



Office of Information
Technology Services



NYSAC
— NEW YORK STATE —
ASSOCIATION OF COUNTIES

Understanding How NYS GIS and Open Parcel Data Sharing Can Benefit Counties

NYS GIS Program Office

January 2021

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*NYSAC Thanks the
Following Sponsor of
Today's Webinar:*

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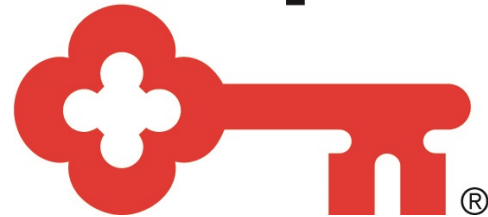
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KeyBanc Capital Markets



Our deep New York government expertise allows us to bring valuable services and actionable ideas to our clients. We're ready to help guide your County toward its strategic goals through customized financial solutions.



**Office of Information
Technology Services**

Kate Kiyanitsa, GISP

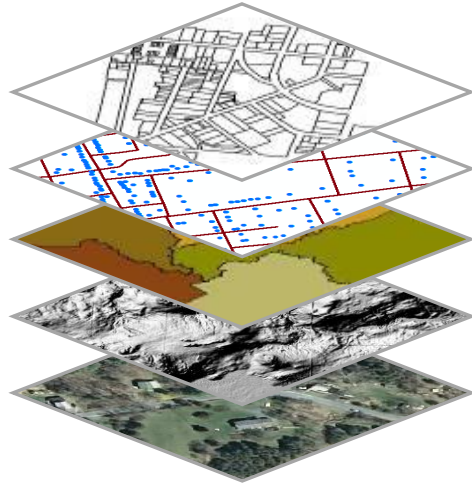
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January 2021

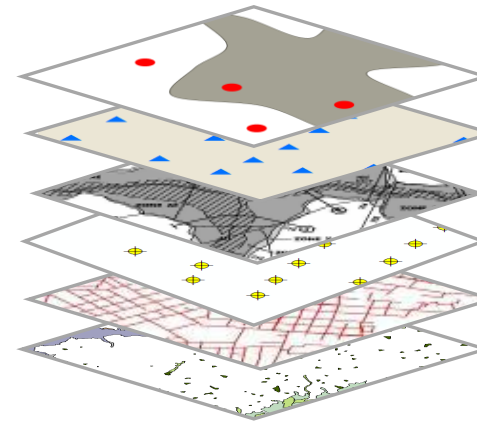
Geographic Information Systems (GIS)

NYS GIS Program Office (GPO) Framework Data



- Tax Parcels**
- Streets & Address**
- Boundaries**
- Elevation**
- Ortho Imagery**

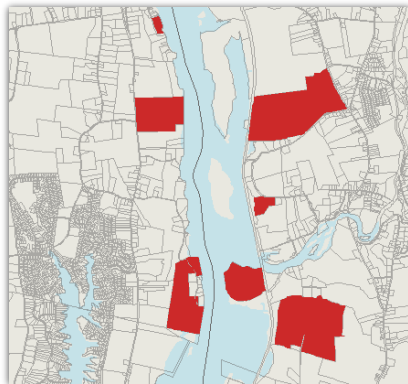
Business Data Layers



- Incidents, Events, 9-1-1**
- Environmental Assets**
- Flood Zones**
- Fleet Vehicles**
- Utilities**
- Wetlands**

Intelligence derived from location analysis

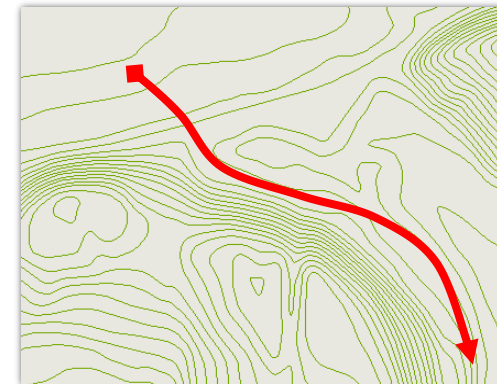
Which properties suit my needs?



Which school am I closest to?



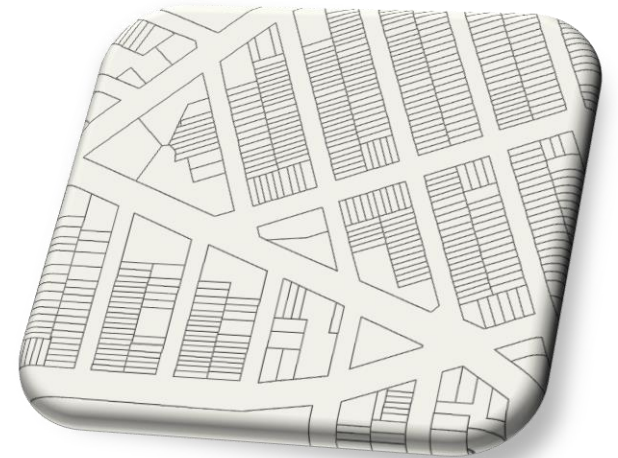
Where will the water flow?



The NYS Statewide Parcel Map Program

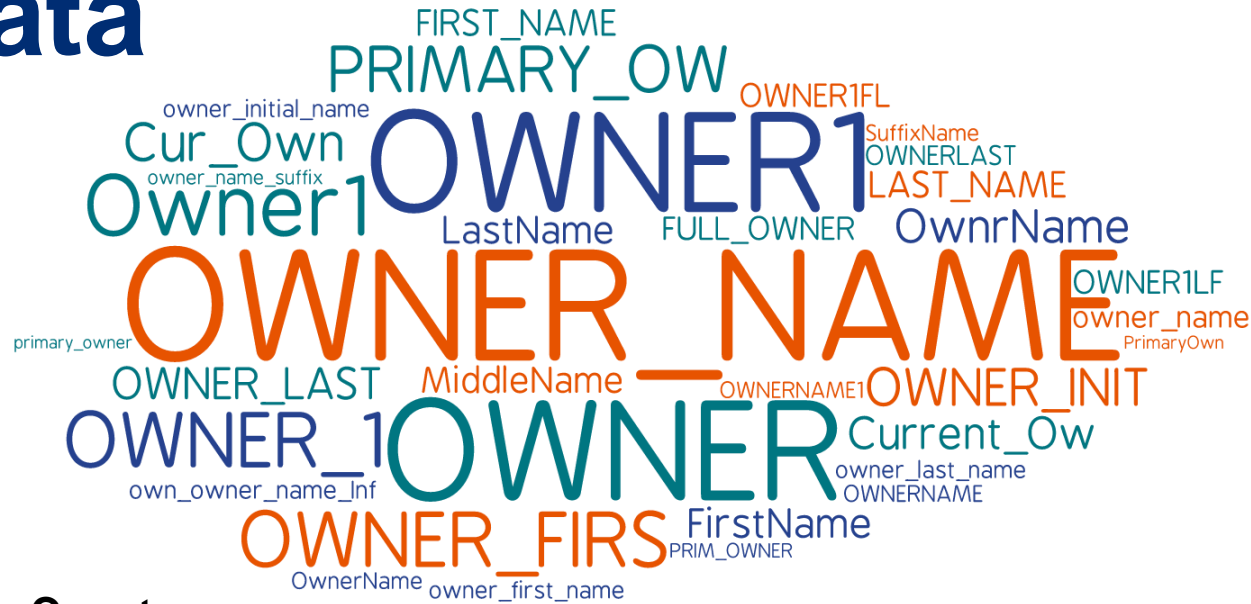
Our mission is to **collect**, **assemble**, **maintain**, and **provide access** to statewide tax parcel GIS data.

We collect every county's GIS tax parcel polygons once a year and standardize them using tabular assessment data from the NYS Department of Taxation and Finance Office of Real Property Tax Services. We share this standardized GIS data product as widely as each county allows. <http://gis.ny.gov/parcels/>



Standardized Parcel Data

It is necessary for users of parcel data across multiple counties to reconcile the differences in attributes and field naming conventions.



Attribute Needed	County #1	County #2	County #3	County #4	County #5
Municipality	✓	✓	✓	✓	✗
Owner	✗	✗	✓	✗	✓
Mailing Address	✓	✗	✓	✓	✓
Property Class	✓	✗	✓	✓	✓
Year Built	✗	✗	✓	✓	✗

This is the work the NYS GIS Program Office does to combine all the counties' parcel data in a common schema.

Sharing Standardized Parcel Data

While we encourage counties to open their parcel data publicly, we respect each county's right as the data owner to control the distribution of their GIS data. We will only share your data as the county directs us.

