Westchester County GIS

Providing Products and Services for Local Governments in 2013

2013 Spring NEARC Conference University of Massachusetts Amherst, MA May 14, 2013

Sam Wear Assistant Chief Information Officer (GIS) Westchester County GIS White Plains, New York

Westchester County GIS

Established 1986

Created first comprehensive large scale (1"=100') countywide land base in 2000 (Spring 2013 update)
Extensive geospatial database & application development
Environmental Systems Research Institute (ESRI) client – worldwide/industry leader in GIS software (
Support several other industry geospatial software programs in both in desktop and web environments (Google Earth & AutoCAD)

Relevant Program Areas

Infrastructure/Asset Inventory
Tax Maps/Parcel Information
Land Use/Zoning/Planning
Emergency Services (Fire & Police)
Stewardship/Maintenance of Countywide base map Geospatial Data Warehouse

Geospatial coordination with local governments

The GIS Cloud Takes Hold

- Administrators and decision-makers much more informed
 / comfortable with cloud concept
- Enough success stories to work with
 - Noteworthy failures, too
- Significant reduction in government workforce
- One of few options available for governments with no GIS capacity to date

Being discussed and considered on all levels of government
Geospatial technology perfect fit for multi-government, centralized, *cloud-type* GIS program development

Cloud Services

Software as a Service (SaaS) **Gmail, Business Analyst Online, ArcGIS Explorer Online**, ArcGIS Online, etc. **Platform as a Service (PaaS)** ArcGIS.com, Google Earth Infrastructure as a Service (IaaS) Computing, storage, managed services, and other IT infrastructure components Data as a Service (DaaS) Map services, commercial data services

Westchester County GIS Cloud

- Online mapping applicationsMap services
- Data warehouse
- Web feature editing and mobile data collection (ArcGIS.com)

