Data Centers What are they and what are the land use impacts

Potsdam Local Government Conference – October 14, 2025

Data Centers: What are they?

A data center is a building that houses the infrastructure that supports the world's computing functions. This building is filled with servers that process and store the data commonly referred to as "the cloud." (Urban Land Institute, 2024)

"Data Center" shall mean: (a) a structure, group of structures, or infrastructure within an existing structure for the central housing of server racks that are used for the interconnection and operation of information technology and network telecommunications equipment for the provision of data storage, data processing, or data transport services; and (b) all related facilities and infrastructure for power distribution, environmental control, cooling and security required to deliver the desired service with respect to the specific data center. (New York State Senate Bill S6394A)

Data Centers: What are they?

There are different types of data centers: corporate data centers; colocation data centers; telecom data centers, hyperscale data centers

Data centers differ from crypto currency processing centers in function, but their land use and community impacts are similar: high power consumption, warehouse type structure, heat production, limited local employment



Data Centers: Challenges

• Speculative (in St. Lawrence County, anyway)

- Few jobs
- Operate 24/7/365
- High power consumption (uninterrupted)
- May require substantial cooling systems



Data Centers: Benefits

• Property tax and potentially sales tax revenue for municipality

 Limited impact on surrounding area (limited traffic, infrastructure needs, "clean industry")

Provides for Cloud storage



Data Centers: Suggested regulations

- Permit with Special Use Permit in Industrial Zones
- SUP considerations should include: setbacks/screening/noise limits/minimum lot size/height restrictions
- Additional conditions could include evidence that adequate power supply exists for size of facility
- Limited number in any one community separation distance
- Any water based cooling needs will need to be regulated for both consumption and discharge
- Battery back-up power supplies might be necessary and should be regulated as well
- Fire department consultation
- Other ideas?

Data centers: State Regulations

- Bill S6394A, currently in the Senate Environmental Conservation Committee
- Summary Regulates energy consumption by data centers; requires annual disclosure reporting; prohibits incentives in fossil fuel power purchase agreements with utilities; directs the public service commission to establish a data center surcharge and discount plan.
- Focus is on energy consumption impacts
- At present no companion Assembly Bill

Data centers: NYSISO Interconnect queue

Queue Pos.	Developer/Interconnection Customer	Project Name	Date of IR	SP (MW)	WP (MW)	Type/ Fuel	Minimum_Duration Full Discharge	County	State	z	Points of Interconnection	Utility	Affected Transmission Owner (ATO)	s	Last Updated Date	Availability of Studies	IA Tender Date	CY/FS Complete Date	Proposed In- Service/Initial Backfeed Date		d Proposed
1728	Arconic Corporation	Arsenal Data Site 250	3/7/2025	250	250	L		St Lawrence	NY	Е	Denniston Substation	NYPA	National Grid	4	5/31/2025				03-2027		
1729	Arconic Corporation	Arsenal Data Site 500	3/7/2025	500	500	L		St Lawrence	NY	Е	Denniston Substation	NYPA	National Grid	4	5/31/2025				03-2027		
1730	Arconic Corporation	Arsenal Data Site 1000	3/7/2025	1000	1000	L		St Lawrence	NY	Е	Denniston Substation	NYPA	National Grid	4	5/31/2025				03-2027		
0430	H.Q. Energy Services U.S. Inc.	Cedar Rapids Transmission	3/5/2014	N/A	N/A	AC		St. Lawrence	NY	D	Dennison - Alcoa 115kV	NM-NG		12	12/31/2019	SIS, FS	10/2/2018	3/19/2018	10/2021	N/A	N/A
0620	Gateway Solar Energy Center, LLC	Gateway Solar Energy Center	3/27/2017	180	180	s		St. Lawrence	NY	D	Massena - Moses 230kV	NYPA		11	2/28/2025	FES, SRIS, FS	2/8/2021	2/8/2021	02-2028	02-2028	04-2028
0800	Rich Road Solar Energy Center, LLC	Rich Road Solar Energy Center	2/20/2019	240	240	CR	4	St. Lawrence	NY	Е	Moses - Adirondack 230 kV Line #2 (MA2)	NYPA		10	1/31/2025	FES, SRIS, FS		************	10-2027	10-2027	04-2028
0848	SunEast Fairway Solar LLC	Fairway Solar	5/20/2019	20	20	s		St. Lawrence	NY	Е	McIntyre - Corning 115kV (Line#6)	NM-NG		11	3/31/2022	SIS, FS	5/10/2021	5/5/2021	TBD	TBD	TBD
0979	North Country Data Center	North Country Data Center	1/22/2020	176	176	L		St. Lawrence	NY	D	Reynolds 115kV	NYPA		6	7/31/2023	SIS			12-2024	N/A	N/A
1039	SED NY Holdings LLC	Morris Solar	1/6/2021	20	20	s		St. Lawrence	NY	Е	Battle Hill - Balmat 115kV	NM-NG		10	5/31/2025	SIS, FS		3/14/2024	01-2028	02-2028	03-2028
1166	BR Project 1 LLC	BR Benson Mines Solar	5/7/2021	12.1	12.1	s		St. Lawrence	NY	Е	Brown's Falls to Newton Falls #22 34.5kV Line	NM-NG		10	11/30/2024	SIS, FS		***************************************	07-2026	08-2026	10-2026
1213		St Lawrence Data and Agricultural Center	6/28/2021	200	200	L		St. Lawrence	NY	D	Dennison 115kV substation	NM-NG		6	1/14/2023	SIS			01-2026		
	Sabey Data Center Properties,										Moses-Reynolds MRG-1 and Moses-Reynolds MRG-2 at										
1315	LLC	SDC St. Lawrence	12/20/2021	1 120	120	L		St. Lawrence	NY	D	115kV	NYPA		6	9/30/2022	SIS			08-2025	_	
1731		New York State Artificial Intelligence Data Center	3/14/2025	300	300	L		St. Lawrence	NY	D	Dennison 115kV substation	NM-NG	HQ, NYPA, ALCOA	4	4/30/2025				10-2026		
0566	New York Power Authority	MA 1 & 2 Rebuild	8/4/2016	N/A	N/A	AC		St. Lawrence- Lewis	NY	D, E	Moses & Adirondack 230kV	NYPA		12	9/30/2022	SIS			6-2023	N/A	N/A
1125	New York Power Authority and National Grid	Northern New York Priority Transmission Project (NNYPTP)	12/22/2020	O N/A	N/A	AC		St. Lawrence- Lewis	NY	D F	Moses 230 kV substation 2. Haverstock 345 kV sub (new) 3. Massena 230 kV substation 4. Adirondack 345 kV sub (new) 5. Willis 230 kV substation 6. Ryan & Patnode 230 kV substations 7. Chases Lake 345 kV sub (new) 8. Marcy 345 kV sub 9. Edic 345 kV sub 9. Edic 345 kV sub			11	5/31/2025	FS		2/14/2023	12-2025	N/A	N/A

