



Vermont's Statewide Parcel Program

Municipal Parcel Data: Features, Improving Data Quality,
and the Future

ANR Municipal Day 2022

tim.terway@vermont.gov | October 28, 2022

Overview & Outline



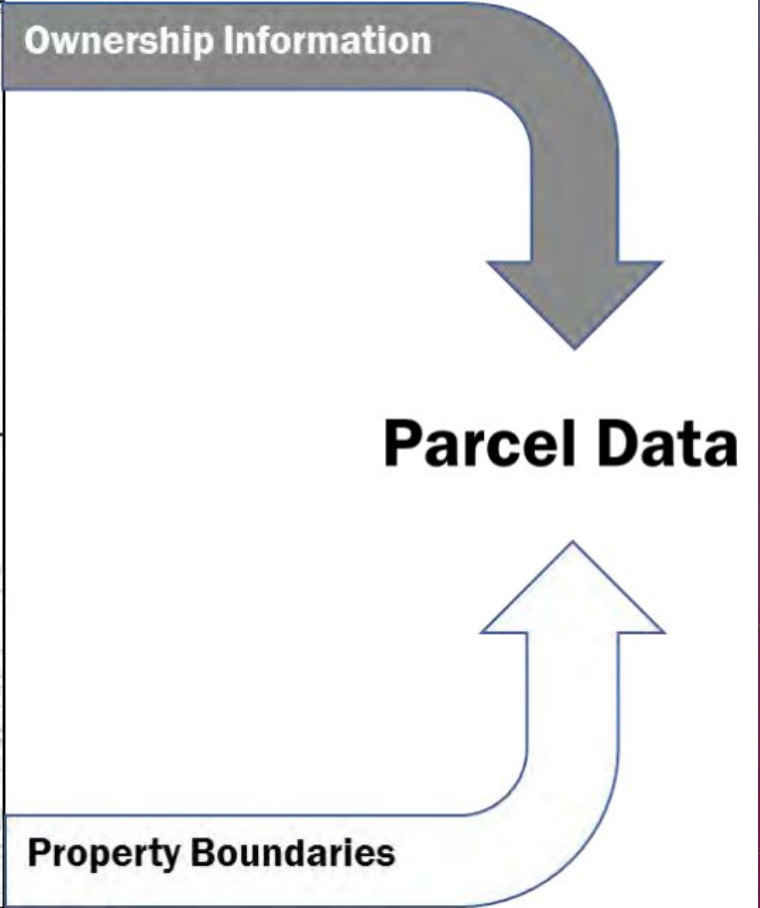
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○

- Status of Parcel Program
- Current and New Uses of Parcel Data
- Status of Municipal Parcels
- Reviewing Status and Quality
- Data Quality: Common Issues in Parcel Data

Parcel Data?

