GEOGRAFIC INFORMATION SYSTEMS

Westchester County GIS Launches Web Site

Project is One of First Sites in the United States to Provide ArcView Internet Mapping in Spanish

In conjunction with County Executive Andy Spano's State of the County address on April 15, county GIS staff launched its inaugural Web site providing basic GIS mapping capabilities to Internet users around the world. In an effort to reach as many Internet users as possible, the site has been developed in both English and Spanish. It is one of the first sites in the United States which provides basic Internet mapping functions in Spanish with ArcView.

The GIS home page is at *http://giswww.co.westchester.ny.us* and can be also accessed via the county's main home page at *http://www.co.westchester.ny.us* . Some of the major areas of the site include:

Interactive Maps: The county is using ESRI's ArcView Internet Map Server (AVIMS) and their Java applet called MapCafe to serve interactive maps on the Web. Currently, the site includes an environmental features map and a community facilities map. These maps allow Internet users to add and remove layers, to pan and zoom around the map, and to identify features all from a normal browser window. Users can also print maps with preformatted templates. Additional mapping applications will be added soon.

Data: For some time, people have been able to download county GIS data export files from the county's FTP site. Now these export files are organized and linked to their corresponding metadata records at the New York State GIS Clearinghouse in the site's data area.
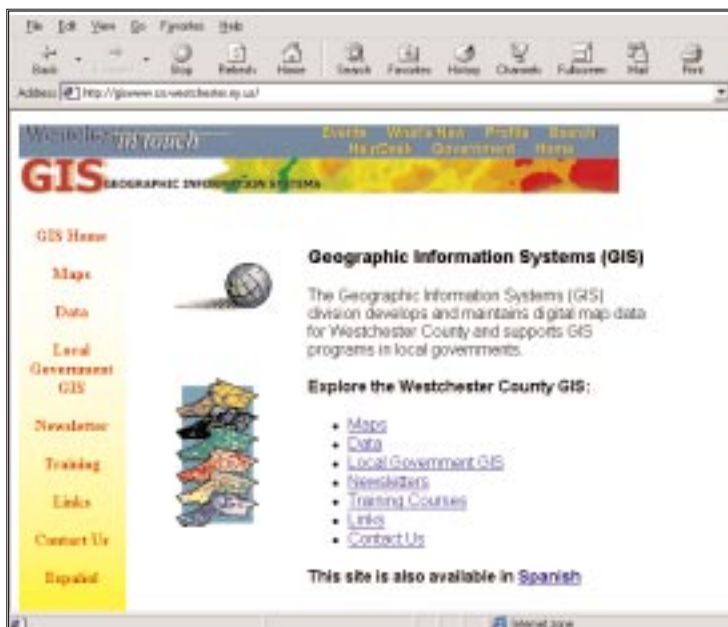
Local Government: One of the most important functions of county's GIS project is to provide support, services and coordination to local governments in the county. The Web should prove quite useful in this effort. Currently, this section includes a menu of the services WCGIS can provide and a table listing contact people and summarizing the status of GIS in many municipal governments throughout the county. It is anticipated this section will grow a great deal as the Web site develops.
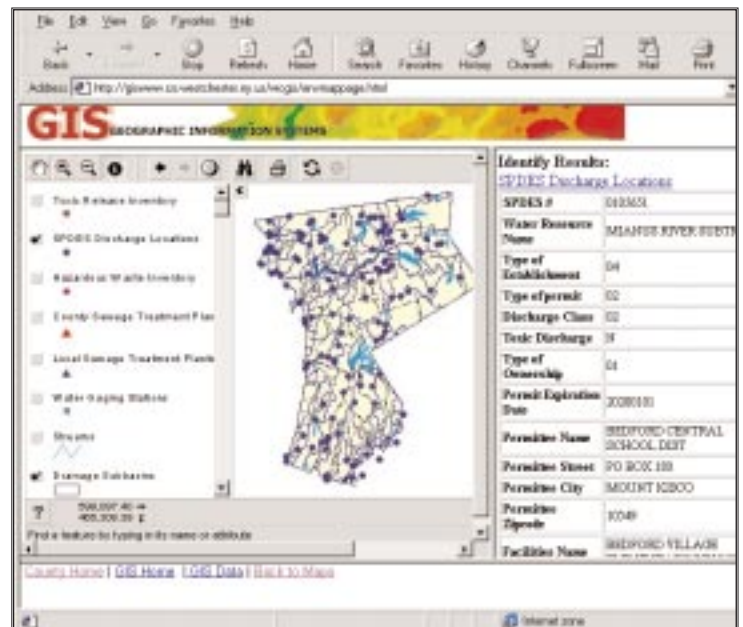
Newsletter: Yes, back issues of Westchester County GIS Newsletters! What could be better?

