GEOGRAPHIC INFORMATION SYSTEMS
GIS

Westchester GIS Receives National Recognition

Special Achievement in GIS
Awarded at ESRI International User Group Conference in San Diego
July 29, 1999

Metadata Grant Awarded
Funded through the Federal Geographic Data Committee (FGDC)
June 17, 1999

GIS Spanish Web Design
Presentation at the National GeoData Forum on Capital Hill
June 8, 1999

Special Achievement in GIS Award

In recognition of over ten years of developing GIS programs and applications in both county and local government, Westchester County GIS has been honored with the "Special Achievement in GIS" award by Environmental Systems Research Institute (ESRI). The award was presented by Mr. Jack Dangermond, founder and president of ESRI, at the 19th Annual International User Group Conference in San Diego. "This award is being given to user sites around the world in recognition of their outstanding work in the GIS field. Your organization was selected to receive this award from over 100,000 sites worldwide. It is quite an honor," said Dangermond.

Dr. Norman Jacknis, Westchester County's Chief Information Officer, said that the award was well deserved in light of all the recent advancements made by GIS. "Our Web site represents a significant milestone in the evolution of GIS in Westchester County, which continues to be one of the most progressive in the United States," said Jacknis.

While the county's GIS program became much more visible with the launching of it's GIS Web site in April of this year, county GIS staff continue to focus on providing basic GIS support to county government

Xiaobo Cui (right), Westchester County GIS staff, receiving the Special Achievement Award from Jack Dangermond founder and president of ESRI at the 1999 User Group Conference in San Diego.

applications and assistance to local governments where technical GIS direction is often needed. County GIS staff supports local GIS users groups, teach at local universities, and are actively involved in state, regional, and national GIS programs as well. All of these areas have contributed towards building the county's successful GIS program. The GIS Web page can be found at *http://giswww.co.westchester.ny.us* or can be accessed through Westchester County's home page at *http://www.westchestergov.com*.

GIS News

Hazus Training

Westchester County GIS staff member Laura McGinty and Ray Albanese, staff from the Office of Disaster and Emergency, recently attended a 3-day HAZUS software training course in Manhattan, June 8-10th. HAZUS is a disaster assessment and modeling software program which is being made available through the Federal Emergency Management Agency (FEMA) and is integrated with ArcView. County (GIS) staff are working closely with SEMO, the State Emergency Management Office, on data development for the HAZUS program as part of a southeastern New York State earthquake preparedness study.

GPS Training

Westchester County GIS recently purchased two Global Positioning System (GPS) units for the collection of new GIS data and the improvement of existing data layers. The two new Trimble units include the GeoExplorer II and Pro XR. Mike Popoloski, of MapCo (West Milford, New Jersey) provided three days of on-site training to GIS staff Laura McGinty, Josephine Amato, and Tim Gulden. GIS staff are scheduled to begin GPS data collection in August. For more information on the county's initial GPS development effort, contact Laura McGinty at 285-3888.

Certification

Xiaobo Cui recently passed the Oracle certified professional examination *Introduction to Oracle: SQL and PL/SQL*. Her Oracle development work will be dedicated to the county's GIS and Oracle related projects.

Westchester County GIS staff members Xiaobo Cui and Ana Hiraldo successfully completed the ESRI Authorized Teaching Program and are now ESRI ArcView 3x Certified Trainers.

Conferences

The New York State GIS 15th Annual Conference will be held October 4-5 in Albany, New York. For registration visit their Web site at *http://www.esf.edu/outreach/conted/conferences/nysgis99.htm.*

The 14th Annual Northeast Arc Users Group Conference (NEARC) is scheduled for November 7-10 at Mashantucket, Connecticut. To register visit *http://www.geography.ccsu.edu/nearc99/nearc_home.htm.*

Westchester County GIS Goes to Washington, D.C.