TNAME	SPAN	CAT	ACRESG - OWNER1	OWNER2	PARC#	DESCPROP	LOCAPROP	REAL_F	HSTED
Alburgh	900310411	Residential-1	5.5 STATE OF VERMONT		CP111-	LAND & HOUSE			25600
Alburgh	900312252	Miscellaneous	0 STATE OF VERMONT		CP111-X	LOT & HOUSE			116700
Bakersfield	2400710137	Commercial	1 STATE OF VERMONT		AGENCY OF TRANSP	MN0188, 1.0 AC	1.0 AC		62000
Bakersfield	2400710243	Residential-1	0.13 STATE OF VERMONT		AGENCY OF TRANSP	DMN019, 0.13 AC & DWL	0.13 AC & DWL		66300
Barnard	3000910809	Miscellaneous	66.79 VERMONT STATE		FISH & GAME	06-0935, VL-66.79	TH 9		69200
Barnard	3000910860	Miscellaneous	43.89 VERMONT STATE		FISH & GAME	06-0936, VL-43.89AC	TH 9		62900
Barnard	3000910861	Miscellaneous	11.48 VERMONT STATE		FISH & GAME	06-0937, VL-11.48AC	TH 9		18000
Barnard	3000910862	Miscellaneous	35.14 VERMONT STATE		DEPT OF PARKS & RE	01-0939, STATE CAMP PARK	TH 3		534300
Barnard	3000910864	Miscellaneous	2627 VERMONT STATE		FISH & GAME	07-0942, VL-2627AC	TH 26		2317700
Barnard	3000910896	Miscellaneous	81.03 VERMONT STATE		DEPT OF TRANSP	01-0930.1 SILVER LAKE	TOWN CENTER		120540
Barnard	3000910898	Miscellaneous	0.11 VERMONT STATE		DEPARTMENT OF PAI	01-0930.2 SILVER LAKE DAM	TH 3		2200
Barnard	3000910900	Miscellaneous	388.55 VERMONT STATE		FISH & GAME	07-0941, Exempt State	TH 26		431800
Barton	4201311501	Miscellaneous	0.47 STATE OF VERMONT		ENVIRONMENTAL CC	20306007, CRYSTAL LAKE DAM SITE			32700
Barton	4201311511	Miscellaneous	660 STATE OF VERMONT		AGENCY OF NATURAL	-9E+07 WILLOUGHBY SF - AX-932			581700
Barton	4201311512	Miscellaneous	0.83 STATE OF VERMONT		FISH AND WILDLIFE D	-9E+07 MAY POND ACCESS PUBLIC ACCESS			32600
Barton	4201311513	Miscellaneous	1.03 STATE OF VERMONT		FISH AND WILDLIFE D	-7E+07 BAKER POND ACCE-EAST ALBANY I			21000
Barton	4201311514	Miscellaneous	107.85 STATE OF VERMONT		FISH AND WILDLIFE D	-1.2E+08 PILOT - BARTON RIVER STREAMBA			83400
Barton	4201311515	Miscellaneous	27.5 STATE OF VERMONT		FISH AND WILDLIFE D	-9003003 X-941	X-941		36000
Barton	4201311517	Miscellaneous	71.2 STATE OF VERMONT		FISH AND WILDLIFE D	-1.9E+07 76.18 AC (PILOT FW X-943			29600
Barton	4201311518	Miscellaneous	0 STATE OF VERMONT		AGENCY OF TRANSP	08160106/RADIO STATION PEIX-945			51100
Barton	4201311519	Miscellaneous	0 STATE OF VERMONT		AGENCY OF TRANSP	08160106/FREIGHT HOUSE PEIX-944			141500
Barton	4201311520	Miscellaneous	4.3 STATE OF VERMONT		AGENCY OF TRANSP	-8.2E+07 VTRANS BLDGS VTRANS BLDG			511800
Barton	4201311860	Miscellaneous	0.51 STATE OF VERMONT		DEPT OF FOREST PAR	-1.2E+08 .51 acres - improved boating acces			176700
Belvidere	4801410234	Miscellaneous	34.5 STATE OF VERMONT		FOREST PARKS & REC	-4.002 34.5 ACRES			13400
Belvidere	4801410235	Woodland	828 STATE OF VERMONT		FORESTS PARKS & RE	-15 828 ACRES	TNC/KARBARR		927900



PROGRAM STATUS

Project: Early 2018 (~2012) – December 2019.

Fed/State Funded, One-Time.

Program: January 1, 2020 – Present

Muni. Funded, Ongoing Voluntary Participation

vcgi.vermont.gov/data-and-programs/parcel-program

Latest Publish:

