### FINAL REPORT PURSUANT TO ACT 68 OF 2023: STATEWIDE REAPPRAISALS AND PROPERTY DATA

House Committee on Ways and Means

February 6th, 2025

Agency of Digital Services | Vermont Center for Geographic Information (VCGI)

John E. Adams, Director Tim Terway, Program Manager



# What VCGI Does



### **BUILD**

Foundational
Datasets
(Spatial Data
Infrastructure)



### LEAD

Development and use of Statewide Geographic Information System (GIS) and the Coordination it requires

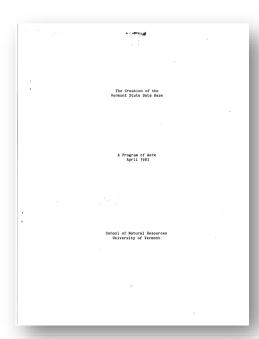


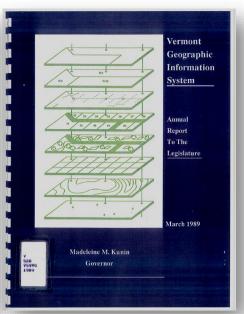
### **EMPOWER**

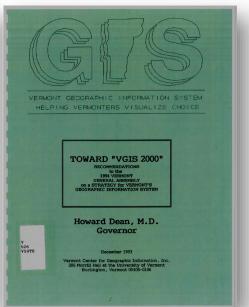
Data access, visualization and use

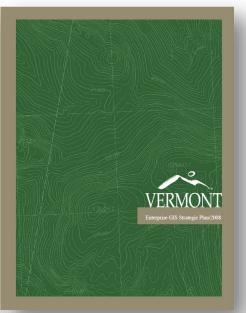


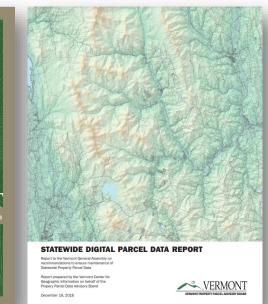
VERMONT CENTER FOR GEOGRAPHIC INFORMATION













**Vermont Mapping Program** (Tax Dept)

1989

Office of GIS
(Agency of Admin)

