

## County GIS Supports Local Government Open Space Mapping

### Town of Lewisboro CAC Proposes to Create Townwide Greenways with Open Space Data

At the request of the Lewisboro Conservation Advisory Council (CAC), Westchester County GIS staff recently assisted in the mapping of town-wide tax parcels relating to the development of a series of Greenways throughout the town. Lewisboro's project was initiated over two years ago as the CAC began an open space inventory which would serve as the foundation for identifying potential Greenways. Lands were categorized at the tax parcel level as developed or undeveloped, with the potential to be developed, or as permanently preserved open space.

The CAC used a twelve-criteria matrix to evaluate which tax parcels should be pre-

served as open space. The land features were rated using zero to three ranking, with zero indicating the feature does not exist or is not significant from a preservation perspective and a rating of three meaning the feature is extremely desirable for preservation purposes. Some of the ranking criteria the CAC used to determine land status were:

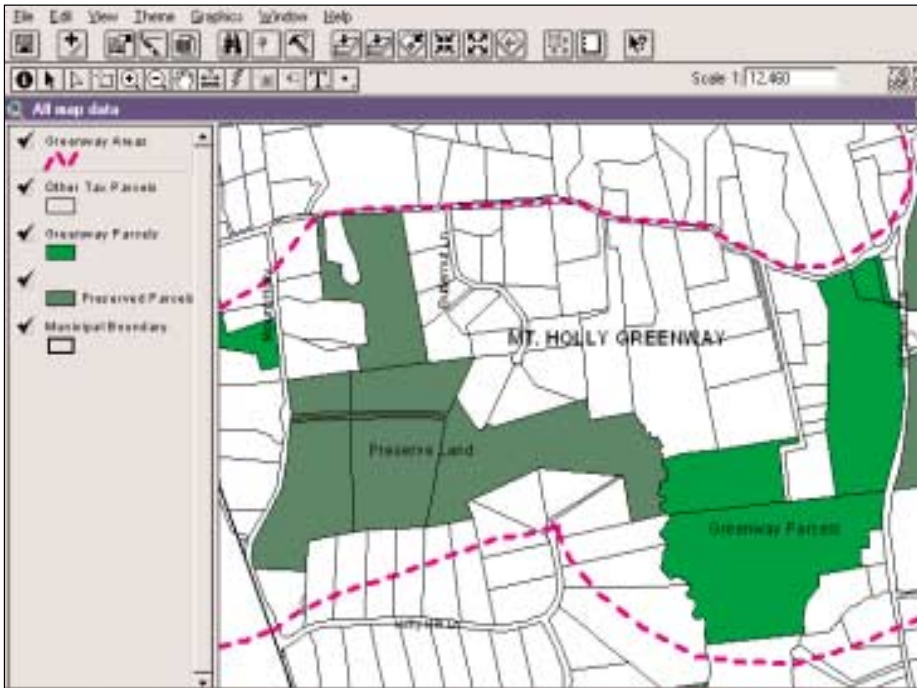
- Does the parcel of land contain or border a lake, pond, or wetlands?
- Does the parcel overlie an aquifer?
- Does the parcel contain old growth forest?
- Does the parcel contain walking or horse trails?
- Is there a connection to

already preserved or proposed open space?

- Is it a "threatened" or "endangered" wildlife habitat?
- Is there a vista, steep slope or ridge line?
- Is the parcel a grassland or meadow?

Using a combination of local assessment files, hardcopy maps, and digital data provided by county GIS staff, CAC members were able to identify specific parcels which could be found in the GIS database and mapped. Both current preserved parcels (parkland, nature preserves, etc.) and unpreserved open space parcels throughout the town were mapped to highlight five Greenways across

*continues on page 4*



*This screen capture highlights properties currently protected (Preserve Land) and those properties (Greenway Parcels) recommended to be included in the Mt. Holly Greenway. Similar desktop GIS mapping applications are being developed throughout local governments in Westchester County.*

### Metadata Grant Program Completed

Last year Westchester County GIS received a grant from the Federal Geographic Data Committee (FGDC) to promote metadata development throughout Westchester and adjacent counties as part of the National Spatial Data Infrastructure (NSDI). The grant program allowed County GIS staff to conduct four metadata workshops in **Westchester, Rockland, and Putnam County**. More than 40 people attended the workshops, which included participants from various government agencies (engineering, planning, DPW, assessment, youth services, and others), and covered information on basic metadata concepts, the uses and importance of metadata documentation when sharing spatial data, and procedures in creating metadata online. Information on the county's FGDC compliant metadata program can be obtained at our website at <http://giswww.westchestergov.com>.