338,552

Active Parcels

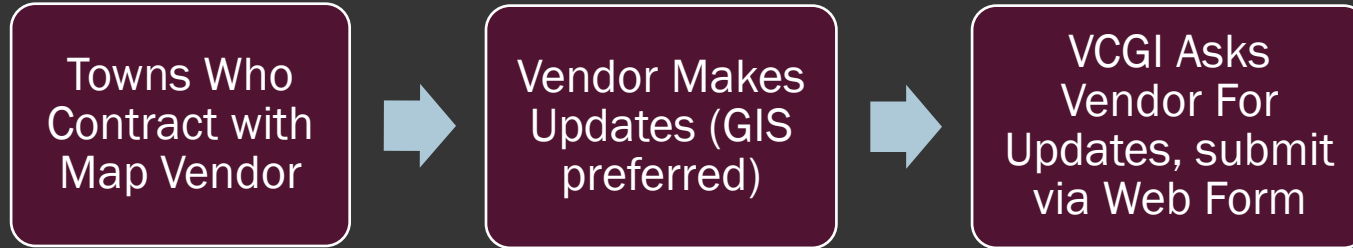
39,500

Inactive Parcels

“Shared Responsibility Model” : A Refresher on How the Program Works

VT TOWNS

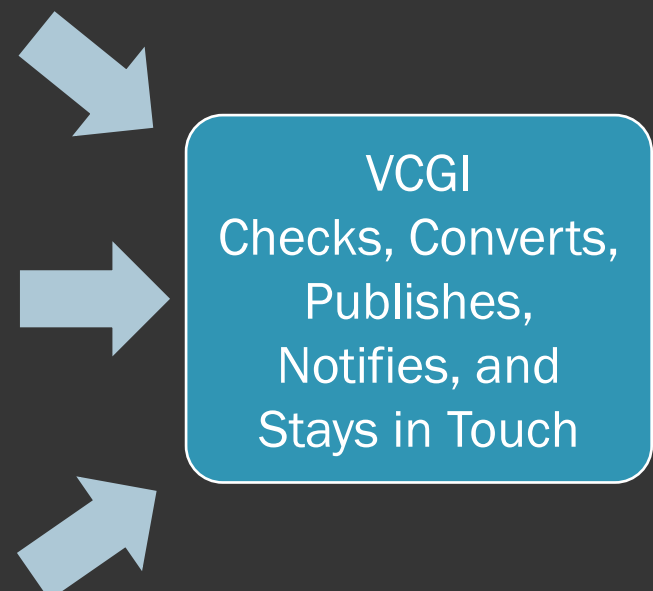
Type 1



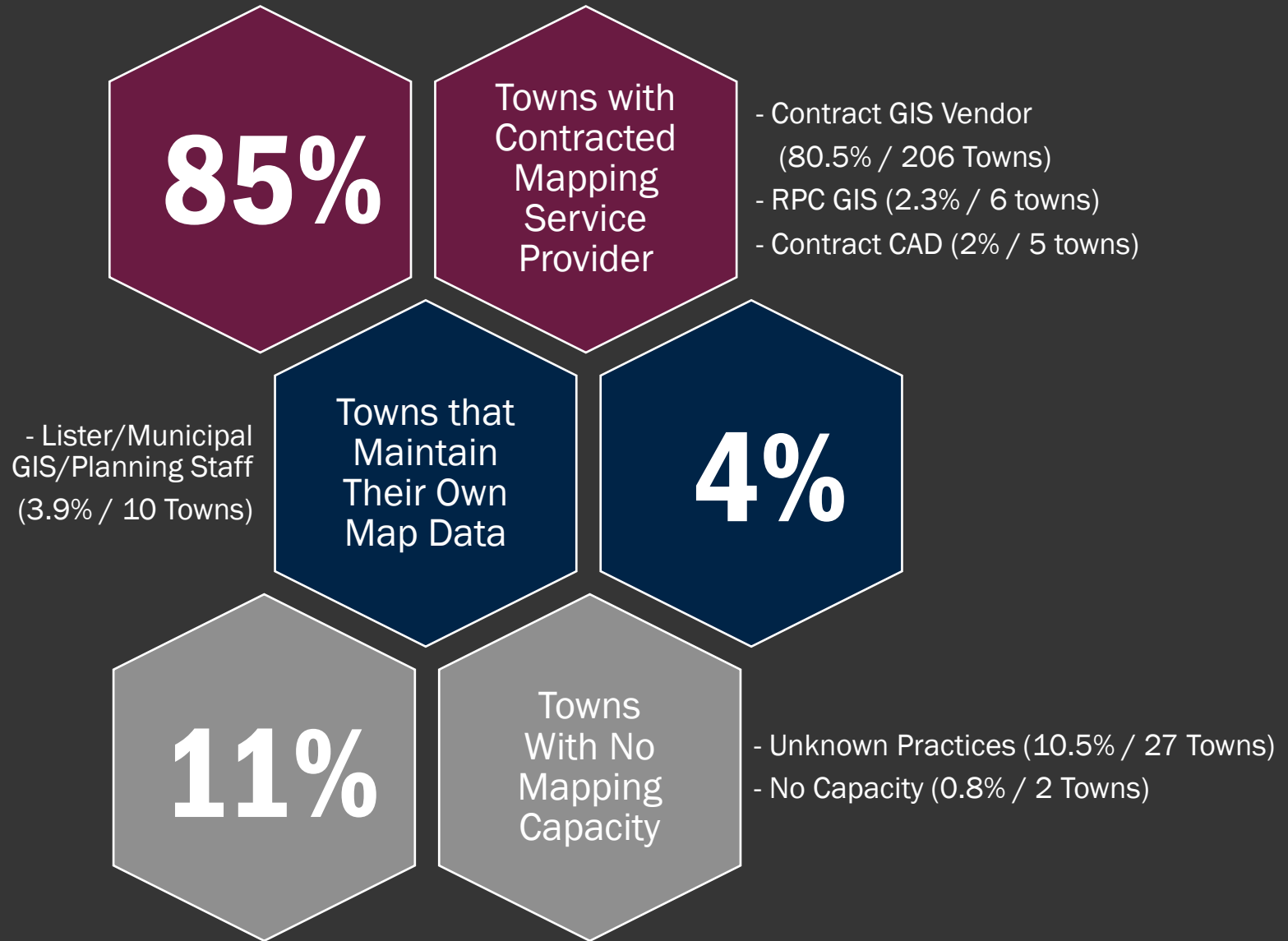
Type 2



Type 3



How are geometry maintained?



Practices Tracked Here, updated weekly:
maps.vcgi.vermont.gov/parcelstatus

Deja Vu?

funds to create digital parcel data had to follow the guidelines. Among other things, the guidelines request that municipal parcel maps be separated into three Arc/Info data layers in order to be compatible with the State GIS. The first layer is the "parcel" layer. This layer contains property boundaries and public road right-of-ways only. A second layer, "tax maps," contains all lines which are not actual property boundaries, but which appear on tax maps, such as streams and private right-of-ways. A third layer, "town boundaries," is simply the town boundary derived from the parcels.

Once the guidelines were established, the Center issued an RFP for contractors and selected five vendors that demonstrated the ability to meet the municipal property mapping standards. The Center then put participating towns in touch with contractors and assisted them in issuing RFPs and other facets of project management. By the end of the project, the state had provided funding to approximately 100 towns, covering about two-thirds of the state population, to generate digital parcel layers from their original paper tax maps. (See Figure 4.1)