\_\_\_\_\_

1992

Vermont Center for Geographic Information (17mb of data!) 1997

1<sup>st</sup> VCGI Website

2015

VCGI becomes Part of

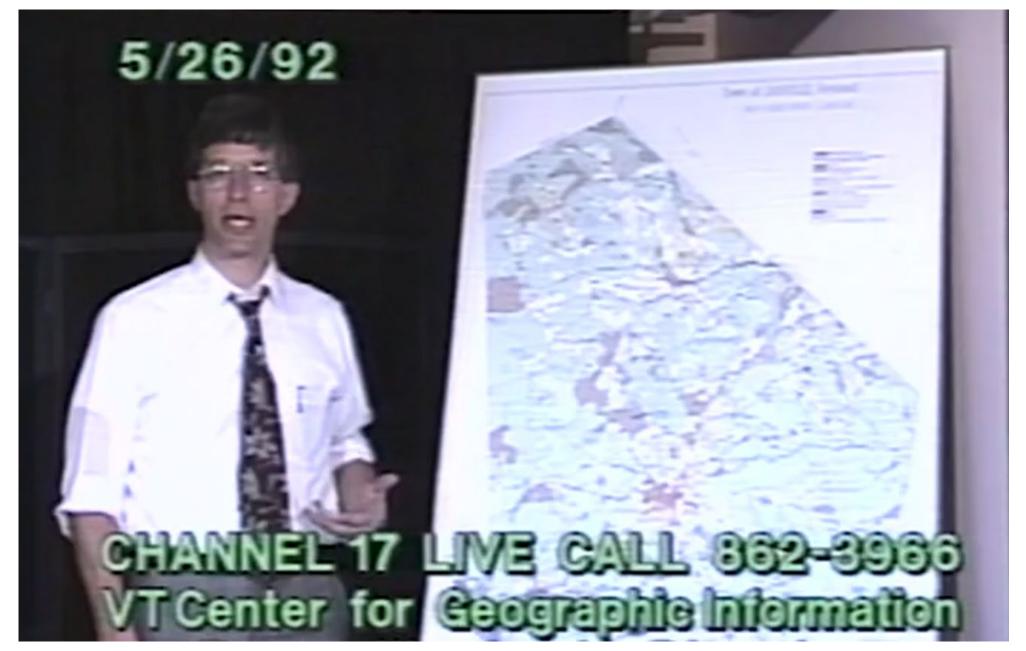
State Government

2020

Statewide Parcel Data

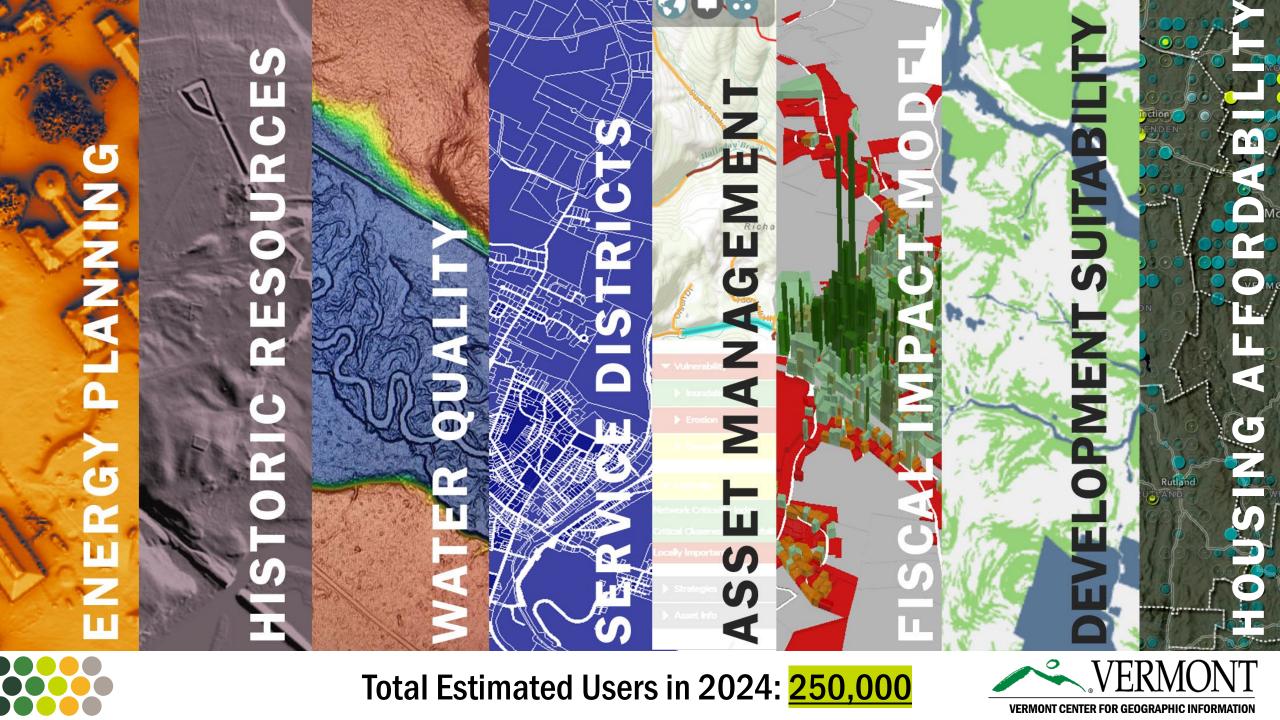


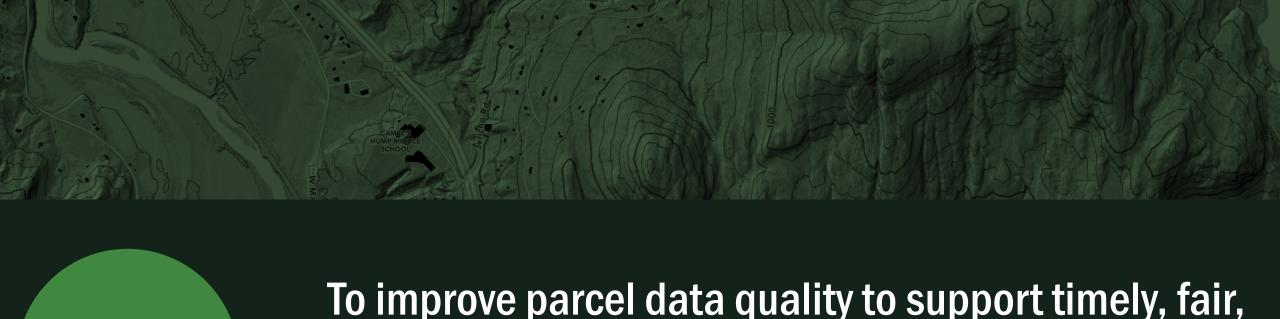










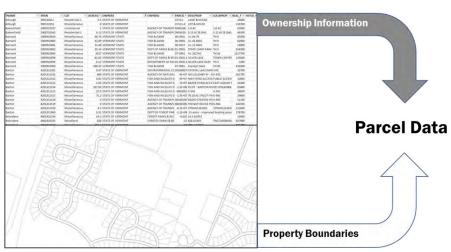


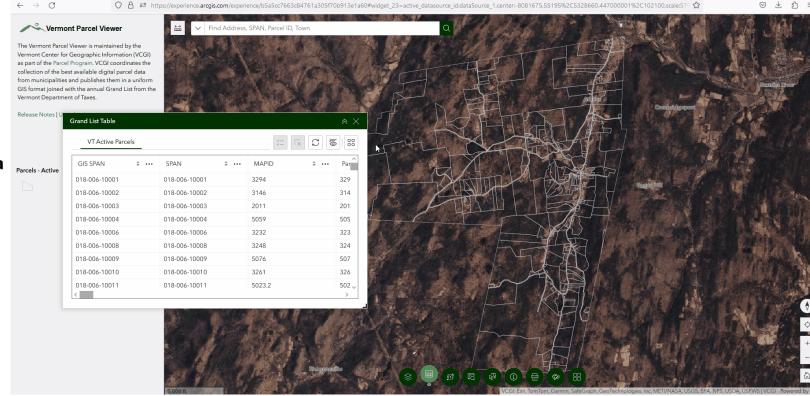
Purpose

To improve parcel data quality to support timely, fair, and accurate property valuation and reappraisals as sought by Act 68.



## What are parcel data?









### Vermont Center for Geographic Information

Q

Da	ata and Programs
	Parcel Program
	Parcel Advisory Board
	Lidar Program
	Imagery Program
	Data Status
	Share Map Data
Re	esources
Ma	aps
Pa	irtners
AŁ	oout VCGI



**EXAMPLE USES** 

**TOWN DATA STATUS** 

PARCEL GUIDELINES

### **Parcel Program**

Parcel mapping in Vermont is undertaken and overseen by each municipality, who may perform annual map updates on their own or hire vendors to maintain. As part of the Parcel Program, VCGI coordinates the collection of the best available digital parcel data from municipalities and publishes them in a uniform GIS format joined with the Tax Department's annual grand list. VCGI also develops the data standards, templates, digital parcel mapping guidelines, and guidance resources by which Vermont digital GIS parcel data are organized and made publicly available.

The Parcel Program is an outgrowth of the <u>Statewide Property Mapping Project</u> which included a three-year (2017-2019) funded effort to create or update digital GIS parcel data for all of Vermont's municipalities. The Project successfully completed that work in December 2019, resulting in a freely available GIS layer for all Vermont municipalities joined with their <u>annual grand list</u> via a parcel's unique <u>School Property Account Number (SPAN)</u>. The parcel Program now supports the ongoing collection and publishing of municipal parcel data in GIS format statewide, continuing to use the SPAN number as a unique parcel identifier.

