning Organization, where for the past 14 years he has wrangled geographic data to support transportation analysis and planning*
10:15 – 10:45 am	Chandreyee Lahiri *MA Department of Conservation & Recreation* **Developing a management system for streetlights using ArcGIS Online** The Massachusetts Department of Conservation and Recreation (DCR) is responsible for thousands of streetlights on diverse DCR managed facilities, ranging from playgrounds and beaches to parking areas and state forests. Light locations collected via GPS have been turned into web-maps that help DCR engineers with their myriad maintenance tasks, upgrades and troubleshooting. Attribute data and photographs were collected with the Collector app. Simultaneous data collection by multiple field work staff was managed real-time from the office enabling relatively pain free data development. Sub-contractors are being trained and will be similarly monitored in future as they complete upgrade and maintenance tasks so that the management system is sustainable. Learn about the obstacles and solutions encountered in setting up this system as well as its potential for the future. ***Chandreyee Lahiri has been a GIS Specialist with the MA Dept. of Conservation of Conservation & Recreation for almost 15 years. She has an MA in Geography and experience in projects involving resource conservation, forestry and model development.***

10:45 –11:00 am	*Break*
11:00 –11:45 am	David Salzer Patrick Santoso *Technology Transfer Center, UNH* **New Hampshire Mosaic: The Power of a Composite Land Base** Governments around the world are awakening to the power of composite land bases and the efficiencies and cost savings that they can yield. In the US, multiple states including New Hampshire have begun developing composite land bases. The New Hampshire Mosaic is a compilation of GIS parcel boundaries and computer assisted mass appraisal (CAMA) data, sourced from each of the 235 taxing jurisdictions in the state. Property information is augmented with real estate transfer information on a weekly basis from each of the 10 County Registries of Deeds. New Hampshire Mosaic is being leveraged by over 10 state agencies in a variety of disciplines. Learn about the Mosaic and its utilization, methodologies, workflows, and the potential challenges of large scale composite land base development. *David Salzer manages the Mosaic Parcel Map Project at the Technology Transfer Center. He received his BS and MS in Engineering from UNH in '05 and '07 respectively and is currently pursuing a Ph.D. in Civil Engineering. David also manages a number of "Special Projects" for the center including; the Municipal GIS Assistance Program, the New Hampshire Damage Estimation Program, and Tax Administration Program Development.* *Patrick Santoso is the Property Tax Equalization Manager at the Technology Transfer Center. He has a BS and MS from UNH in Engineering and is currently pursuing a Ph.D. In addition to Property Tax Equalization Patrick also manages Road Salt Reduction in winter maintenance, Municipal Road Surface Management, process automation, and GIS data collection projects.*
11:45 – 12.30	Steven Santovasi, GISP Burns & McDonnell **Application of UAV Technology in GIS** With the recent advancements in super-light, low altitude UAV technology, the applications are becoming commercially available for personal level ultra-high resolution orthomosaic imagery, 3D point clouds, and residual products such as contouring, slope mapping, hillshading, aspect mapping, DEM, DSM, DTM, TIN, georeferenced images, NIR imagery, NDVI, and Google Earth 3D KML data. This is a look into the cutting edge of UAV mapping and how it is being currently applied in geospatial technologies today. ***Steven P. Santovasi, GISP is the Geospatial Services Manager at Burns & McDonnell, New England Regional Office in Wallingford, Connecticut. His responsibilities include Managing GIS Services, UAV Technologies, 3D Services, GPS technologies, Surveying, Mobile Mapping Solutions, and Web Mapping Solutions for several multi-billion dollar critical infrastructure electrical transmission reliability projects. He has 25 years' experience in the ESRI GIS market and survey industry, a BS in Management Information Systems, a Certificate in Geographic Information Systems, is a Certified Geographic Information Systems Professional, Certified Civil and Commercial UAV Pilot, and a Member of the GISCI Certification Board.***

12:30 – 1:30 pm	*Lunch and Vendors*
1:30 – 2:15 pm	Michael Clifford, PLS *DGT Survey Group* **Subsurface Utility Mapping in Two Dimensions and Three** While industry standards for the collection and depiction of existing subsurface utility data have been in place for a generation, these standards and their application are not as widely known, understood or practiced as they should be. This presentation from the point of view of a practicing Professional Land Surveyor will give an overview of the basic code of standards and discuss how to integrate them as Best Practices into a utility mapping specification. Surveying methods, locational accuracies and means of plan graphic standards will be presented with reference to actual projects, with an emphasis on urban sites. ***Michael A. Clifford, PLS is a Principal at DGT Survey Group in Boston, Mass. He has over 30 years of experience in surveying and mapping for a range of clients, including utilities, land developers, construction managers, and designers.***
2:15 – 3:00	Jed Fehrenbach *Town of Brookline* **Creating a Web Application that Utilizes ESRI's Local Government Information Model** The Town of Brookline, MA has long been using ArcSDE and ArcGIS Server to host a number of GIS-based web applications. Our most recent endeavor involved the use of ESRI's Local Government resources to redesign our aging "WhereAmI" application into something with a fresh, clean map-based interface that would work on any device with a web browser, regardless of the OS or screen resolution. ESRI's MyGov Services app provided a great foundation to build upon. After a demo of the new WhereAmI web application, we will look in detail at the three main components needed to implement - the geodatabase, the REST services, and the web application files. ***Jed Fehrenbach has been the GIS Administrator for the Town of Brookline for six years. Prior to this he served as a GIS Analyst in Austin for the Texas Department of Transportation. He received his undergrad degree in Geographic Information Science from the University of Southern California in 2003.***

3:00 – 3:45 pm

Zachary Shark
Boston Fire Department

Implementation of LiveMuM by Boston Fire Department

In June of 2014, the city of Boston transitioned to a new, map-based CAD (Computer-Aided Dispatch) System from Intergraph. The system interfaces many different applications such as LiveMUM (Live Move up Module) used by Boston Fire Department. LiveMUM is a visual, map-based application that utilizes rules and configurations to alert Fire Alarm Operators when there are gaps or holes in coverage for Engines, Ladders and Chiefs in the city. It can recommend move-ups during day-to-day operations when company's go out-of-service for drills/training, or when prolonged incidents occur that would utilize many resources.

Zachary Shark graduated University of Massachusetts Boston 2011 with a B.S. in Environmental Sciences, and focus on GIS in Emergency Management settings. He works for the Boston Fire Department leading the effort to configure the map-based dispatch system used today. Daily functions involve monitoring aspects of the system, GIS issue resolution and fire alarm operator training.

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