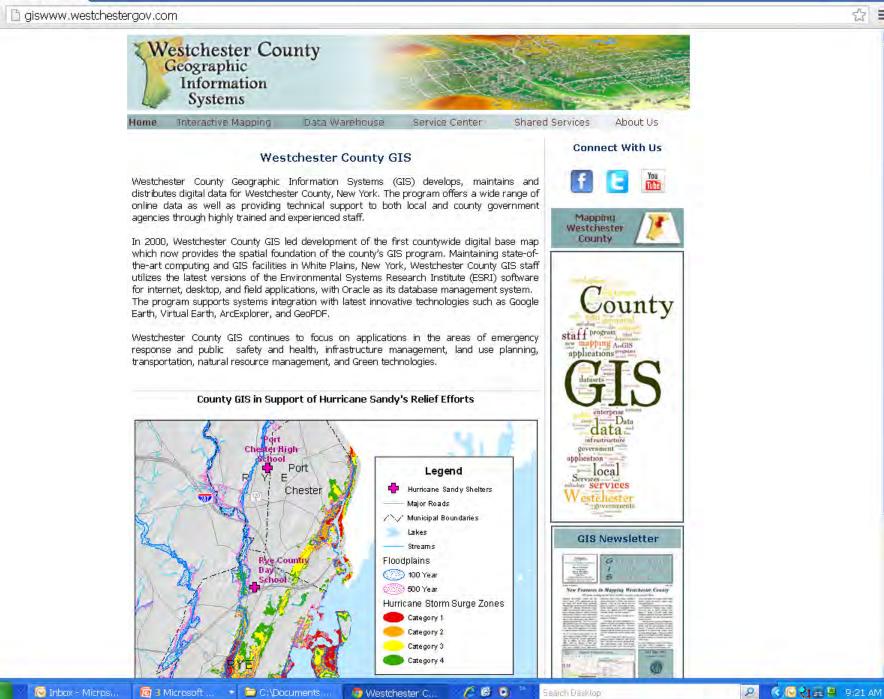
Mapping Westchester County

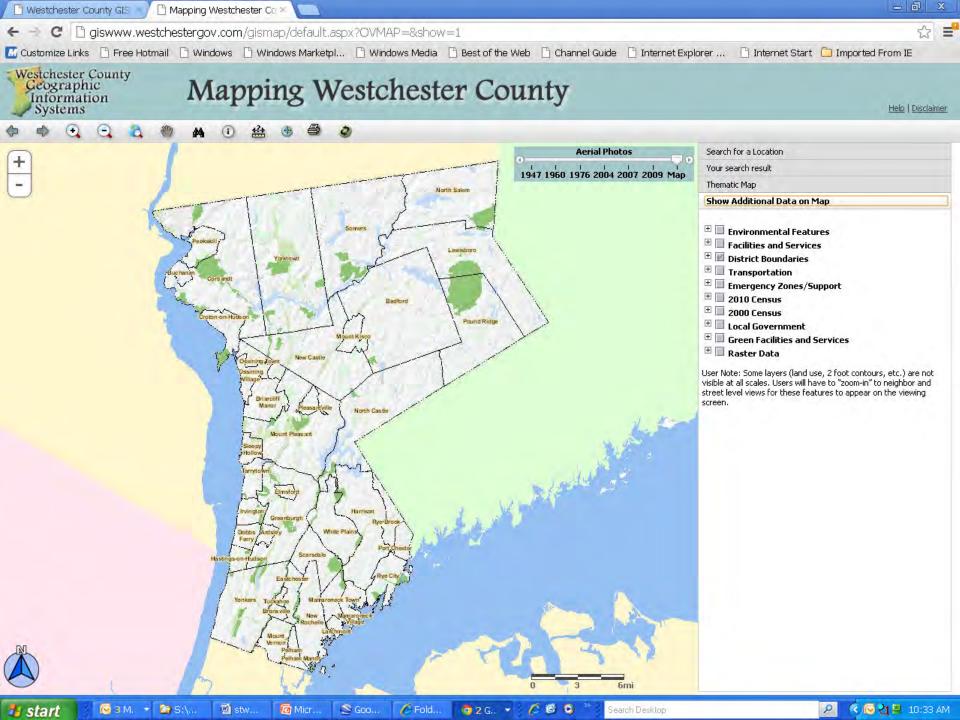
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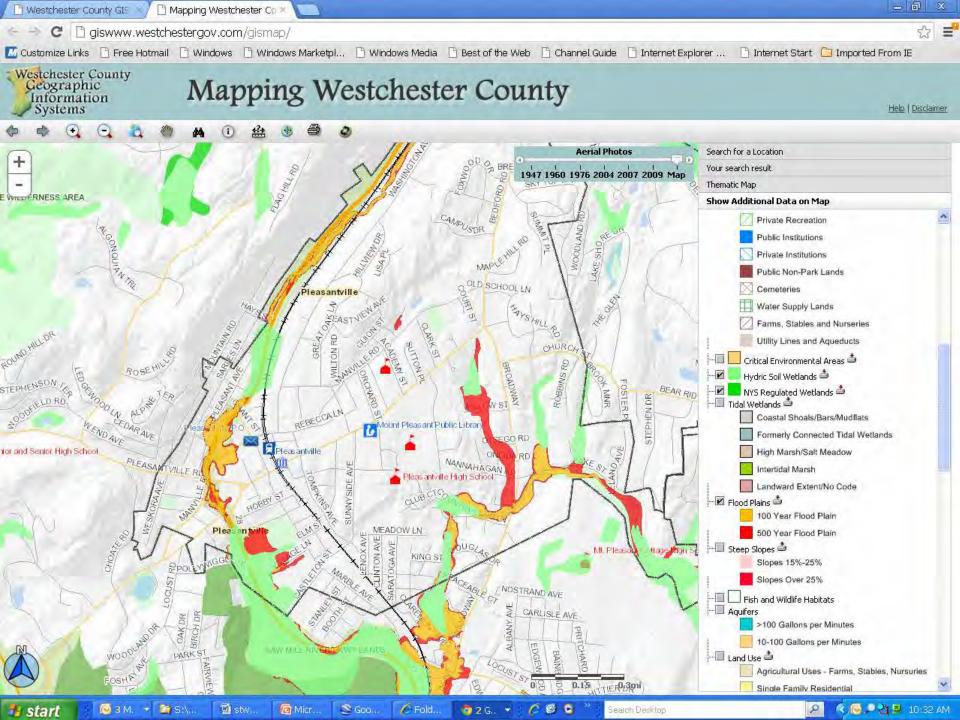
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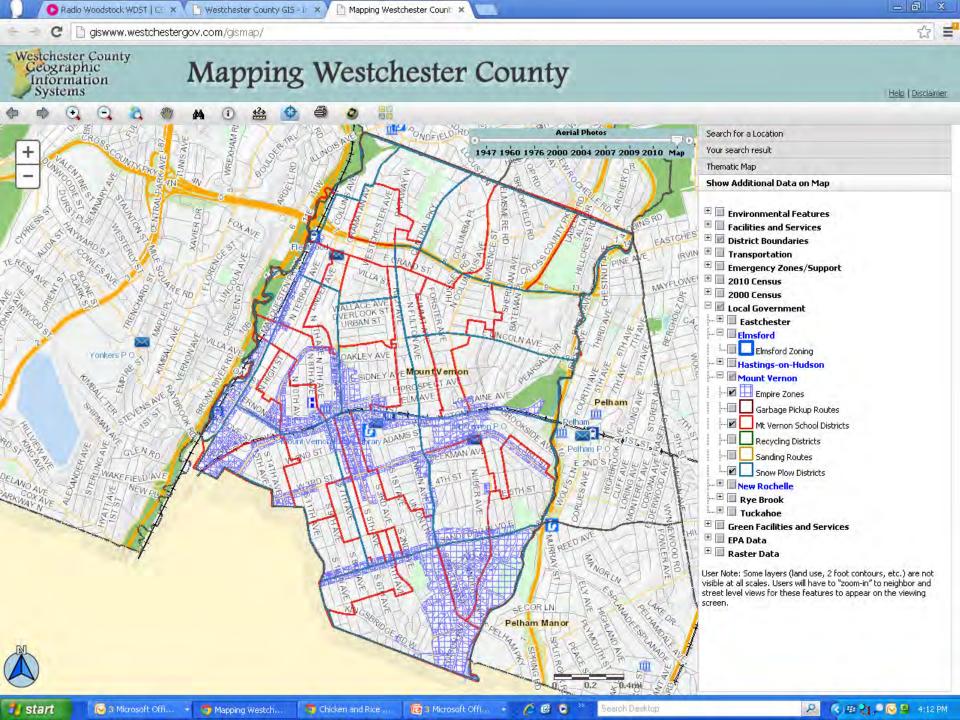
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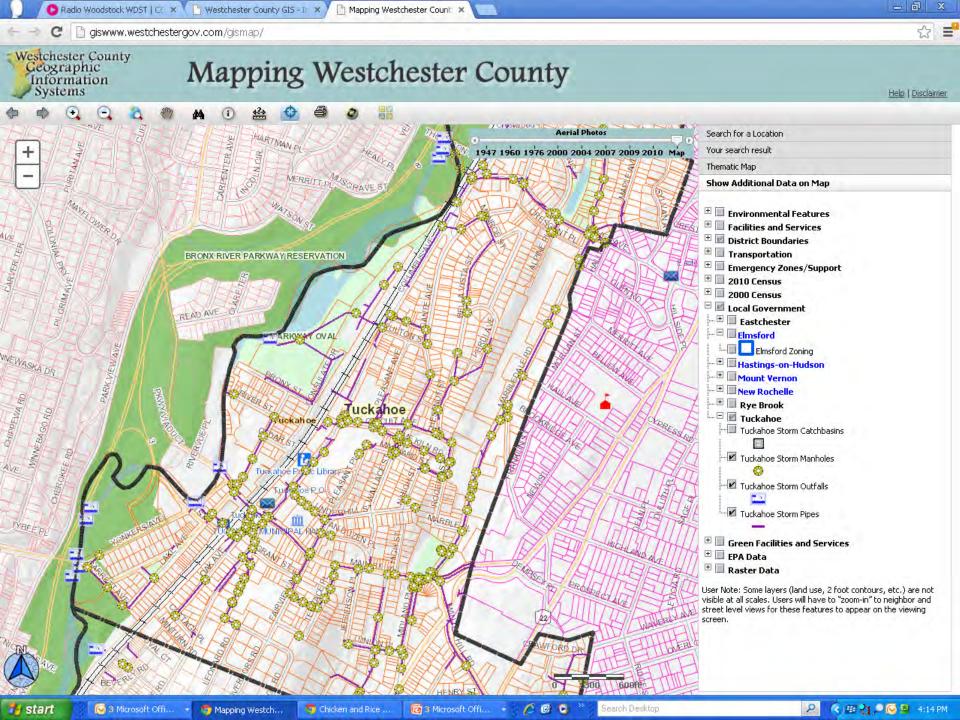
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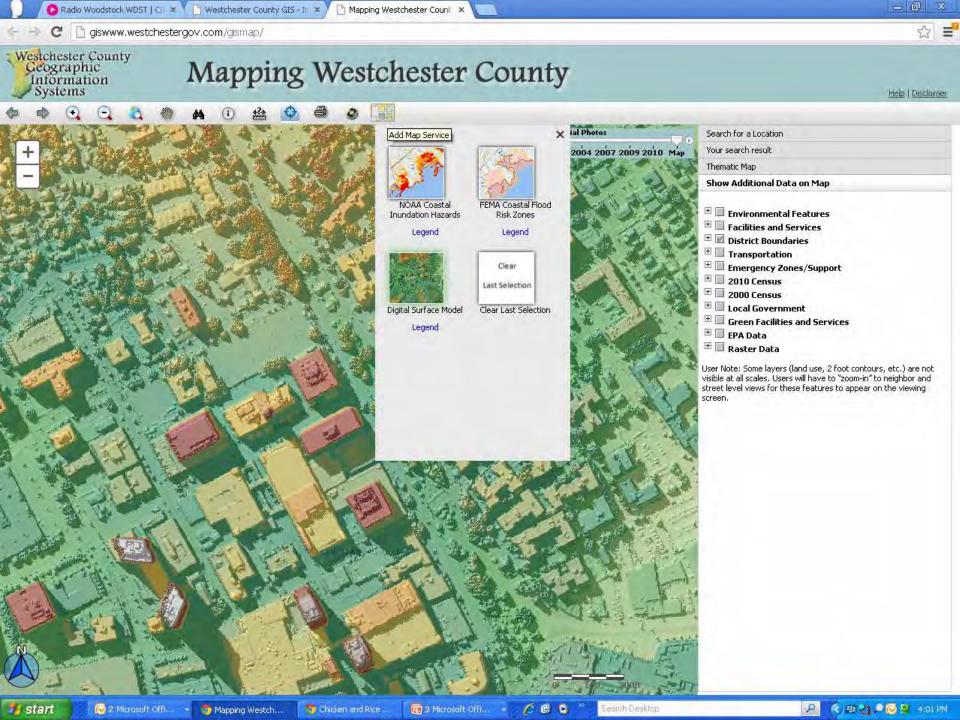


