

Information Resources Exchange Group Highlights

Wednesday, December 12, 2018

The 108th meeting of the Information Resources Exchange Group (IREG) was called to order at the Delaware Valley Regional Planning Commission's office by IREG Chair, Michael Gall, from the City of Philadelphia Parks and Recreation Department. 49 people were in attendance.

Key Points

- Stephen Holt, Michael Baker International, discussed how they built a GTFS data model and workflow for creating, publishing and maintaining a General Transit Feed Specification (GTFS) in conjunction with NJTPA. The creation of the GTFS has provided multiple benefits to NJTPA and local transit agencies, such as: increasing transit ridership, promoting the transit agencies and NJPTA, and providing a new way to view and analysis real-time transit data to help future planning projects..
- DVRPC has developed a Map Reliability Calculator that helps planners and researchers using ACS data produce reliable maps without compromising an excess of geographic detail.
- CARTO, an open source web mapping and data platform for location data, has released two new powerful resources for users to create responsive and fast custom web mapping applications.

Presentations

Shared Transportation Services Mobile Application Data Support Project - Stephen Holt | GIT Associate II | Michael Baker International | stephen.holt.mbakerintl.com

In an effort to provide the traveling public with timely and accurate information about transportation mode choices, particularly "shared-ride" alternatives to driving alone, Michael Baker International, in conjunction with the North Jersey Transportation Planning Authority (NJTPA) developed a data model and workflow for creating, publishing and maintaining a General Transit Feed Specification (GTFS). The NJTPA Shared Pilot Shared Transportation Services Data Model project included information from twenty-three (23) data feeds from fifteen (15) shared-ride agencies. Using a variety of technology including ArcGIS, python, and SQL server, Michael Baker developed an extract, transform and load (ETL) process to collect and validate transit data from the various transit agencies into one unified GTFS feed to be consumed by third party applications like Google and Apple. Additionally, Michael Baker and the NJTPA developed outreach, implementation and maintenance plans to support future development and expansion of the system as need and interest of shared-ride mode choices increase. Stephen detailed how they worked closely with NJTPA and the other agencies to successfully produce a data-rich product that helps the public better understand public transit options as well as provides their partners with a better data-driven decision tool to view their transit operations.

Mapping with sample error in mind - Addison Larson | Planning Data Scientist | DVRPC | alarson@dvrpc.org

Survey estimates from the U.S. Census Bureau are used to characterize neighborhoods and inform planning and policy decisions. However, as researchers use smaller geographies, the margins of error increase relative to the size of the estimates, making these data less reliable in description and decision-making.

DVRPC has begun to address the issues associated with survey data by developing a Map Reliability Calculator that helps planners and researchers produce reliable maps without compromising an excess of geographic detail.

Addison demonstrated a tool that she recently built called "The Map Reliability Calculator". This is an interactive online tool developed in R Shiny that computes the expected classification error of Census estimates. She also discussed the trade-offs in categorizing and mapping estimates, including the number of classes, classification schemes, and geographies, and showed example maps and how they differ when a user's manipulates the different options within the tool. She wrapped up with a informative discussion of DVRPC's proposed procedure to satisfy reliability criteria for smaller geographies by aggregating adjacent observations.

CARTO - Andrew Thompson | Solutions Engineer | CARTO | athompson@carto.com

Andrew Thompson showed us several insightful new features and enhancements that have been made to the Carto (<u>https://carto.com/</u>) platform, an open source web mapping and data platform for location data. CARTO VL is a new javascript library that builds location intelligence applications using the power of vector rendering technology. This allows quicker map and data transitions and faster query and load rendering with direct access to the data layer and all the attributes. Airship is a library of layouts, basic patterns, components and widgets that allow for efficient and fast building and deployment of web mapping applications.

Information Items

- GevDev Summit 2018 will be held on March 5, 2019 in Harrisburg
- Esri Fed User Conference is being held January 29-30 in Washington D.C.
- GeoPhilly, MaptimePHL and Women in GIS Philly are having a Mappy Festivus on December 13

The next scheduled IREG meeting is Wednesday, March 13th, 2019.

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