#### What is the Statewide Property Parcel Mapping Program?

- The ongoing effort for the publishing of annual grand list-joined digital municipal parcel data throughout Vermont in GIS format that are freely available and useful
- The Program is overseen by VCGI, yet relies on cooperation among towns officials who oversee their grand list and map maintenance and their map vendors in





### **Data Standard**

- Ensures that all mapped properties statewide are linkable to their unique grand list record
- Works via unique School Property Account Number (SPAN)
- Enables visualization and analysis of a statewide parcel data layer
- Enables other information to be related with properties on a map







Recommendation	Statute Change	Incentive / Funding	Technical Guidance	New Technology
1. Update Parcel Definition in Vermont Statute	•			
2. Support Digital Parcel Maintenance and Submittal to the State	•	•		
3. Implement Vermont CAMA Data Standard and Require Submittal to State	•		•	
4. Clarify Right-of-Way Mapping for Tax Purposes			•	
5. Clarify Grand List vs. GIS Acreage Guidance			•	
6. Acquire and Publish Annual High-Resolution Imagery and Offer Buy-Up Imagery Contract			•	•
7. Pilot Remotely-Sensed Tools to Support Appraisals				•
8. Develop and Offer Updated Parcel Contract Guidance			•	•
9. Modernize Current Use Map Standards, Submittals, and Access				•
10. Consider Updating and Moving Parcel Program in VT Statute	•			
11. Coordinate With Concurrent Efforts to Digitize Land Records				•
12. Make Proposed Assessment Districts Consistent and Compatible with Existing Administrative Boundaries			•	





### **Additional Recommended Improvements**

Improve Submittal of Land Surveys to the Vermont Land Survey Library

Support Survey of Municipal Boundaries and/or Corner Points







# in Vermont Statute

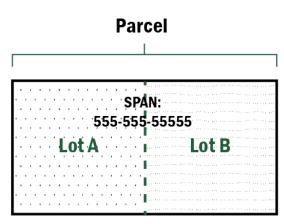








### **Current**



"Contiguous" parcel defined by ownership





ADMINSPAN:
Duplicate values
indicate contiguous
lots with common
ownership; can be
used to aggregate

ADMINSPAN

One Administrative

Parcel; four Parcels.

ADMINSPAN matches one of the SPANs (others in SPAN field only).

One Administrative

Parcel; one Parcel.

ADMINSPAN and SPAN are the same

for each.

One Administrative Parcel; two Parcels.

SPAN:
All unique values,
representing each
single sellable lot

MAPID: Identifier specific to municipality, as assigned by town

	66 6		,		
	ADMINSPAN	SPAN	MAPID	PROPTYPE	•••
-	111-222-33333	111-222-33333	StreetRd.a	PARCEL	
	111-222-33333	111-222-12345	StreetRd.b	PARCEL	
	111-222-33333	111-222-23456	StreetRd.c	PARCEL	
-	111-222-33333	111-222-34567	StreetRd.d	PARCEL	
Ħ	111-222-44444	111-222-44444	AvenueRd	PARCEL	
<b>→</b>	111-222-55555	111-222-55555	RouteRd	PARCEL	
×	111-222-66666	111-222-66666	LaneRd	PARCEL	
-	111-222-77777	111-222-77777	DriveRd.a	PARCEL	
-	111-222-77777	111-222-98765	DriveRd.b	PARCEL	

#### **Parcels Layer** 111-222-111-222-23456 34567 111-222-111-222-33333 12345 111-222-33333 111-222-44444 111-222-44444 111-222-111-222-111-222-77777 55555 55555 111-222-77777 111-222-98765 111-222-66666 111-222-66666

Parcels Layer

(formerly "inactives")



(formerly "actives")

**Administrative** 

## **Example Statute Update**

**32 V.S.A. § 4152 (a)(3)** A brief description of each parcel of taxable real estate in the town. "Parcel" means a separate and sellable lot or piece of real estate. Parcels are to be combined to represent all contiguous land in the same ownership, together with all improvements thereon for tax administration.

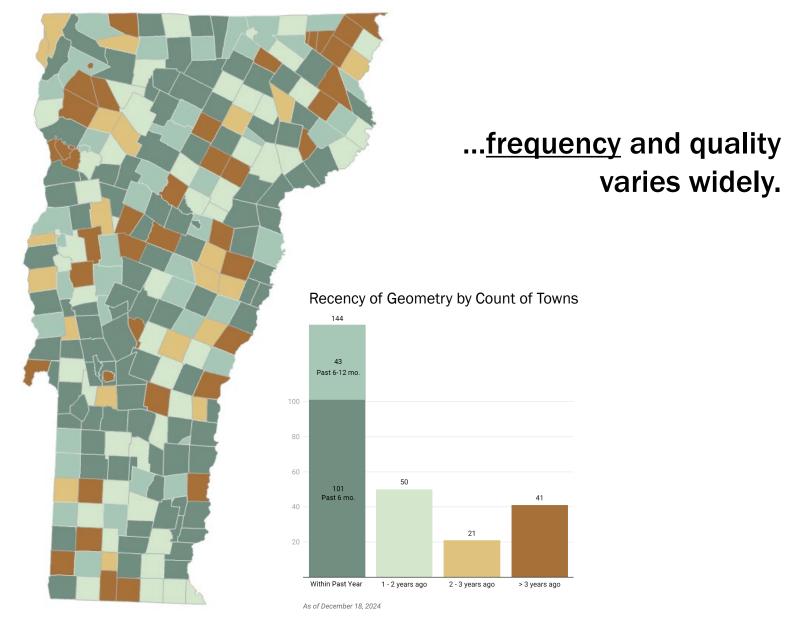








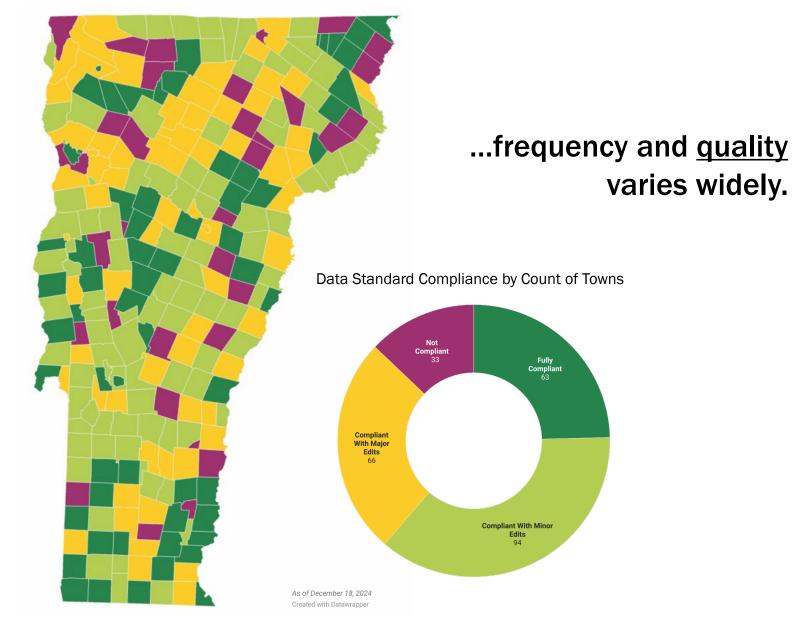
~90% of towns now maintain parcel data. But...