Spanish Web Presentation

Westchester GIS was one of fifty organizations selected nation-wide to demonstrate GIS applications as part of the 1999 National GeoData Forum Conference held June 7-9 in Washington, D.C. One of the key themes of the conference was to

Westchester County GIS staff Ana Hiraldo(right) demonstrating GIS Spanish Web site to Deserene Worsley(left), Director of Technology Development and Applications Support National Capitol Park and Planning Commission in Washington, D.C.

address key public policy issues in making geospatial data easier to share and disseminate - of which the internet is increasingly one of the most important components. Secretary of the Interior Bruce Babbitt delivered the keynote address.

GIS staff member Ms. Ana Hiraldo, who designed and developed the Spanish translation for the county's GIS Web site, met and demonstrated this unique Web component to congressional representatives in the Rayburn Foyer on Capital Hill on June 8th. The county's Web application was one of the first in the country to offer GIS mapping functions with ArcView IMS in both English and Spanish. The new Web application provides expanded opportunities for the Spanish-speaking population to use GIS technology and has greater access to government and public information. The Westchester County GIS Spanish Web site can be access at *http://giswww.co.westchester.ny.us/spgis/spdefault.htm.*

Metadata Grant Award

Promoting Metadata Development in Westchester County

As part of the National Spatial Data Infrastructure (NSDI), Westchester GIS was recently awarded a competitive grant from the Federal Geographic Data Committee (FGDC) to support metadata training development throughout Westchester County. Metadata, which is "data about data", is an increasingly important component of the global geospatial infrastructure. By using industry standard Web browsers and search engines, internet users can connect to metadata repositories, or clearinghouses, worldwide to find information on GIS data in specific geographic areas. Typically, metadata contains basic information such as date of automation, data development methodology, agency responsible for creating the data, related attribute fields, and several other key fields of information. Metadata is not just for GIS data, but applies to other digital data formats, such as CAD, which also may have a spatial data component. The project will utilize and promote metadata standards developed by the FGDC and applied through the New York State GIS Clearinghouse (*http://www.nysl.nysed.gov/gis/*).

Westchester GIS is currently one of the largest contributors and suppliers of metadata to the New York State GIS Clearinghouse.
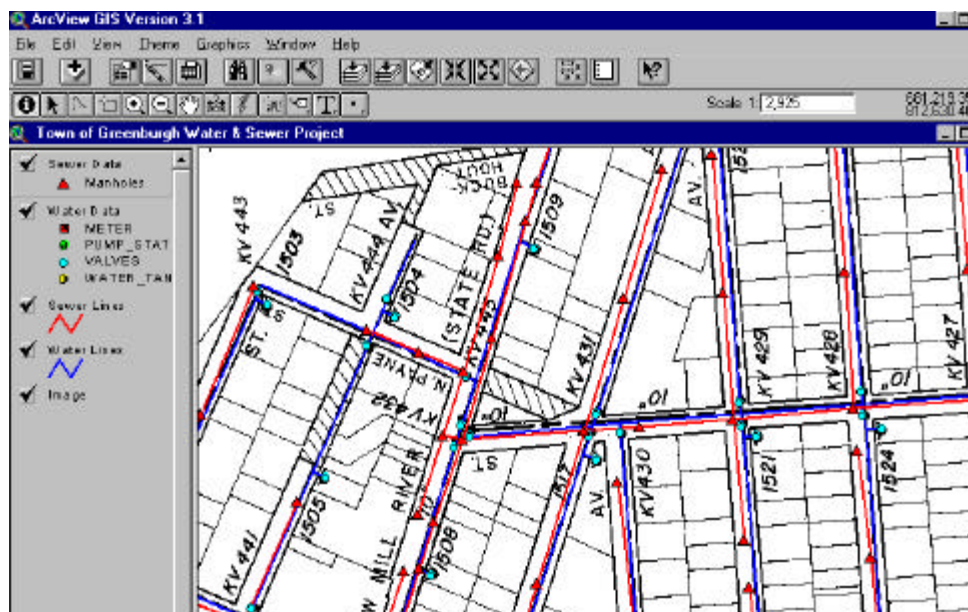
The project will consist of a series of four metadata training workshops throughout the county over the next 12 months, with the first one scheduled to be held this fall. Seminar attendees will receive an overview of basic metadata concepts and procedures on how to summit metadata to the New York State GIS Clearinghouse. Handout and other background information on the national metadata effort will also distributed. County GIS staff anticipates posting information and updates on the metadata training seminars on the county's GIS Web page at *http://giswww.co.westchester.ny.us.* Interested individuals or agencies can also contact Ana Hiraldo.