Although the project has been very successful, several problems were encountered along the way. First, the quality of the towns' paper parcel maps varied a great deal. As a result the project took quite a while longer than initially expected. Second, the Center found that providing the full funding to the towns meant that many invested very little of their own time into the project, thus creating additional sources of delay. The Vermont Center for Geographic Information believes that towns should be asked to match state dollars as a way of increasing their investment in the timely outcome of the project. A third problem relates to maintenance of the data and is addressed in the following section.

Maintenance

At present the state has not provided funding for database maintenance, and each town carries the responsibility for maintaining and updating its parcel map database. Unfortunately, because updating is expensive, only some of the towns have dedicated the necessary financial resources to regular database maintenance. The hope is that towns, recognizing the immense value afforded by having a digital parcel map layer, will be able to generate the necessary maintenance revenue in the future.

Towns that do maintain their databases use a variety of methods to update their digital parcel data. Some municipalities have in-house GIS systems and continually update the parcel data on an as-needed basis. The sophistication of technology at a town or city could range from

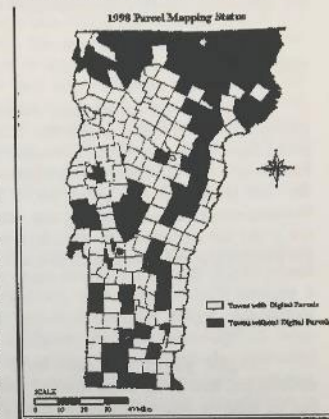


Fig. 4.1 Parcel Mapping Availability in Vermont (Courtesy of Vermont Center for Geographic Information)

“The hope is that towns, recognizing the immense value afforded by have a digital parcel map layer, will be able to generate the necessary maintenance revenue in the future.”