Training: This space will be used to keep the user community informed of GIS training courses, workshops, and other GIS educational opportunities being offered throughout the county.

Users are encouraged to use the site, query the data, make maps and contact GIS staff via e-mail with comments and suggestions.

Westchester County GIS home page

Interactive maps support both map and tabular data browsing

Local Government GIS Spotlight ...

City of New Rochelle Makes Significant Advancement in GIS Development

In February of '98, the City of New Rochelle began GIS development for municipal functions and services. The first step in the process was to install ArcView software in the Department of Development and Public Works and to automate hardcopy tax maps. Other GIS development activities included acquiring aerial photography to support a 1" = 200' planimetric base map and installing several GIS data layers.

In February of '99, the city obtained ARC/INFO software to manage the seamless tax parcel coverage. This data layer will contain the geometry of each parcel within 5' accuracy and reflect the attribution of the lot dimensions. Additionally, the tax parcel layer will be the backbone of Govern Software, a parcel centric land management system which includes a Building Permit/Code Enforcement module for the Bureau of Buildings and a Mass Appraisal module for the Tax Assessor. All information tagged to a parcel will be stored on a relational database on a central server and will be used in con-junction with ArcView. Eventually, all of the city's spatial data will be housed in the database to allow for multi-user access and efficient retrieval through the use of client/server technology such as ESRI's SDE and Map Objects.

Most recently, the City has awarded a contract to acquire rectified aerial photography for the entire city. This data layer will conform to their 1" = 200' base map. It is anticipated that the imagery will be useful to almost every department in the city in one form or another. Currently, the city continues to create new data layers and improve its map composition environment as a means to better planing and decision making. In the near future, The city plans to award a tree and infrastructure inventory project using GPS technology. Additionally, progress continues to be made in educating city employees about the benefits of GIS technology. For more information on the City of New Rochelle GIS project, contact Nando Schmitt, Department of Development at (914) 654-2193.

More Local News

GIS staff have recently completed User Needs Assessments and Implementation Plans for both the *Village of Mt. Kisco* and *Town of Ossining*. The County is working with the *Town of Greenburgh* on the automation of the town's water distribution network. Both the *Towns of Cortlandt* and *Harrison* received grants from ESRI for software and the *City of Rye* has been conducting ArcView training for city staff. County GIS staff recently met with the *City of Mt. Vernon* to discuss initial GIS development steps and planning issues. The *City of Yonkers* continues to work on finalizing digital tax mapping and will be working with a contractor on Quality Assurance/Quality Control (QA/QC) efforts with the data. The *Town of Pound Ridge* and *Town of New Castle* have applied for GIS UNA studies through the New York State Archives and Records Administration (SARA).

