ABSTRACT(S) IN THIS SESSION

Is That My Parcel? Modernizing Real Estate and Transit Oriented Development using GIS
Scott Sugar, Geospatial Technology Team Lead, HNTB, Atlanta, GA
Richard S. Slaton, CCIM – Director of Real Estate, MARTA, Atlanta, GA
Darin Welch- Geospatial Solutions Manager, HNTB, Chicago, IL

ABSTRACT TEXT: Real Estate Management System (REMS) is a web mapping tool that allows MARTA staff to identify properties they have acquired and disposed of from their desktop or in the field. REMS database holds nearly 1,000 active parcels, each of which are classified in three different categories (fee, easement and license). REMS has many functionalities to assist in the discovery and management of MARTA properties, like a global search tool and filtering ability, and users are also able to export information from the properties table. Using REMS, users can easily find a parcel, then interact with it to view all of the attributes that MARTA manages and has maintained over time. Once a particular parcel is found, users can also click on a series of scanned PDF documents that are related to the parcels such as title work, leases, appraisals, agreements, and drawings. Overall, REMS has enabled all relevant MARTA employees to view and manage the latest status of their properties an activity formerly lost through head knowledge and lack of access to information.

Development Review - Data Storage, Analysis, and Visualization with PostgreSQL, ESRI Server, and Geocortex Essentials
Krystal Phaneuf, GIS Specialist, Santa Clara Valley Transportation Authority, San Jose, CA

ABSTRACT TEXT: Santa Clara Valley Transportation Authority (VTA) is the Congestion Management Agency and Transit Agency for Santa Clara County. Our Development Review team "reviews, analyzes, and tracks land use developments within and near Santa Clara County to improve land use/transportation coordination, promote alternative travel modes, and encourage a balanced approach to addressing congestion. This process has been in effect since the late 1990s and has not had a huge technology overhaul since then. The team currently uses MS Access to enter in and store data relating to any new and/or existing projects. The database contains over 1,500 entries dating from 1997 - 2016. This project consisted of:

- Transferring the entire MS Access database into PostgreSQL for better storage capabilities and to reduce the incidents of data corruption.
- Creating an ArcGIS Service to allow for connection and feature editing to the PostgreSQL database.
- Visualizing the data in a Geocortex Web Service and creating multiple workflows to allow a more user friendly editing interface within the web browser.

The project was greatly received by the customer, the Development Review Team, and is currently in testing with plans for full integration with the program in April 2017.

Development of Live Train Map – An Integration of GIS and Train Control System
Minhua Wang, GIS Enterprise Architect, WMATA, Washington DC

ABSTRACT TEXT: Train control system is operated based on track circuit blocks, a common train detection method, to monitor train locations. A common way of displaying real-time train locations in a train control center is a schematic live train map. WMATA GIS has been working closely with WMATA's Automated Train Control (ATC) division, IT Rail Control Center division, IT Public Facing division and Media Relations Division to develop a public facing live train map application that showing real-time train locations on geo-referenced Google basemap.

The application has three major components:

- Backend track circuit block mapping: WMATA GIS has compiled both revenue track circuit blocks and non-revenue track circuit blocks into ArcGIS features from ATC circuit charts and using track LRS network developed by GIS.
• Conversion of track circuit block to geo-referenced point location (Lat/Long): a windows service was developed to receive live feed of train location from the Train Control System web service and convert track circuit locations to geo-referenced point locations

• Public facing live train map with Google basemap: a public facing live train map application was developed to combine ArcGIS map services and Google basemap using ArcGIS Javascript API

The live train map application has been published to WMATA’s public facing website: wmata.com. Now Metro riders can check and plan their travel for their desired Metro service lines with the application.