GEOGRAPHIC INFORMATION SYSTEMS

Online Express Edition

GIS Day 2009

Westchester County Hosts its 8th Annual GIS Day

Westchester County GIS held its 8th annual GIS Day on November 17th. The day's activities started with a map gallery in the county office building lobby showcasing 25 posters submitted by county staff, local government users and consultants which offer and provide GIS services throughout the county. Posters highlighted how GIS is currently being applied in the areas of infrastructure mapping (fire hydrants, storm drains and traffic signs), tracking invasive species in county parkland and mapping community assets. During the course of the day, dozens of county staff and citizens observed and critiqued the maps which were submitted by 15 different agencies and departments. A slideshow of the day's events and the map gallery can be seen on the county's GIS website.

In keeping with previous GIS Day activities, GIS staff also took time to reach out to county GIS stakeholders by holding two user group meetings – one for local governments and another one for county employees/staff. The morning User Group meeting included presentations from the cities of New Rochelle and White Plains and the towns of Ossining and Cortlandt. Woodard & Curran, consultants to the Town of Harrison and Village of Mamaroneck, and the Westchester Joint Water Works, also presented.

The User Group meeting in the afternoon was a huge success with over 45 staff employees - representing 15 county departments- jamming the 2nd floor conference room to hear user presentations and getting updates on enterprise GIS activities from GIS staff. User presentations from the departments of Planning (Future Developmental Planning in Westchester), Environmental Facilities (Automated Sewer Manhole Inspections), District Attorney (Crime Analysis) and Parks,

Recreation and Conservation (Biodiversity Surveying and Conservation) were provided. GIS staff provided a demo of the Optimum Routing Applications (ORA) and the new service-based Spatial Analysis for Public Health, and discussed forthcoming products (LiDAR & color orthophotography) from the Spring 2009 aerial photography campaigns.

GIS Day is held on the third week of November each year during Geography Awareness Week. It is a global event in which GIS organizations educate people on how geography makes a difference in our lives through the technology of GIS. For more information contact Cindy Marx at llc4@westchestergov.com.

twitter
Follow us on Twitter
http://twitter.com/WCGIS

2009 Best of NY Award

The Optimal Routing Application (ORA), developed in-house using open source and Google Maps components, received the Center for Digital Government's 2009 Best of New York Award for the category Project Demonstrating Most Innovative Use of Technology. ORA is a web-based intranet application providing county staff with "optimal" driving routes when using county vehicles as part of daily inspection and operational programs. ORA is currently being used by staff in several county agencies and is integrated with the county's fleet management application. Use of this application is intended to reduce both gasoline consumption and the number of miles driven in county vehicles. For more information contact Zhenglu Zhang at zqz1@westchestergov.com.

An overflow crowd of county employees attended the GIS Day user group meeting which focused specifically on county department applications and programs. Updates on 2009 countywide aerial photography projects and upcoming training opportunities were also discussed.

Spatial Analysis for Public Health

At the request of the Department of Health, GIS staff developed an ArcGIS Server 9.3 intranet application, providing them access to staff in Mt. Kisco and New Rochelle. The new "service" requires no client software, and combines dozens of environmental and social datasets with rich geospatial analysis tools. Flexibility was a primary goal, giving users the ability to display multiple event locations, and view them in context of relevant features. Locations can be mapped from a text file of street addresses or coordinates, and buffered by a user-defined distance. Users can also quickly find specific facilities within a buffer of any location on the map, or within any selected boundary or service district. 'Find' results, displayed at the bottom of the screen, can be exported as an 'action list' for field staff.

Critical facilities available in the map include: schools, hospitals, shelters, senior centers, municipal offices; and regulated industries such as restaurants and dry cleaners. The application includes datasets such as wetlands, steep slopes, soils, flood zones, EPA-regulated discharge permits, parks, watersheds, boundaries, roads, structures, street addresses, parcel boundaries, service districts, land use, census tracts, aerial photos, and many other layers. The user interface also provides customizable markup tools, measure, and print functions. For more information, contact Zhenglu Zhang at zqz1@westchestergov.com.

Municipal Outreach

GIS staff continues to provide ongoing support to local government GIS efforts through the county's Shared Services program. Several meetings and discussions have been held in recent weeks with officials from the villages of Tarrytown, Briarcliff Manor, Pelham, Scarsdale, Mamaroneck and the cities of Mount Vernon and Peekskill. Providing a public-facing web mapping application which provides basic tax parcel and property information (SBL, property use code, zoning, designation, mailing address, etc.) continues to be a high priority for many municipalities. The county is currently working towards deploying a basic tax parcel viewer map service which would be available to any municipality that makes arrangements to provide the necessary data. In the meantime, local governments are encouraged to use Mapping Westchester County as their default web mapping application. County GIS staff can provide a unique URL which can be posted on municipal websites to make interactive mapping available. The predefined URL address "zooms" to the geographical footprint (or boundary) of each municipality. Examples of local governments which have already taken advantage of this functionality can be seen at the Town of Cortlandt, City of Mt. Vernon and Village of Hastings. Local government specific data can also be integrated. For more information, contact Sam Wear at stw1@westchestergov.com.

Day vs. Night Population Distribution

Collaborating with the federal Homeland Security Infrastructure Program (HSIP), Westchester County GIS obtained LandScan datasets developed at the Oak Ridge National Laboratory which can be used to represent daytime and nighttime population concentrations throughout the county. This model of downtown White Plains illustrates the significant shift in population concentrations between business and evening hours. Such variations in population are useful in formulating emergency response, evacuation and traffic planning, and related public safety management scenarios.

New & Updated GIS Datasets

Westchester County GIS has recently developed or acquired a number of new datasets which are being made available either as download from the Data Warehouse or for viewing as part of Mapping Westchester County. Several datasets were automated as part of the county's Livable Communities project which includes locational data on physical and mental health care providers, pharmacies, fitness centers, adult homes, and other related "quality of life" facilities. Other recent database work includes (new): polling places, courthouses, hamlets and place names, veterinarians, and (updated): Beeline Bus routes and bus stops, hospitals and university locations. New Green Map datasets have also been added, including bike racks and environmental education centers and the updating of existing layers such as farmer's markets, Energy Star builders, and recycling locations. A new, highly accurate dataset representing steep slopes (polygon) is also now available having been produced in-house from 5-foot contours, replacing an earlier version derived from a 30-meter Digital Elevation Model (DEM). All geospatial datasets can be accessed from the Data Warehouse on the county's GIS website.

2009 Web Statistics

Westchester County GIS is a major GIS portal for public and industry interactive mapping applications, access to geospatial data downloads, pertinent web links, and a repository of countywide GIS contacts. The GIS web site was viewed by 68,241 visitors in 114 countries around the world representing 50 languages between January 1, 2009 and November 30, 2009. The website has an average of 204.31 visits per day with over 10,000 GIS data layers having been downloaded from the website.