

Government Map Services for Business and Industry

Sam Wear

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Westchester County GIS

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2012 Spring NEARC User Group Meeting

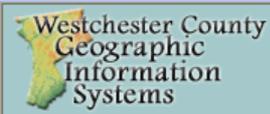
Smith College

Northampton, MA

May 22, 2012

Items for Discussion

- First Generation Map Services
 - ESRI/ArcIMS
 - Purpose/Intended Users
- Data Centric vs. Service Centric
 - Thematic Services
- Acceptance of WMS & OGC formats
- Viewer Independence
- Validation from Business & Industry
- Pros & Cons



Mapping Westchester County

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Aerial Photos

1947 1960 1976 2004 2007 2009 Map

Search for a Location

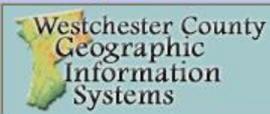
Your search result

Thematic Map

Show Additional Data on Map

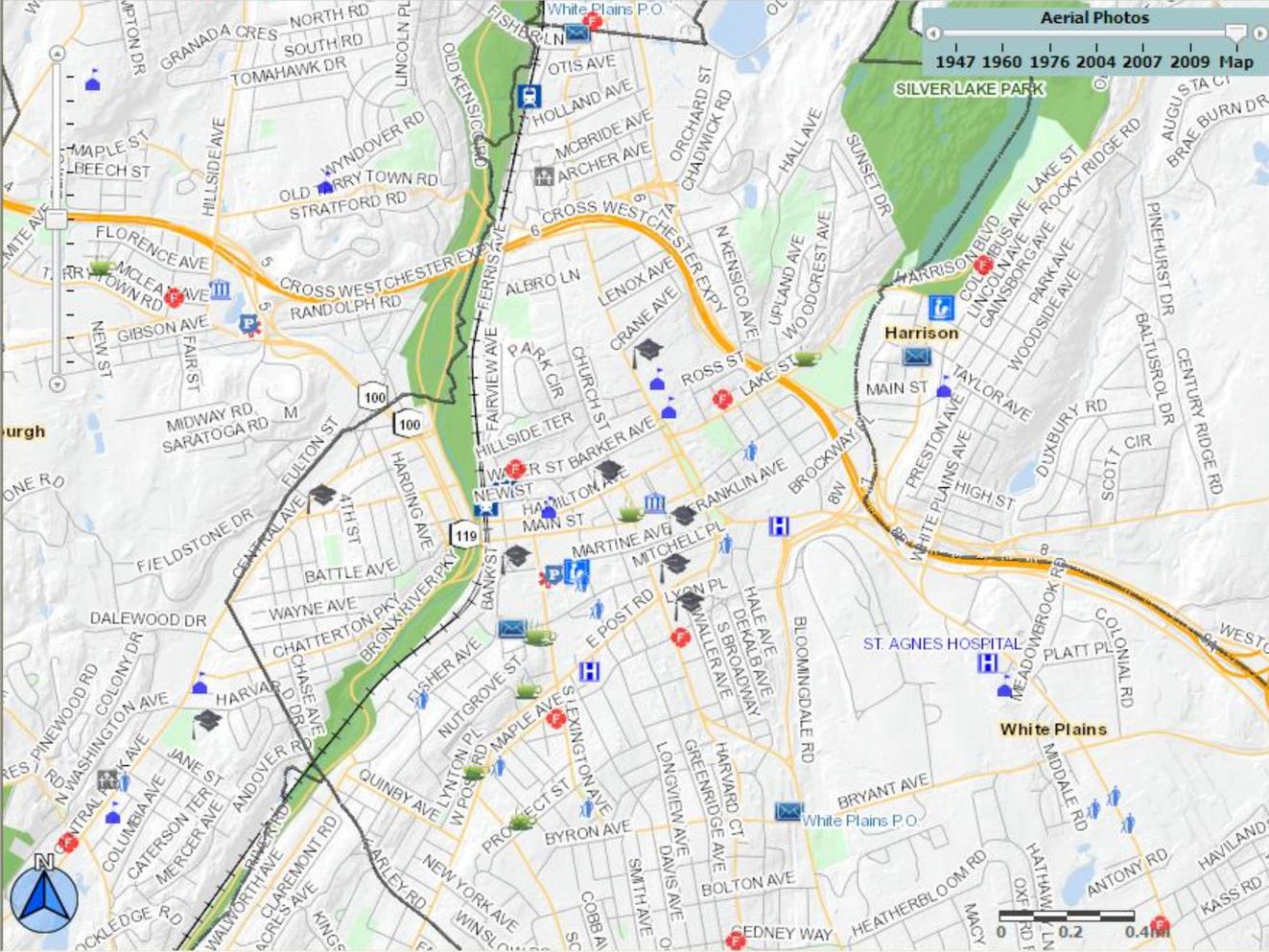
Environmental Features

- Release Inventory (EPA)
- Hazardous Waste Sites
- SPDES Permits
- Citizen Water Monitoring Sites
- Stormwater Outfalls
- County Sewage Treatment Plants
- Sewage Treatment Facilities (Private)
- 2 Foot Contours**
- 2-Foot Topo (Download Only)
- LIDAR Index (Download Only)
- Farms, Stables, Nurseries
- County Trail System
 - Existing Off-Road Path
 - Existing Road Corridor Route
 - Original Aqueduct Route
 - Proposed Off-Road Path
 - Proposed Road Corridor Route
 - Wide Road Shoulder
- Streams
- Southern Exposure
- Open Space
 - County Parklands
 - State Parklands
 - Local Parks
 - Nature Preserve