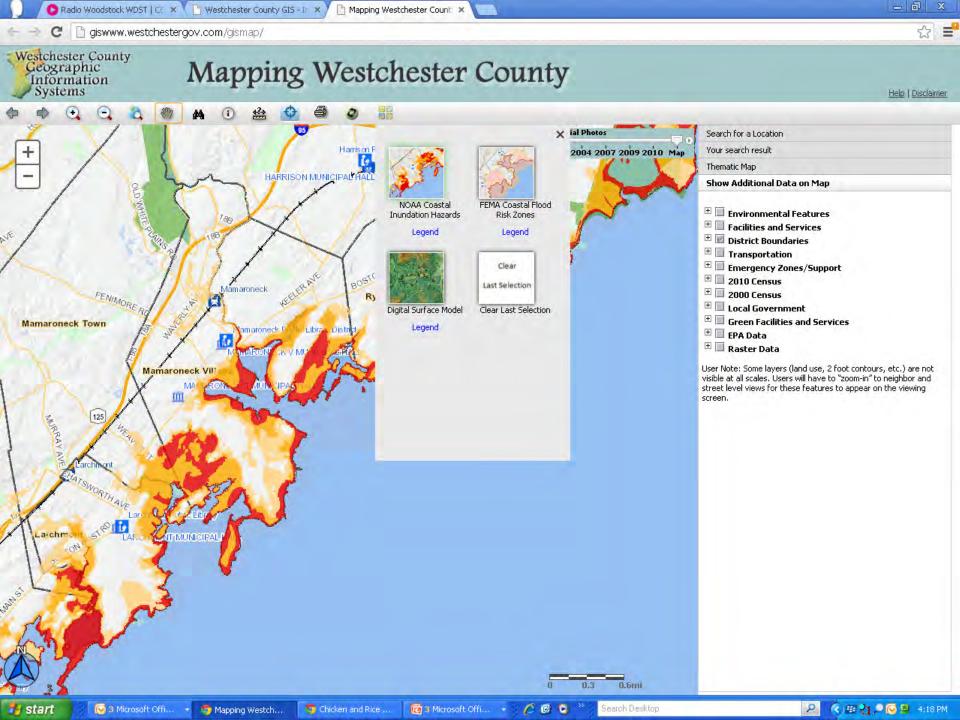


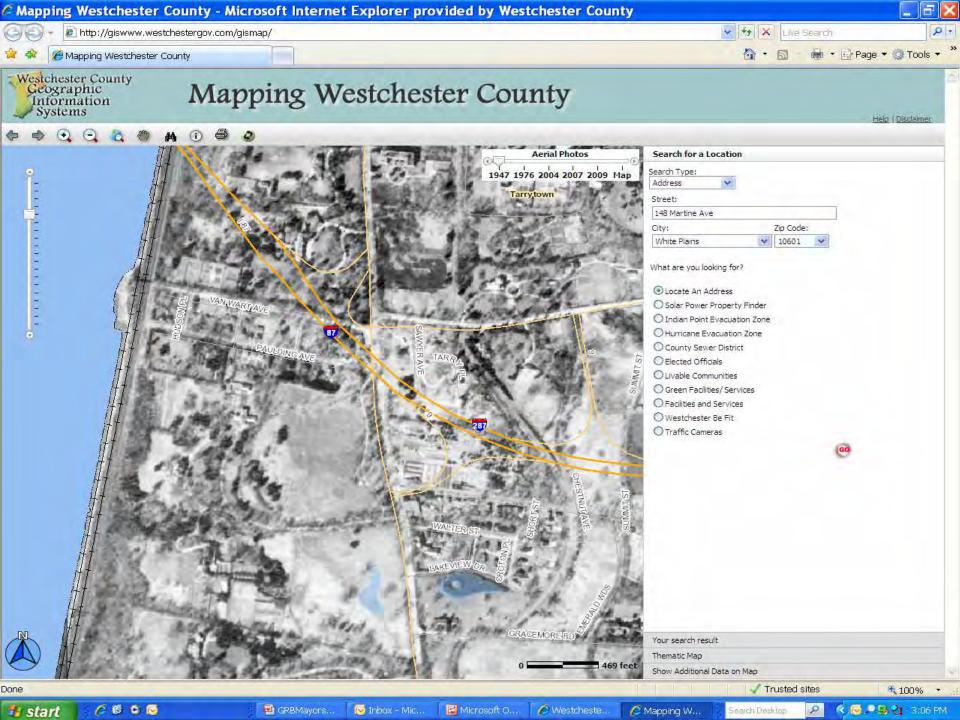












Tax Parcel Viewer

Westchester County GIS - Interactive Mapping Applications - Micro	osoft Internet Explorer provided by Westchester County 📃 🖃 🔀
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Westchester County Geographic Information Systems	
Home Interactive Mapping Data Warehouse	Service Center Shared Services About Us

INTERACTIVE Interactive Mapping Applications

Mapping Westchester Municipal Tax Parcel Viewer Solar Property Locator Green Map Locator Hurricane Zone Finder Indian Point Plan Elected Officials Livable Communities County Sewer Districts

For a brief description of Westchester County's Public GIS Mapping Applications, please read below.