The column labeled 'SP' refers to the maximum summer megawatt electrical output. The column labeled 'WP' refers to the maximum winter megawatt

DC, L=Load, FC=Fuel Cell,CW=CSR - ES + Wind, CR=CSR - ES + Solar

NOTES: electrical output.

• Type / Fuel Key: ST=Steam Turbine, CT=Combustion Turbine, CC, CS= Steam Turbine, & Combustion Turbine, H=Hydro, PS=Pumped Storage, W=Wind, OSW= Off-Shore Wind, NU=Nuclear, NG=Natural Gas, M=Methane, SW=Solid Waste, S=Solar, Wo=Wood, F=Flywheel ES=Energy Storage, O=Oil, C=Coal, D=Dual Fuel, AC,

D=Dual Fuel

The column laheled '7' refers to the zone

[•] The column labeled 'S' refers to the status of the project in the NYISO's LFIP. Key: 1=Scoping Meeting Pending, 3=FES in Progress, 34=FES Approved. Performed, 4=SRIS/SIS in Progress, 54=FES in Progress, 5

Titula Completed, 12=Under Construction, 13=in Service for Test, 14=in Service Commercial, 0=Withdrawn, 15=Partial In-Service, P=Pending Adoption of IP Compliance with

Availability of Studies Key: None=Not Available, FES=Feasibility Study Available, SRIS=System Reliability Impact Study Available, FS=Facilities Study and/or ATRA Available

[•] CY Completion/SGIA Tender refers to the Attachment X milestone used to apply the 4-

year COD limitation.

Proposed In-Service Dates, Proposed Initial Synchronization Dates and Commercial Operation Dates (COD) are shown in format Year/Qualifier, where Qualifier may indicate the month, season, or quarter.

Data centers: Example from Niagara Falls

Title: The Data Center At Niagara Digital Campus

Size: 53 Acres

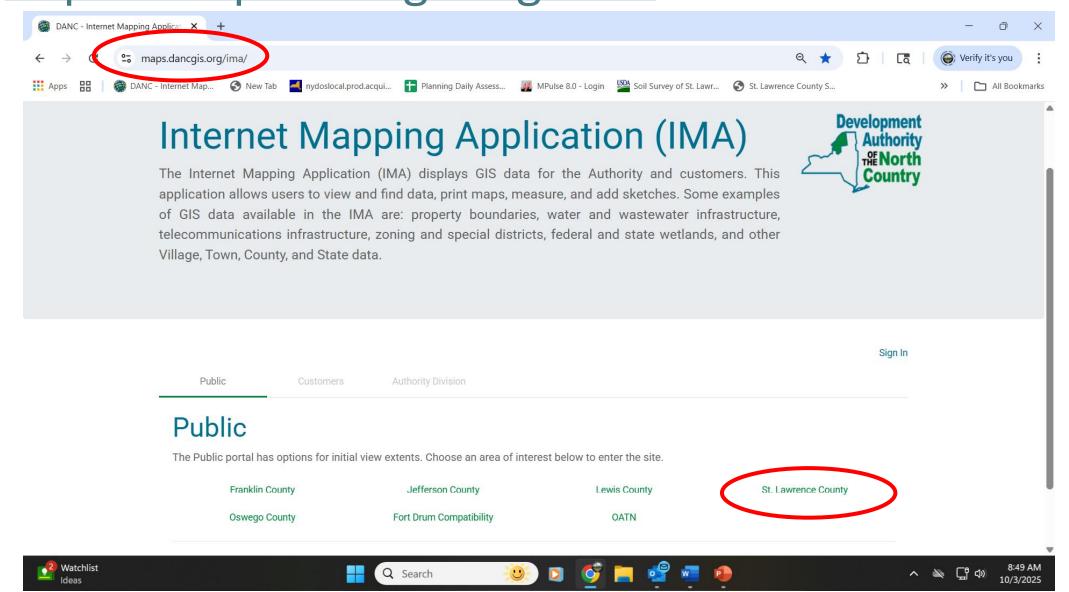
Zoning: Permitted through Planned Unit Development (PUD)