Mapping Westchester County

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Search for a Location

Your search result

Thematic Map

Show Additional Data on Map

- Private Schools
- Universities and Colleges
- Post Offices
- Libraries
- Fire Stations
- Police Stations
- Hospitals
- Court Houses
- Polling Places
- Adult Homes
- Nursing Homes
- Volunteer Ambulance Corps
- County Health Offices
- Youth Services
- Family Resources
- Food Pantries
- Senior Centers
- Stay Cool Centers
- Shelters
- Soup Kitchens
- Cemeteries
- Restaurants
- County Regulated Beaches
- Marinas
- County Historic Places
- National Register Sites
- National Historic Landmarks

MappingWestchesterCounty (MapServer)

View In: [ArcMap](#) [ArcGIS Explorer](#) [ArcGIS JavaScript](#) [Google Earth](#) [ArcGIS.com Map](#)

View Footprint In: [Google Earth](#)

Service Description: Mapping Westchester County: a comprehensive and dynamic map service with over 200 layers: environmental features, community facilities, political boundaries, transportation, census boundaries and demographics, emergency zones, and 'green' facilities and services. Includes some local municipal data layers.

Map Name: Layers

[Legend](#)

[All Layers and Tables](#)

Layers:

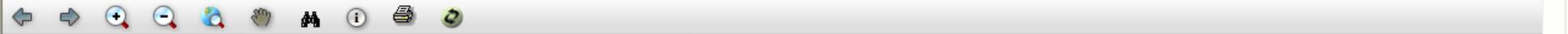
- [Pharmacies](#) (0)
- [Supermarkets](#) (1)
- [Dining](#) (2)
- [Theaters Tourism](#) (3)
- [Hotels](#) (4)
- [Alternative Energy](#) (5)
- [Environmental Engineering](#) (6)
- [Coyote Sightings](#) (7)
- [Food Stores](#) (8)
- [Playgrounds](#) (9)
- [Swimming Pools](#) (10)
- [Recreation Centers](#) (11)
- [Sport Fields](#) (12)
- [Fitness Centers](#) (13)
- [Traffic Cameras](#) (14)
- [Cemeteries](#) (15)
- [County Health Offices](#) (16)
- [Court Houses](#) (17)
- [Gas Stations](#) (18)
- [Libraries](#) (19)

- [Adult Homes](#) (54)
- [Family Resources](#) (55)
- [Food Pantries](#) (56)
- [Nursing Homes](#) (57)
- [Senior Housing](#) (58)
- [Senior Centers](#) (59)
- [Shelters](#) (60)
- [Soup Kitchens](#) (61)
- [Youth Services](#) (62)
- [Indian Point](#) (63)
- [Emergency Bus Stops](#) (64)
- [Indian Point Sirens](#) (65)
- [Emergency Reception Centers](#) (66)
- [Evacuation Routes](#) (67)
- [Indian Point 10-Mile Radius](#) (68)
- [EMERGENCY.WCREEA_CTR](#) (69)
- [EPZ Municipality](#) (70)
- [County Historic Places](#) (71)
- [County Regulated Beaches](#) (72)
- [Farms, Stables, Nurseries](#) (73)
- [Hotels and Motels](#) (74)
- [Marinas](#) (75)
- [Parks](#) (76)
- [National Register Sites](#) (77)
- [Theaters](#) (78)
- [County Trail System](#) (79)
- [2-Foot Topo \(Download Only\)](#) (80)
- [LiDAR Index \(Download Only\)](#) (81)
- [Citizen Water Monitoring Sites](#) (82)
- [County Sewage Treatment Plants](#) (83)
- [Hazardous Waste Sites](#) (84)
- [Sewage Treatment Facilities \(Private\)](#) (85)
- [SPDES Permits](#) (86)
- [Stormwater Outfalls](#) (87)
- [Toxic Release Inventory \(EPA\)](#) (88)
- [Streams](#) (89)
- [Municipal Boundaries](#) (90)

Westchester County Geographic Information Systems

Mapping Westchester County

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Search for a Location
Your search result
Thematic Map

- Show Additional Data on Map
- Environmental Features
 - Facilities and Services
 - District Boundaries
 - Westchester Be Fit
 - Transportation
 - Emergency Zones/Support
 - 2010 Census
 - 2000 Census
 - Local Government
 - Green Facilities and Services
 - Raster Data

User Note: Some layers (land use, 2 foot contours, etc.) are not visible at all scales. Users will have to "zoom-in" to neighbor and street level views for these features to appear on the viewing screen.