Mapping Westchester County

Mapping Westchester County is the county's primary internet mapping portal, providing access to dozens of datasets, and to specialized "County Locators": Hurricane Zone, Indian Point Plan, Elected Officials, Community Services, and Green Facilities. In addition, select county datasets - designated by this icon $\stackrel{\text{d}}{\Longrightarrow}$ - can be downloaded directly from the mapping application.

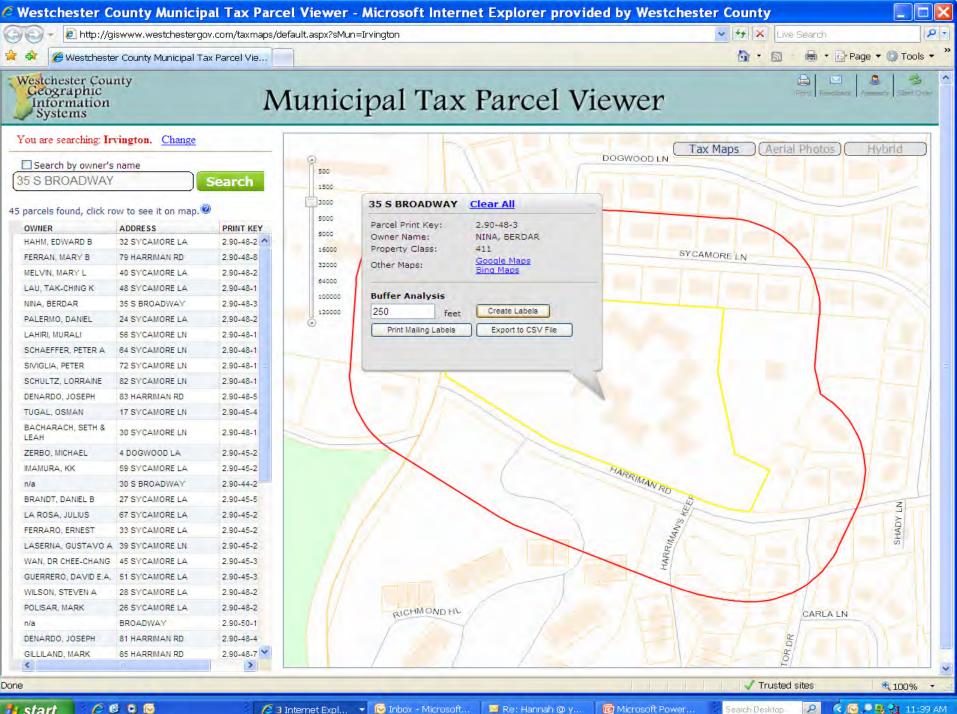
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Hurricane Zone Find	er		
County Sewer Distri	Ardsley Briarcliff Manor		
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Westchester Be Fit	Irvington		
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Data Warehouse