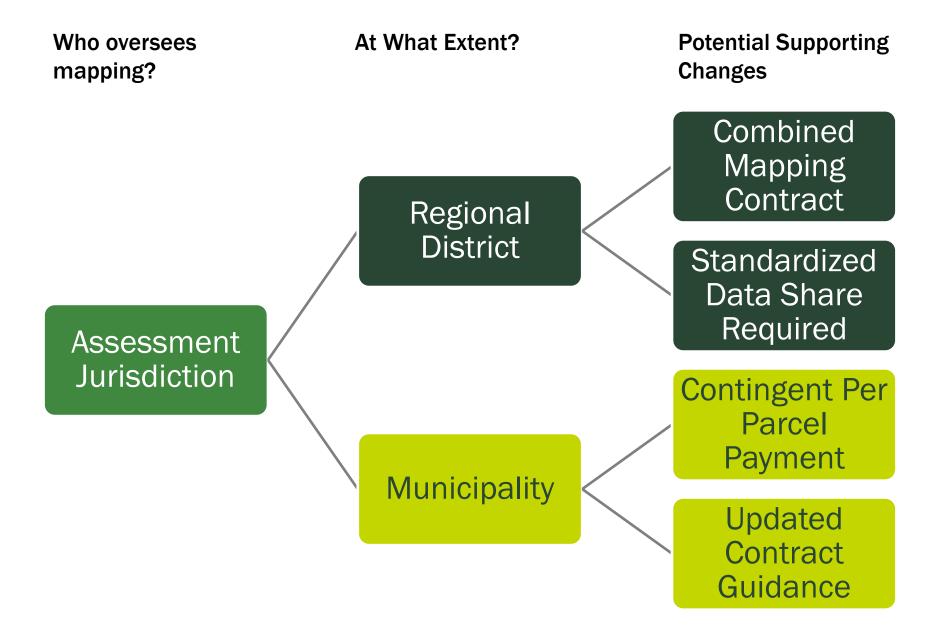


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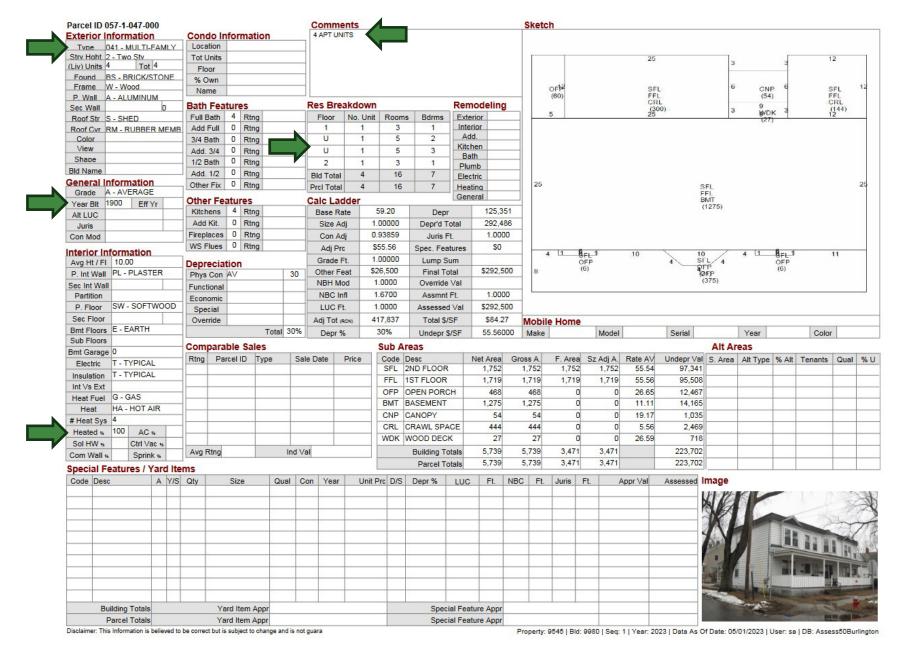