GIS Program Office, Emergency Preparedness/Response, CIRIS*, and State Agency Business Use



62
(all counties)



Publicly Available



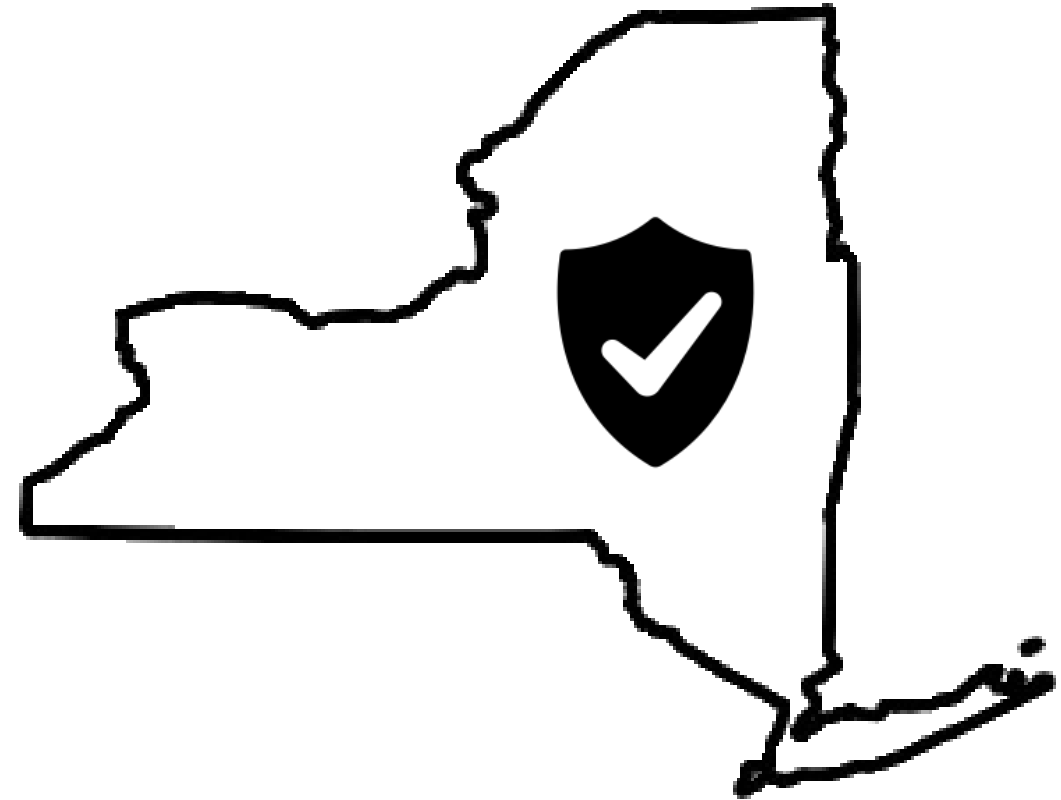
26



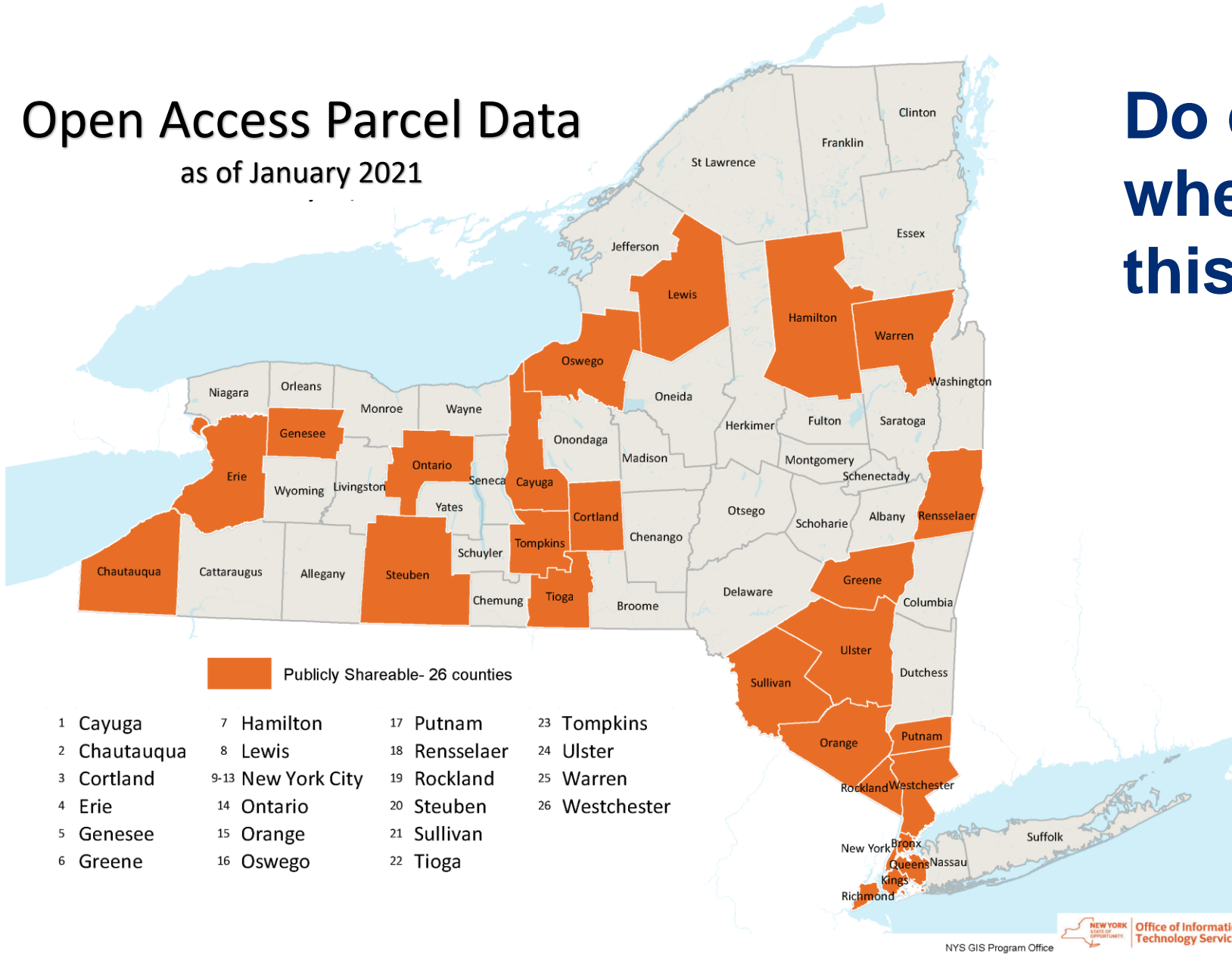
*CIRIS: Critical Infrastructure Response Information System

Thank you for your yearly updates- Even when you do not share your GIS parcel data publicly, providing timely yearly updates to the NYS GIS Program Office ensures that the following critical services (and much more) are always using the most current parcel data:

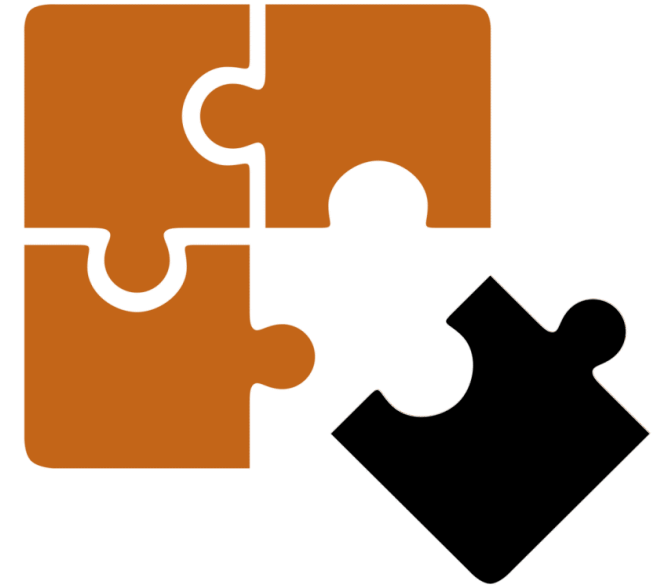
- **State Police** – use parcels in their computer aided dispatch (CAD) systems to assess property boundaries and ownership on 911 calls
- **Department of Corrections**– use the parcel boundaries in the State’s Critical Infrastructure Response Information System (CIRIS) application to ensure sex offenders are housed at a legal distance from schools
- **Office of Emergency Management/Dept of Environmental Conservation** – use parcels for natural disaster planning and response, such as flooding and high-risk dam assessments. Federal aid for disasters has been secured for localities within a much shorter time window when current data is on hand in case of an emergency.