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LiDAR	Beaches (Public and Private Locations)	9 КВ 🔇
	Bedrock Geology	168 KB 🌑
Frequently Asked	Citizen Water Monitoring Sites	11 КВ 🌑 4 КВ 🍣
Questions	County Designated Critical Environmental Area	260 КВ 🌑 296 КВ 🃎
	County Sewage Treatment Plants	7 КВ 🔕 3 КВ 📚
	Digital Elevation Model (50- Foot)	41 MB 🔇
	FEMA 100 & 500 year flood plains (2007)	14.3 MB 🔇 16.6 MB 🚫
	Gaging Stations	8 КВ 🔕
	Hazardous Waste Sites	111 КВ 🔇 72 КВ 📎
	Hydric Soil Wetlands	4.16 MB 🌑 4.23 MB 💫
	Land Cover Classification	343 KB 🔕
	Major & Minor Drainage Divides (2012)	527 KB 🚳 612 KB 🔊
	Major Drainage Basins	167 KB 🔇
	National Wetland Inventory	2.21 MB
	NYS Designated Freshwater Wetlands	593 KB 🔕 625 KB 👟
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	Sewage Treatment Facilities (Private)	5 KB 🔇 5 KB 🔇
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Larchmont	2010	Download	287 KB	Mr. Daniel Whittemore 120 Larchmont Avenue Larchmont, NY 10538 Phone: (914) 834-6230
Mamaroneck (V)	2010	Download	607 KB	Mr. Lloyd T. Wright 123 Mamaroneck Avenue Mamaroneck NY, 10543 Phone: (914) 777-7720
Mount Kisco	2010	Download	443 KB	Mr. Roger D Miller 104 Main Street Mount Kisco NY, 10549 Phone: (914) 864-0006
Mount Pleasant	2010	Download	1,80 MB	Mr. James J. Timmings 1 Town Hall Plaza Valhalla NY, 10595 Phone: (914) 742-2315 Ext: 2345
Pleasantville	2010	Download	544 KB	Mr. James J. Timmings 80 Wheeler Avenue Pleasantville NY, 10570 Phone: (914) 769-1886
Sleepy Hollow	2010	Dównload	295 KB	Mr. Fred Gross 28 Beekman Avenue Sleepy Hollow NY, 10591 Phone: (914) 366-5156
Mount Vernon		Contact Assessor		Mr. Anthony V. DeBellis 1 Roosevelt Square Mount Vernon NY, 10550 Phone: (914) 665-2325
New Castle	2010	Download	3.26 MB	Mr. Philip M Platz 200 South Greeley Avenue Chappaqua NY, 10514 Phone: (914) 238-7266
New Rochelle	2010	Download	2.04 MB	Mr. Daniel T. Whittemore 515 North Avenue New Rochelle NY, 10801 Phone: (914) 654-2054
North Castle	2010	Download	1.72 MB	Ms. Victoria Sirota 17 Bedford Road Armonk NY, 10504 Phone: (914) 273-3324
North Salem	2010	Download	753 KB	Ms. Karen A. Futia-Kazmierczak 266 Titicus Road North Salem NY, 10560 Phone: (914) 862-5214
Ossining (Town/Village)	2010	Download	7.4 MB	Mr. Fernando Gonzalez 16 Croton Avenue Ossining NY, 10562 Phone: (914) 762-8274
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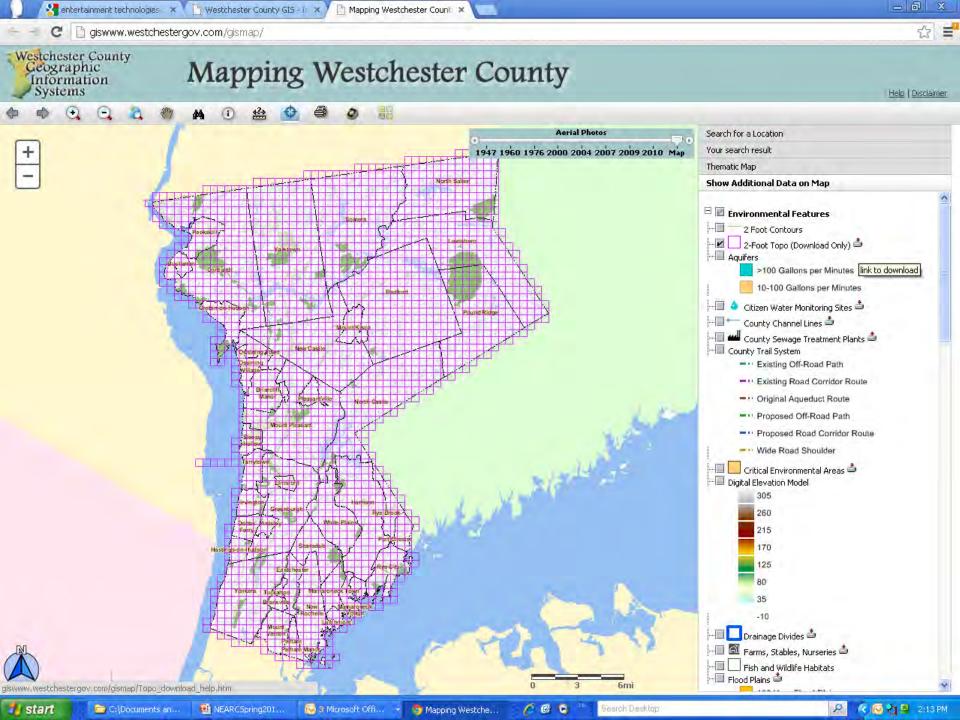
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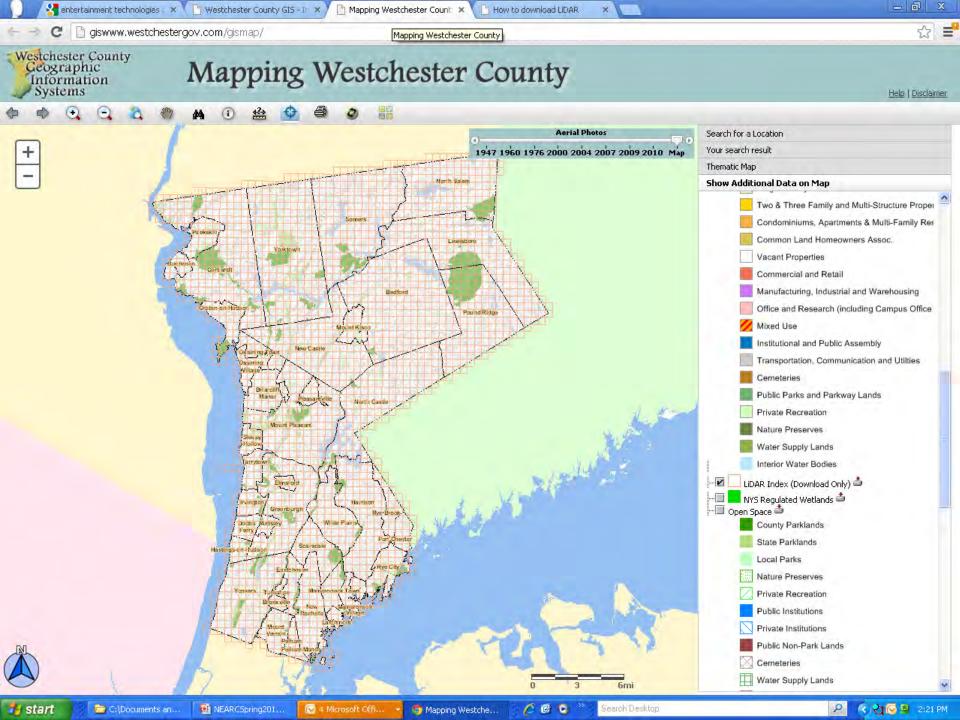
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Map Services

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DigitalSurfaceModel (MapServer)

View In: ArcMap ArcGIS Explorer ArcGIS JavaScript Google Earth ArcGIS.com Map

View Footprint In: Google Earth

Service Description: Digital Surface Model: a one-meter-resolution countywide raster created from spring-2009 LiDAR 'first-returns'. Enhanced with a shadowed 'hillshade', uppermost surfaces of structures and landscapes are seen as 3-dimensional objects. The DSM can be used for planning and visualizations, for siting solar power installations, to analyze vegetation density, etc.

Map Name: Layers

Legend

All Layers and Tables

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- <u>Digital Surface Model Hillshade</u> (0)
- Digital Surface Model (1)