# Require Submittal to State



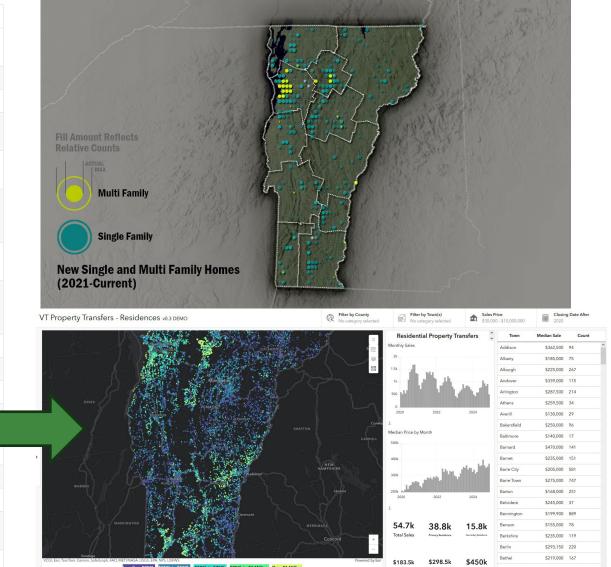






Туре	Field	Alias	Description	Field Type	Length	Example
Identification	SPAN	SPAN	Unique identifier for record, with dashes	String	13	001-002-12345
History	YearBuilt	Actual Year Built	Actual year built	Integer	4	1950
History	YearReno	Year Renovated	Year of most recent renovation	Integer	4	2003
Building	TotFinSqFt	Total Finished Square Feet	Total finished square footage of structure	Decimal	10	4500
Building	Heat1ID	Primary Heat/Cool Source	Primary heat/cool source, corresponding with following field	String (domain)	30	Heat Pump
Building	Heat1Pct	Primary Heat/Cool Source Percent	Percentage of usage of primary source for heating/cooling the structure	Percent (integer)	3	75
Building	Heat2ID	Secondary Heat/Cool Source	Secondary heat/cool source, corresponding with following field	String (domain)	30	Forced Air
Building	Heat2Pct	Secondary Heat/Cool Source Percent	Percentage of usage of secondary source for heating/cooling the structure	Percent (integer)	3	25
Building	TotRooms	Total Rooms	Total count of rooms	Integer	5	10
Building	Bdrms	Bedrooms	Total count of bedrooms	Integer	5	3
Building	FullBths	Full Baths	Total count of full bathrooms	Integer	5	1
Building	ThrQtBths	Three Quarter Baths	Total count of three quarter bathrooms	Integer	5	0
Building	HalfBths	Half Baths	Total count of half bathrooms	Integer	5	1
Building	Ktchns	Kitchens	Total count of kitchens	Integer	5	1
Building	PctCmplt	Percent Complete	Percent of structure that is complete	Integer	3	100
Building	UnitCnt	Unit Count	Count of inhabitable units within structure	Integer	5	1
Building	StoryCnt	Story Count	Total count of stories within structure	Integer	3	2
Building	UnIndCode	Unlanded Code	Prefix for unlanded structure type if applicable	String (domain)	2	Null

**Table 1: Proposed CAMA Data Schema.** CAMA data schema for initial phase of data standardization. Following agreement with CAMA vendors, these fields should be made available to VCGI for inclusion in a statewide CAMA dataset.



Live January 21, 2025:

https://housing.mapvt.com/



Implement VT Cama Data Standard and Require Submittal to State



## **Data Quality Improvements**

- Unlanded
   Structures
- Common
   Interest Parcels

Condo Typ Stacked	e #2	
PARCELID	TAXROLL ATTRIBUTE	
100	99.00	
101	49.50	100
102	49.50	101

▶ Stacked parcels, 1 per owner

Prefix Code	Applies To
CO	Condominiums
CA	Camps
MH	Mobile Homes
SA	Ground-Mount Solar Arrays
WT	Wind Turbines





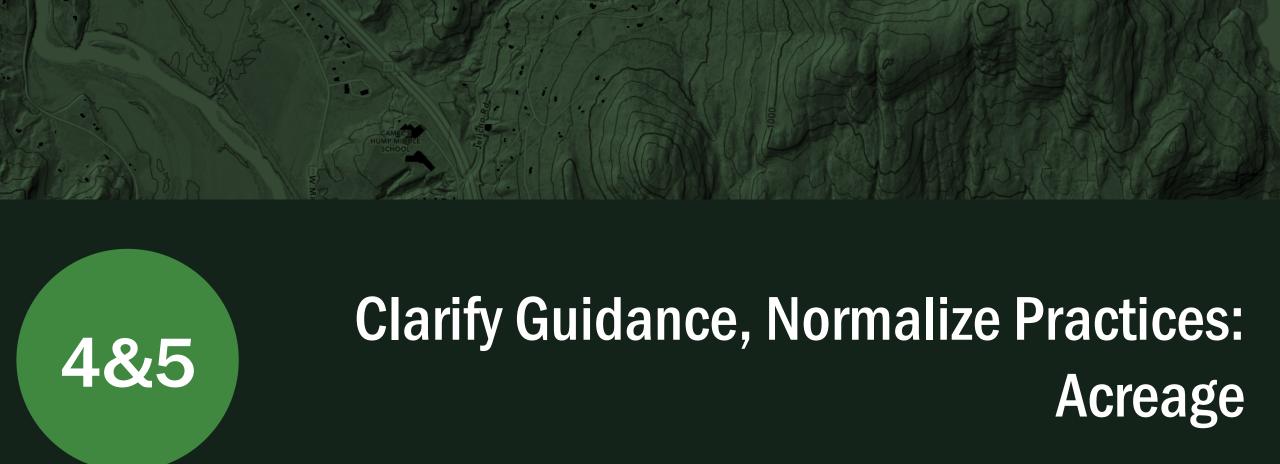
# **Example Statute Update**

**32 V.S.A.** § **5404(b)** Annually, on or before August 15, the clerk of a municipality, or the supervisor of an unorganized town or gore, shall transmit to the Director in an electronic or other format as prescribed by the Director: education and municipal grand list data, including exemption information and grand list abstracts; tax rates; an extract of the assessor database also referred to as a Computer Aided Mass Appraisal (CAMA) system or Computer Aided Mass Appraisal database, and the total amount of taxes assessed in the town or unorganized town or gore...



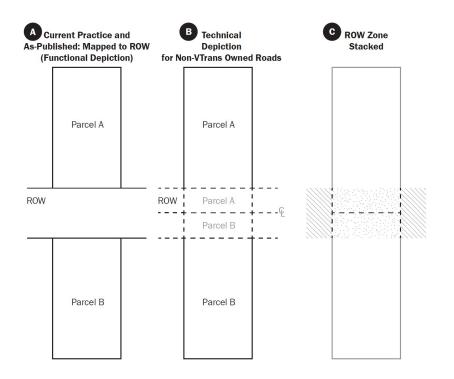
Recommendation 3 Link







### **ROW Areas Add Up**

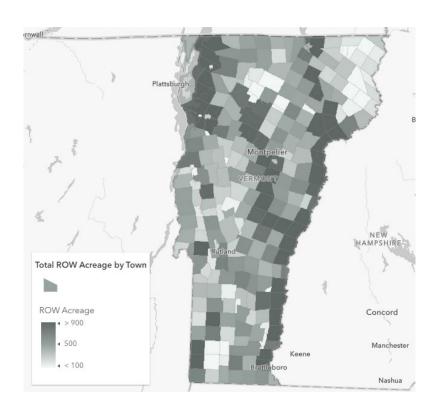




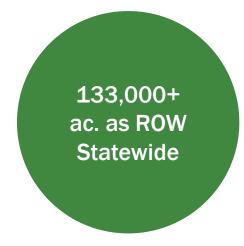




### **ROW Areas Add Up**



"With the more widespread use of the GIS parcel data, more and more Towns are using it to calculate taxable acreage. Without any clear legal direction of whether to include area within the public right-of-way for the calculation for taxable acreage, it will lead to further issues." – GIS Mapping Vendor