Open Access Parcel Data as of January 2021

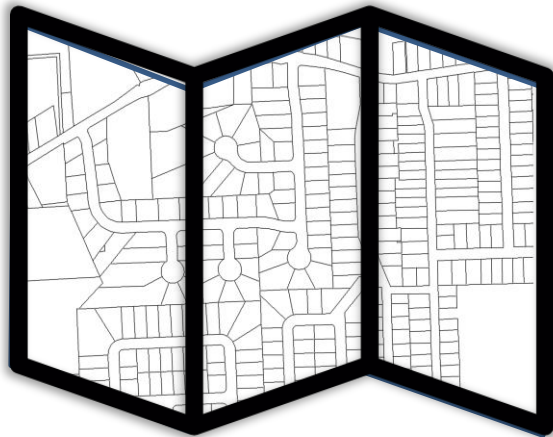


Do counties miss out when their piece of this puzzle is absent?



Distribution of Mapping Data Through Time

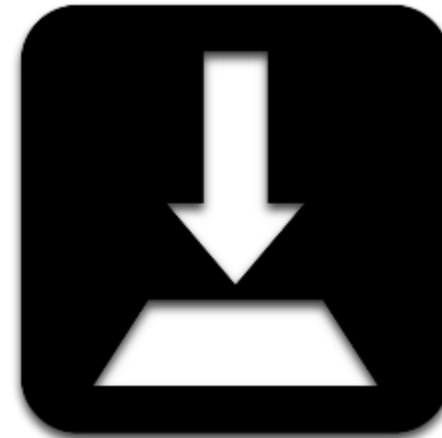
Print



Burn



Click



< 1980

2000

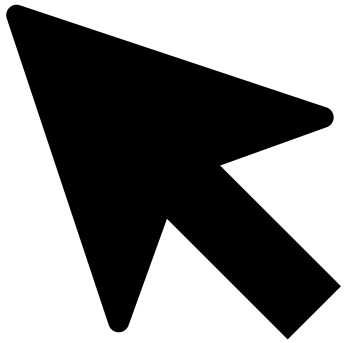
2020

Paper Maps

Files on Disc

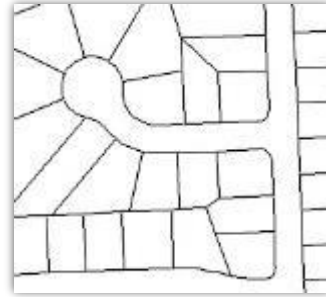
Download

Click

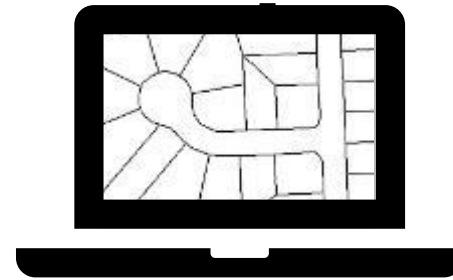
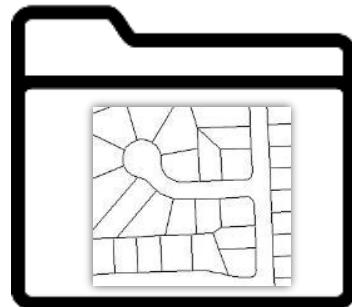
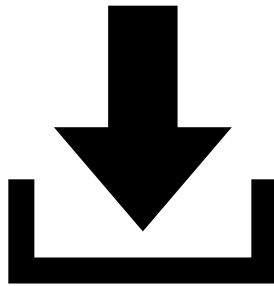


These days it is expected that you can get almost everything online at the click of a button...

Get



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Connect with Web Services

...Why not parcel data too?

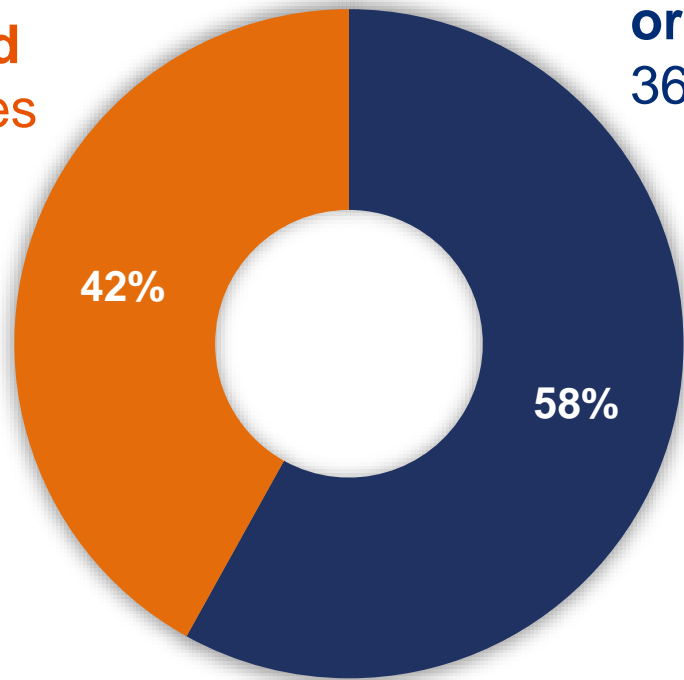
Happy



Obtaining GIS Parcel Data in New York

County GIS Tax Parcel Data Access

**Public
Download**
26 counties



**Restricted
or Charge \$**
36 counties



Internet searches on multiple websites



Phone calls to multiple offices



In-person visits, witness notary



Written agreements and/or FOIL



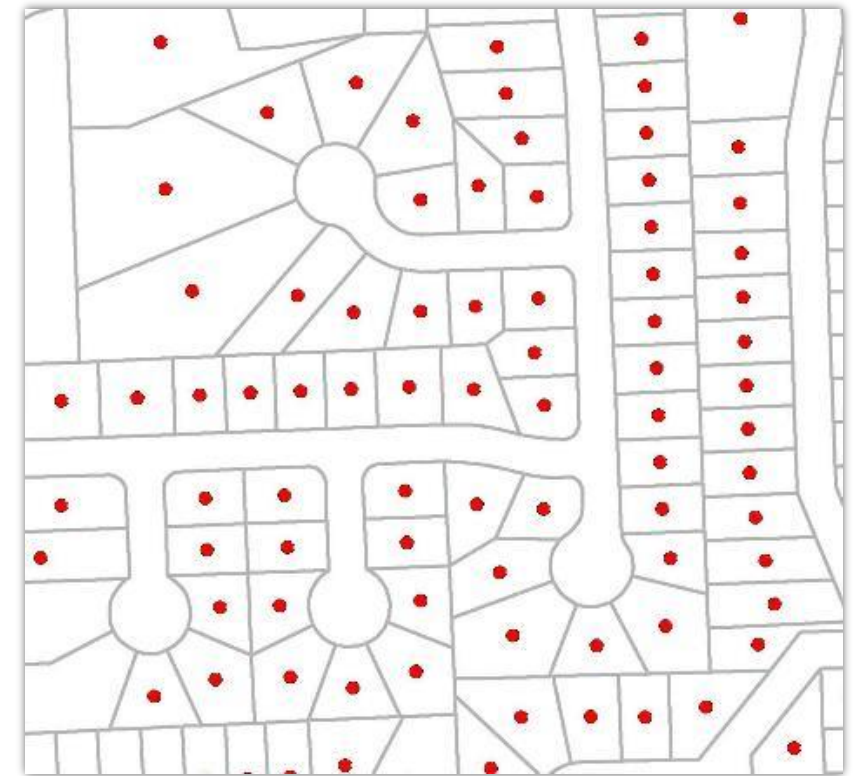
Requests & data may need to be physically mailed



Data may cost \$ to access

Assessment Information is already Publicly Available in some formats

Parcel centroid points with assessment information from the NYS Department of Taxation and Finance Office of Real Property Tax Services are publicly available. Assessment information is also available in **posted local Tax Rolls**. Attributes include owner names and parcel addresses.



20 CRR-NY 8189.10
NY-CRR

OFFICIAL COMPILATION OF CODES, RULES AND REGULATIONS OF THE STATE OF NEW YORK
TITLE 20. DEPARTMENT OF TAXATION AND FINANCE
CHAPTER XVI. REAL PROPERTY TAX ADMINISTRATION

PART 8189. PREPARATION AND MAINTENANCE OF TAX MAPS FOR REAL PROPERTY ASSESSMENT AND TAXATION ADMINISTRATION

20 CRR-NY 8189.10
20 CRR-NY 8189.10

8189.10 Coordinate locator number.

(a) Each land parcel shall have a coordinate locator number assigned to its visual center. The coordinate locator number shall be derived from the appropriate zone of the New York coordinate system. The easting reading must precede the northing reading. The grid coordinate value describing the visual center of each land parcel shall be accurate to a degree to ensure that the true position of such coordinate falls within the boundaries of the land parcel being described. A new coordinate locator number, which shall not duplicate any previous coordinate locator number used, shall be assigned to each new land parcel.