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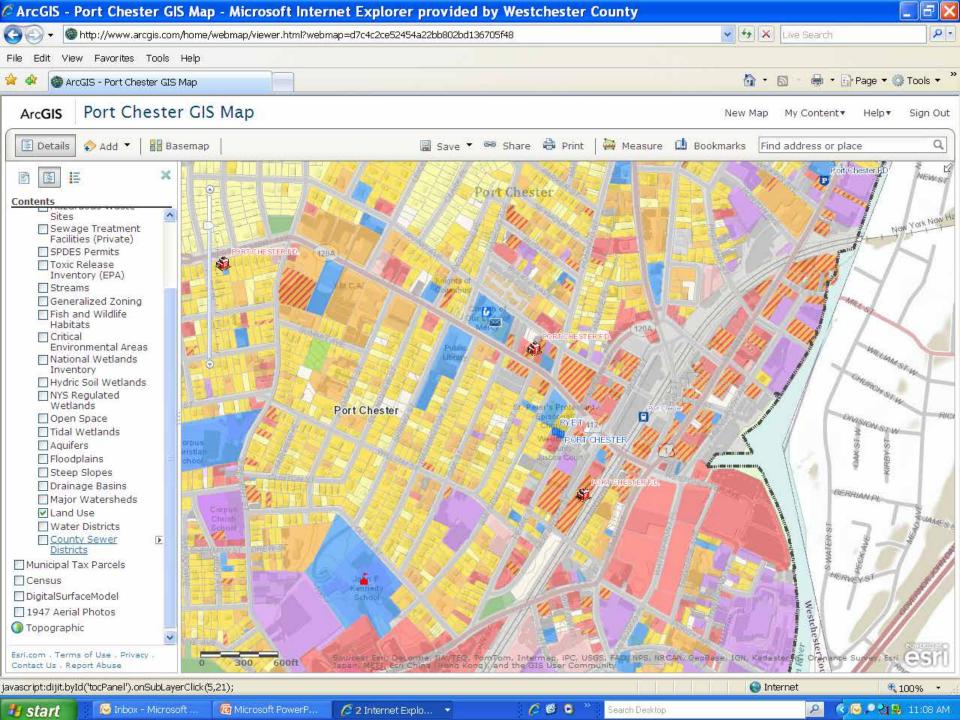
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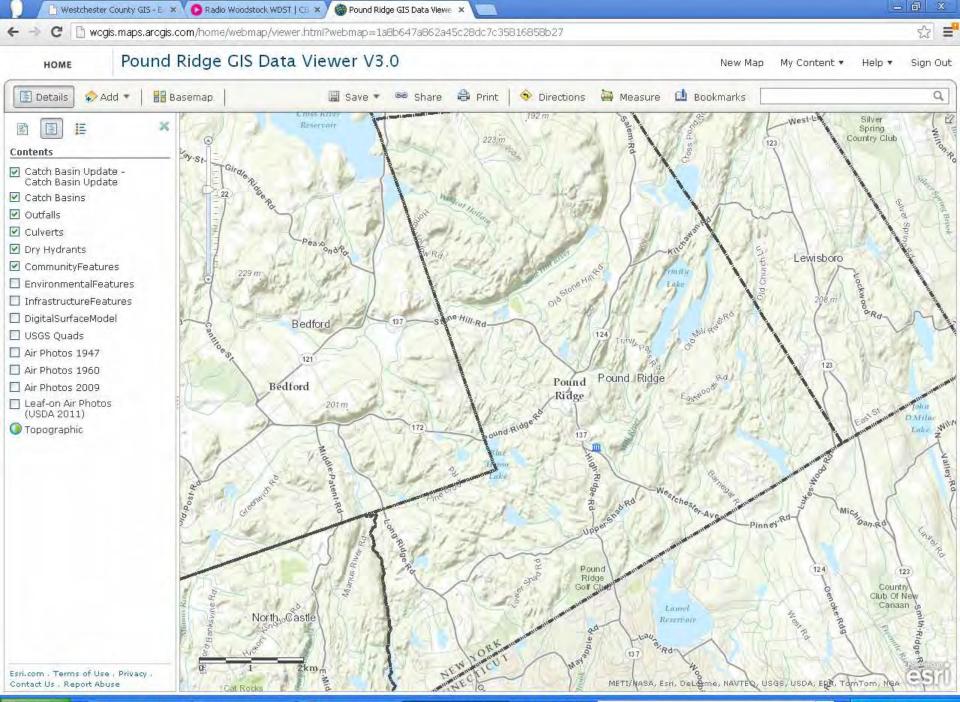
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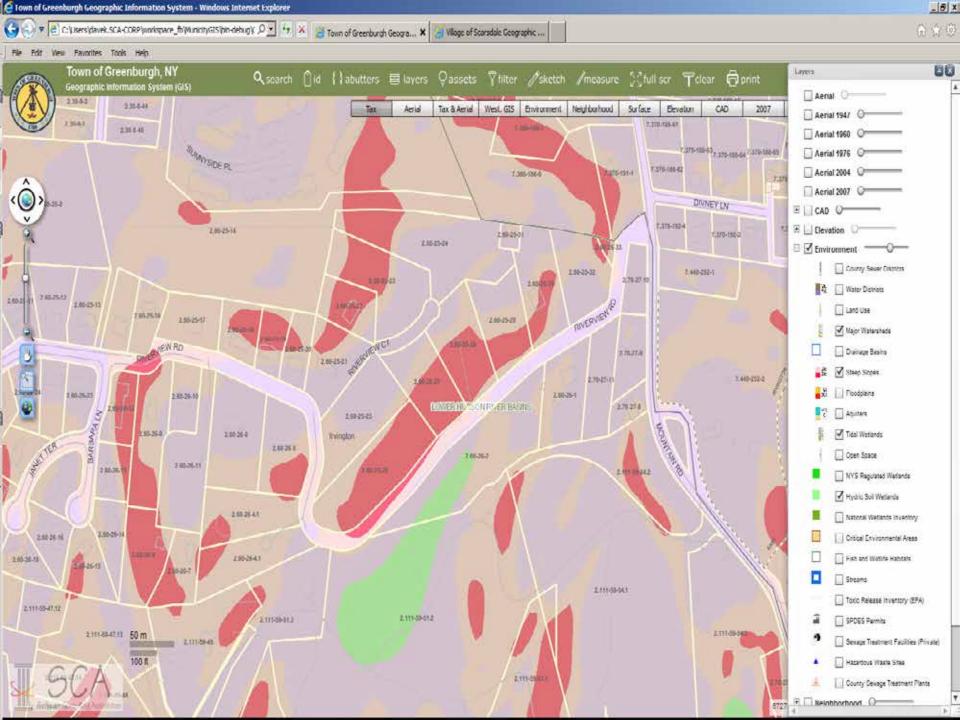
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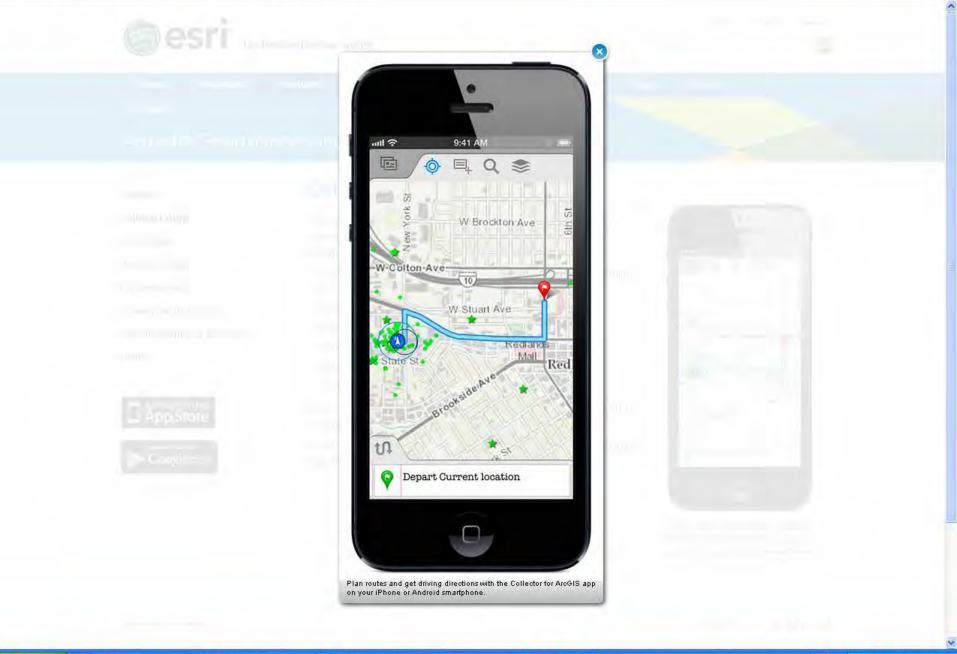