Metadata training for is scheduled for October 21-22, 1999 from 9:00 AM to 12:00 PM at the Westchester County Offices, 148 Martine Ave. Room 102. Seating is limited. For reservations call (914) 285-4416.

Greenburgh Sewer and Water System Map Conversion

GIS staff recently assisted Greenburgh in converting maps of the town's sanitary sewer and water infrastructure systems into vector format. Working closely with staff from the town's engineer, the project consisted of converting 34 mylar sheets (1"=200') into ArcView format which could be integrated with the town's evolving GIS program. The new GIS data layers contain over 503 miles of sewer and 565 miles of water system infrastructure, along with 5,395 manholes, 2,225 fire hydrants, and nine (9) water mains. Attribute data such as pipe size, and unique identifiers have also been included in the database. Actual conversion of the infrastructure maps was done by the Sanborn Map Company (Pelham, New York) which also provided scanned and registered raster images of the original manuscripts. For more information about the project contact Brett Auerhahn, Engineer, Town of Greenburgh at (914) 993-1583 or Ana Hiraldo at (914) 285-4416.
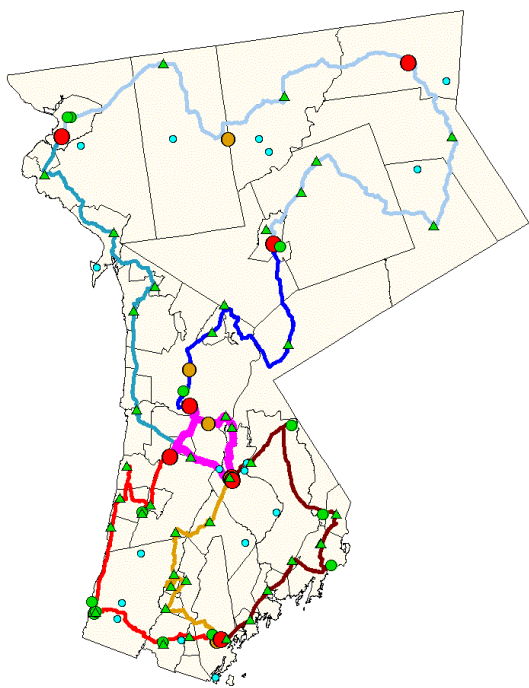

View of both vector and scanned infrastructure data in Town of Greenburgh

Local Government News

GIS growth continues throughout many local governments and organizations in Westchester County. Having secured 1999-2000 New York State Archives and Records Administration (SARA) grant funding, the **Towns of North Castle** and **Pound Ridge** will be initiating user needs assessments and implementation plan projects this fall. County GIS staff recently met with both the **Towns of Eastchester, Cortlandt** and the **Villages of Hastings-on-Hudson** and **Croton-on-Hudson** to discuss GIS applications recommendations on how to move forward on GIS development efforts. Representatives from the **Town of Harrison**, which was a recent recipient of ESRI's Start-up Grant Program, met with county GIS staff in June to discuss implementation alternatives upon delivery of digital tax parcel data from their mapping contractor. The **Village of Scarsdale** continues it's GIS planning and development efforts this fall as established by the Village GIS Planning Committee. The county continues to work closely with the **City of Yonkers** on final tax mapping development work, and provides technical support to the **Village of Mt. Kisco** GIS Steering Committee. For more information on local government GIS activity and municipal contacts, refer to the county's GIS Web page at *http://giswww.co.westchester.ny.us* or contact Ana Hiraldo at *aeh2@exchange.co.westchester.ny.us.*

Westchester County Telecom

County proposes a 125 mile fiber optic network to serve as a "information super highway" throughout Westchester

Over the past several months, GIS staff has used the ArcView GIS Network Analyst extension to explore the technical options and costs involved with building a countywide, high capacity data network. The project involves many variables ranging from purely technical issues of network topology to logistical, financial, and political issues. The GIS was used to rapidly develop draft plans, allowing various options to be examined and decisions to be made based on a solid understanding of the issues.