Folder: /

Current Version: 10.03

View Footprints In: [Google Earth](#)

Services:

- [2FtContours](#) (MapServer)
- [AffordableHousing](#) (MapServer)
- [CADWMS](#) (MapServer)
- [Census](#) (MapServer)
- [CommunityFeatures](#) (MapServer)
- [DigitalElevationModel](#) (MapServer)
- [DigitalSurfaceModel](#) (MapServer)
- [EnvironmentalFeatures](#) (MapServer)
- [Geometry](#) (GeometryServer)
- [InfrastructureFeatures](#) (MapServer)
- [Mapa_de_WestchesterCounty](#) (MapServer)
- [MappingWestchesterCounty](#) (MapServer)
- [MappingWestchesterCounty_AerialPhoto1947](#) (MapServer)
- [MappingWestchesterCounty_AerialPhoto1960](#) (MapServer)
- [MappingWestchesterCounty_AerialPhoto1976](#) (MapServer)
- [MappingWestchesterCounty_AerialPhoto2004](#) (MapServer)
- [MappingWestchesterCounty_AerialPhoto2007](#) (MapServer)
- [MappingWestchesterCounty_AerialPhoto2009](#) (MapServer)
- [MappingWestchesterCounty_BaseMap](#) (MapServer)
- [MobileCommunityMap](#) (MapServer)
- [MunicipalTaxParcels](#) (MapServer)
- [Stormwater](#) (MapServer)
- [WestchesterCountyBaseMap_Light](#) (MapServer)

Supported Interfaces: [REST](#) [SOAP](#) [Sitemap](#) [Geo Sitemap](#)

View In: [ArcMap](#) [ArcGIS Explorer](#) [ArcGIS JavaScript](#) [Google Earth](#) [ArcGIS.com Map](#)

View Footprint In: [Google Earth](#)

Service Description: Environmental Features: protected areas, sensitive features (soils, wetlands, slopes, etc.), and state- or federally-regulated activities (i.e., wastewater discharge), on a basemap elevation model.

Map Name: Layers

[Legend](#)

[All Layers and Tables](#)

Layers:

- [County Sewage Treatment Plants](#) (0)
- [Hazardous Waste Sites](#) (1)
- [Sewage Treatment Facilities \(Private\)](#) (2)
- [SPDES Permits](#) (3)
- [Toxic Release Inventory \(EPA\)](#) (4)
- [Streams](#) (5)
- [Generalized Zoning](#) (6)
- [Fish and Wildlife Habitats](#) (7)
- [Critical Environmental Areas](#) (8)
- [National Wetlands Inventory](#) (9)
- [Hydric Soil Wetlands](#) (10)
- [NYS Regulated Wetlands](#) (11)
- [Open Space](#) (12)
- [Tidal Wetlands](#) (13)
- [Aquifers](#) (14)
- [Floodplains](#) (15)
- [Steep Slopes](#) (16)
- [Drainage Basins](#) (17)
- [Major Watersheds](#) (18)
- [Land Use](#) (19)
- [Water Districts](#) (20)
- [County Sewer Districts](#) (21)

Tables:

Description:



Property Information Portal



New Rochelle

- [Property Search](#)
- [Radius Map](#)
- [Permits](#)
- [Multiple Dwelling](#)
- [Title Search](#)

Mamaroneck (Town)

- [Property Search](#)
- [Radius Map](#)
- [Permits](#)
- [Multiple Dwelling](#)

Mamaroneck (Village)

- [Property Search](#)
- [Radius Map](#)
- [Title Search](#)

Hastings-on-Hudson

- [Property Search](#)
- [Radius Map](#)
- [Permits](#)
- [Multiple Dwelling](#)
- [Title Search](#)

Dobbs Ferry

- [Property Search](#)
- [Radius Map](#)
- [Permits](#)
- [Multiple Dwelling](#)
- [Title Search](#)

Irvington

- [Property Search](#)
- [Radius Map](#)
- [Permits](#)
- [Multiple Dwelling](#)
- [Title Search](#)

Layers ... **Map** **Satellite**

- View Preservation
- Structures
- Lines
- Zoning

POWERED BY
Westchester County
GIS

- 2009 Color Infrared Images
- Digital Elevation Model
- Land Use
- County Sewer Districts
- Water Districts
- Steep Slopes
- Tidal Wetlands
- Flood Plains

Hide all

100 Circle Dr

Parcel Number:	11 21 0663 24
Block:	0663
Lot:	24
Roll Year:	2011
Land Value:	\$2,000
Total Value:	\$15,300
Property Class:	Single Res
Acres:	0.23
Frnt:	0
Dpth:	0
Market Value:	\$568,773
Zoning:	--

- Registered Professionals**
- What is included:
- Exemption
 - Sale Information
 - Permits and Approvals
 - Tax District
 - Inspections
 - Village's Records
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CONTACT Josh Heitler



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Layers ... Map Satellite

- Structures
- Lines

POWERED BY
Westchester County
GIS

- 2009 Color Infrared Images
- Digital Elevation Model
- Show/Hide layers
- County Sewer Districts
- Water Districts
- Steep Slopes
- Tidal Wetlands

Hide all

100 BELDEN AVE

Parcel Number:	3.50-16-5
Legacy Number:	08/13/0427//61
Block:	0016
Lot:	005
Roll Year:	2011
Land Value:	\$2,100
Total Value:	\$13,600
Property Class:	1 FAMILY RES
Acres:	0
Frnt:	0
Dpth:	0
Market Value:	
Zoning:	--

- Registered Professionals
- What is included:
- Exemption
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 - Village's Records
- [Subscribe](#) | [Login](#)