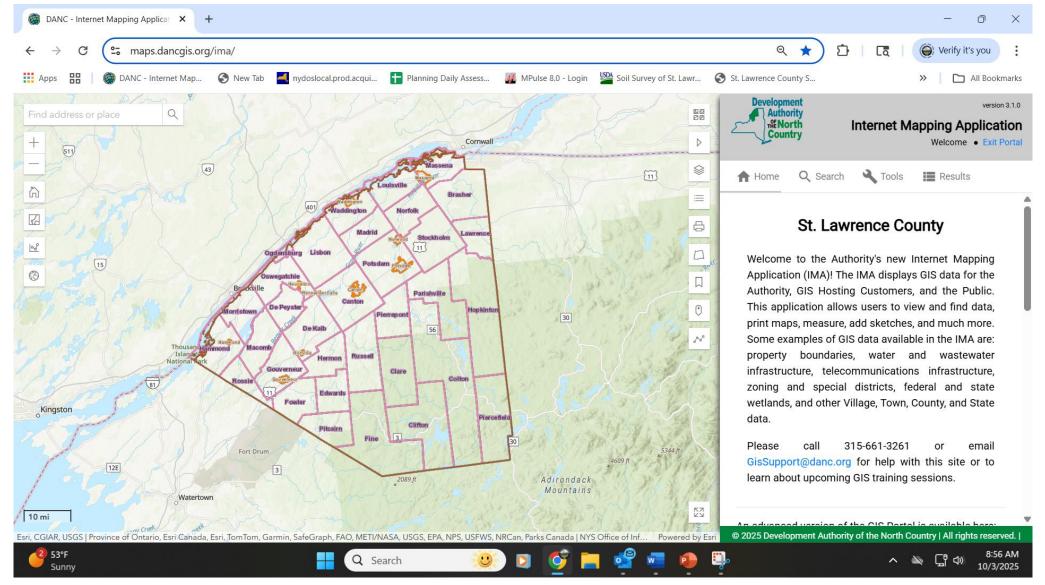


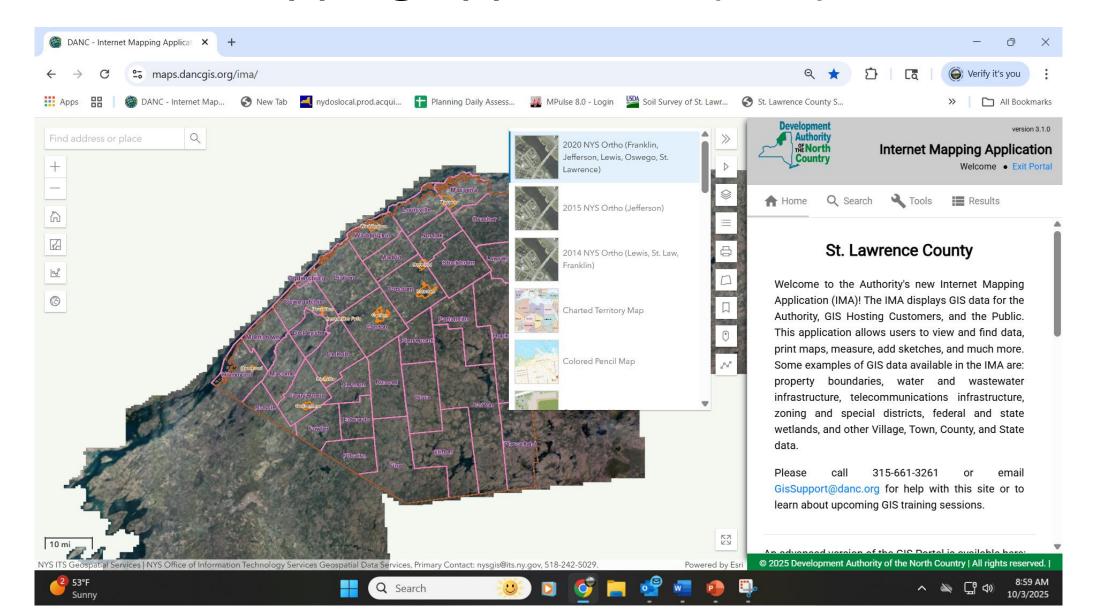
https://cms3.revize.com/revize/niagarafallsny/Documents/Government/Department/Planning%20And%20Environmental/PUD%20PETITION_FULL_5.14.2025.pdf?t=202507301201210&t=202507301201210

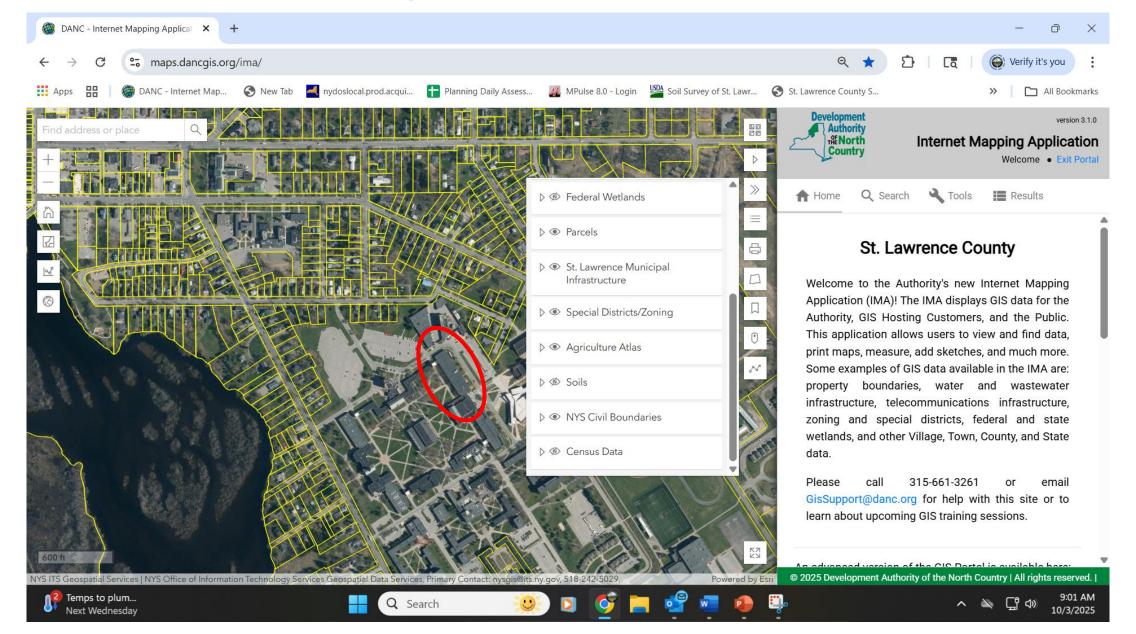
Potsdam Local Government Conference – October 14, 2025