For more information on local GIS work, contact Ana Hiraldo at (914) 285-4416 or email at aeh2@exchange.co.westchester.ny.us
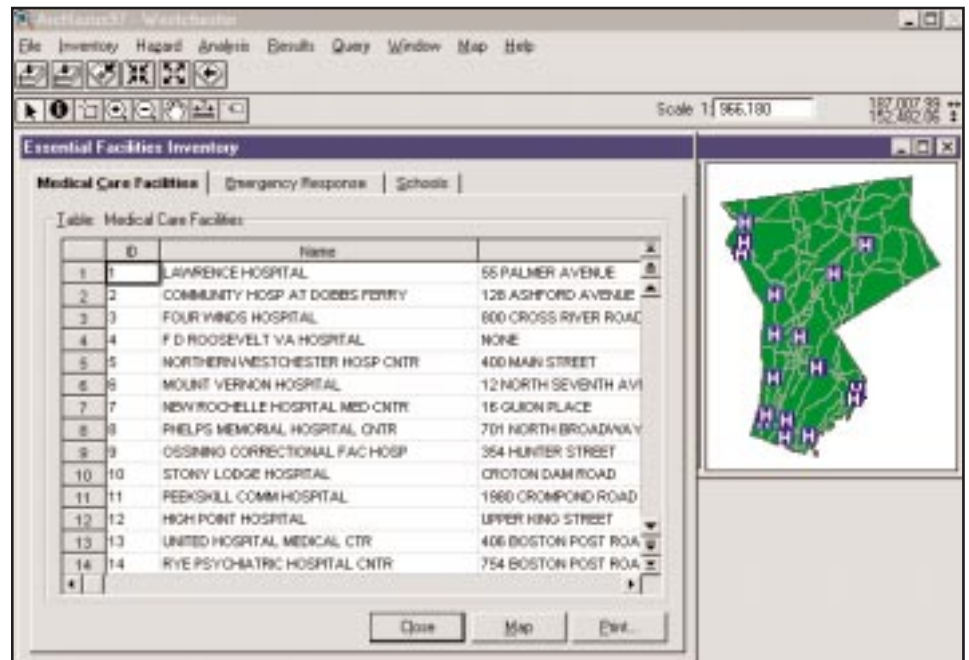
County Receives Emergency Prepardness GIS Grant

In a collaborative effort between Westchester County GIS and the Office of Disaster Emergency Services (ODES), Westchester County has received a grant of $30,000 from the New York State Emergency Management Office (SEMO) to participate in an earthquake prepardness study. The funding will be used in to develop GIS databases which are utilized in a new Federal Emergency Management Agency (FEMA) software program called HAZUS. HAZUS is integrated with ArcView, the county's primary desktop GIS software platform. County GIS staff will be receiving formal HAZUS training in Emmitsburg, Maryland.

HAZUS is an essential element of FEMA's National Mitigation Strategy to promote sustained action to reduce or eliminate long-term risk to people and property from earthquakes. HAZUS also will assist local governments in facilitating short-term recovery through emergency preparedness in response to earthquakes. The software also contains modeling capabilities for estimating potential losses from wind (hurricanes, thunderstorms, tornadoes, cyclones, and hail) and flood (riverine and coastal) hazards. FEMA's National Mitigation Strategy recognizes that mounting dollar losses cannot be adequately addressed by a fragmented approach to natural hazards.

For more information contact Laura McGinty at (914) 285-3888 or visit the HAZUS home page at *http://www.nibs.org/hazus.htm*

View of the HAZUS application showing Medical Care Facilities in Westchester County

Municipality-in-a-Box

Innovative GIS program creates "ready-made" ArcView projects for map and data distribution