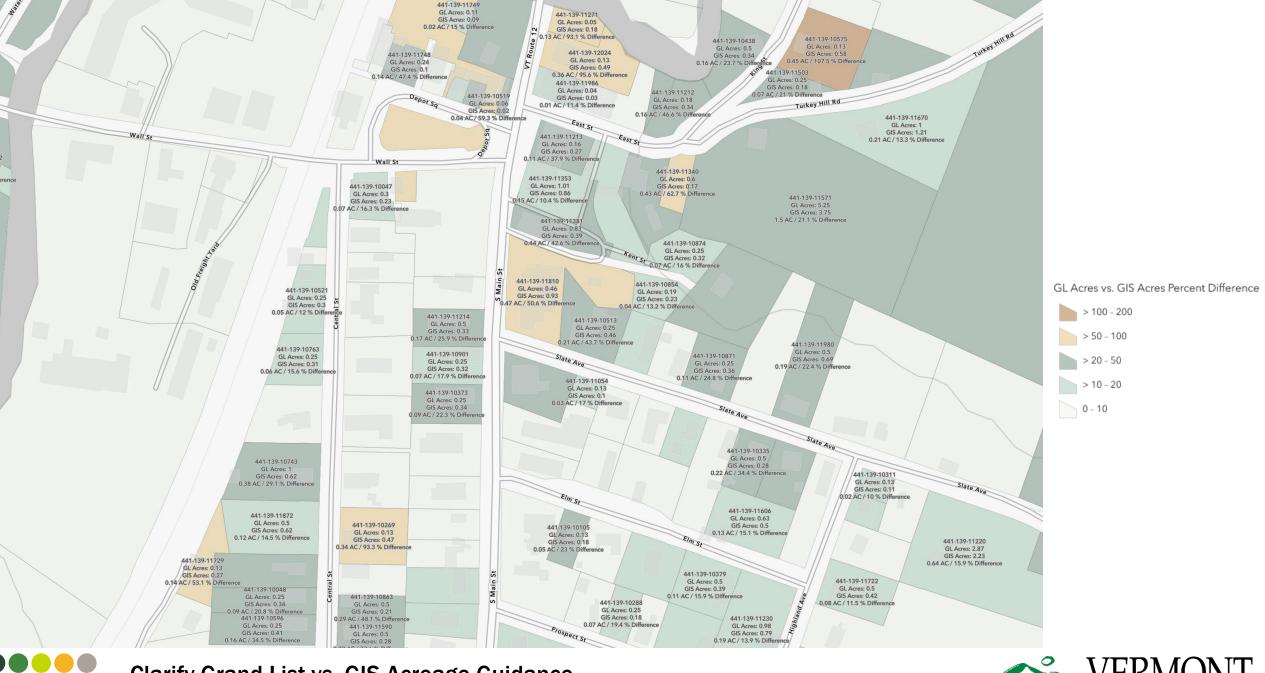
### **Determining Acreage and Property Mapping**

- From the <u>Lister and Assessor Handbook</u> (pp. 33-34):
  - "We [Tax Dept.] recommend that you list acreage in the grand list according to the best information available to you."
  - "As a general rule, a survey done by a Vermont registered land surveyor is entitled to the greatest evidentiary weight, followed by a tax map and, finally, by a recorded deed."
  - "Surveys, maps, deeds and any other evidence of acreage of a particular parcel should all be considered by a lister in determining value of properties."

	Total Acreage
Listed Acreage (2023 Grand List)	5,609,102 ac
Mapped Acreage (statewide parcel dataset)	5,786,273 ac
	177,171 ac difference























# **Example of Oblique Imagery**





### Pilot Remotely-Sensed Tools to Support Appraisals











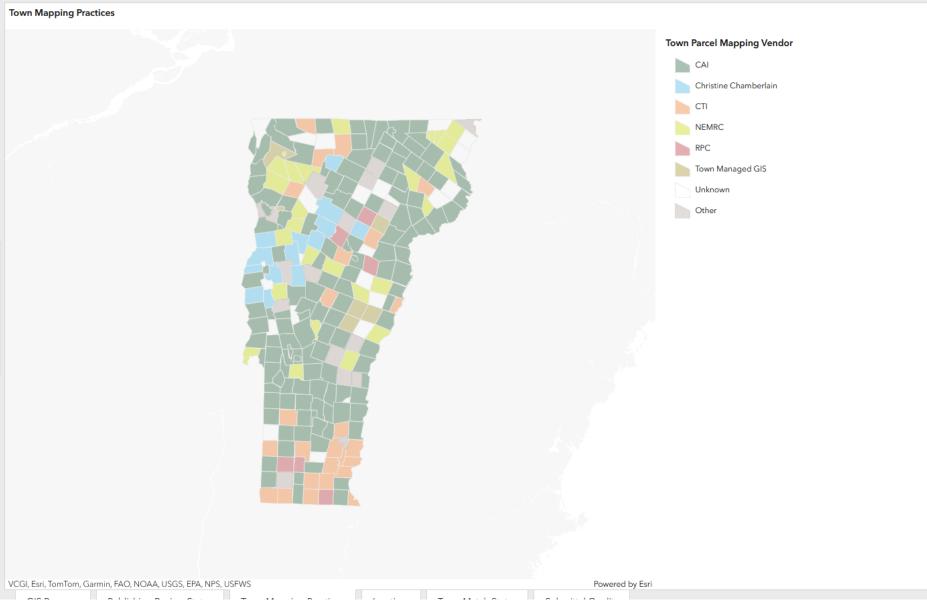




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	3. Implement Vermont CAMA Data Standard and Require Submittal to State	•		•	
:	4. Clarify Right-of-Way Mapping for Tax Purposes			•	
	5. Clarify Grand List vs. GIS Acreage Guidance			•	
	6. Acquire and Publish Annual High-Resolution Imagery and Offer Buy-Up Imagery Contract			•	•
	7. Pilot Remotely-Sensed Tools to Support Appraisals				•
•	8. Develop and Offer Updated Parcel Contract Guidance			•	•
	9. Modernize Current Use Map Standards, Submittals, and Access				•
	10. Consider Updating and Moving Parcel Program in VT Statute	•			
	11. Coordinate With Concurrent Efforts to Digitize Land Records				•
	12. Make Proposed Assessment Districts Consistent and Compatible with Existing Administrative Boundaries			•	







Select a town from the drop down menu above.