- Circa 1990's...

The background is an aerial map of a town, overlaid with a blue-to-purple gradient. The map shows streets, buildings, and a river. In the top-left and bottom-right corners, there are white geometric symbols: a plus sign (+), a circle with a dot inside (◉), and a circle with a dot inside (◉).

USES OF DATA

As of October 27, 2022

Current Uses of Parcel Data

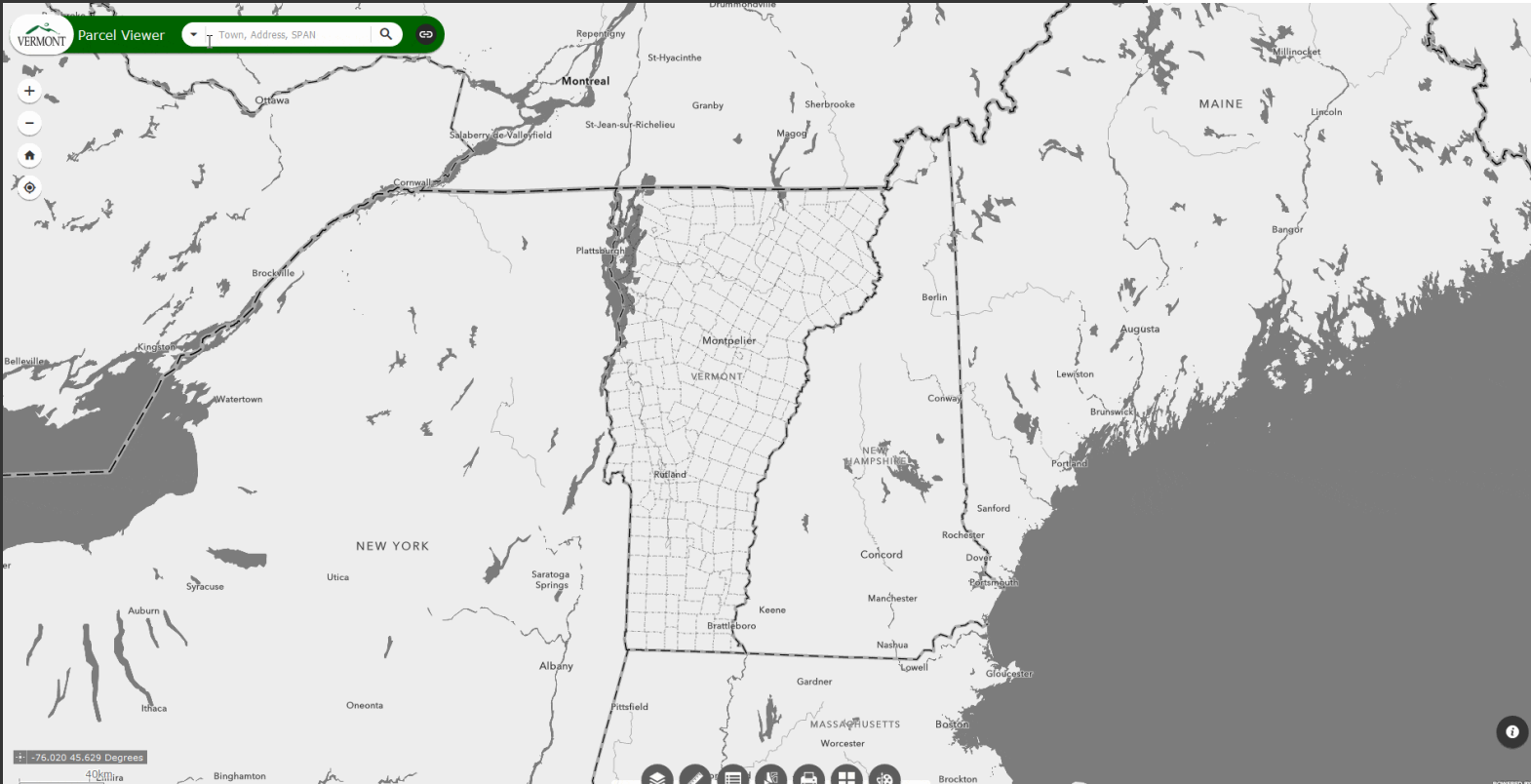
Home Gallery Map Scene Notebook Groups Content Organization