Westchester County GIS is introducing an innovative product known as "*Municipality in-a-Box*" which is intended to provide quick and easy access to GIS data for any municipality in the county.   Designed for the GIS "novice", the program creates three separate projects (environmental, land use and zoning, and cultural features) which can be viewed, queried, and even mapped with ArcView GIS software. All three of the projects contain basemap features such as roads (and road names) and hydrologic features. The three initial projects include:
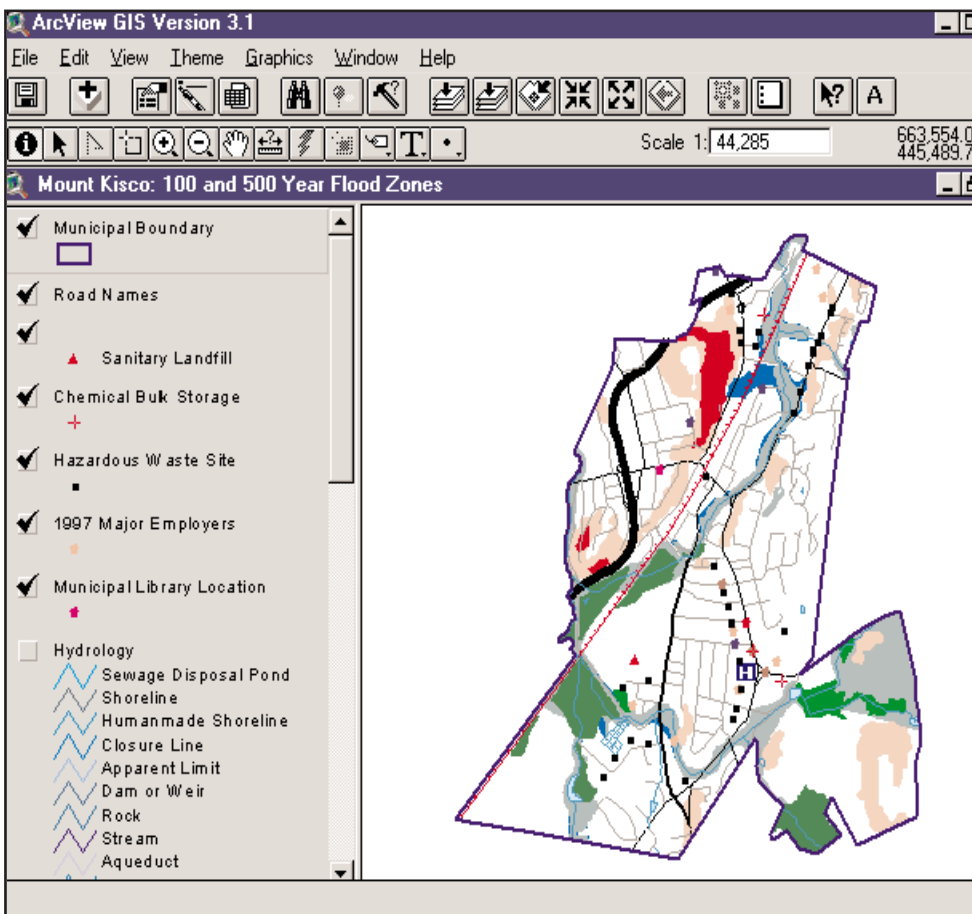
The **Environmental Data** project provides users with a range of environmental data such as wetlands, generalized floodplains, steep slopes, underground storage tanks, streams and lakes, and hazardous waste sites to name a few.

The **Land Use and Zoning** project permits includes data on generalized land use and zoning classifications throughout the county. Data is based on a compilation of local data sources including zoning maps, master and comprehensive plans, and review of aerial photography.

The **Cultural Features** project shows locations of such features as police and fire stations, libraries, municipal halls, public schools, major employers, and movie theaters. Users can also view school district boundaries, zip code boundaries, and fire and police district boundaries.

"*Municipality in-a-Box*" projects are available for municipalities in Westchester County upon request by contacting Josephine Amato at 285-3012 or email at *jja9@exchange.co.westchester.ny.us.* Files can be sent electronically or on floppy diskette. Currently there is no cost for the ArcView project data, but there is a $50/hour charge for staff time in data assemblage. Diskettes are one dollar each.

This map of the Village of Mt. Kisco shows environmental data created through the county's "Municipality-in-a-Box" program.

GIS Meetings & Announcements

On February 19th, the **Westchester GIS Task Force** met to discuss and review the status of the proposed countywide base mapping project. The focus of the meeting was a presentation by Plangraphics, Inc. which will be meeting with county, local government, and utility representatives over the next several months as part of developing RFP technical specifications.   Other meeting agenda items included discussion on the Freedom of Information Law (FOIL) affect on GIS datasets and local government GIS activity. For more information, contact Sam Wear at (914) 285-3047 or email at *stw1@exchange.co.westchester.ny.us*

The GPS Committee, which is comprised of representatives from nine county departments and agencies, has developed an extensive list of potential GPS data collection applications. The county issued a Request for Information (RFI) the week of April 26th, requesting information on the establishment of a countywide GPS network, and is moving forward in purchasing GPS hardware which is anticipated to be used in initial data collection efforts this year. The RFI is posted at the County's Web site at *http://www.co.westchester.ny.us/rfp/GISR-FI.htm.* For more information, contact Laura McGinty at (914) 285-3888 or email at *lam7@exchange.co.westchester.ny.us*

