

GEOGRAPHIC INFORMATION SYSTEMS

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New Features in Mapping Westchester County

GIS data viewing portal now includes access to tax parcel data

Mapping Westchester County and Tax Parcel Viewer (TPV) applications are the two major GIS public-facing interactive mapping applications hosted by Westchester County GIS. Mapping Westchester County (MWC) provides users with a variety of GIS tools including locating an address, finding nearby public facilities, search information on hurricane evacuation zones, access to historical aerial photography, and dozens of other geospatial datasets. The TPV is available for users to query and display tax parcel data along with other local GIS data layers. A key feature of the application is the ability to create an abutter notification mailing list.

One of the major improvements for the newly released version of MWC is the integration of these two popular applications. After an address has been identified in MWC, users are directed to the same address (or parcel) in TPV. Users are able to view more detailed parcel information,

including owner name (where available) Section, Block and Lot (SBL), and Print Key numbers. Users are also able to view the parcel in context of surrounding environmental features, such as floodplains, steep slopes, tidal wetlands and NYS regulated wetlands, zoning, and land use maps.

This release of MWC also includes the following new features:

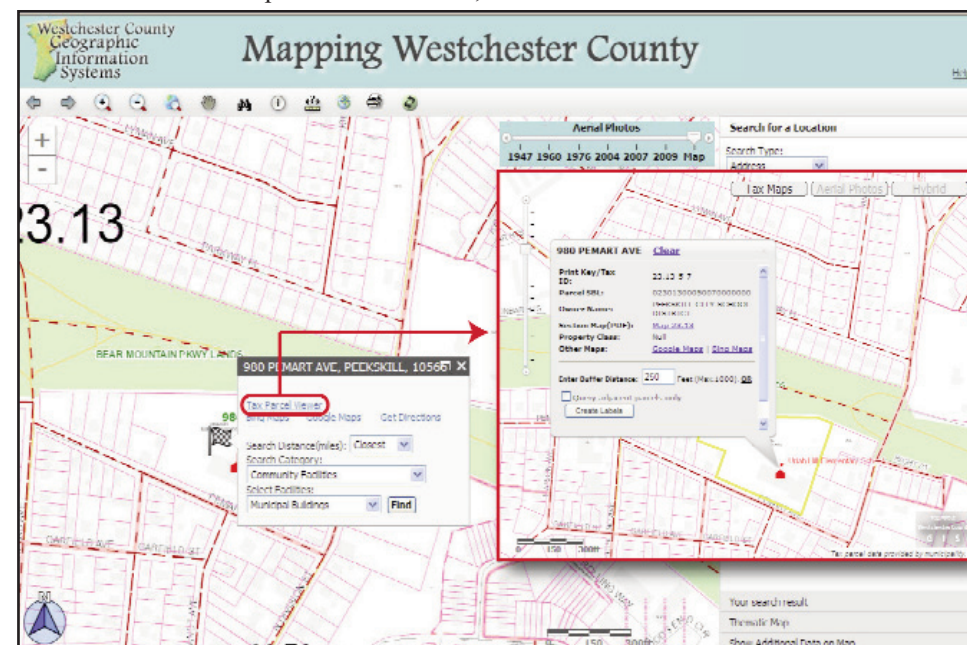
- Providing geospatial coordinates of a specific location in two formats: latitude/longitude and NY State Plane feet. This function is especially useful to users wanting to pinpoint a specific location on the map, such as a new development site or incident location.
- A new "measure tool" enabling users to measure a specific distance or "area" on the map. Users have an option to choose the distance measurements in feet, miles, kilometers, meters or yards. Users can also define

"areas" as square feet, square miles, square meters, square kilometers, square yards, acres, and hectares.

• Enhanced functionality for the Indian Point Emergency Planning Zone module. Users are able to search whether their address is within a specific Indian Point emergency planning zone and to identify the closest emergency bus stop and designated reception center.

• Address match (geocoding) functionality has been spatially improved to match the address with the corresponding tax parcel centroid. Previously, the address would be matched to its approximate location based on street address ranges. If the user defined address is not found in the MWC database, a calculated location is estimated and shown on the map.

For more information on these new features and other MWC components, contact Xiaobo Cui at xxc1@westchestergov.com.