Internet Mapping Application (IMA) https://maps.dancgis.org/ima/









Use Variance Legal Test Case Study

Potsdam Local Government Conference – October 14, 2025

Use Variance Legal Test Case Study

Use variances are sought when an applicant wants to do something that is prohibited in a municipalities' zoning code – restaurant in a residential area

For a use variance to be granted it must meet 4 of 4 legal tests

Rarely are all 4 legal tests met sufficiently

Transitional home required to move from current location in Canton, looking to relocate to a similar sized residence in Potsdam

New location in a zoning district where transitional homes not permitted

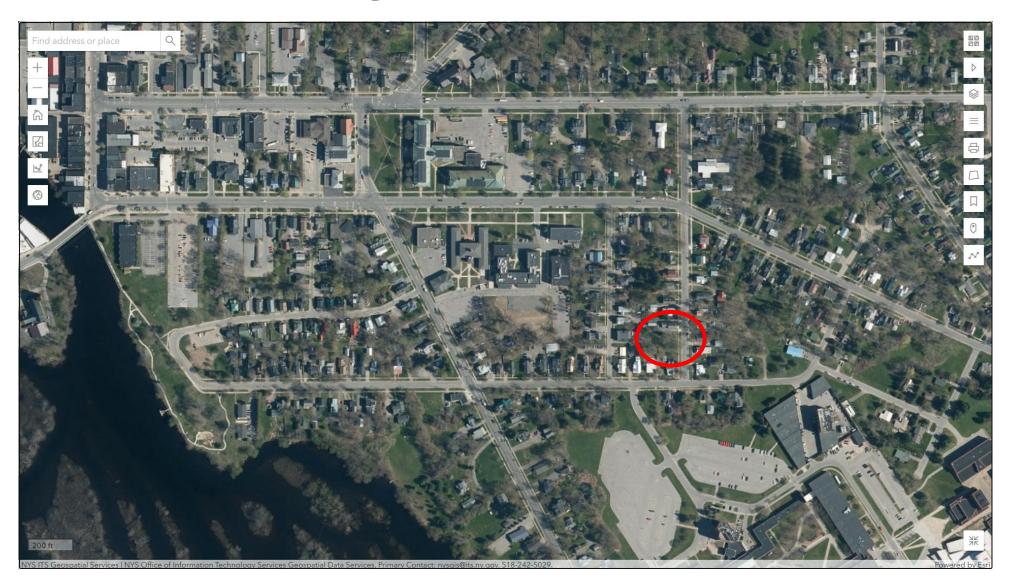
Applicant must prove that:

- √ They cannot realize a reasonable return on the property (financial)
- √ The hardship is unique (step slope, change in land use pattern)
- √ That the request, if granted, will not alter the essential character of the neighborhood (subjective; factors include scale, location, noise)
- √The hardship has not been self-created (beyond control of applicant)

Applicant must prove that:

- They cannot realize a reasonable return on the property (financial)
- The hardship is unique (step slope, change in land use pattern)
- That the request, if granted, will not alter the essential character of the neighborhood (subjective; factors include scale, location, noise)
- The hardship has not been self-created (beyond control of applicant)

Use Variance Legal Test Case Study – Location



Use Variance Legal Test Case Study – Location



Applicant must prove that:

• They cannot realize a reasonable return on the property (financial)

-Current use of property classified as a 501(c)3, must sell property to another 501(c)3.

-Return limited unless selling to another Not-For-Profit

Applicant must prove that:

• The hardship is unique (step slope, change in land use pattern)

-Not-for-profit status unique to properties in the neighborhood

Applicant must prove that:

- That the request, if granted, will not alter the essential character of the neighborhood (subjective; factors include scale, location, noise)
- -Applicant provided a detailed description about how the house would be occupied, i.e., number of occupants, parking, traffic, etc.
- -Applicant provided numerous testimonials about how the use fit into the character of the neighborhood in Canton
- -New location neighborhood currently consists of student and multifamily housing, similar in occupancy make-up of proposed new use

Applicant must prove that:

The hardship has not been self-created (beyond control of applicant)

-Regulations regarding sale of Not-For-Profit beyond control of applicant

Does the argument that the transitional home must leave its current location factor into this legal test?

Use Variance Legal Test Case Study

Outcome:

County Planning Board reviewed this use variance request in March of 2025. Executive Committee agreed it could be returned for local action.

Village of Potsdam Zoning Board of Appeals held a hearing and reviewed this request in April of 2025. The ZBA approved the use variance.