# New Emergency Dispatching System Supported with GPS Data Collection

*Interstate Mile Markers Mapped To Serve as Important Reference Point in Emergency Dispatching Deployment*

With the assistance and coordination of the Westchester County Department of Emergency Services and several New York

State agencies, Westchester County GIS has recently completed the mapping of more than 1,050 mile markers along interstates I-

87, I-287, I-95, and I-684 with Global Positioning System (GPS) technology. Placed approximately 1/10 of a mile apart, mile markers serve as an important reference point when accidents and emergencies are called into the county's 911 system. This GPS initiative is one of several data development efforts associated with implementation of the county's new Intergraph Public Safety (IPS) emergency dispatching system. GIS staff member Laura McGinty, who was transported along the interstates in state highway patrol vehicles, collected data. Mile marker locational data was collected by mounting a Trimble Pro-XR GPS unit on top of a patrol car and stopping at each mile marker to collect an X,Y coordinate. After the data is post-processed with Trimble software and visually inspected with ArcView, export files are prepared for import into IPS. For more information on the data collection effort, contact Laura McGinty at [lam7@westchestergov.com](mailto:lam7@westchestergov.com).



GIS staff Laura McGinty on I-684 capturing mile marker near Westchester County Airport (exit 7)

## County Base Mapping Project On Schedule



County GIS staff and project QA/QC consultants (Applied Geographics, Inc) are nearly finished with their review of the countywide base mapping pilot project. Data shown above contain several layers of planimetric features captured from the Spring 2000 photography. The pilot project was conducted to confirm data capture accuracy and completeness, database design components, and other project deliverables before full production of the countywide data begins. The pilot project study area was located in the northwestern section of the county. When completed, the project will contain an estimated 220 GB of data including color digital orthophotos, 5' contours, and over 35 planimetric features including building footprints. Production and QA/QC of the data will continue through August 2001.

## I-Team Meets in White Plains

The inaugural meeting of the NY-NJ Metropolitan I-Team convened in White Plains on November 28th with Westchester County GIS serving host to the all-day meeting. More than 25 GIS and information technology professionals representing federal, state, and local governments, as well as business and utilities met to discuss the creation and direction of the metropolitan area I-Team. The I-Team concept was created by both the Federal Geographic Data Committee (FGDC) and the federal Office of Management and Budget (OMB) to overcome the financial and institutional barriers to the sharing of geospatial information among federal, state, local and tribal government agencies and the private sector. Regional and consortium GIS initiatives often have very similar data and application development requirements which can be better financed and justified when resources are pooled. Westchester County GIS will be hosting information on the metropolitan I-Team collaborative effort at its website. For more information on the I-Team program, visit the FGDC website at <http://www.fgdc.gov/I-Team.html/docs>.

## Local Government News

Westchester County staff continues to provide assistance to local government GIS programs. County GIS staff advises local officials on a wide range of technical issues including the identification of contractors or consultants for specific GIS development needs, education and training programs and development of implementation programs. Currently GIS staffs are assisting the towns of **Ossining** and **North Castle** in potential tax map updating programs as well as initiating a user needs assessment study with the city of **Mt. Vernon**. The city was a 2000-2001 New York State Archives

and Records Administration (SARA) grant recipient for a user needs assessment (UNA) study. County staff continues to provide technical assistance to the city of **Yonkers** on final tax mapping QA/QC development work, as well as support implementation efforts in the village of **Mt. Kisco**, and towns of **Lewisboro** and **Greenburgh**. The county is currently discussing Internet tax parcel mapping options with the town of **Yorktown** and is assisting the town of **Somers** in the conversion of digital tax parcel data into ArcView format as part of the Croton Watershed project.