The newly released version of Mapping Westchester County application includes the integration of tax parcel data. Once an address has been located, users have the ability to view the address in more detail in the Tax Parcel Viewer. Options to view the property in Google and Bing Maps are also available.

Articles and graphics in this newsletter prepared by: Xiaobo Cui, Ana Hiraldo-Gomez, Connor Lynch, Cynthia Marx, Deborah Parker, Dongming Tang, Ilir Tota, Sam Wear, and Zhenglu Zhang.



<http://giswww.westchestergov.com>

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Local Government Geospatial Programs Continue to Expand

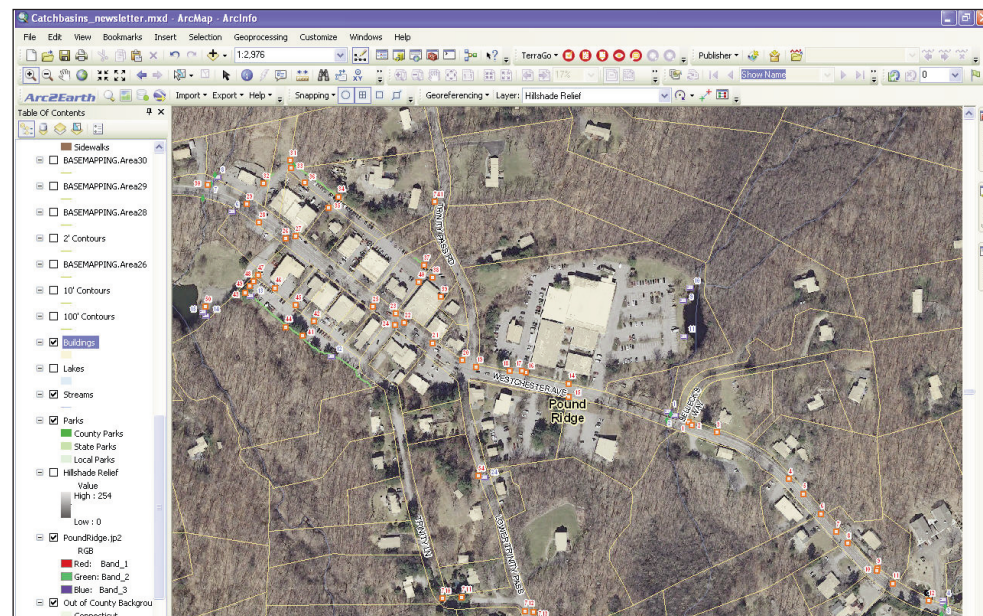
Over the past several months, Westchester County GIS has been working closely with numerous local governments on a range of geospatial projects though the focus continues to be on the inventory and mapping of critical infrastructure features including pub-

lic water supply systems and sanitary and storm sewer networks. In several cases this is the first time many of the infrastructure networks are being digitally mapped. Recent GIS discussions or meetings have been held with over twenty municipalities.

In context of using Westchester County web-based products and services, the villages of Ardsley, Rye Brook, Tarrytown, Port Chester, and Briarcliff Manor, as well as the towns of Eastchester, Pound Ridge, Lewisboro, and Harrison use the County's tax parcel viewer on a day-to-day basis. Also, discussions with the Village of Hastings and the City of Rye include making County GIS data and map services available to third-party police and emergency response software programs.

In collaboration with the Department of Emergency Services (60 Control), GIS staff continue ongoing work with several local fire districts with the inventory and mapping of fire hydrants and the production of a maps which is being made available in both hardcopy and PDF format. Currently, county GIS staff is working with the Purchase, West Harrison, Peekskill and Mohegan Lake fire districts in various phases of these projects. All data being collected will be integrated into the County's emergency dispatching system (911).

For more information on local government activities, contact Sam Wear at stw1@westchestergov.com or Connor Lynch at cql2@westchestergov.com.



Storm water system mapping continues to be the focus for many municipalities in context of infrastructure data development. Captured by a consultant for the town, this data shows outfall, catch basins, and swale features in the Scotts Corners area in the Town of Pound Ridge.