Move is taking place in early October



Public Utility Variances

What they are and why they are relevant to local land use boards

Potsdam Local Government Conference – October 14th 2025

General Use Variance Test

• 4 legal tests

The applicant must meet all four legal tests

• Showing of <u>unnecessary hardship</u> in relation to the property in question

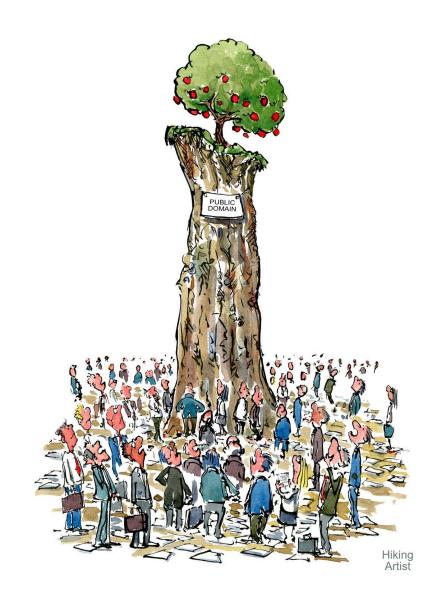


Public Utility Variance

• 2 legal tests

• The applicant still must meet both tests

Showing of <u>public necessity</u>



Public Utility Variance Legal Tests

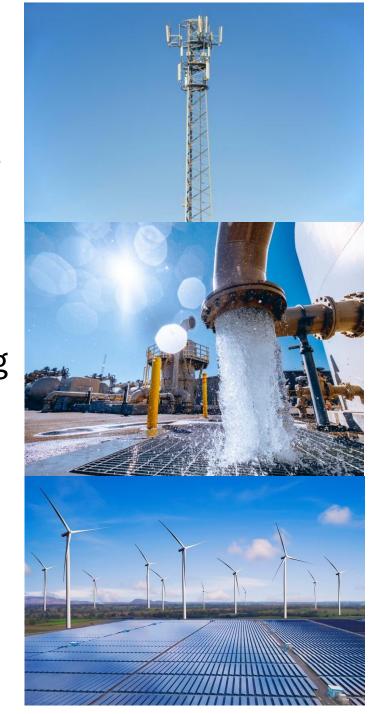
The utility must show that the project is a public necessity in that:

- (1) It is required to render safe and adequate service.
- (2) There are compelling reasons, economic or otherwise, which make it more feasible to seek the variance than to use alternate sites

Additionally, "where the intrusion or burden on the community is minimal, the showing required by the utility should be correspondingly reduced." (Con. Edison v. Hoffman (1978)).

Why are they relevant?

- A public utility can apply for this less rigorous standard to potentially develop in areas municipalities have deemed unsuitable for their development.
- Courts have already determined the following public utilities eligible for this less rigorous standard:
 - Telecommunications facilities, Water and gas facilities, renewable energy
- Characteristics of a public utility outlined in Cellular Telephone Co. v. Rosenberg (1993).



Freepoint v. Town of Athens 2024

 What precedent should a municipality follow if they receive a PUV application?

 Town of Athens denied PUV application from Freepoint solar, but the NYS Appeals Court overturned the denial.

 The Town now has to approve the PUV because the Town's decision was not supported by substantial evidence

PUV Tests



• Test #1:

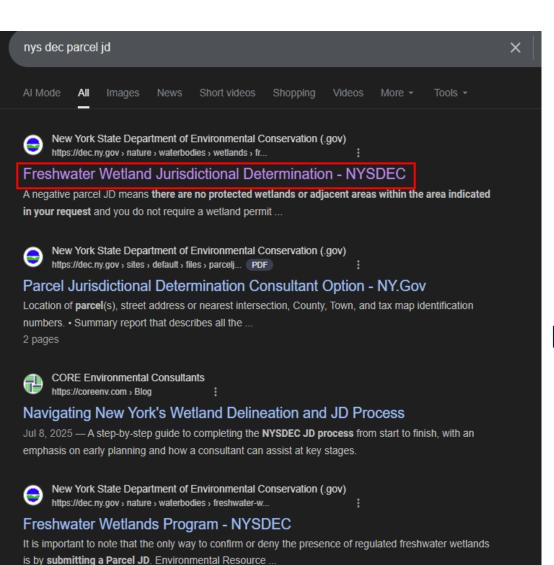
- The Town did not believe the solar array was required and focused on a small group of landowners in the Town who opposed the project. This was not substantial evidence.
- The Town also argued that the project was not required because at the time of the application, NYS was close to its goal of 6Gw of distributed solar by 2025. But the Town did not consider the broader scope of the goals.

• Test #2:

• The Town required the developer to prove it would be "impossible" for the project to go anywhere that solar facilities are permitted. There is no legal requirement for this in the PUV tests.

DEC Parcel JD Process

A quick crash course on filling out the Parcel Jurisdictional Determination Form



Programs To Conserve Wetlands

Our jurisdictional.

Real Property Assessment

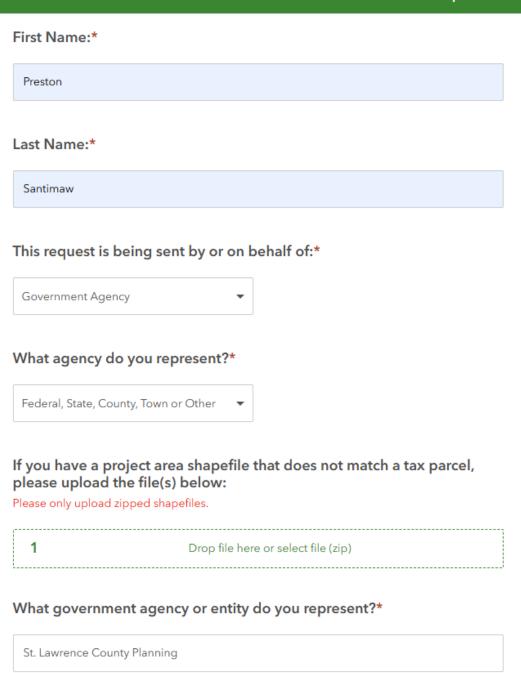
Got Wetlands? Submit the Parcel Jurisdictional Determination Request Form Below to Find Out

Note: One jurisdictional request per parcel. This streamlines the process to ensure quicker response time.

After submitting the parcel JD request online, an email confirmation will be sent to the applicant that includes a summary of all of the information provided. Be sure to check all Junk or Spam folders for a confirmation email from DEC. If you did not receive an email or your information is incorrect, please resubmit your request with the correct information.