(b) New York State plane coordinate grid tic marks for the four corners of each section map shall be accurately located and appear thereon along with a clear indication of the visual center of each land parcel delineated on the section map. Coordinate locator numbers for each land parcel delineated on the section map shall be generated in a mechanized environment and appear together with the section, block and lot number for each such land parcel on a tape or other mechanized media to be incorporated into a data base maintained by the county. This mechanized media or the assessment roll supplied pursuant to article 15-C shall be submitted by the county to ORPTS showing the section, block and lot number together with the corresponding coordinate locator number for each land parcel delineated on each section map within the county.

20 CRR-NY 8189.10
Current through March 15, 2020

New York Consolidated Laws, Real Property Tax Law - RPT § 1588. Posted tax roll

Notwithstanding any provision of law to the contrary, information regarding date of payment of taxes, the receipt number and related information need not be posted on the tax roll or other printed record of payment if that information is entered into the data file and retained by means of electronic data processing. **This information must be stored so that it can be made readily available to the public in legible form.** At the conclusion of the period for the redemption of property from taxes which become a lien on such roll, a copy of the posted tax roll shall be produced in either a paper format or archival quality microform and be permanently retained as a public record.

Freedom of Information Law (FOIL) - Article 6 § 84-90 of the NYS Public Officers Law

Real Property Data is subject to the FOIL process.

Sources:

<https://codes.findlaw.com/ny/real-property-tax-law/rpt-sect-1588.html>

<https://www.dos.ny.gov/coog/foil2.html>

https://tax.ny.gov/help/contact/foil_requests.htm

Most Counties offer an Online Parcel Viewer

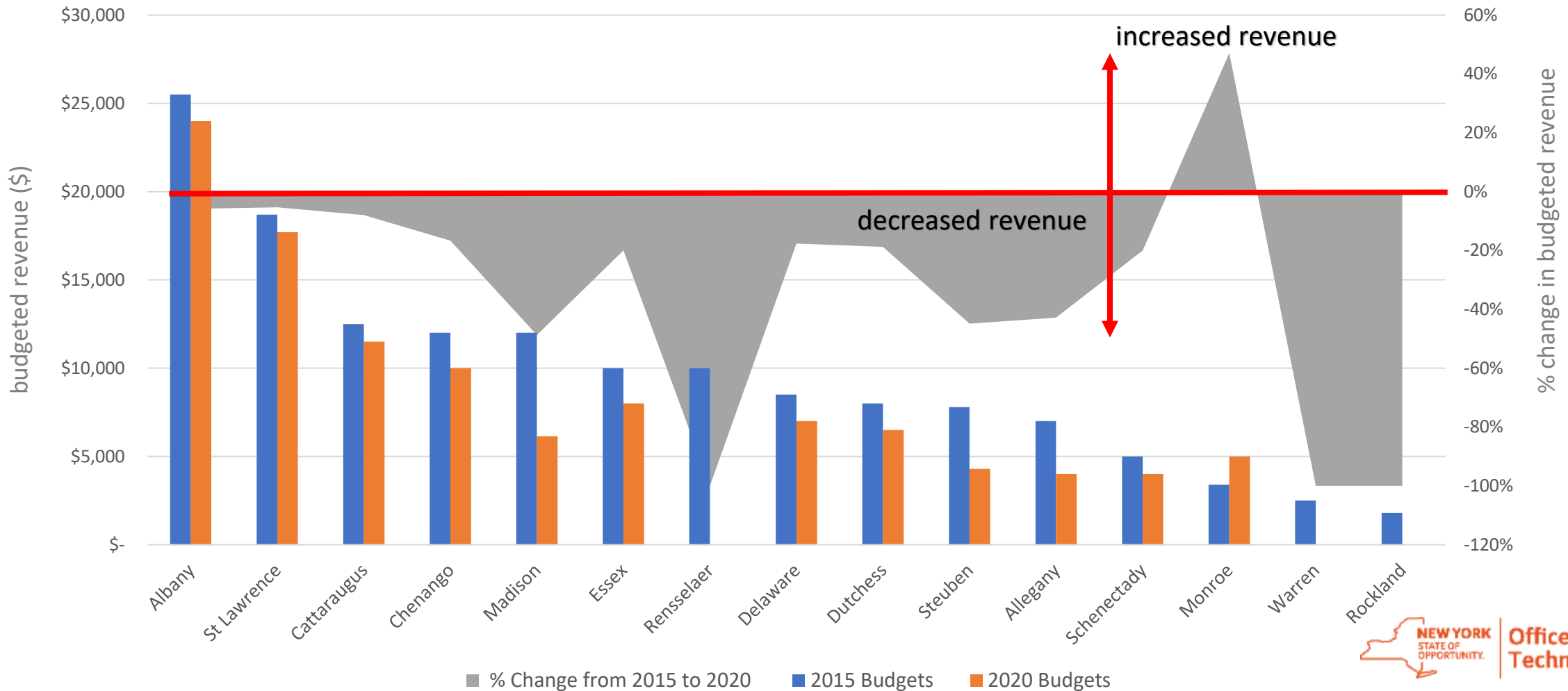
<http://gis.ny.gov/parcels/#parcel>

County Parcel Data Resources

County	Parcel Data on gis.ny.gov	Parcel Data on County Website	Parcel Data Viewer
Albany	Albany parcel page	Albany parcel resources	Albany parcel viewer
Allegany	Allegany parcel page	Allegany parcel resources	Allegany parcel viewer
Bronx	n/a	NYC parcel resources	NYC parcel viewer
Broome	n/a	Broome parcel resources	Broome parcel viewer
Cattaraugus	Cattaraugus parcel page	Cattaraugus parcel resources	Cattaraugus parcel viewer
Cayuga	n/a	Cayuga parcel resources	Cayuga parcel viewer
Chautauqua	n/a	Chautauqua parcel resources	Chautauqua parcel viewer
Chemung	Chemung parcel page	Chemung parcel resources	Chemung parcel viewer
Chenango	n/a	Chenango parcel resources	Chenango parcel viewer
Clinton	n/a	Clinton parcel resources	Clinton parcel viewer
Columbia	Columbia parcel page	Columbia parcel resources	Columbia parcel viewer
Cortland	Cortland parcel page	Cortland parcel resources	Cortland parcel viewer
Delaware	Delaware parcel page	Delaware parcel resources	Delaware parcel viewer



The GPO examined the online budgets of 15 counties that received revenue for budget items which likely included the sale of GIS tax parcel data. These numbers may include the sale of other tax map data products as well. In 2015, the **average revenue** budgeted by these counties for tax map/parcel data was **\$9,700**. In 2020, the **average revenue** was **\$7,200**. Average decrease in revenue of **-33%** during this time. If you only include counties that continue to receive revenue for parcel data in 2020 the figures are: **\$10,900** in 2015, **\$9,000** in 2020, and an average decrease of **-17%**. See the following page for more detail and links to the information included in this graph.



Online County Budget Details:

County	Tax Map Data Sales (per 2015 County Budgets)	Tax Map Data Sales (per 2020 County Budgets)	Change from 2015 to 2020	2020 link to Budget	Revenue Item(s) in Budget (2020)
Albany	\$ 25,500	\$ 24,000	\$ (1,500)	Albany County 2020 Budget	p.152 ("Tax Map Reproduction Charges" + "Tax Map Charges")
St Lawrence	\$ 18,700	\$ 17,700	\$ (1,000)	St Lawrence 2020 Budget	p.133 ("Imagemate Online fees" + "R LR Sale of Tax Maps" + "RP Salesnet")
Cattaraugus	\$ 12,500	\$ 11,500	\$ (1,000)	Cattaraugus 2020 Budget	p.22 (Real Property "Sales, Other, Sale of Maps/Supplies")
Chenango	\$ 12,000	\$ 10,000	\$ (2,000)	Chenango County 2020 Budget	p. 4 ("Sale Of Tax Maps")
Madison	\$ 12,000	\$ 6,150	\$ (5,850)	Madison County 2020 Budget	p. 20 ("Digital Processing Fees" + "Sale of Tax & Survey Maps")
Essex	\$ 10,000	\$ 8,000	\$ (2,000)	Essex County 2020 Budget	p. 440 (2020 Tentative Budget, "Sale of Tax Maps")
Rensselaer	\$ 10,000	\$ -	\$ (10,000)	n/a	opened up GIS tax parcel data publicly since 2015
Delaware	\$ 8,500	\$ 7,000	\$ (1,500)	Delaware County 2020 Budget	p. 11 ("Minor Sales- Electronic" + "Minor Sales Files")
Dutchess	\$ 8,000	\$ 6,500	\$ (1,500)	Dutchess County 2020 Budget	p.193 ("Assessor Fees Maps & Aero Photos: Sale of maps, aerials and assessment data")
Steuben	\$ 7,800	\$ 4,300	\$ (3,500)	Steuben County 2020 Budget	p. 53 ("Tax map sales" + "Sales- Geogrpahic Info Sys"); opened data publicly in 2020
Allegany	\$ 7,000	\$ 4,000	\$ (3,000)	Allegany County 2020 Budget	p. 56 (Assessments "Sales- Other")
Schenectady	\$ 5,000	\$ 4,000	\$ (1,000)	Schenectady 2020 Budget	p. 270 ("Minor Sales- Tax Mapping")
Monroe	\$ 4,000	\$ 5,000	\$ 1,000	Monroe County 2020 Budget	p. 155 ("Map Copies and Overlays")
Warren	\$ 2,500	\$ -	\$ (2,500)	n/a	opened up GIS tax parcel data publicly since 2015
Rockland	\$ 1,800	\$ -	\$ (1,800)	n/a	opened up GIS tax parcel data publicly since 2020
Average:	\$ 10,917	\$ 9,013	\$ (1,904)	NOT including the counties that opened up their GIS tax parcel data	
Average:	\$ 9,687	\$ 7,210	\$ (2,477)	Including the counties that opened up their GIS tax parcel data	