### GIS Publication Featured on NYS GIS Clearinghouse Website

*Annotated Bibliography on GIS Applications in Government now Available*

Westchester County GIS has recently published a document entitled "**GIS Applications in Government: An Annotated Bibliography of Publications and Websites**" which is now featured and available for download from the New York State GIS Clearinghouse (<http://www.nysgis.oft.com>). Initiated in the summer of 2000, data and information for the document was collected by Andrea Albert, an intern who has been working with the county's GIS program for the past

three summers. The document was created in response to the county's on-going work with local governments, schools, and not-for-profits which often ask for examples of successful GIS projects. The document is accessible through the NYS GIS Clearinghouse home page at <http://www.nysgis.state.ny.us> or by directly accessing the publication at <http://www.nysgis.state.ny.us/gisannotatedbib.pdf> (Adobe Acrobat PDF File - 115kb).

## GIS in City & County

Westchester County GIS was featured in the November issue of **American City and County** in an article focusing on government Internet applications. Along with several other nationally recognized GIS programs, the county's GIS project was highlighted as a major portal to public and government information. The article also referred to the unique Spanish interface designed by GIS staff. Both Chief Information Officer Dr. Norm Jacknis and GIS Manager Sam Wear are mentioned in the article.

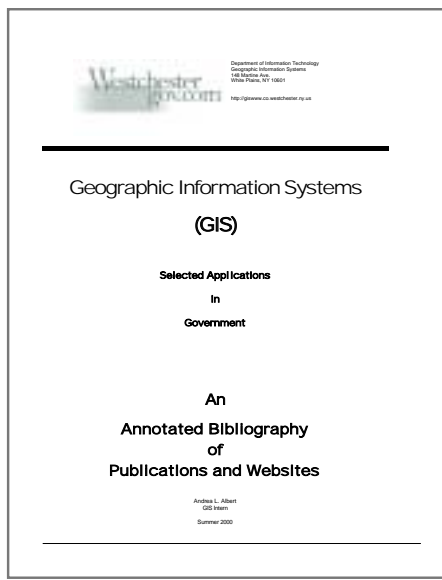
## ArcView Training

Westchester County GIS continues to provide **Introduction to ArcView** training courses. ESRI certified trainer and GIS staff Xiaobo Cui held the two-day GIS course at the Westchester County training facility in White Plains. Ten people attended the training, which included representatives from the towns of **Pound Ridge**, **North Castle**, city of **Yonkers** and the **Westchester County Planning Department**. For more information on training opportunities, visit our web site at <http://giswww.westchestergov.com/wcgs/course.html> or contact Ana Hiraldo at [ah2@westchestergov.com](mailto:ah2@westchestergov.com).

## 2000 NYS GIS Conference

Westchester County GIS staff members Sam Wear and Greg Sullivan attended the 16th annual New York State GIS conference, on September 20 and 21 in Liverpool, NY. Nearly 400 GIS professionals attended the conference. In addition to serving on the conference steering committee, Mr. Wear moderated both a pre-conference roundtable on Global Positioning Systems (GPS) and presented a three part seminar entitled "**Implementing GIS in Your Organization**."

The following posters were prepared and presented by GIS staff : **Developing Fire Districts on a New Westchester County Road Base** (Greg Sullivan and Carrie Keneally); **Croton Watershed Land Use Classification System** (Josephine Amato); **Internet Tax Parcel Mapping in Westchester County** (Xiaobo Cui); **Using GIS for Crime Analysis in North Castle, New York** (Ana Hiraldo); and **Utilization of GPS in Westchester County** (Laura McGinty). Files for both the seminar and posters are available at the county's web site.



### Introduction

As geographic information systems (GIS) applications continue to become established in mainstream government programs such as tax mapping, environmental and land use planning, infrastructure management, and transportation systems, increasing development is becoming apparent in non-traditional areas such as health and human services, economic development, parks and recreation, and public safety.

In the course of our work in building GIS programs with local governments in southeastern New York state, we are often asked about examples of GIS applications in villages, towns, and cities. In response to these requests, we initially decided to publish an annotated bibliography on GIS applications in hardcopy format. However, we modified the traditional hardcopy format to include a Web link so the document could be used electronically. Links and citations are intended to be illustrative examples and users are encouraged to conduct further Web research for examples which may be more germane to certain disciplines.

Information included in the document was obtained by utilizing the Go Express search engine and was found to be accessible as of August 1, 2000.