GIS Day 2012

November 14, 2012



In celebration of the event, we encourage county residents to visit and use the many types of the geospatial products and services available at the county GIS website at: <http://giswww.westchestergov.com>

Other informative GIS Day related activities and programs can be found at <http://www.gisday.com/> and <http://education.nationalgeographic.com>

Celebrate GIS Day

Street Sign Inventory Prototype

At the encouragement of several local governments, County GIS is developing a Street Sign Management mapping application for use in municipal highway and public works departments. This application leverages the County's existing ArcGIS Server web mapping environment and requires no specialized GIS mapping software at the local level. The application, or feature service, allows users to add or delete street signs by category (i.e., stop, speed limit, and parking, etc.) or edit sign attributes such as visibility, condition, and inspection or maintenance dates. The system also allows users to associate one or more related documents (photos or videos in many formats, PDF or MS-Word files) to the sign. To ensure data integrity, the system will be password protected. County staff are currently prototyping the system with the Village of Croton-on-Hudson. For more information, contact Zhenglou Zhang at zqz1@westchestergov.com.

Indian Point Drill

County GIS staff participated in the Indian Point emergency response and preparedness drill held at Westchester's Emergency Operations center in Hawthorne on Tuesday, Oct. 2. The drill, monitored by the Federal Emergency Management Agency (FEMA), tests systems and trains responders from throughout the 10-mile emergency zone around Indian Point. GIS staff supports the Indian Point Emergency GIS (IPEG) application, which is used extensively by Westchester County Department of Emergency Services (DES) staff during drills held twice annually. GIS staff also prepares maps and reports for representatives of various agencies and County departments. For more information, contact Ilir Tota at iat2@westchestergov.com or Noah Goldberg ndg1@westchestergov.com.

GIS at Teatown

On Oct. 4, Westchester County GIS staff offered an overview of different GIS "viewing" software packages at Teatown Lake Reservation. More than a dozen members of ELLA (Environmental Leaders Learning Alliance) representing several northern Westchester municipalities received introductory training on the use of both GeoPDF (<http://www.terragotech.com>) and ArcGIS.com software products. Viewing GeoPDFs requires no GIS software (only Adobe Acrobat Reader) while the ArcGIS.com product is the new ESRI "cloud" viewing software available over the internet. Those in attendance received a GeoPDF file of their municipality containing many Westchester County GIS datasets. For more information contact cql3@westchestergov.com

GIS for Emergency Services Database and Application Development Efforts Underway

County GIS staff supports digital mapping and geographic database development for the County's E911 system which provides primary emergency dispatch to 47 fire departments and 23 emergency medical services (EMS) agencies throughout the county.

This year, GIS staff teamed with the Department of Emergency Services (DES) on a critical project to update and edit (or "conflate") the street centerline and Fire/EMS district boundary layers used in the E911 dispatching software to be consistent with road datasets being maintained as part of the County's central GIS database. Bowne Management Systems (Mineola, N.Y.) was selected to provide contractor support throughout the project.

The County's Emergency Communications Center (ECC), which is also referred to as "60 Control," utilizes a Computer Aided Dispatch (CAD) system from Intergraph Public Safety (IPS) for dispatching. Since the initial launch of the CAD system in 2000, the street centerline file and district boundaries have been maintained separately from the County's enterprise GIS road file data.

The current street centerline conflation project will transfer all data elements in the current IPS road files to the primary road file which is maintained by GIS staff and used in all other enterprise mapping appli-

cations. This work will ensure spatial consistency amongst all mapping applications and eliminate the unnecessary maintenance of two separate road datasets. As currently being implemented, the current data maintenance environment will include GeoMedia v.6.1 (I/Map Editor), which handles ESRI GIS files and geodatabase structure, allowing CAD fields to be associated with GIS-accurate centerlines. Five days of in-house software training were provided by GeoMedia to seven County employees involved in supporting ECC systems.

Conflation is now in its final phase with GIS and DES staff reviewing data recently submitted by Bowne Management Systems and making final recommendations regarding attribute values. Project completion is anticipated by the end of the year.

GIS staff is also working with Fountains Spatial (Schenectady, NY) to migrate the County's existing All Hazard (All-Haz) application to ArcGIS 10. All-Haz consists of three modules: All-Haz Viewer, All-Haz Flood and All-Haz Indian Point Emergency GIS (IPEG). The IPEG application has been used extensively since early 2005 during Indian Point emergency response and preparedness drills by DES staff. For more information, contact Ilir Tota at iat2@westchestergov.com or Connor Lynch at cql3@westchestergov.com.



Data assembled with the original E911 street centerline file (orange) has been "conflated" to be more current and spatially accurate road centerlines (green).