GIS parcel data revenue is likely only a portion of these sales figures



Managing requests online or via email



Handling requests on phone calls



Staff time on filling data requests



Written agreements or FOIL and legal costs



Filling data delivery via physical mail



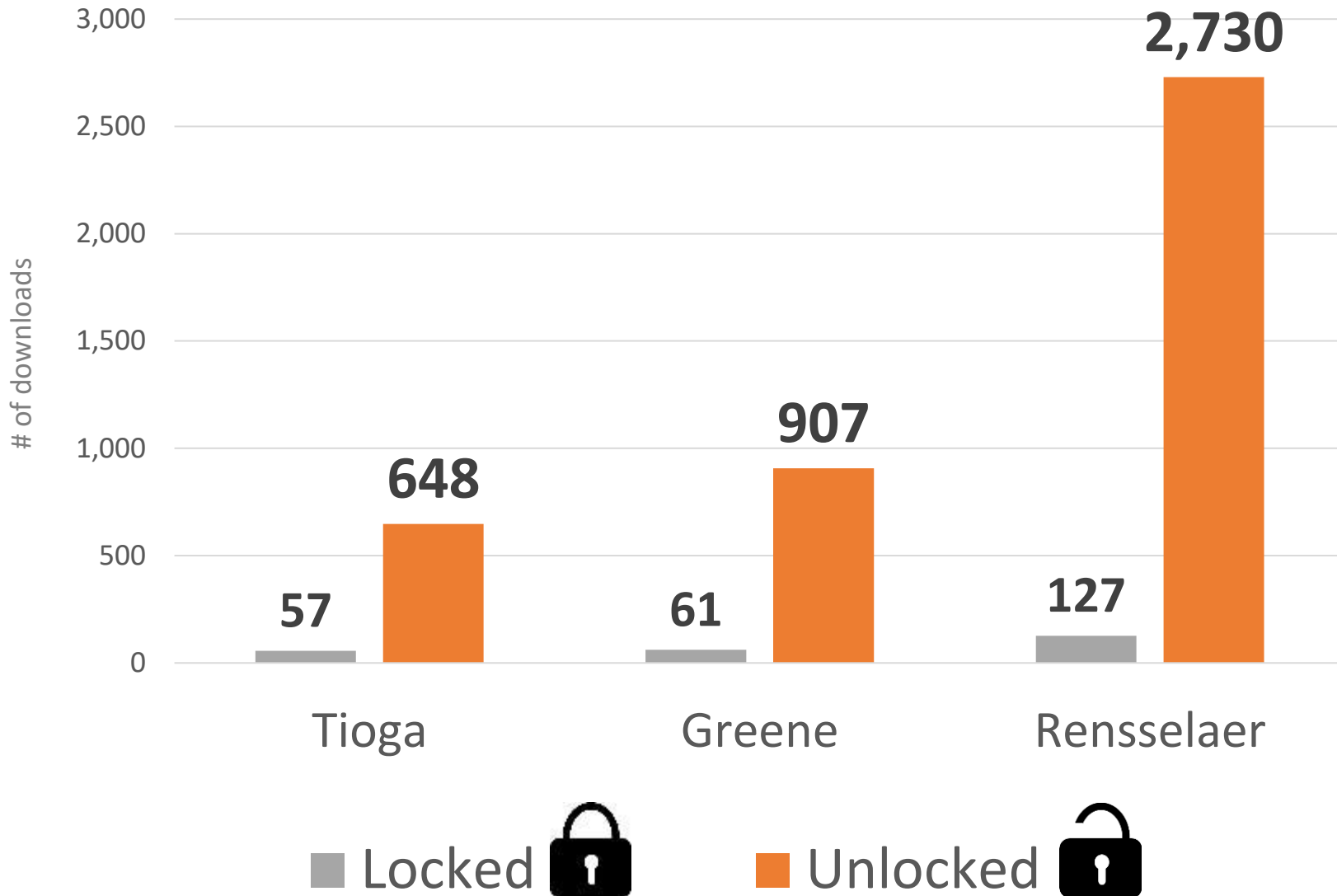
Mechanisms for exchange of \$

\$9,000 average revenue to maintain this data delivery system (which has its own inherent costs)OR....

What happens when a county says YES to sharing GIS tax parcel data publicly, at the click of a button?



County Parcel Downloads on GIS.NY.GOV



We examined the number of downloads for three counties that unlocked their parcel data in 2015. The number of downloads drastically increased after opening up the data to the public.