In the course of the project, GIS staff examined many scenarios. The proposed plans ranged in size from 18 core county facilities to 581 facilities, including all government buildings in the county (e.g. schools, libraries, fire houses, etc.). With fiber optic cable costing between $4 and $8 a foot to purchase and install, and the equipment for each node costing $3,000 to $40,000, an efficient design will be essential. The Network Analyst's shortest path and "traveling salesman" functions allowed staff to rapidly estimate the amount of cable required for each plan and to explore the efficiency of different topologies.

While the final network design will probably be designed by an independent contractor, this process has given the county's decision-makers the background to solicit and evaluate bids from a position of knowledge. For more information contact Tim Gulden at *trg1@co.westchester.ny.us* or visit the Westchester Telecom Web site at *http://www.westchestergov.com/wctelcom.*

Westchester County GIS Web Site

As of August 1999, several elements of the Westchester County GIS Web site have been updated. New or updated features include the following:

Community Facilities Map: Private schools, railroad stations, and water and sewer districts have been added. Private schools are displayed in three categories: high schools, elementary, middle and special schools. The railroad station data identifies stations along the Hudson, Harlem, and New Haven commuter rail lines. Water district data shows boundaries of municipal and private water suppliers. The sewer district data highlights sewer district boundaries. The colleges and universities data layer has also been updated as two categories: public and private.

Environmental Features Map: Farms, stables and nurseries in the county have been incorporated.

Metadata: New metadata for all updated and new coverages are becoming available via the New York State GIS Clearinghouse.

GIS Data Download: All new GIS data layers are available to be downloaded through Westchester County GIS FTP site.

GIS Newsletter: The new 1999 summer issue of Westchester County GIS Newsletter will be posted. The file format is Acrobat Reader's PDF format that allows the clients to read and print out the newsletter.

Training: The GIS training page has been updated to show upcoming workshops, seminars and conferences.

Local Government GIS: This page displays the GIS staff services and activities in Westchester County. It is updated in three categories: history, GIS local government contacts, and GIS services to local governments.

Links: The GIS links have been updated to search GIS Web sites by four categories: Federal, state, and public/private agencies, as well as "other" resources.

For more information, visit the Web site at *http://giswww.co.westchester.ny.us.*

Transit GIS Users Meeting

Westchester County DOT staff attended the NYSDOT Transit GIS Users Group Meeting, on Wednesday, June 16th in Albany. The meeting was highlighted by Terry Bill's presentation of the Southern California Association of Governments (SCAG) GIS planning and modeling tools, as well as TRANSTAR, a transit itinerary and rideshare software package SCAG developed to assist transit operators in metropolitan Los Angeles. TRANSTAR is being used in the Transit Itinerary Planning System (TRIPS) project, which covers 27 counties in three states comprising the New York Metropolitan Region. The meeting also included a demonstration of the Schedule Data Maintenance System. NYSDOT is developing this application with a consultant to support the maintenance of schedule data in Microsoft Access format, linked via SQL-connect to an ArcView application. This will allow transit operators to edit stop location data and query time-based schedule information. For downstate operators, the application will support and be populated with data from the TRIPS project. The meeting also included a discussion on the negotiations for the extension of NYSDOT's five (5) year ESRI site license to cover transit operators. NYSDOT is attempting to make ArcView available to transit operators under the terms of their license with ESRI. Under the agreement, about 63 operators would be covered under NYSDOT's site license, including upgrades and extensions. For county DOT GIS work, contact Greg Sullivan at (914) 285-6612.

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