PARCEL JURISDICTIONAL DETERMINATIONS REQUEST FORM IF

NYS Freshwater Wetlands Jurisdictional Determination Reques...





Contact Telephone Number:*

315-379-2292

Contact Email Address:*

psantimaw@stlawco.gov

Mailing Address:*

Please provide the full address, including city, state, and zipcode where you receive mail.

9 48 Court St, Canton, NY, 13617, USA

Parcel Address:*

Please click the map icon, type the address of the parcel where you wish the determination to be performed into the search bar, and confirm the point is in the approximate center of the property for which you are submitting a request.



Parcel County:*



Tax Parcel ID:*

A single Tax Parcel ID must be provided for us to process your Jurisdictional Determination request. Please record your tax ID exactly as it appears on your tax bill or as it is presented on the <u>DEC Info Locator</u> mapping tool when you turn on the tax parcels information found under the Reference Layers tab. You may also identify Tax Parcel ID by contacting your local assessor's office.

(Example Parcel ID for 625 Broadway, Albany NY, 12233: 76.27-1-22)

88.028-1-1

Please note, we are unable to estimate the length of time it will take our team to process your request as we are continually receiving requests and processing them in the order received.

Submit

Exclusionary Zoning in St. Lawrence County Story Map Analysis

SUNY Potsdam
Local Government Conference
October 14th, 2025



What is the Story Map about?

Goal:

- To identify exclusionary zoning in County population centers by comparing current and past data;
- To offer suggested zoning revisions each population center may adopt to give affordable housing opportunity to all its residents.
- To create a document with information on affordable housing that any municipality may incorporate or use to its advantage;
- To provide methods by which each population center may accommodate affordable housing through zoning or other methods;

Sections of the Narrative

- Endorsements
 - County Planning Board & Fair Housing Task Force
- Introduction
 - Defining Exclusionary Zoning,
 The Purpose of Zoning,
 U.S. Fair Housing Act,
 Housing Stock Availability
- Preliminary Analysis
 - Residential zoning districts, Median Total Assessed Value (MTAv), Exclusionary zoning criteria

- Population Center Analysis
 - Residential districts overview,
 Neighborhood analysis,
 Exclusionary zoning determination
- Conclusion
 - Exclusionary zoning in the courts, Form-based zoning, Zoning code updates, Pro-housing communities, Vacant housing/Assistance, Other strategies for affordable housing

Population Center Zoning Districts – Village of Gouverneur

Residential districts are color-coded:

First-tier

Second-tier

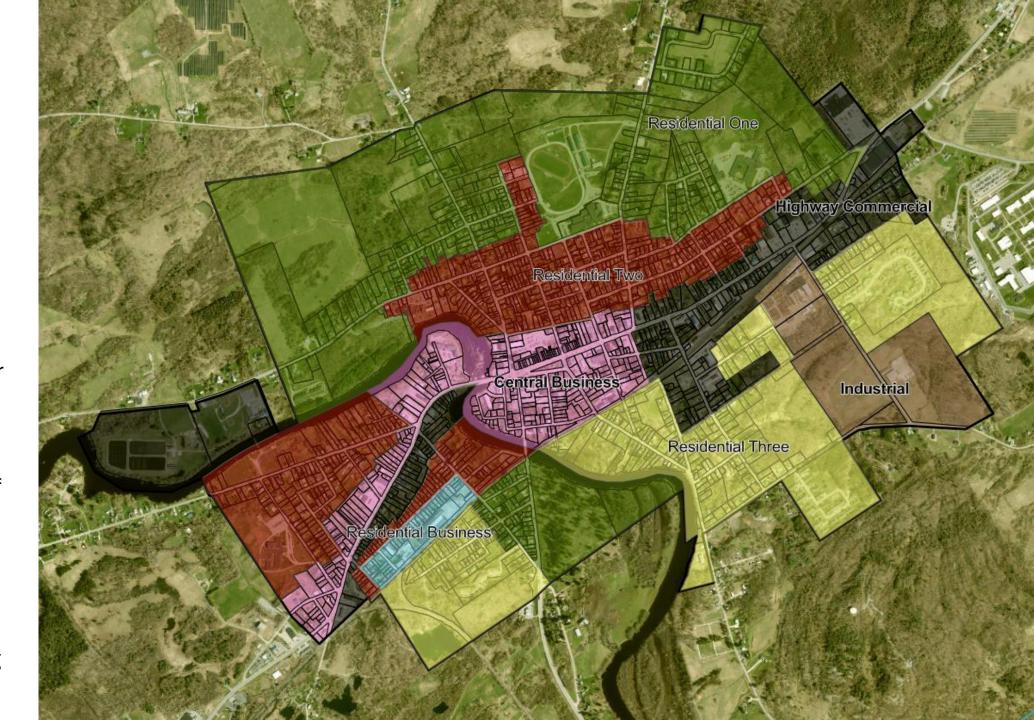
Third-tier

Fourth-tier

All other district types follow a color code for consistency

Story map has an option to toggle on/off the non-residential zones to view only the residential districts