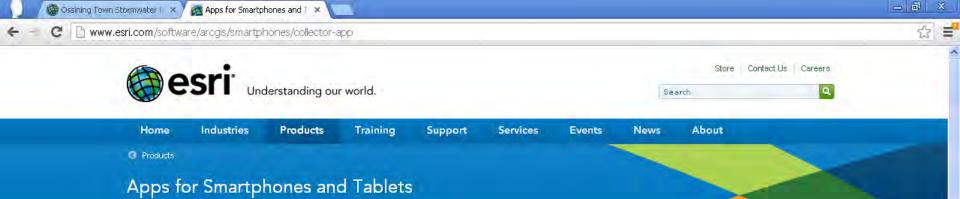


Mobile GIS w/ArcGIS.com

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Overview

Collector App

ArcGIS App

Windows 8 App

For Developers

System Requirements

Brochures/Articles/ Podcasts

Demos



Collector App

Collector for ArcGIS improves your productivity with intuitive data collection. It's designed specifically for iPhone and Android smartphones.

- Capture, update, and report spatial and tabular information directly from your Android or Apple device.
- Plan routes and get directions
- Improve your data quality with data-driven forms.
- Capture photos and video.
- Integrate information into your organization's GIS.
- . Configure the app to fit your organization's workflow.

Data captured in the field using the Collector app can be displayed in an Operations Dashboard.

Download the free Collector app from the <u>Apple App Store</u> or <u>Google</u> <u>Play</u> and <u>get started</u>.



Plan routes and get driving directions with the Collector for ArcGIS app on your iPhone or Android smartphone.