FS_VCGI_VTPARCELS_WM_NOCACHE_v2 Overview Data Visualization Usage Settings

Usage details for the period: **1 Year of Use**
October 27, 2021 - October 27, 2022 Past 12 Months

Requests this Period: **86,128,932**

Avg Requests Per Day: **235,969.68**



<https://maps.vcgi.vermont.gov/parcelviewer/>

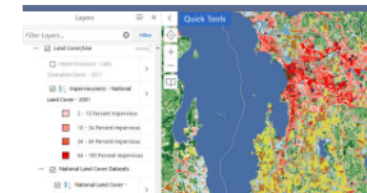
Dynamic mapping applications contain layers that are regularly updated while focusing on specific kinds of map information.

Themed mapping applications typically show one or a few kinds of content, usually at a snapshot in time. The data these applications show are static and are not guaranteed to be current or updated in the future.

Static Maps

[Vermont Municipalities Reference Map - 8.5"x11"](#)

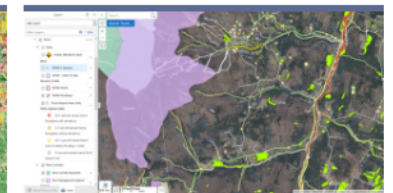
[Vermont Municipalities Reference Map with Hillshade - 8.5"x11"](#)



Vermont Interactive Map Viewer

Use the Vermont Interactive Map Viewer to create maps in your browser.

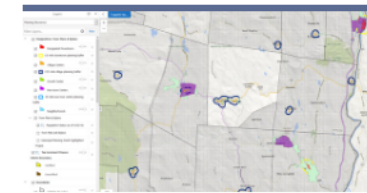
[LAUNCH MAP VIEWER](#)



ANR Atlas

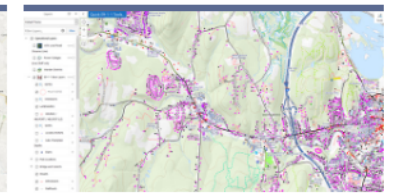
Use the Agency of Natural Resources' Atlas to create maps in your browser, with emphasis on pre-loaded layers overseen by ANR.

[LAUNCH MAP VIEWER](#)



Planning Atlas

Use the Department of Housing and Community



e-9-1-1 Viewer

Use the Enhanced 9-1-1 Board's Viewer to create

<https://vcgi.vermont.gov/maps>

Permit Navigator

- ✓ Getting Started
- 2 General Questions
- 3 Project Questions
- 4 Review / Download

General Questions

Disclaimer: The Permit Navigator Results Summary is based on the information provided, and is not intended as an official or binding permitting determination by the ANR. The Agency reserves the right to require additional permits and/or approvals depending on the specific details of the project.

Contact Information

First Name

Timothy

Last Name

Terway

Phone

(802) 585-0820

Email

tim.terway@vermont.gov

Address 1

8 Orange Street

Address 2

City

Barre

State

Vermont

Mailing Zip/Postal Code

05641

* Which category describes you?

Individual

* Please select the activity that best describes your project

Select an Option

Complete this field.

New Uses of Parcel Data

[ANR Permit
Navigator](#)