2012 GIS User Group Meeting

Over 120 attend meeting on Purchase College Campus

The Westchester GIS 2012 User Group meeting was held on May 17 hosted by Purchase College. Dr. Paul Ryan, Assistant Professor of Environmental Studies, opened the meeting in the Natural Sciences building by welcoming attendees to the Purchase campus. The meeting was well attended and was supported by a number of regional geospatial firms and businesses.

The event drew Westchester County-based planners, engineers, analysts, health inspectors, cartographers, assessors, technicians, curators, students, architects, fire captains, administrators, civic volunteers, GPS professionals, and educators. Also attending were GIS vendors and service providers from across New York State. The schedule included presentations on wide-ranging geospatial subjects from municipal projects, mobile mapping, advancements in GIS software and hardware, and criminal justice system mapping. There was also a map gallery in the lobby where vendors demonstrated products and services.

Local users including the Westchester Land Trust, the Journal News, and Village of Tuckahoe showcased current projects. Barry Nechis, OEM/EMS Coordinator for the City of New Rochelle's Fire Department, illustrated how critical site-specific information is deployed to mobile data terminals for emergency response. Chris Gomez, Planning Commissioner, Village of Port Chester Planning and

Development Department, illustrated build-out and suitability analysis and other village projects based on ESRI and Google Earth tools.

Sponsor presentations covered www.ArcGIS.com (ESRI), the County's recent oblique imagery acquisition (Pictometry), LiDAR data compression (LizardTech), latest Global Positioning System technology (Waypoint Technology Group), Mobile GIS (Bergmann Associates), GIS for Infrastructure Design (Parsons Brinckerhoff Americas), and tax parcel mapping (Bowne Management Systems). Eric Steinnagel, Westchester County Health Department and Denise Knauer, City of Peekskill, both won door prizes.

Several of these presentations are posted on ftp://ftp.westchestergov.com, along with two "lunch and-learn" sessions which were led by County GIS staff. The first session served as an introduction to accessing and using the County's public facing map services while the other focused on using the free ArcGIS extension for AutoCAD. Downloads and other information on this subject matter is available on the GIS website. Contact Deb Parker at dape@westchestergov.com for information on accessing the ftp site and for announcements pertaining to upcoming GIS meetings and workshops.



In the Natural Sciences auditorium at Purchase College, the County's largest-ever User Group Meeting drew over 120 participants and vendors to a full day of presentations, posters, networking, covering issues from public safety, the environment, and to GIS in the media.

Basemap & Pictometry Updates

In October, Westchester County GIS released a Request for Proposals (RFP) for new high-resolution aerial photography, orthophotos, and an update of countywide planimetric datasets (buildings, edge-of-pavement, etc.). The County maintains the authoritative 1"=100' scale basemap, first developed in 2000, and last updated from Spring 2004 photography. New imagery is anticipated to be captured in Spring 2013.

The County is also working on an extension to its contract with Pictometry International, Inc., for additional products and services, and support. New products are expected to include a Change Analysis viewer for comparing images from different dates; Pictometry Online, providing access to the County's 2010-2011 imagery and Pictometry toolsets via the web; and custom tools for assessors.

Homeseeker Website Award

Westchester County recently won a prestigious Award of Excellence from the National Association for County Community and Economic Development (NACCED) for the county's Homeseeker Web site (www.westchestergov.com/home-seeker). The site, which provides tools for people to learn about affordable housing opportunities in the County, includes several GIS-based functions to explore neighborhoods, and get information on schools, libraries, hospitals, churches, parks and public transportation. This is the second award won by the Homeseeker Web site, developed by the county's Department of Information Technology. In April, the Homeseeker section was awarded a Best Practices Award of Merit by the County Planning Division of the American Planning Association for its user friendly design.

Livable Communities Update

First made available online in late 2009, the Livable Communities mapping application enables users to find the locations of a wide range of senior citizen facilities and service providers throughout the County. Developed with the assistance of Dept. of Senior Programs and Services staff, users start the application by simply entering an address and then are able to find nearby facilities such as family resources, senior centers, stay cool centers, public transportation facilities, and government/public buildings. Work is now underway to update many of the existing data layers and include new ones as well. The Livable Communities mapping application is available as part of Mapping Westchester County viewer at <http://giswww.westchestercounty.gov>.