Overall, the document is intended for both new and existing GIS users in context of providing basic information on a range of government GIS applications. Reviewer comments and suggestions are welcome and Westchester County GIS encourages distribution of the document. It is anticipated other GIS programs, including the expanding use of the global positioning system (GPS) will be included in future revisions of the document.

Sam Wear  
GIS Manager  
Westchester County GIS  
[Swear1@westchestergov.com](mailto:Swear1@westchestergov.com)  
15 October 2000

Visit our website at  
<http://giswww.westchestergov.com>

# Westchester County Geography Trivia

## Part II: Streams, Rivers and Water Bodies

Our previous newsletter (Summer 2000) identified the role and use of "place names" throughout the county. Place names normally have a significant historical meaning to local residents and were often the first common name used in identifying a particular part of the county. Readers in our last issue were challenged to associate a list of common "place names" in the county with their correct village, town or city. The first reader who responded via email and correctly made the associations was entitled to a "Getting to Know Desktop GIS." We had a tie in this installment of the geography trivia contest and our winners are listed below.

In this issue, we examine another geographic feature which helps shape and define the Westchester landscape: water. While the Hudson River, Long Island Sound, and other large water bodies such as the Croton, Titicus, Kensico, Amawalk, and Cross River reservoirs are more commonly known and visible, there are hundreds of miles of streams and rivers, including reservoir and lake shorelines, throughout the county! Below is a list of 15 named and

mapped streams, lakes and associated water bodies throughout Westchester County. The first person to correctly associate each water feature with its correct village, town or city will win the book "*Beyond Maps: GIS and Decision Making in Local Government*" courtesy of ESRI. All entries must be sent either email or fax to Ana Hiraldo at [ah2@westchestergov.com](mailto:ah2@westchestergov.com) / 914-995-3269. The winner will be announced in our next newsletter. Good luck!

<i>Blind Brook</i>	<i>Naumburg Pond</i>
<i>Browns Reservoir</i>	<i>Sparkle Lake</i>
<i>Bear Ridge Lake</i>	<i>Huguenot Lake</i>
<i>Hunter Brook</i>	<i>Stone Hill River</i>
<i>Crestwood Lake</i>	<i>Dickey Brook</i>
<i>Wallace Pond</i>	<i>Lake Hawthorne</i>
<i>Lake Penelope</i>	<i>Mystery Lake</i>
<i>Crook Brook</i>	

**The Winners:** Winners from the Place Names trivia contest were John Yoegel, Westchester County Department of Environmental Facilities, and Ray Galinski at Westchester Community College. Congratulations!

Continued from page 1

the town:

- The Titicus Greenway encompasses land north of Route 138 in Golden's Bridge
- The Mt. Lakes Greenway encompasses the area from Lake Rippowam to Lake Kitchawan
- The South Salem Greenway includes the South Salem hamlet to Route 35
- The Silvermine Greenway takes in the south east section of the town, and
- The Mt. Holly Greenway encompasses the area south of Todd Road to Lake Waccabuc.

Overall, the inventory identified twenty-nine (29) high priority parcels within the proposed Greenway system which includes three town and two county parks. The CAC notes that approximately 2,000 acres of unprotected land lies within the Greenways and that protecting these lands will expand existing parks. "The GIS maps and inventory will serve as a guide for the town as it decides how to allocate the \$2 million open space acquisition fund that Lewisboro voters recently approved. They will also guide future zoning amendments and day to day subdivision application review," said CAC Chairman Pat Daigle.



### DEPARTMENT OF INFORMATION TECHNOLOGY

908 Michaelian Office Building  
148 Martine Avenue  
White Plains, NY 10601

Articles and graphics in this newsletter prepared by: Andrea Albert, Josephine Amato, Xiaobo Cui, Ana Hiraldo, Laura McGinty, Greg Sullivan, Sam Wear and Tong Zhou

[www.westchestergov.com](http://www.westchestergov.com)

Westchester County GEOGRAPHIC INFORMATION SYSTEMS

is published by the Westchester County Department of Information Technology

Andrew J. Spano, County Executive

Dr. Norm J. Jacknis, Chief Information Officer

Ana Hiraldo, Layout Editor

Sam Wear, Associate Editor