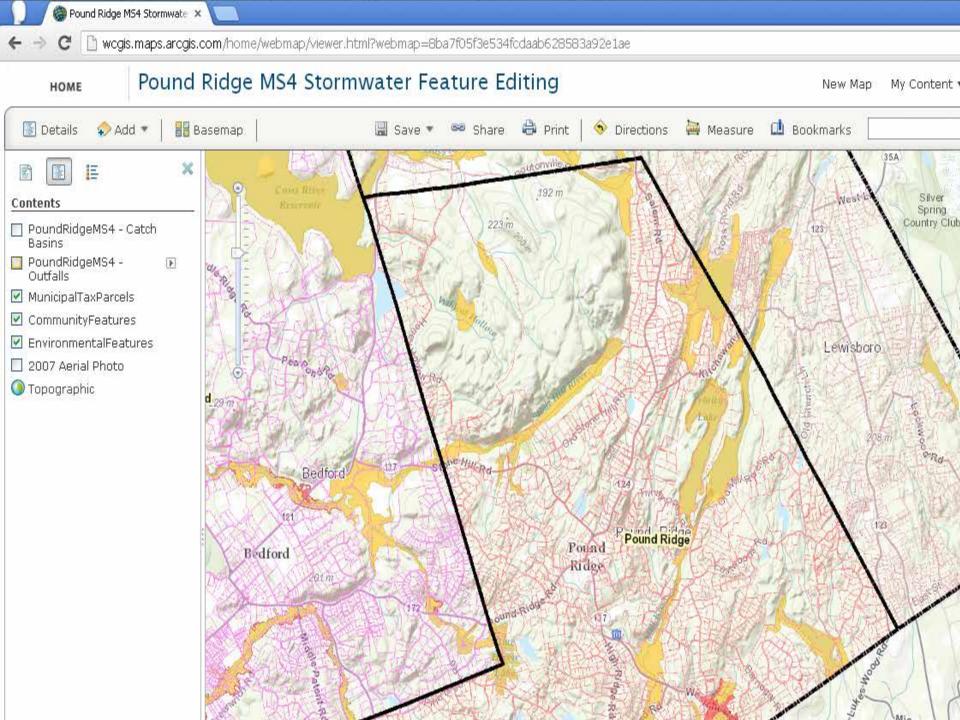
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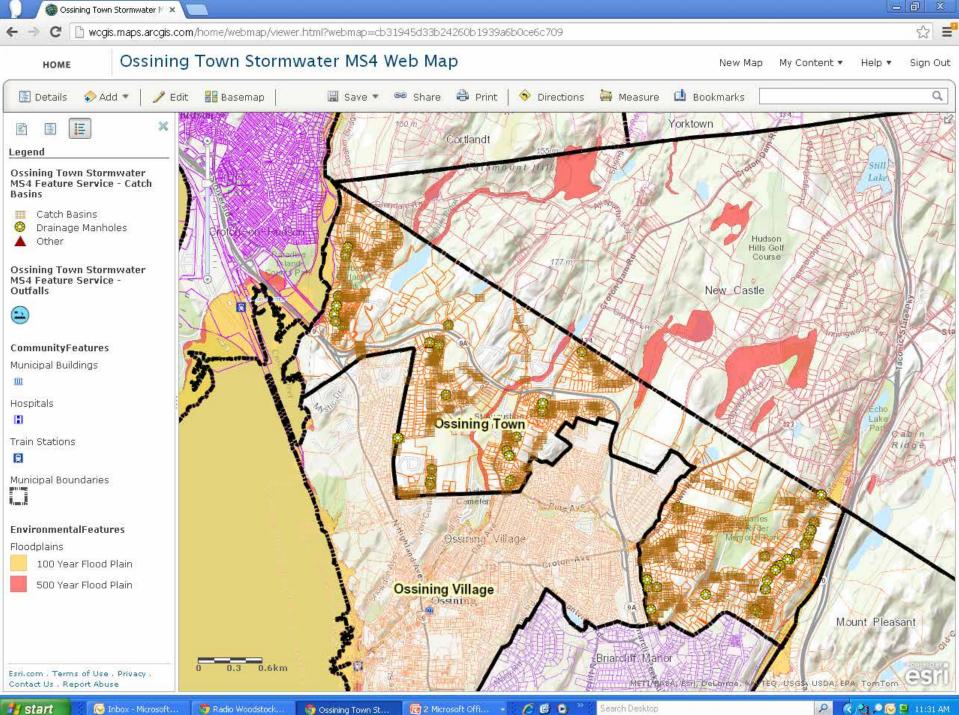
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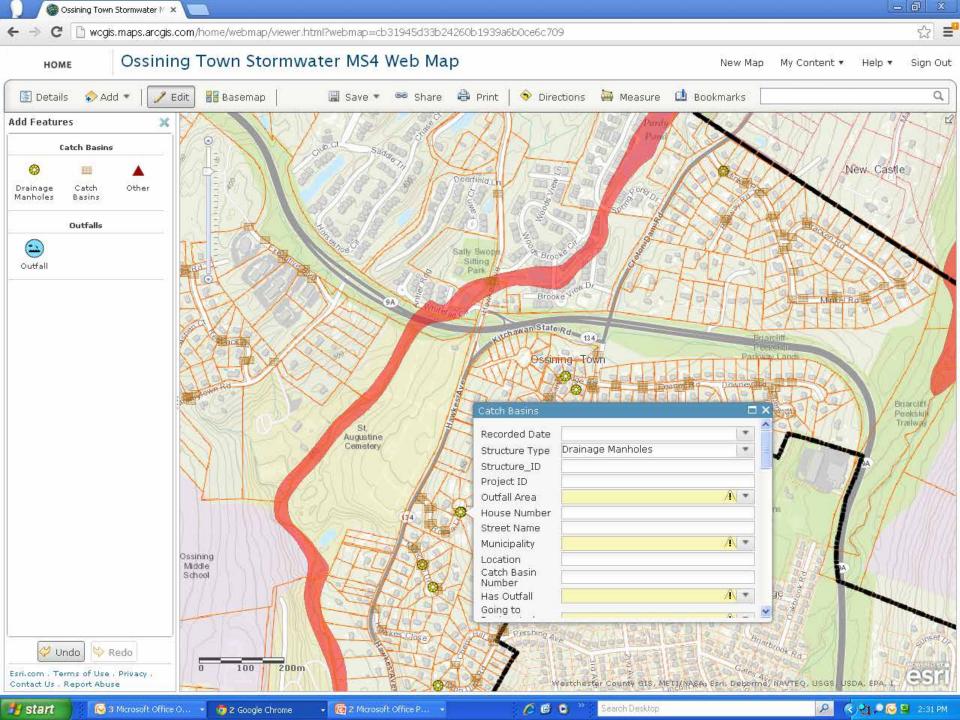
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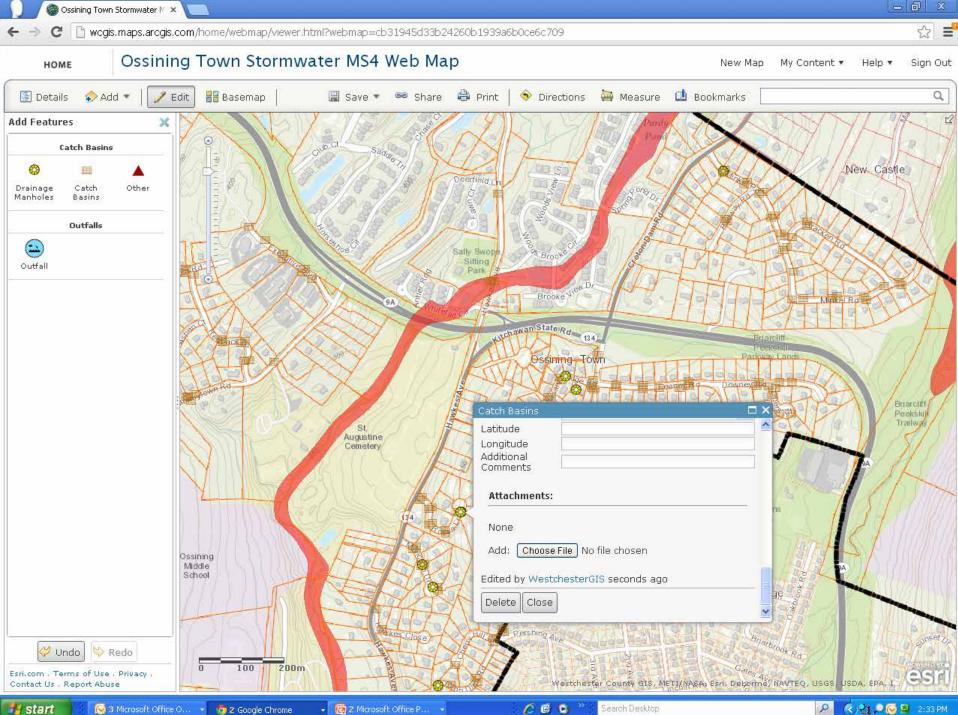




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Parting Thoughts

- **Big Assumption:** Agency is available to serve as *The Cloud.* **Another Assumption:** Cloud discussion furthers collaboration in difficult times (However, our experience suggests so).
- **Return on Investment (ROI):** I don't have one. Both obvious (software, infrastructure, app development, DUPLICATION) & not-so-obvious.
- It's Cloudy & Not so Clear: Meaning the GIS Cloud is different things to different organizations. GIS technology is a perfect fit for County/local governments & Regional organizations.
- Just an Example: We're only scratching the surface for what we can do for local governments.
- Not Going Away: Cloud concept is here to stay in the GIS arena. Chances are local governments will use a variety of Cloud components. How products/platforms like ArcGIS.com fit in – TBD.

Questions

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http://giswww.westchestergov.com

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