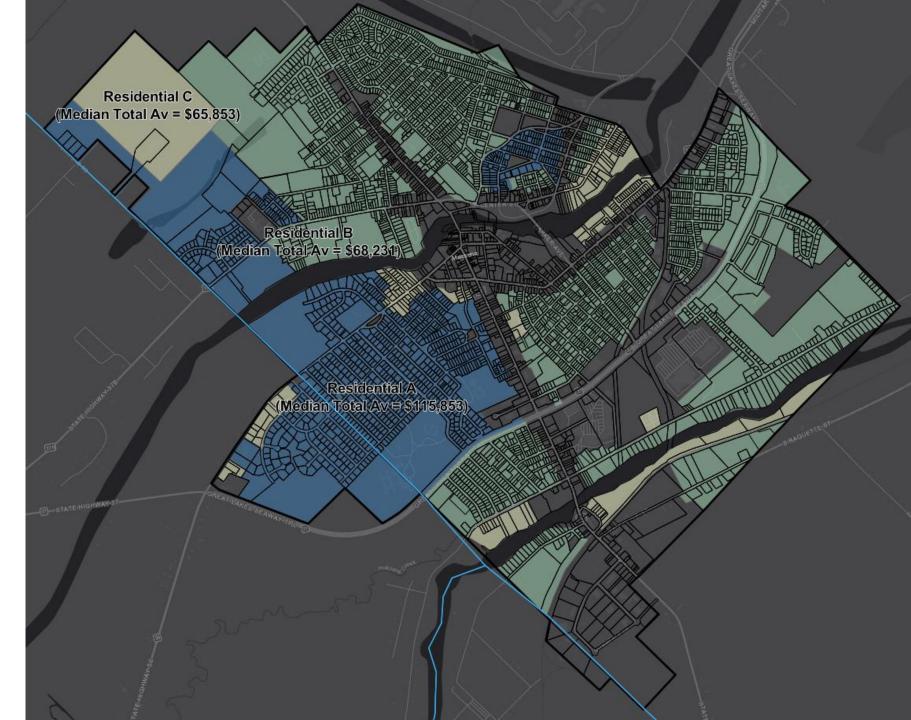
Gives the viewer an idea of where housing is located



MTAv by residential district – Village of Massena

Lighter colors indicate a lower MTAv, darker colors indicate a higher MTAv

Visualizes inequality within each population center



MTAv Analysis - Equalization

		Canton (V)	Gouverneur (V)	Massena (V)	Ogdensburg (C)	Potsdam (V)
Equalization Rate (%)		74%	81%	82%	100%	74%
% Increase from Reported		35% increase	24% increase	22% increase	No change	35% increase
Total	Reported -	\$118,500	\$63,500	\$62,000	\$70,000	\$94,000
	Equalized -	\$160,135	\$78,395	\$75,609	N/A	\$127,027
1 st Tier	Reported -	\$136,200	\$74,150	\$95,000	\$75,000	\$117,600
Residential Zone	Equalized -	\$184,054	\$91,543	\$115,853	N/A	\$158,918
2 nd Tier	Reported -	\$80,500	\$65,000	\$55,950	\$68,000	\$78,900
Residential Zone	Equalized -	\$108,783	\$80,246	\$68,231	N/A	\$106,621
3 rd Tier	Reported -	\$104,250	\$50,450	\$54,000	\$65,000	\$85,700
Residential Zone	Equalized -	\$140,878	\$62,283	\$65,853	N/A	\$115,810
4 th Tier	Reported -		\$53,700		\$60,000	\$61,500
Residential Zone	Equalized -		\$66,296		N/A	\$83,108

Exclusionary Zoning Criteria

Below is a list of indicators that a population center has exclusionary zoning in effect. A population center need not meet all five criteria, but each analysis should consider all five conditions:

- 1. It does not permit accessory dwelling units in the single-family residential district;
- 2. It does not permit multi-family housing in all residential zones;
- 3. It only permits multi-family housing through issuance of a special use permit in a zone designated for such uses;
- 4. The zone with the highest MTAv does not permit multi-family housing, and the zone with the lowest MTAv does permit multi-family housing;
- 5. A readily apparent correlation exists between a population center's Master Plan (published between 1964 and 1971), as it details housing condition by neighborhood/planning district and present day MTAv by residential zoning district. This could be due to one or more of the following:
 - The current zoning is determined to be "legacy zoning";
 - A significant portion of the present-day housing stock was built in or before the year the population center's Master Plan was adopted;
 - The present-day residential district with the lowest MTAv mostly coincides with a neighborhood that previously had poor housing conditions;

Population Center Analysis ex. - Canton

Background Statistics: Ranking Among Population Centers:

➤ Population (2020 Census):

7,155 people 2nd lowest

➤ MTAv (All residential parcels):

\$160,135 Highest

➤ Three Residential Districts:

Residential Single-Family (R-SF),

Residential Multi-Family (R-MF)

Neighborhood Mixed-Use (NM-U)

➤ Median Family Income (2022 ACS 5-yr estimates):

\$117,266 Highest

➤ Median Household Income (2022 ACS 5-yr estimates):

\$57,639 2nd Highest

➤ Poverty Rate (2022 ACS 5-yr estimates):

19.6% 2nd Lowest

Residential District Overview – R-MF District

- 325 Residential parcels
 - o 76.3% 1-family residential
 - o 7.1% apartments
- MTAv (residential parcels) = \$108,583 (lowest of three residential districts)
- "This district supports the Village's more densely settled residential areas that provide a variety of housing options and supporting community services. The intent of the district is to support these uses and preserve the historic scale and character of the Village. These areas are adjacent to mixed-use areas providing services within walking distance of residential units supported by attractive tree-lined streetscapes, public spaces and pedestrian and bicycle amenities."
- Permitted uses:
 - o By-right- one- and two-family dwellings, and accessory dwelling units
 - Site Plan Approval
 – Home occupations (minor), conversion into multi-family or group dwellings, multi-family dwellings, group dwellings, townhouses, daycares (group or family), and bed and breakfasts
 - Site Plan & SUP Approval Home occupations (major)

Neighborhood Analysis – What is it and How does it Help?

• A section of a local master plan that divides the community into "neighborhoods" based on population, geography, etc. and assesses housing conditions and other related factors.