### Addison

Published GIS Geometry Date	2024-08-01
Current Map Capacity	Contract GIS Vendor
Current Vendor	CAI
Most Recent Geometry Submittal	2024-07-29
Submittal Reviewed by Town	No
Submitting Entity	CAI
Submitted By	Liam Brush
Regional Planning Commission	Addison County Regional Planning Commission
Published GIS Notes	
Parcel Project (2017-19) Vendor	CAI

All Towns Currently Joined With

Statewide Grand List

\*Statewide Grand List represents the owner on record on April 1 annually.

Status Last Updated: 2/5/2025, 9:23 AM Status updated weekly.







#### 2024 Lands in Current Use and Designated Areas

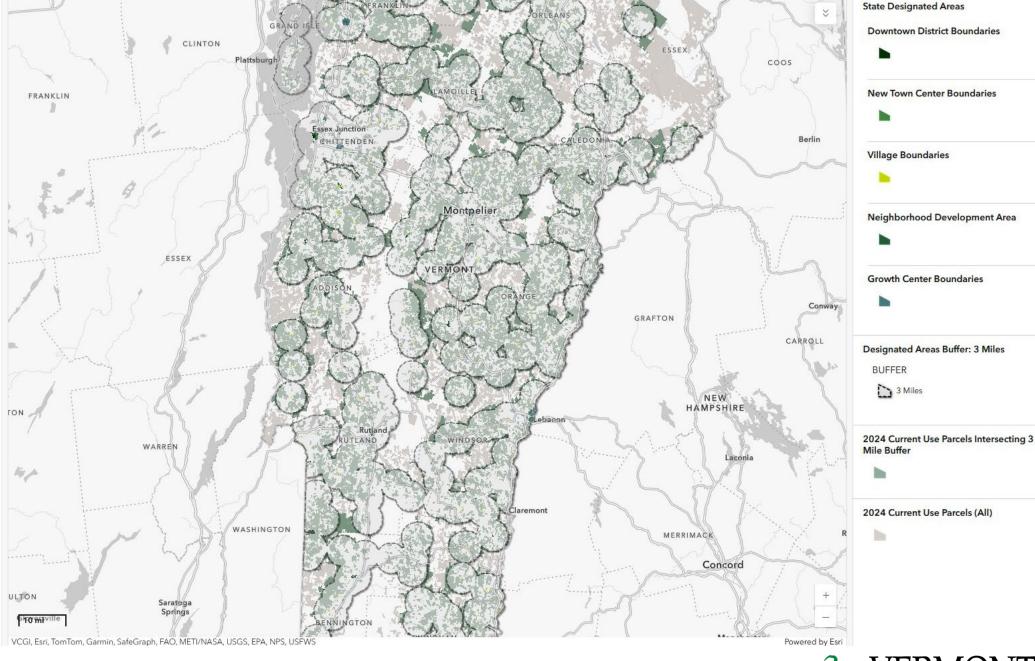
This application depicts lands enrolled in current use and their relation with designated areas per the Agency of Commerce and Community Development's State Designation Programs as of January 23, 2025.

#### Data are for references purposes only.

Enrolled acreage of current use-enrolled parcels is summed in indicator, however, entire parcel extent is mapped.

Current Use Enrolled Parcels Intersecting 3 Mile Buffer

**14,717** 1,793,635.9 ac

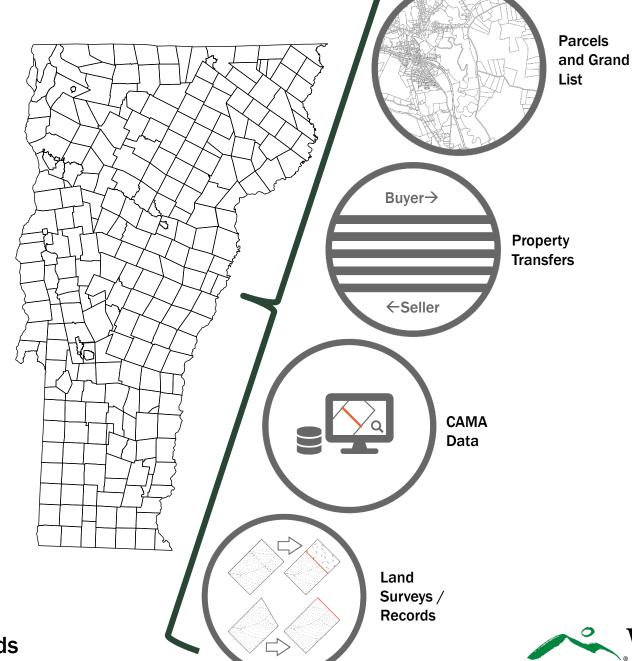


9: Modernize Current Use Mapping and Access
Recommendation 9 Link



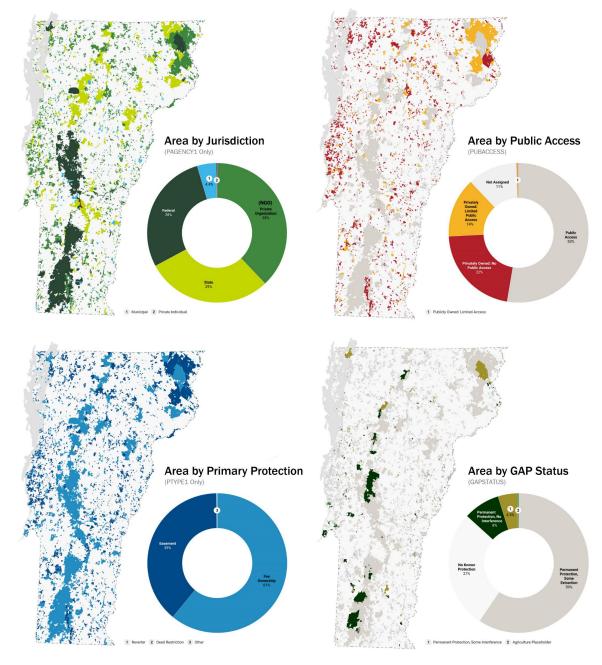
### Digital Land Records

- A Mature Solution Data and accessibility wise
- Manage and unite all property info at the source
- Would unify access to what currently takes tremendous amount of time and resources to integrate (if possible), reducing duplication and multiplying downstream uses





