

# **Information Resource Exchange Group Highlights**

Wednesday, December 9, 2015

The 97<sup>th</sup> meeting of the Information Resource Exchange Group (IREG) was called to order at the Delaware Valley Regional Planning Commission's office by Christopher Pollard, Delaware Valley Regional Planning Commission. Forty five people were in attendance.

#### **Key Points**

- Open Source data is leading the way on how developers and geospatial companies are building new web platforms, resources, and tools. Open data has proven that it is becoming more vital to the successful development of new web, desktop, and mobile applications.
- Python is a powerful scripting language that can help GIS professionals drastically improve their workflows and can change how they manage multiple projects. Spending time learning Python to build tools that help automate repetitive tasks, analysis, and data creation will benefit many.

#### **Presentations**

## **Openly Mappy**

Diana Shkolnikov (@dianashk), Engineering Director at Mapzen, spent time discussing open source data and tools created by her and her colleagues at Mapzen for utilizing such data. Mapzen is an open source mapping lab, focusing on core components of geo platforms, including search, rendering, navigation, and open source data. People alike can access free data through a variety of sources such as:

OpenStreetMap (OSM), Openaddresses.io (parcel data), and Mapzen's own data portal: Who's On First (<a href="https://whosonfirst.mapzen.com">https://whosonfirst.mapzen.com</a>). Mapzen builds and provides a variety of tools as services, but also allows for developers to easily access and setup the tools for personal usage. Among these services is a search tool for modern geocoding, transforming names/addresses into geographic coordinates, and vice versa. Another service discussed was Mapzen's Turn-by-Turn: a routing service for applications based on the OSM road network data, that can provide directions anywhere in the world. Information about Mapzen and numerous other services can be found at: <a href="https://mapzen.com">https://mapzen.com</a>.

## Python and GIS: Improving Your Workflow

John Reiser (@johnreiser), Rowan University, spent time discussing the power of Python scripting and how to better leverage GIS projects using Python. As of December 2015 (*TIOBE Index*), the Python language was rated as the 4<sup>th</sup> most popular programming language, in part, due to its functionality and flexibility. Python maintains a strong community of support and continued development, and can be easily integrated into various operating systems and GISs. For GIS, Python (which is actually built into ArcGIS) can extend ArcGIS functionality by creating standalone scripts for enabling scheduled task and improving ETL (extract, transform, and load) tasks. ETL processes can be rather tedious, thus Python can help compile, clean up, and load data straight to your database. Various modules have been created to support web data retrieval and extraction, allowing users to access data through a single Python script. More information regarding learning Python can be found at: https://code.org or

http://www.codeacademy.com. ESRI also offers web courses in Python development (http://www.esri.com/training/main).

### **Information Items**

- DVRPC is getting ready to receive the 2015 orthoimagery in January 2016.
- Chester County reminded the committee that they have information about Natural Resource and Endangered Species on the Landscapes 2 (http://www.landscapes2.org) web site.
- ESRI's Federal GIS Conference is being held February 24-25, 2016.
- FOSS4G NA 2016 (Free and Open Source Software for (4) Geospatial) is holding their annual conference in Raleigh, NC from May 2-5, 2016.

The next scheduled meeting of the IREG is Wednesday, March 9th, 2016.

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