Local Licensed Professionals: [See More](#)

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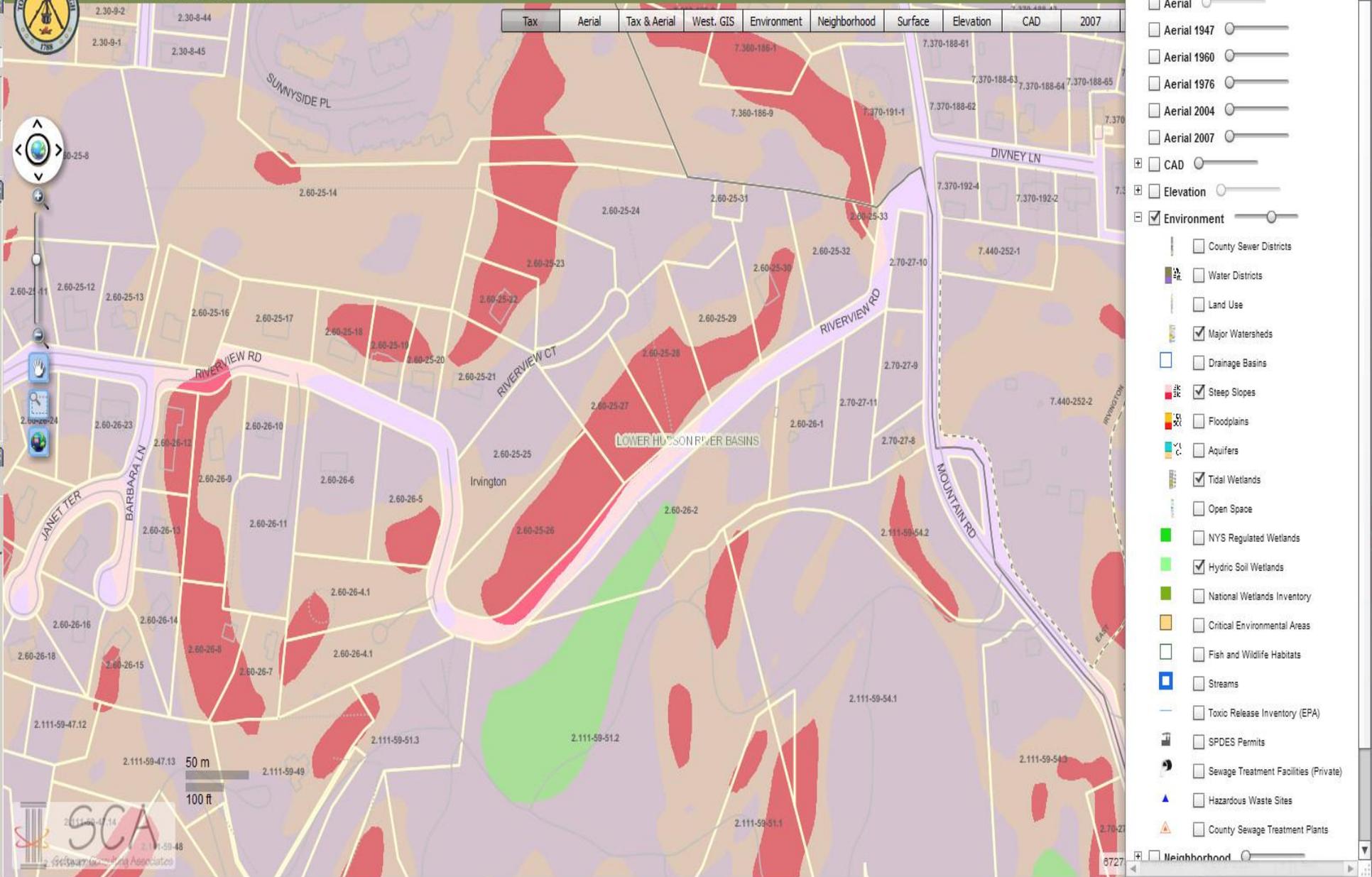
Our software products are always evolving to meet the ever changing requirements of State and County mandates.



Login

Town of Greenburgh, NY
Geographic Information System (GIS)

search id abutters layers assets filter sketch measure full scr clear print



Tax	Aerial	Tax & Aerial	West. GIS	Environment	Neighborhood	Surface	Elevation	CAD	2007
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Layers