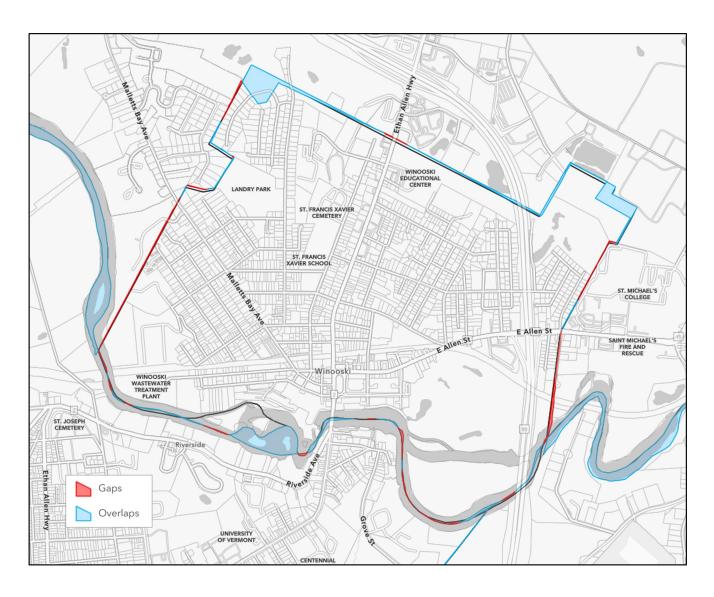






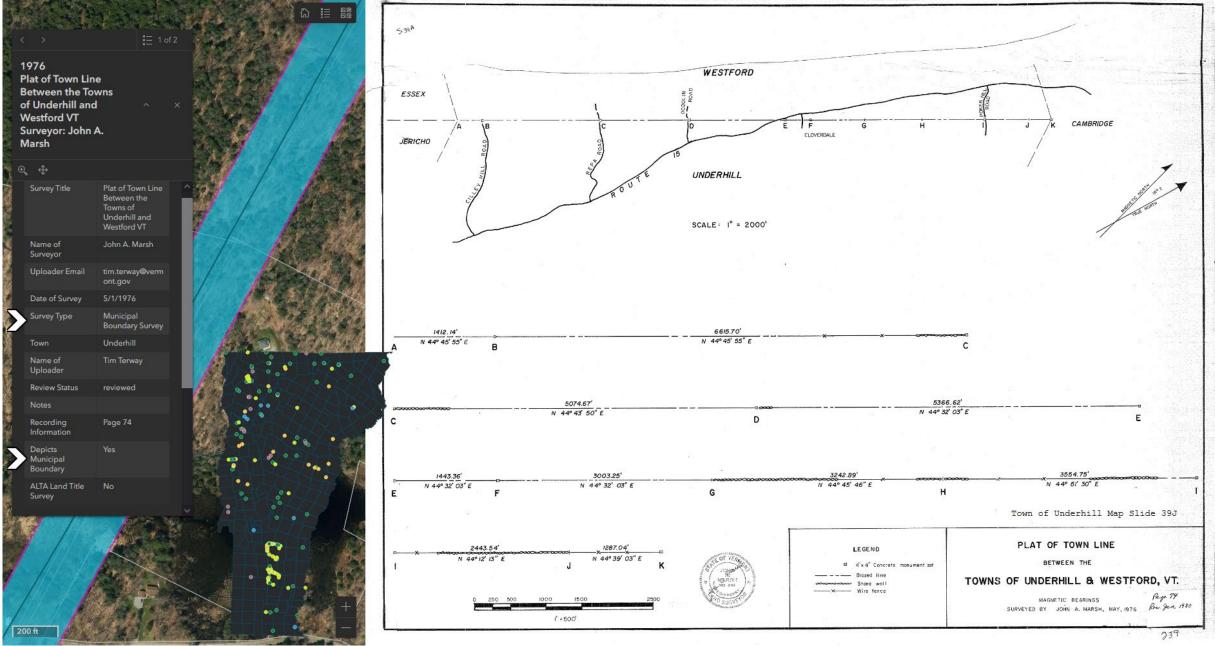






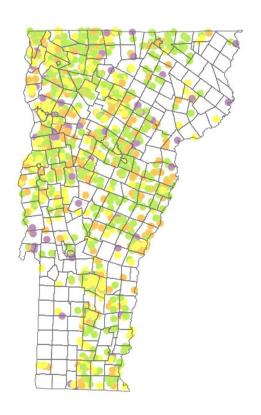














#### Digital Survey Plats

Effective January 1, 2020 and as stated in 27 V.S.A. § 341, surveys are required for property line changes in Vermont. Licensed land surveyors who produce the surveys are to submit a digital copy of them to the library in .pdf format (see 27 V.S.A. § 1401 and 27 V.S.A. § 1403).

The copies of surveys are for public reference only, with the signed and stamped mylars that

#### What is it?

The library consists of a web map that displays the general locations of .pdf copies of surveys produced by Vermont licensed land surveyors. For new surveys produced from January 1, 2020 onward, surveyors upload the .pdf copies to the map when the surveys are to be filed with the Town Clerk. The library's content is open to the public for viewing and reference.

#### Submit a Survey

Are you a Vermont licensed land surveyor completing a survey of a property line change on land in Vermont? Are you a town official with recorded surveys that you'd like to make available on a map? If yes to either, then use the survey library application linked from this page to submit a .pdf copy of these documents. Learn more about how and when to use the library in



### **Vermont Land Survey Library**

landsurvey.vermont.gov

- Added as requirement to State Statute, effective Jan. 1, 2020.
- Requires digital copies of surveys for all boundary line changes. Burden is on land surveyor to submit surveys set for recording. ~3,100 to date.
   Official docs reside with town. Ideal instead would be town officials / digital land records.
- While successful to a degree, ideal scenario would have staff and resources for compliance and enforcement to increase completeness, working with towns
- · Supported by Parcel Program staff





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8. Develop and Offer Updated Parcel Contract Guidance			•	•
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