New Uses of Parcel Data

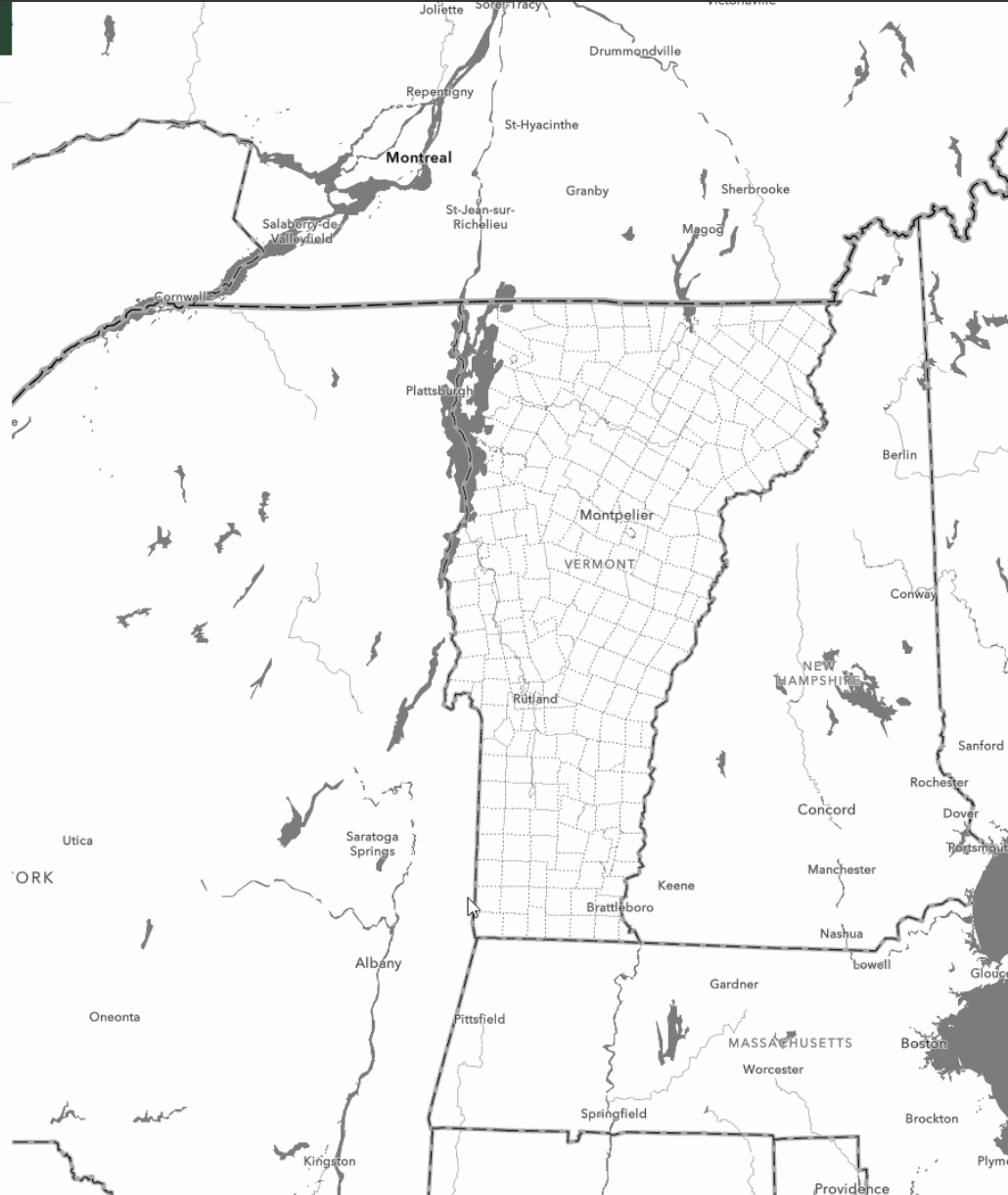
[Rental
Assistance
SPAN Finder](#)

SPAN Finder

Enter Address Here

Enter an address in the search bar to find the School Property Account Number (SPAN) number of a property.

If you are having trouble finding the correct SPAN, please contact your landlord and ask for the SPAN number of the property you are renting. This number can be found on their property tax bill.