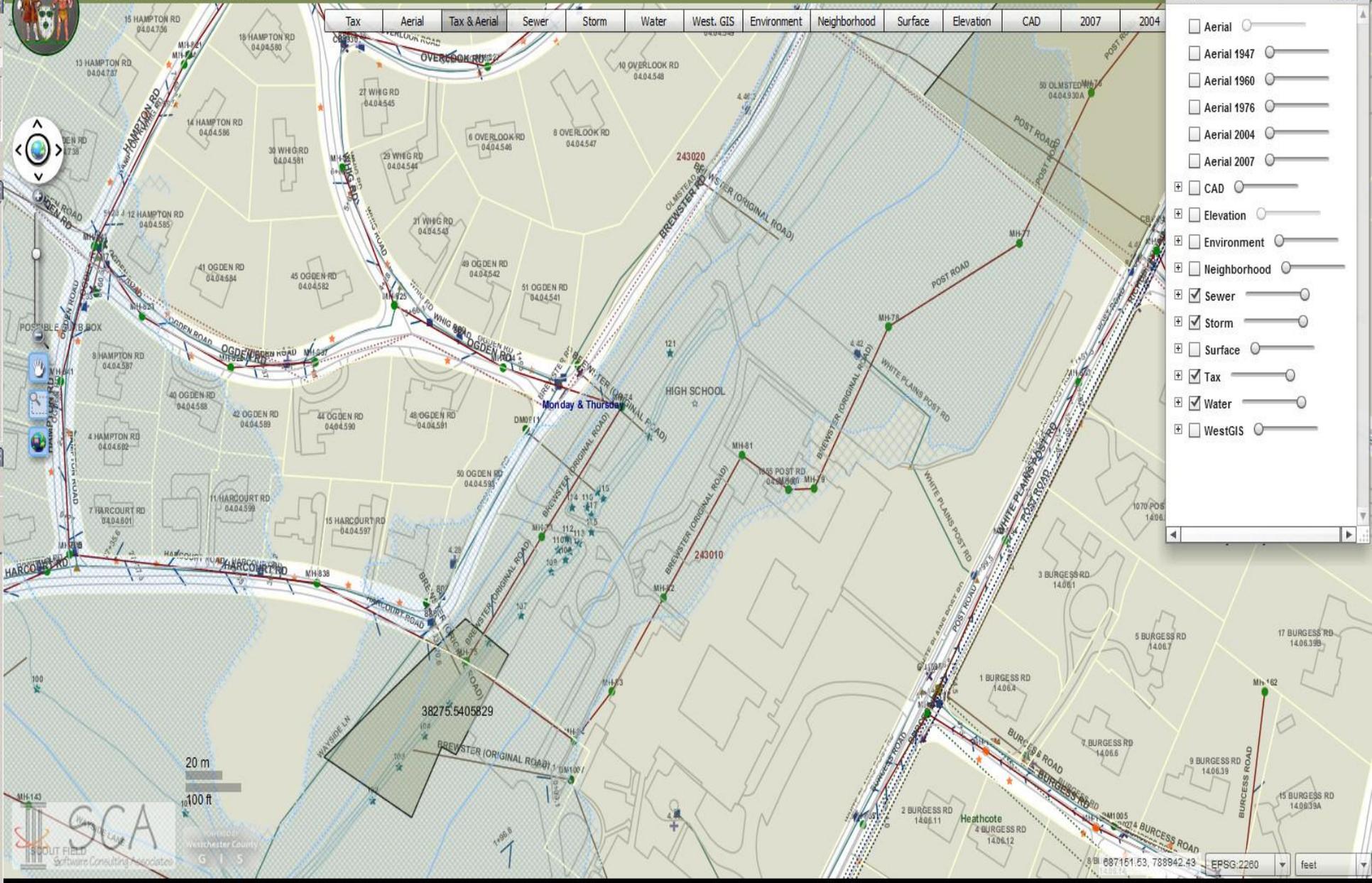
- Aerial
- Aerial 1947
- Aerial 1960
- Aerial 1976
- Aerial 2004
- Aerial 2007
- CAD
- Elevation
- Environment
 - County Sewer Districts
 - Water Districts
 - Land Use
 - Major Watersheds
 - Drainage Basins
 - Steep Slopes
 - Floodplains
 - Aquifers
 - Tidal Wetlands
 - Open Space
 - NYS Regulated Wetlands
 - Hydric Soil Wetlands
 - National Wetlands Inventory
 - Critical Environmental Areas
 - Fish and Wildlife Habitats
 - Streams
 - Toxic Release Inventory (EPA)
 - SPDES Permits
 - Sewage Treatment Facilities (Private)
 - Hazardous Waste Sites
 - County Sewage Treatment Plants
- Neighborhood

Village of Scarsdale, NY

Geographic Information System (GIS)

search id abutters layers assets filter sketch measure full scr clear print

Tax Aerial Tax & Aerial Sewer Storm Water West GIS Environment Neighborhood Surface Elevation CAD 2007 2004