Rensselaer County Parcel Data Downloads by Sector

\$ Finance Industry

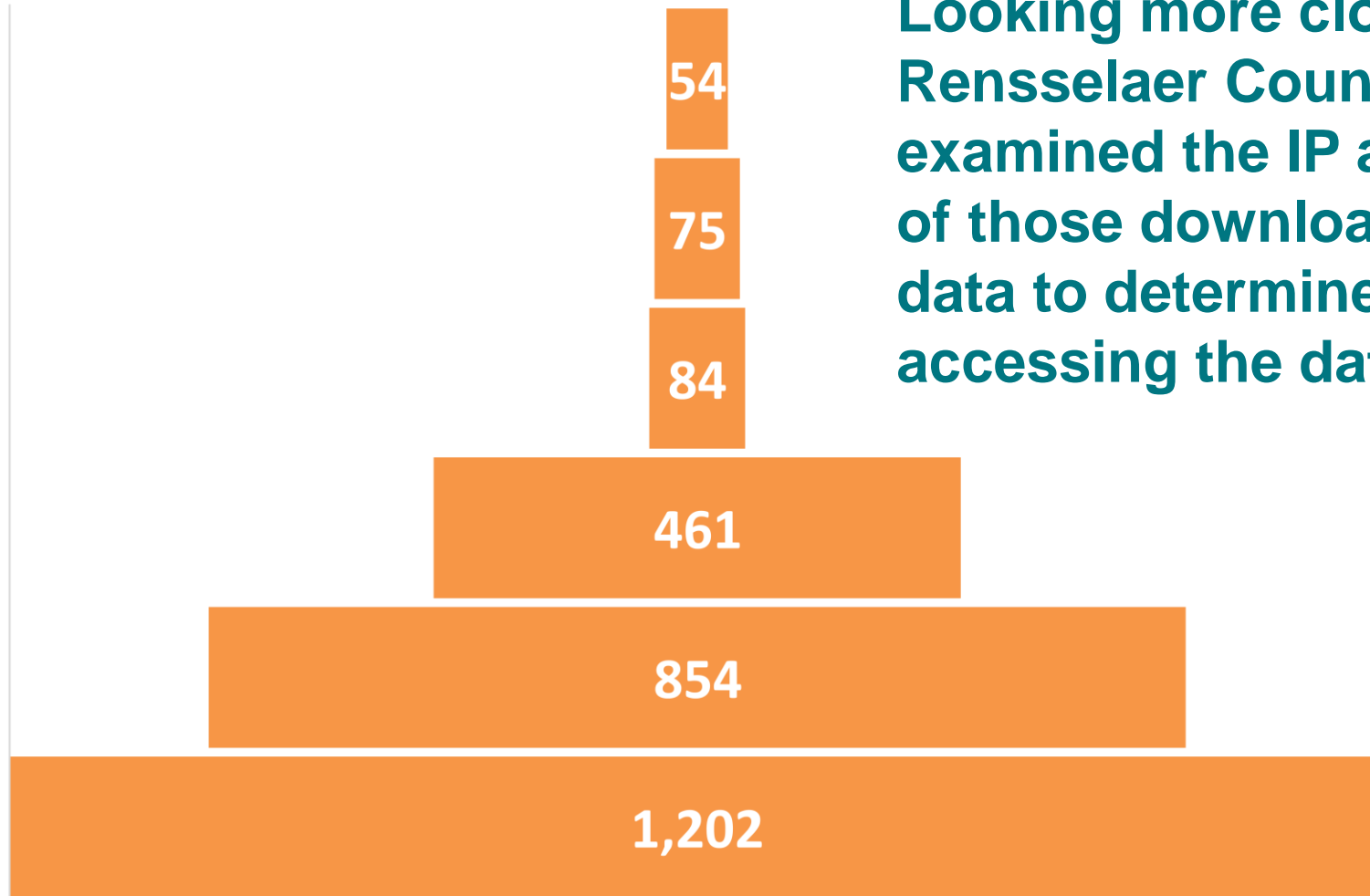
Education

Government

Residential

Business

? Unknown



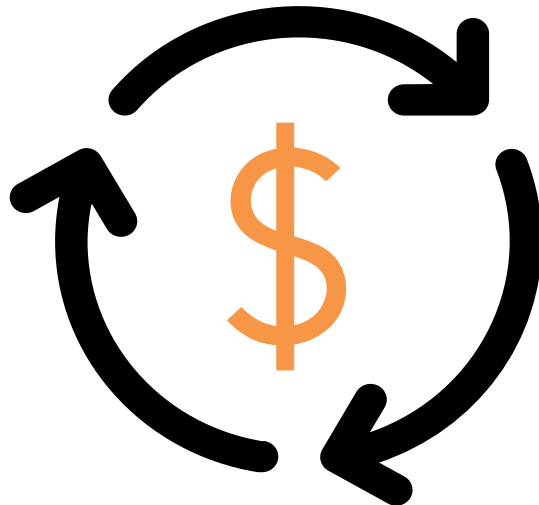
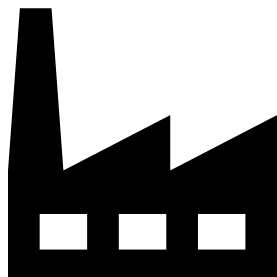
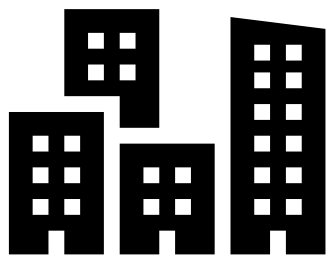
Looking more closely at Rensselaer County, we examined the IP addresses of those downloading the data to determine *who* was accessing the data

Types of Businesses that Downloaded Data



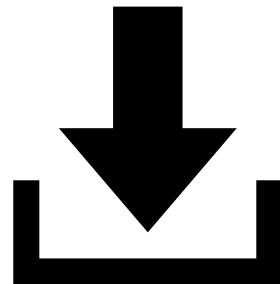
Examples of Specific Businesses that downloaded open parcel data on GIS.NY.GOV

Projects and priorities that benefit local economies



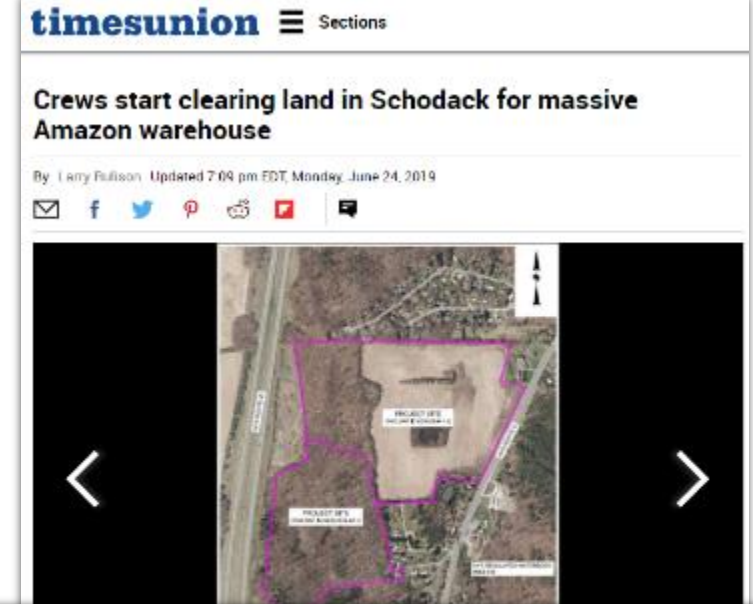
Economic Development

Amazon downloaded Rensselaer County GIS tax parcel data



Amazon Warehouse Facility has just been built in Schodack bringing:

- **800 full time jobs** with benefits, and up to \$3,000 tuition assistance per year for 4 years
- **Property Tax estimates over the next 20 year period after taking into account the cost to the town: \$1.5 million per year (previously \$15,000 for the property)**
 - ✓ Town of Schodack average annual, would get \$206,000
 - ✓ Water district- \$21,000
 - ✓ Sewer district- \$13,000
 - ✓ Ambulance- \$9,000
 - ✓ Fire district- \$45,000
 - ✓ East Greenbush School District- \$1.25 million



Regeneron

Temple Lane, East Greenbush

Pharmaceutical Science Building, Manufacturing, and Warehouse being built now. Engineering companies working on the site downloaded the publicly available parcel data.

- ✓ **1,500 jobs (salary range \$45,000-\$110,000)**
- ✓ **Creating medicine to treat: eye disease, allergic and inflammatory diseases, cancer, cardiovascular and metabolic diseases, pain, rare diseases, and infectious diseases like Ebola and COVID-19.**

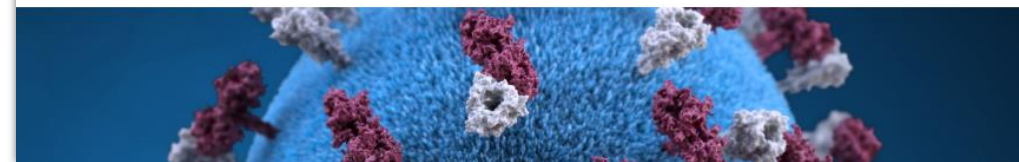
Our goal is to address serious medical conditions, across multiple and diverse therapeutic areas. Our FDA-approved medicines are only the beginning of our long-term commitment to solve the human body's most complex mysteries.



Regeneron trial finds Covid-19 therapy improved symptoms

30th September 2020 (Last Updated September 30th, 2020 07:49)

A descriptive analysis of Regeneron Pharmaceuticals' Phase I/II/III clinical trial has found that its antibody cocktail REGN-COV2 lowered viral load and the time to symptoms improvement in non-hospitalised Covid-19 patients.



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[g](#)
[in](#)
[t](#)
◀ Back

REGENERON
August 12, 2019 at 10:01 AM EDT

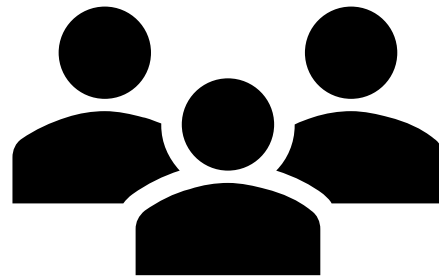
PALM EBOLA CLINICAL TRIAL STOPPED EARLY AS REGENERON'S REGN-EB3 THERAPY SHOWS SUPERIORITY TO ZMAPP IN PREVENTING EBOLA DEATHS

