

Federal Committee on STATISTICAL METHODOLOGY

Geospatial Interest Group 2017 Geospatial Workshop Bureau of Labor Statistics Janet Norwood Conference and Training Center October 23, 2017 DRAFT Agenda

8:30AM Welcome

Part I Geospatial Analysis for Disasters and Disruptions

8:45AM Advances in Geospatial Methods and Analysis Used in Disaster and Disruption Response and Evaluation

- Providing Disaster Relief, An ESRI Case Study Erica Phillips, ESRI
- USGS Office of Water Information VizLab Laura DeCicco, U.S. Geological Survey

9:45AM Break and Networking

10:15AM Hands On Disaster Apps and Tools - Two 25 minute on demos of apps from different agencies

- EPA Disaster Debris Recovery Database Lucy Stanfield, Environmental Protection Agency
- OnTheMap for Emergency Management Matthew Graham, Census Bureau

11:15AM Group Activities – Developing Cross Sector Geospatial Analytical Solutions

Proposed Questions/Scenarios for the Group Activity:

- 1. Choose and describe a natural disaster occurring in a specific area. How could we best determine land use allocation (i.e., the process of allocating different activities or uses to specific units of area) under conflicting objectives brought on by a natural disaster to maximize resources to meet objectives?
- 2. After a tsunami, an immediate concern is how to contain any outbreak of disease and prevention of further deaths because of starvation. Taking the fact that geospatial data is often sparse and of low quality in areas where tsunamis are likely to occur, what steps would you take to get an accurate picture of the damage and prioritize need with respect to disease containment and starvation? Think about the types of activities that would be necessary, and what specific steps (from a geospatial data perspective) you would take to carry out these activities.
- 3. When disasters strike, the areas affected are very chaotic, thus, it is imperative that areas that believe they might be affected by a disaster properly prepare for any upcoming disaster. Describe how GIS might be used to prep for an upcoming disaster. Think about medical needs of the population, evacuation planning, sheltering, and public transportation needs.

11:45AM Report Out

12:00PM Lunch

Part II Statistical Quality for Non-Survey Data

- 1:00PM Open Innovation: Engaging Citizens in Science in a Changing World Sophia B Liu, U.S. Geological Survey
- 2:00PM Geospatial Analysis and Tools Lightning Presentations A series of 5 minute talks about recent geospatial analysis, projects, and tools
 - School-level Poverty Conditions Index Doug Geverdt, National Center for Education Statistics
 - Challenges of Mapping Criminal Careers Using the Rap Sheet Data and Performing Predictive Analysis Based on the Movement of Career Criminals - Howard Snyder, Bureau of Justice Statistics
 - BLS Hurricane Maps using QGIS TBD, Bureau of Labor Statistics
 - Agricultural Flood Monitoring Claire Boryan/Zhengwei Yang, National Agricultural Statistics
 Service
 - EIA Coverage of Recent Hurricanes Jim O'Sullivan, Energy Information Administration
 - Uses of AIS Data
 – Marin Kress, United States Army Corps of Engineers
 - National Census of Ferry Operations Ferry Route Visualization Andrew Barrows, Bureau of Transportation Statistics
 - Promoting Best Practices in Measurement of the Food and Physical Activity Environments: The NCCOR Measures Registry User Guides - David Berrigan, National Cancer Institute
 - NCI Public Tools/Software Li Zhu, National Cancer Institute
 - National Transportation Noise Map BTS Tentative
- 3:00PM Break and Networking
- 3:15 PM Presentation on FCSM Problem of Statistical Quality for Non-Survey Data Rolf Schmitt, BTS
- 3:30 PM Group Activity Defining Transparency and Statistical Quality for Non-Survey Geospatial Data
 - 1. What are the best ways to describe the quality of geospatial data to:
 - a. a power user in technical terms?
 - b. a novice user in an executive summary fashion?
 - 2. When looking at data quality, geospatial data adds the dimension of location or spatial accuracy in addition to the need for correctly measuring a variable. What unique factors or considerations exist for geospatial data that are not present in non-spatial data and should be taken into account when examining data quality?
 - 3. Error can be introduced in various phases of data collection and analysis. These can range from input errors related to sampling or noise for non-disclosure, to processing errors when blending different data sets, to output errors created in running a model. What would guidance look like for describing these potential sources of error and explaining the possible impacts of these different errors (How far off might these results be and is there a good chance or a small chance)?

4:00PM Report Out and Wrap Up

4:30PM End of Day