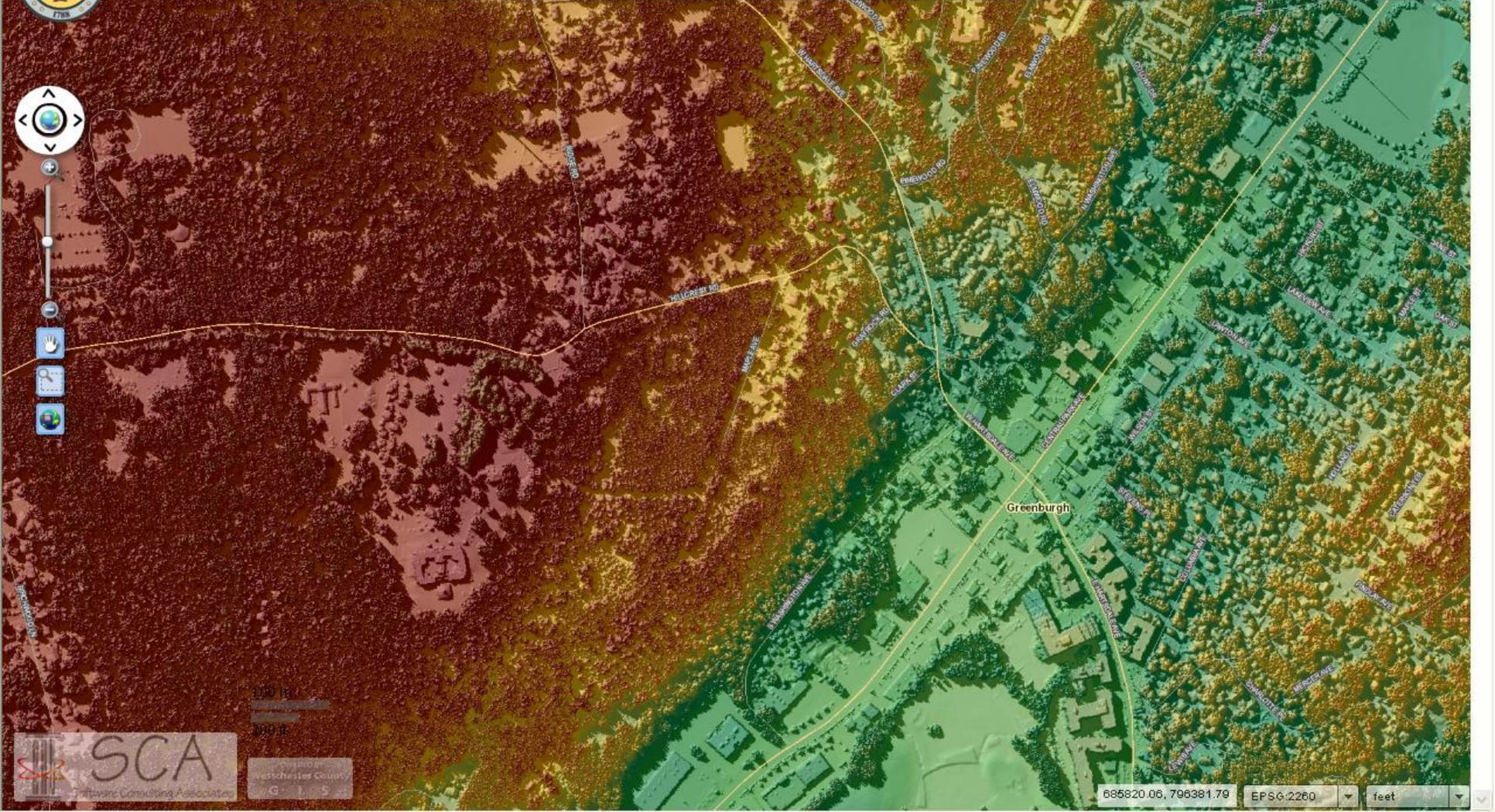


Layers

- Aerial
- Aerial 1947
- Aerial 1960
- Aerial 1976
- Aerial 2004
- Aerial 2007
- CAD
- Elevation
- Environment
- Neighborhood
- Sewer
- Storm
- Surface
- Tax
- Water
- WestGIS



20 m
100 ft



The screenshot shows a GIS application window with two tabs: "Town of Greenburgh Geographi..." and "Village of Scarsdale Geograp...". The main interface has a green toolbar with icons for "id", "abutters", "layers" (circled in red), "assets", "filter", "sketch", "measure", "full scr", "clear", and "print". Below the toolbar is a horizontal menu with tabs for "Tax & Aerial", "Sewer", "Storm", "Water", "West. GIS", "Environment", "Neighborhood", "Surface", "Elevation", "CAD", "2007", "2004", "1976", "1960", and "1947". The main map area displays an aerial view of a residential area with property lines and labels such as "1084 POST RD 14.05.3", "1 MICHELL RD 14.05.23", "243020", "Tuesday & Friday", and "3 MICHELL RD 14.05.24". A "Layers" panel is open on the right side, listing various layers with checkboxes and sliders: "Aerial" (checked), "Aerial 1947", "Aerial 1960", "Aerial 1976", "Aerial 2004", "Aerial 2007", "CAD", "Elevation", "Environment", "Neighborhood", "Sewer", "Storm", "Surface", "Tax" (checked), "Water", and "WestGIS".

Town of Greenburgh, NY
Geographic Information System (GIS)

search id abutters layers assets filter sketch measure full scr clear print Help Log Out

Tax Aerial Tax & Aerial West. GIS Environment Neighborhood Surface Elevation CAD 2007 2004 1976 1960 1947





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Mission

SDG provides real property, imaging and GIS centric software and systems integration services to government, education and private sector companies. The main pillar of the SDG business model is our focus on assisting our clients to properly apply the appropriate technologies to cost effectively improve services while reducing operational costs. The proper blend of expertise in imaging, GIS and workflow systems tools are applied to assist our clients to "do more with less" during challenging economic times. SDG's trademark collaborative approach includes a long and growing list of real world success stories with State, County and Municipal government agencies. Working in concert with a host of expert business partners further increases our client's return on investment (ROI) in 100% of SDG projects.

Results

If you work in a real property or county clerk's office, then our software will make your job easier and, hopefully, a little bit more fun. If you own property in New York State, our [Image Mate Online](#) software can show you (almost) everything you could want to know about it. (And we're working on that "almost" part.)