The 2nd meeting of the **Westchester GIS User Group** met on March 23rd at Pace University in downtown White Plains. Skip Heise of ESRI-Boston made a presentation of current ESRI software products focusing on ARC/INFO Release 8.0 and the on-going evolution of ArcView products which are being used for Web-based GIS applications. The user group is an independent forum for GIS users (including CAD) throughout the Westchester County intended to bring together the many different users (assessment, public works, utilities, business, planning, public safety, etc.) of geospatial data. The next meeting is scheduled for June 22st, 1:00-3:00PM,   at   Pace   University. Additional meetings are scheduled for September 9th and December 14th. For more information or to have your organization put on the mailing list, contact Ana Hiraldo at (414) 285-4416 or email at *aeh2@exchange.co.westchester.ny.us.*

New School Districts and Educational Facilities Map and Databases

The GIS division of the Planning Department has produced a new map entitled "School Districts and Educational Facilities". This three color printed map was digitally prepared and is a major update to the former "School Districts" map prepared in 1991. In addition to showi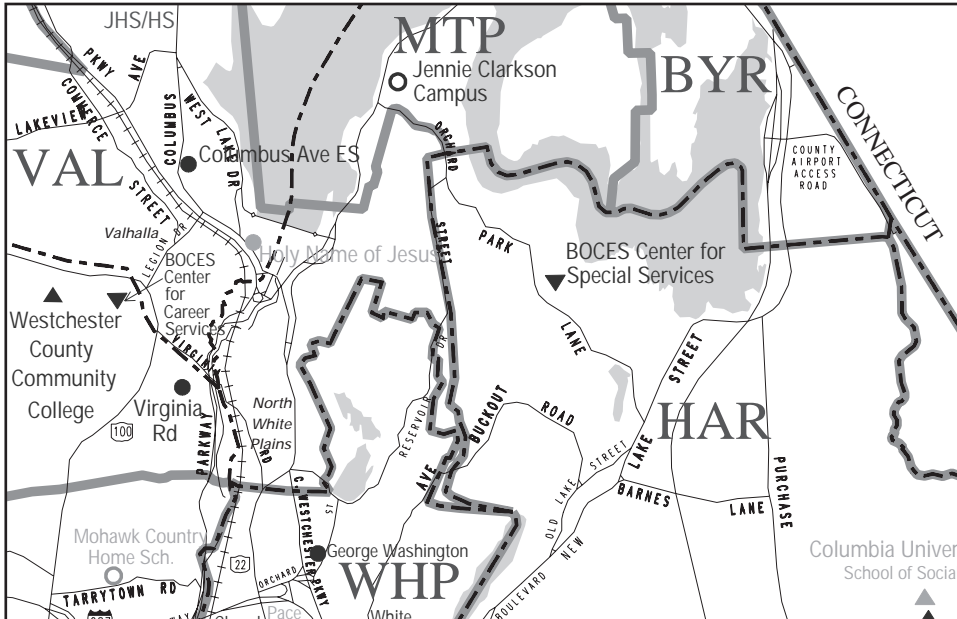ng school district boundaries and public schools, the map has been expanded to include all private schools, colleges and universities in the county. New GIS coverages are also available of the these educational facilities and district boundaries.

The map illustrates the complexity of school district geography in Westchester in which school district boundaries are seldom coterminous with municipal boundaries. Of the 41 school districts in the county, only seven districts boundaries completely follow the municipal boundaries they are within. The Bedford Central School District spans a broad area in the northern part of the county, incorporating sections of four towns and the entire Village of Mount Kisco.

Preparation of the map involved an extensive research effort that involved providing each school district with a proof copy of the map for verification, and the review of source data provided by the New York State Dept. of Education, NYS Office of Real Property Services, and the Westchester-Putnam School Board Association. A statistical companion report is being developed which will provide educational data on school districts and facilities.

The map was digitally produced by the departments' GIS staff using ARC/INFO, and offset printed by Higham Press of Pleasantville. Prints of the map, which measures 30 x 40", can be obtained for $5.00 plus postage by calling (914) 285-4400. To obtain the GIS coverages, contact Laura McGinty (914) 285-3888.

Section of Westchester County School District and Educational Facilities Map

Articles and graphics in this newsletter prepared by: Josephine Amato, Xiaobo Cui, Paul Gisondo, Tim Gulden, Ana Hiraldo, Laura McGinty, Mike Selig, and Sam Wear

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