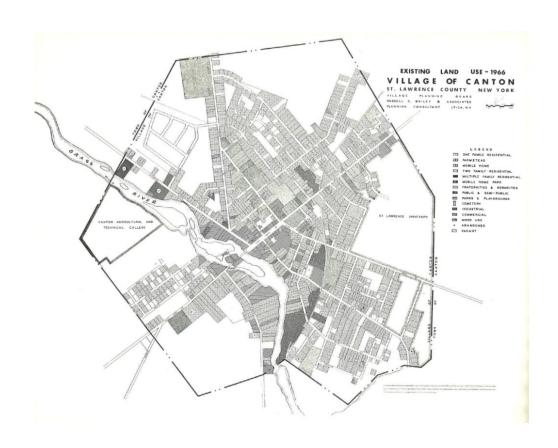
• A neighborhood analysis is helpful to compare present-day data (census, MTAv, permitted uses) to previous housing development to look for correlations.

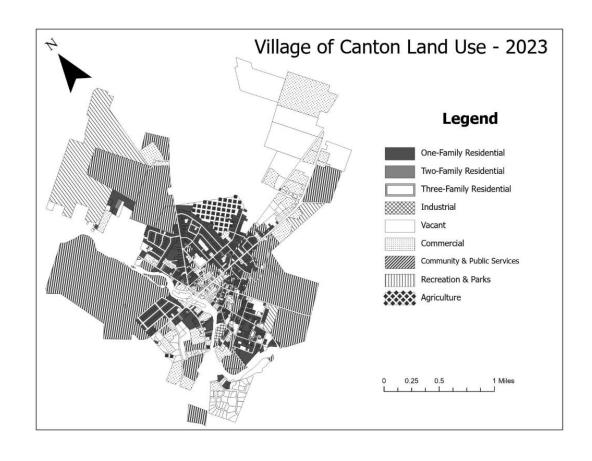
• Helps determine "legacy zoning", and exclusionary zoning.

Neighborhood Analysis Maps & Figures

Village of Canton Land Use - 1966

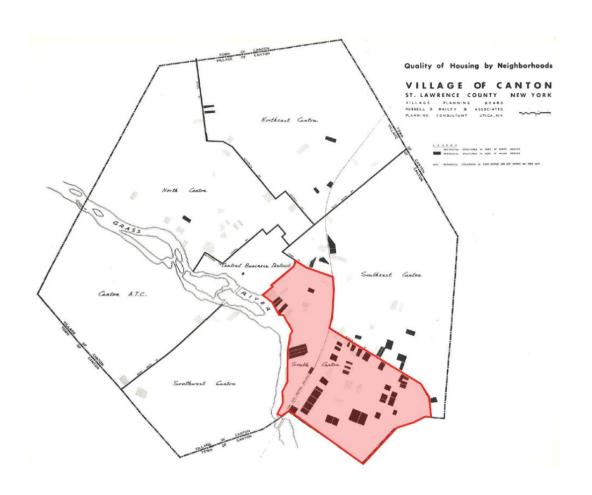
Village of Canton Land Use - 2023





Neighborhood Analysis ex.

- South Neighborhood
- 68.5% of residential structures in good condition
- 10.5% needed minor repairs
- 21% needed major repairs
- Very bad condition compared to other neighborhoods
- Today within R-MF zone



Exclusionary Zoning Determination

- 43.4% of the Village's housing units were built before the adoption of the Comprehensive Development Plan
 - Likely has similar housing conditions as outlined in the neighborhood analysis
- 31.5% of housing structures in the South Neighborhood required repairs
 - Currently within the R-MF zone, which has lowest MTAv, and permits multifamily housing via site plan review
- Canton meets 3 out of the 5 exclusionary zoning criteria including the final criterion, and therefore has exclusionary zoning

	does <u>not</u> meet criteria	Canton	Gouverneur	Massena	Ogdensburg	Potsdam
1.	Permits ADUs in the single-family residential district	√	√	√	√	√
2.	Permits multi-family housing in all residential zones	×	×	×	×	×
3.	Special Use Permit required for multi- family housing	✓	×	√	✓	×
4.	Zone with the highest MTAv does <u>not</u> permit multi-family housing, & zone with lowest MTAv <u>does</u> permit multi-family housing	×	×	×	√	×
5.	Readily apparent correlation between Master Plan and present-day MTAv by residential district	×	×	×	√	×
E	xclusionary Zoning?	YES	YES	YES	NO	YES

Conclusion - Highlights

- Exclusionary Zoning in the Courts
 - How have NYS Courts ruled on exclusionary zoning?
 - Berenson v. Town of New Castle (1975)
- Form-Based Zoning
 - What is it and how can it benefit community development?
 - Case studies from around the State
- Pro-Housing Community Program
 - What is it and how does a municipality become a Pro-Housing Community?

Zoning Code Updates

- The Story Map narrative offers suggestions <u>all five</u> population centers may consider to accommodate affordable housing development:
 - Residential Zoning Consolidation
 - Increases areas that permit multi-family housing
 - Streamline Local Review Processes
 - Ministerial review by the Village Code Enforcement Officer may reduce the burden on housing developers
 - Reduce Minimum Parking Standards
 - These standards may cause inefficient land use
- Other recommendations for individual population centers include:
 - Canton Expand permitted uses to allow more "missing middle" housing
 - o Gouverneur Alter dimensional requirements to allow higher density development
 - Massena Permit multi-family housing in more zones to increase capacity
 - Ogdensburg Create affordability goals that developers should meet with project designs
 - Potsdam Draft a form-based district for downtown and university-adjacent areas

Other Strategies for Affordable Housing

- Housing Rehabilitation Program
 - Municipally or County administered
- Payments in Lieu of Taxes (PILOTs)
 - Offering PILOTs to developers may provide financially feasible affordable housing projects
- Low-Income Housing Tax Credits (LIHTC)
 - May be beneficial in a project involving the vacant 2nd-story Main St. apartments
- First Time Homebuyer Program
 - Used to be administered on a County level, HCR's CDBG can provide funding

Thank You!

Any questions/Comments?

Story Map Link