SDG software in action



- Residential
 - Property Info
 - Owner/Sales
 - Inventory
 - Improvements
- Tax Info
- Report
- Comparables

Municipality of City of Yonkers			
SWIS:	551800	Tax ID:	6.-6326-3
Tax Map ID / Property Data			
Status:	Active	Roll Section:	Taxable
Address:	24 Grant St		
Property Class:	220 - 2 Family Res	Site Property Class:	220 - 2 Family Res
Site:	Res 1	In Ag. District:	No
Zoning Code:	S-50 -	Bldg. Style:	Old style
Neighborhood:	00028 - Kimball	School District:	Yonkers
Legal Property Description:	Legal description not given for property		
Total Acreage/Size:	0.05	Equalization Rate:	2012 - 3.35%
Land Assessment:	2012 - \$1,800	Total Assessment:	2012 - \$10,100
Full Market Value:	2012 - \$301,493	Market Value/sqft:	2012 - \$137
Deed Book:	45292	Deed Page:	437
Grid East:	670353	Grid North:	759281
Special Districts for 2012			

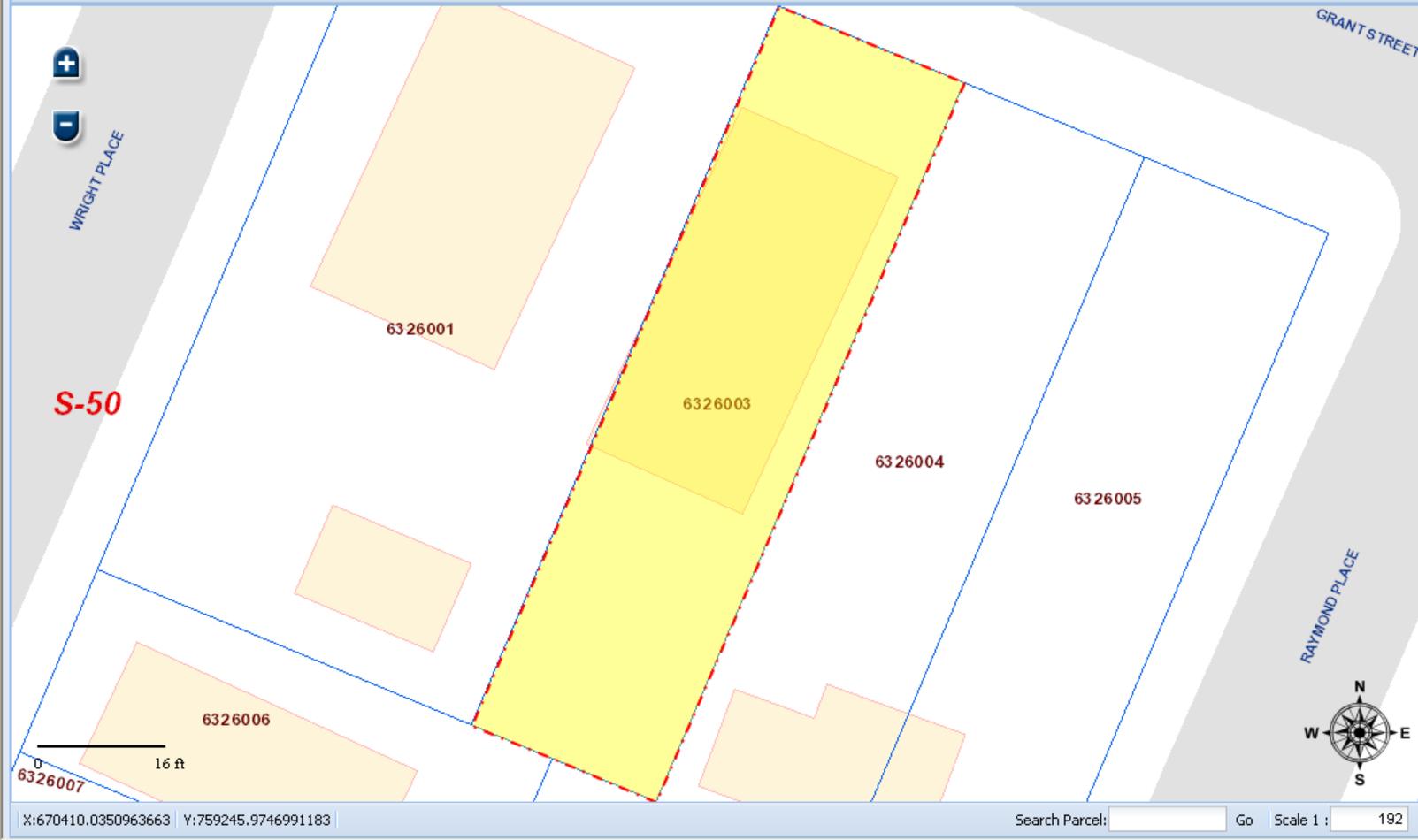
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- Documents
- Property Record Card
 - Sketch

- Maps
- Historic Tax Map Sec 6, Block 6326, Pg 55
- [Pin Property on GIS Map](#)