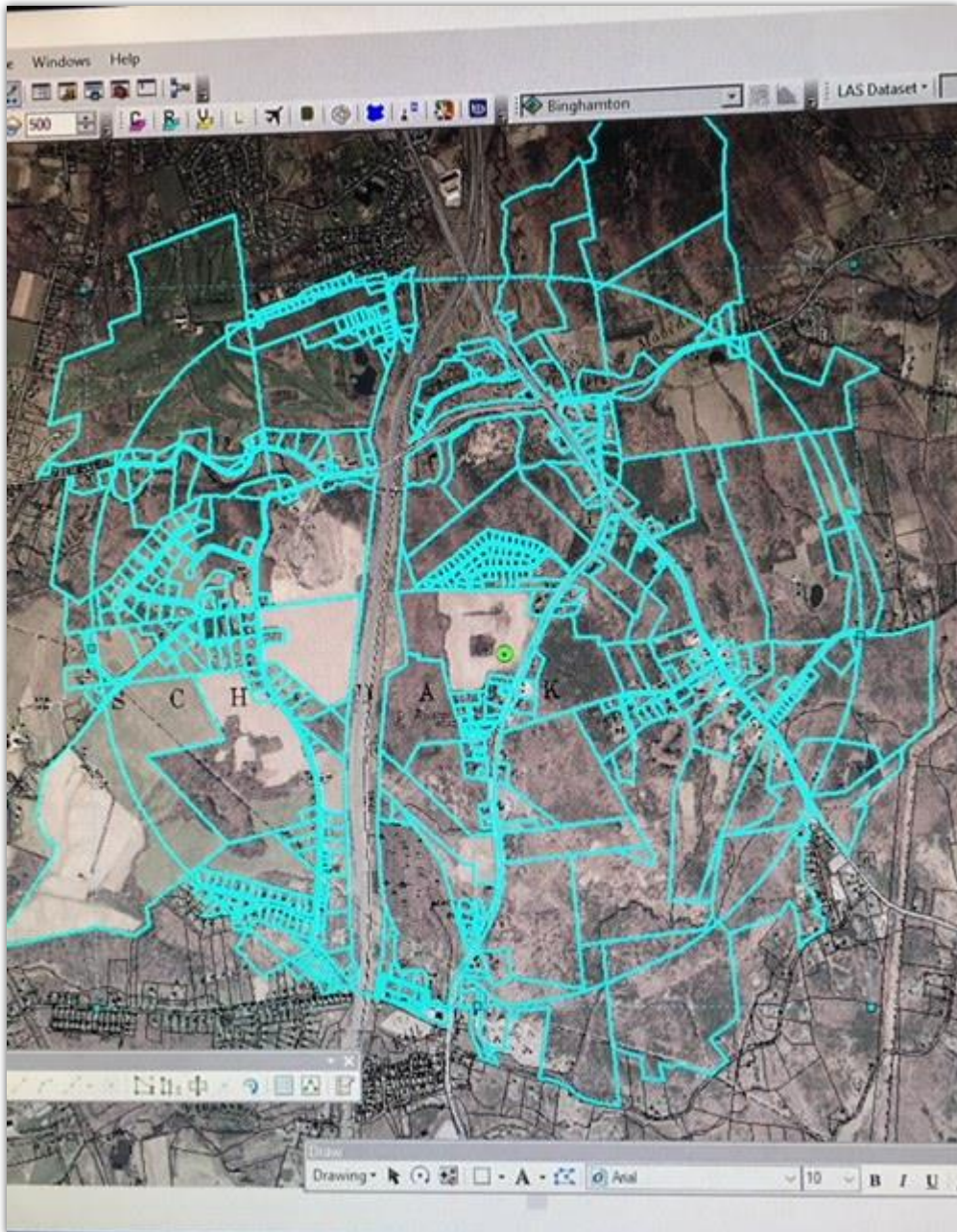
TARRYTOWN, N.Y., Aug. 12, 2019 /PRNewswire/ -- Regeneron Pharmaceuticals, Inc. (NASDAQ: **REGN**) today announced that the Company was informed by study investigators that a randomized, controlled trial evaluating four investigational therapies for Ebola virus infection was stopped early because REGN-EB3 was superior to ZMapp in preventing death. ZMapp served as the control arm of the trial because it was considered the standard-of-care based on the previous PREVAIL II clinical trial. The protocol specified that the PALM trial

Sources: <https://www.timesunion.com/business/article/Regeneron-plans-to-add-1-500-in-East-Greenbush-13221059.php>; <https://www.eastgreenbush.org/departments/planning-zoning/apps/regeneron-tempel-lane-phase-3>

Citizen Engagement

GIS-powered opposition to the Amazon project in Schodack



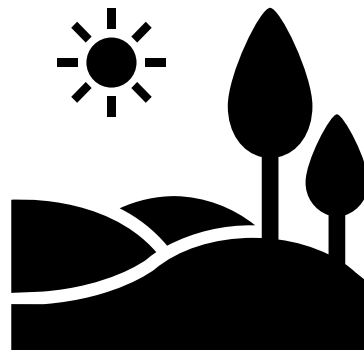


“484 parcels that intersect the Amazon parcel within 1 mile. The green dot is the blasting coordinate.”

Local citizens downloaded the publicly available parcels for Rensselaer County to quickly act on their concerns about the development. Blasting at the Amazon site was rescheduled after the neighbors used a map analysis of parcel data to remind the town about the law that stated all residents had to be informed and allowed to request a pre/post inspection.

Environmental Protection

Forest and wildlife preservation and sustainable energy companies



The Conservation Fund

Cowee Forest **traps more than 2.2 M tons of CO₂** from the atmosphere-equivalent to removing 471,000 passenger cars from the road for one year

Contributes to the local economy by supporting 102 jobs in Vermont, 102 jobs in Massachusetts and **101 jobs in the state of New York**

Conserves **59 miles of streams**, and filters nearly **27B gallons of water** annually

Conserves habitat for seven species of national importance, like the New England cottontail, and four hawk species listed by the New York State Endangered Species Act

Protects **5,442 acres for public access**

The screenshot shows the website for The Conservation Fund. The header includes the organization's name and navigation links for Green Bonds, News, Blog, Video Stories, Our Work, Where We Work, Our Experts, and a prominent yellow 'Donate' button. The main content area is titled 'Projects / Cowee Forest' and features a large heading 'Cowee Forest'. Below the heading is a paragraph describing the forest as former privately-owned land along the New York, Vermont, and Massachusetts border, totaling 23,000 acres. To the right of the text are social media icons for Facebook, Twitter, LinkedIn, and Print. Below the icons is a photograph of a forest path with autumn foliage, captioned 'Cowee Forest. Photo credit: Carl Heilman'.

<https://www.conservationfund.org/projects/cowee-forest>; 2017 Project



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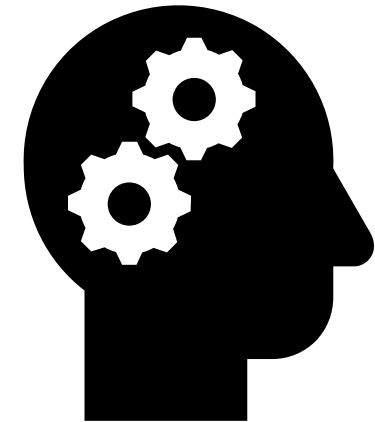
Virtual Site Simulations

“...data analysis applications for commercial construction, windmill and solar engineering...”

The screenshot shows the homepage of the Virtual Site Simulations (VSS) website. On the left, there is a logo for VSS with the tagline "Your Visual Data Partner" and a testimonial: "Creating fast and accurate photo simulations and viewshed analysis packages for telecommunication providers." The main content area features a background image of a construction worker in a yellow hard hat and safety vest reviewing blueprints in front of a tall telecommunications tower. A horizontal navigation menu is positioned at the top of the main area, with buttons for "Home", "About", "Services", "Contact", and "Client Portal". To the right of the worker, large white text reads: "Providing faster, better and consistent visual data solutions."

And Many More...

- **Broadband Internet Access Expansion**
- **Historic and Cultural Preservation**
- **Research Laboratories**
- **Application Developers**
- **Small Business Development**



We hear from businesses and residents...

- I'll just keep using the old data I have for now.
- I lose too much time and money for my business having to track this data down.
- Let us know when more of the data is public. We'll only use what's available now until then.
- I don't understand why I have to pay when I'm using it to do something good for the county.
- I can get this for other States, why not here?