Map



Properties

Map Contents

Layers

- Comparable Results
- Border Mask
- City Boundary
- Rivers and Lakes
- House Numbers
- Hydrants
- Zoning
- Zip Code
- Blocks
- Parcels
- Parcel ID Labels
- Section Block Lot Labels
- Roof Square Feet
- Annotation
- Parcels Historic
- Street Layers
- Election Districts
- Council Districts
- Schools
- Buildings
- Neighborhoods
- Intersection

X:670410.0350963663 Y:759245.9746991183

Search Parcel: Go Scale 1 : 192



- Residential
- Property Info
- Owner/Sales
- Inventory
- Improvements
- Tax Info
- Report
- Comparables

Municipality of Village of Pelham Manor

SWIS:	554405	Tax ID:	167.45-1-25
-------	--------	---------	-------------

Tax Map ID / Property Data

Status:	Active	Roll Section:	Taxable
Address:	40 Forest Rd		
Property Class:	210 - 1 Family Res	Site Property Class:	210 - 1 Family Res
Site:	Res 1	In Ag. District:	No
Zoning Code:	RAAA -	Bldg. Style:	Colonial
Neighborhood:	00017 -	School District:	Pelham
Legal Property Description:	Lot 10.1 15740 Sq Ft 4.-461-010.1		
Total Acreage/Size:	308 x 51	Equalization Rate:	2011 - 100.00%
Land Assessment:	2011 - \$363,000	Total Assessment:	2011 - \$870,000
Full Market Value:	2011 - \$870,000		
Deed Book:	48031	Deed Page:	239
Grid East:	685364	Grid North:	748958

Special Districts for 2011

Description	Units	Percent	Type	Value
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- Maps
- [View Tax Map](#)
 - [Pin Property on GIS Map](#)
 - [View in Google Maps](#)
 - [View in Yahoo! Maps](#)
 - [View in Bing Maps](#)
- Map Disclaimer



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Support land preservation by making a secure online donation to Westchester Land Trust!

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Join WLT and make a difference today!

WLT Benefit

IN OUR BACKYARD
6:30 PM Saturday, June 16, 2012



We help communities create new parks and preserves.



Jennifer and Roger Schwartz enjoy a Quest with their kids.

Go on a Quest at Hilltop Hanover!

We invite you to a fantastic family outing at Hilltop Hanover Farm and Environmental Center this Sunday, May 20, 10-4 PM. As part of

LATEST NEWS

Maurice Sendak, RIP

WLT is saddened by the passing of Maurice Sendak, children's author and supporter of our work and the conservation of open land. We wish his grinches, goblins and assorted creatures our most sincere sympathy.
Copyright Where the Wild Things Are, courtesy Maurice Sendak, who supports our efforts to preserve them.

[Read more...](#)

Garden Tour

Lewisboro Land Trust, in association with Lewisboro Garden Club presents "Beyond the Garden Gate". A tour of Waccabuc and North Salem Gardens. Sunday, June 24, 10am-3:00pm.

[Read more...](#)

Take A Walk



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Map Services for Developers

Service Center > Map Services > For Developers

The ArcGIS Server REST API provides a simple, open Web interface to services hosted by ArcGIS Server. From the ArcGIS Server REST page you can view Map Server in ArcGIS as a layer file (.lyr), in ArcGIS Explorer as map file (.nmf) or in Google Earth as a kmz file. You can also view map service information such as layer names and supported interfaces.

****Note**** Some layers are scale dependent and will only display when zoomed in close enough.

Available map services

Mapping Westchester County	Map Service for AutoCAD Users
Mapping Westchester County - Base Map	Mapa de Westchester County (Spanish users)
Mapping Westchester County Base Map - Light	Aerial Photos 1947-2009
Municipal Tax Parcels	Environmental Features
Digital Elevation Model	Digital Surface Model

Disclaimer: Map services are to be used for general information and planning purposes only, and should not be relied upon as a sole informational source. The County of Westchester hereby disclaims any liability for any and all damage, loss, or liability which may result, directly or indirectly, from the use of this GIS mapping system by any person or entity.

Mapping Westchester County

The Mapping Westchester County map service contains over 150 features such as environmental features, facilities and services, district boundaries, transportation features, census demographics and much more.

Map Service REST Endpoint

<http://giswww.westchestergov.com/ArcGIS/rest/services/MappingWestchesterCounty/MapServer>

Type: Dynamic

WMS

<http://giswww.westchestergov.com/ArcGIS/services/MappingWestchesterCounty/MapServer/WMServer?request=GetCapabilities&service=WMS>

Mapping Westchester County - Base Map

Mapping Westchester County-Base Map map service includes several county base layers including municipal boundaries, public schools, train stations, lakes and parks.

Map Service REST Endpoint

http://giswww.westchestergov.com/ArcGIS/rest/services/MappingWestchesterCounty_Basemap/MapServer

Type: Tiled

WMS

Summary

- Highlights and leverages ArcGIS Server functionality
 - w/ Viewer independence
- Furthers movement towards data as a service (DaaS)
- Significantly expands user base
- Reduces local government investment & expenditures
 - Efforts to quantify cost savings/ROI
- Promotes GIS as “*business friendly*”
- Increases visibility and responsibility
 - New space for government GIS web applications

Questions

Sam Wear

stw1@westchestergov.com

914-995-3047