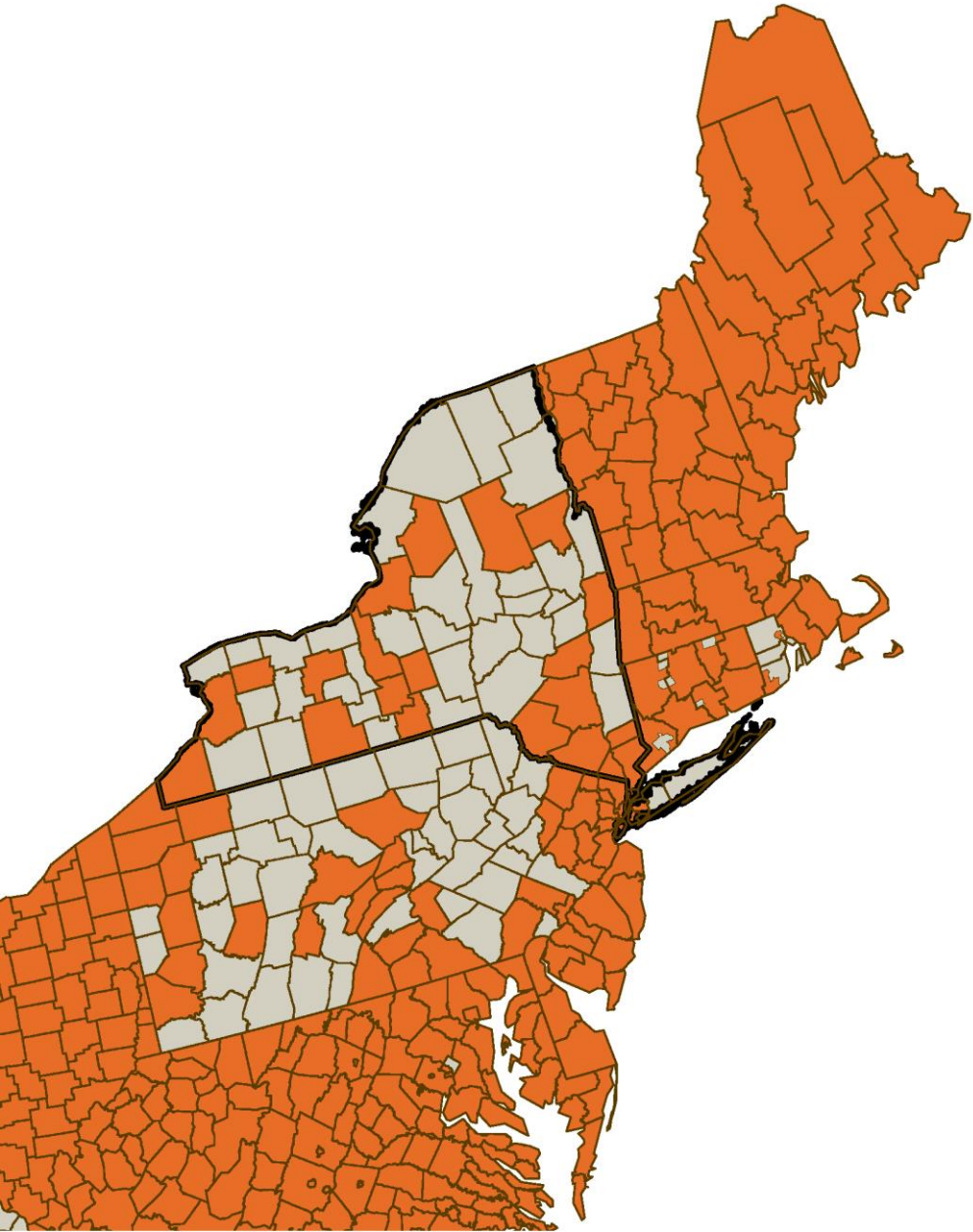


We hear from NYS Empire State Development...

“One premier site selection firm, that has sited numerous **large-scale projects in NYS**, expressly told [us] that **communities have been excluded from consideration** because this information was not easily available to the site selector.”

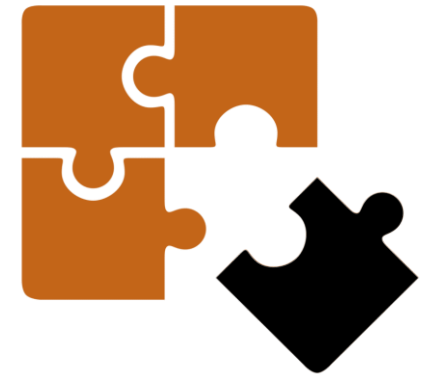
- Strategic Business Division of Empire State Development



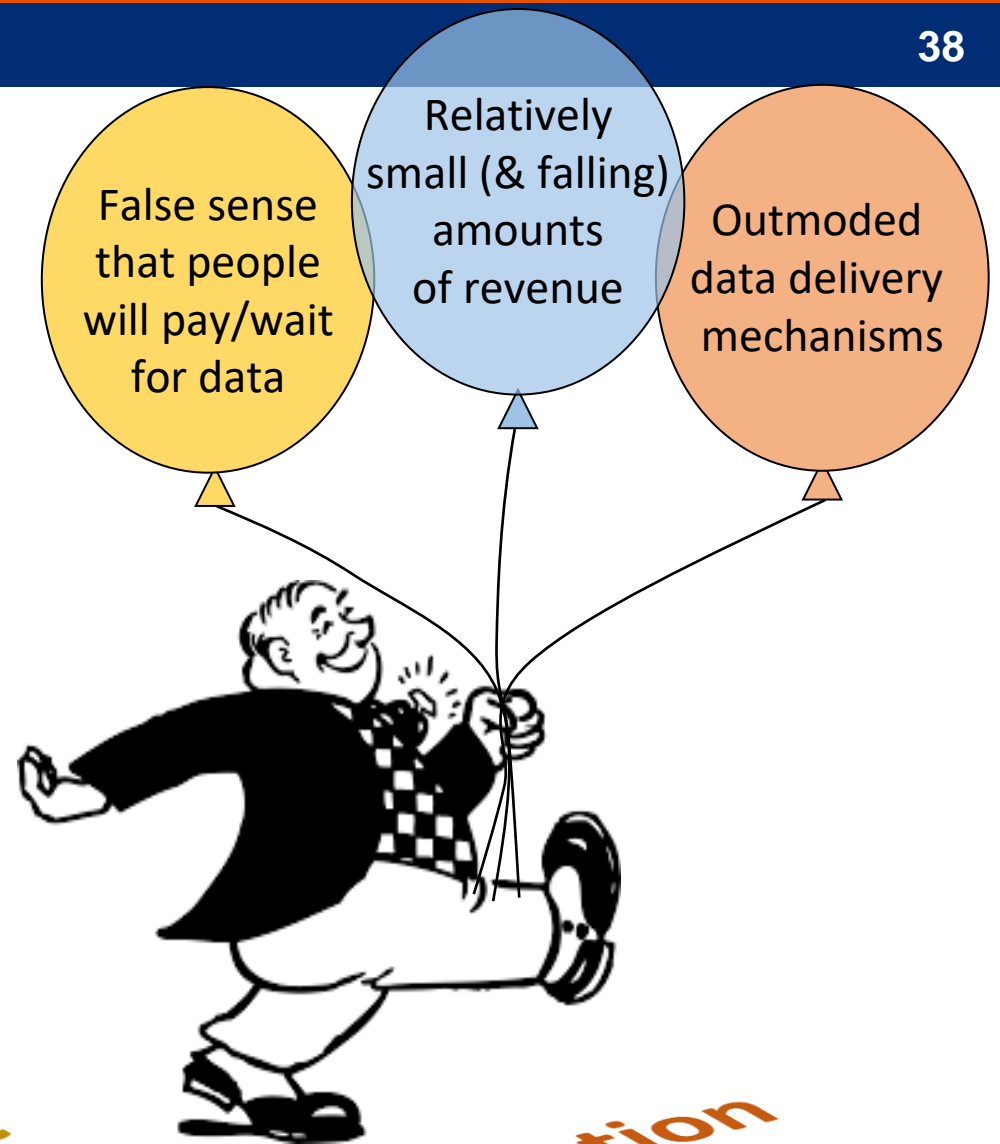


Northeast Regional Map of Open Parcel Availability

Economic opportunities, jobs/services, and innovation requiring open and fast access to parcel data can easily go elsewhere in our region....



Help put authoritative GIS parcel data in the hands of job creators, researchers, and innovators. Don't miss out!



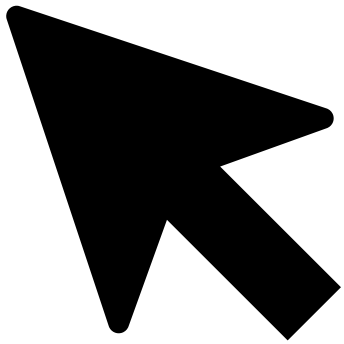
Economic Opportunity
Research & Innovation
Jobs

The **New York State GIS Program Office** has the **technical capability already in place** to make your county's parcel data accessible in **one-click** via **data download and web services**.

Just Say

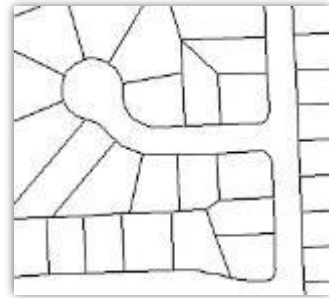


Click

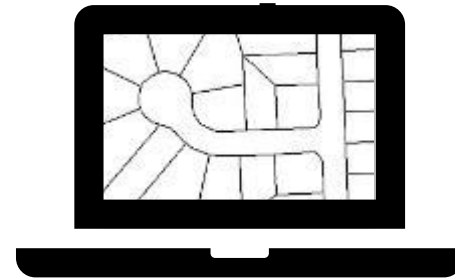
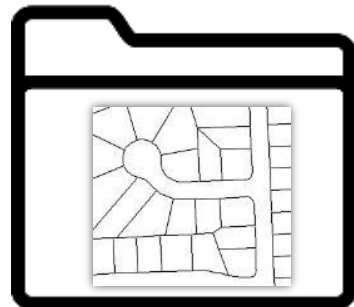
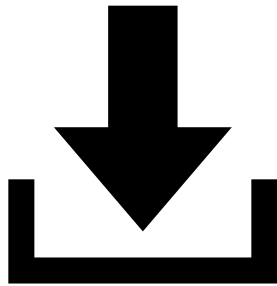


Is it beneficial to open access to parcel data?...

Get



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Connect with Web Services

Happy



...The decision is up to you.

Thank You!

GISBoundaries@its.ny.gov

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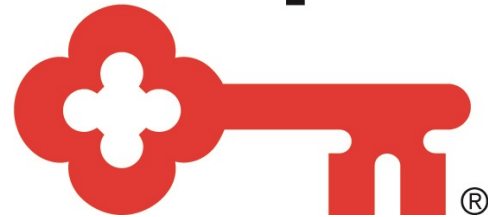
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