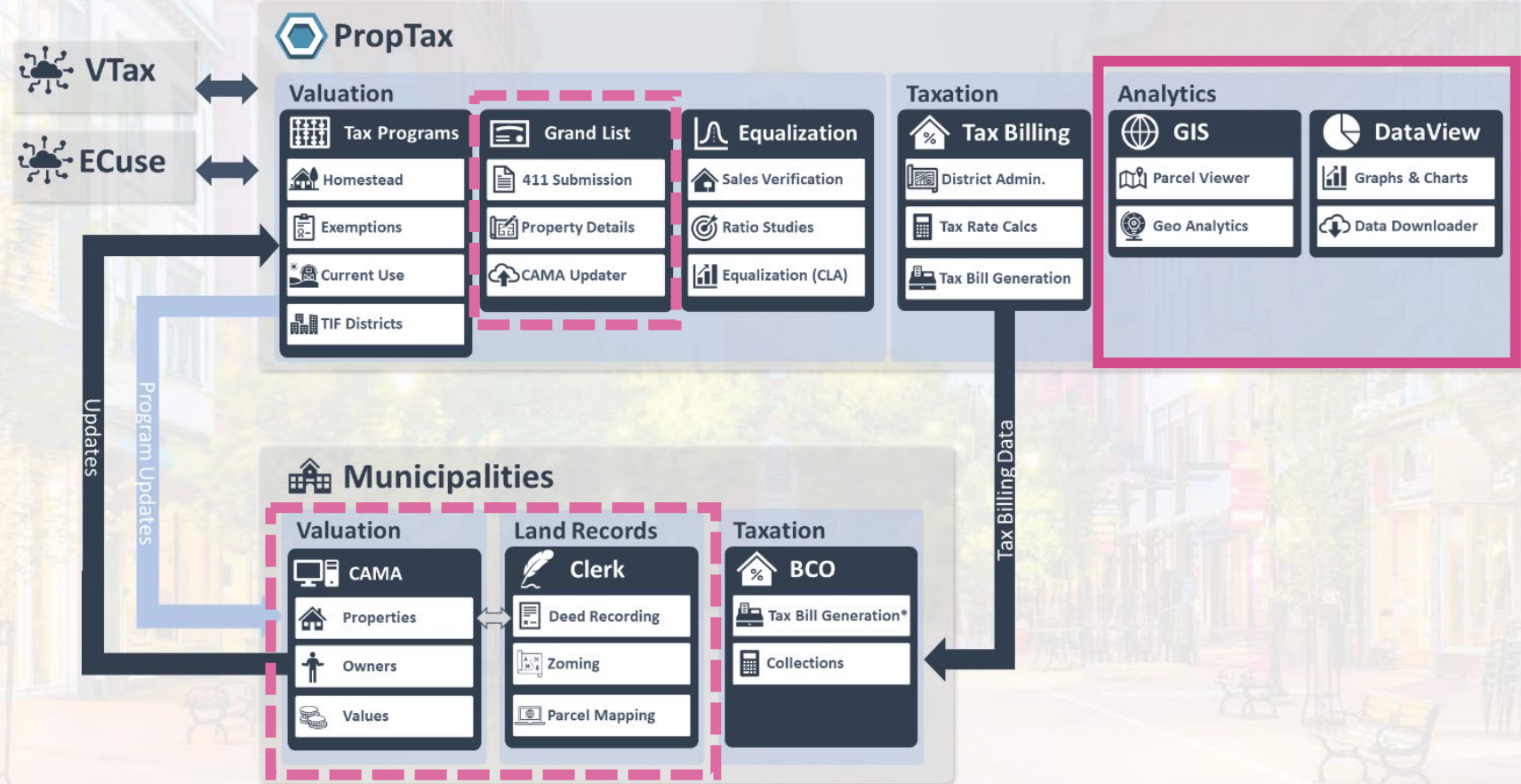


The map displays the state of Vermont with a grid overlay representing school districts. Labeled districts include Montreal, St-Hyacinthe, Granby, Sherbrooke, Magog, St-Jean-sur-Richelieu, Plattsburgh, Rutland, Montpelier, and Brattleboro. Surrounding areas in Quebec, Canada (e.g., Joliette, Drummondville, Repentigny, Salaberry-de-Valleyfield, Cornwall) and New Hampshire, USA (e.g., Concord, Dover, Manchester, Nashua, Lowell, Gardner, Worcester, Springfield, Pittsfield, Brattleboro, Keene) are also labeled. The state name 'VERMONT' is prominently displayed in the center of the map.

New Uses of Parcel Data

[VT Property
Information
Exchange](#)

FUTURE STATE VALUATION & TAXATION



New Uses of Parcel Data

[VT Property Information Exchange](#)

VT PIE Dashboard

County: Town: Year:

Total Parcels
342,262

Homestead Parcels
167,977

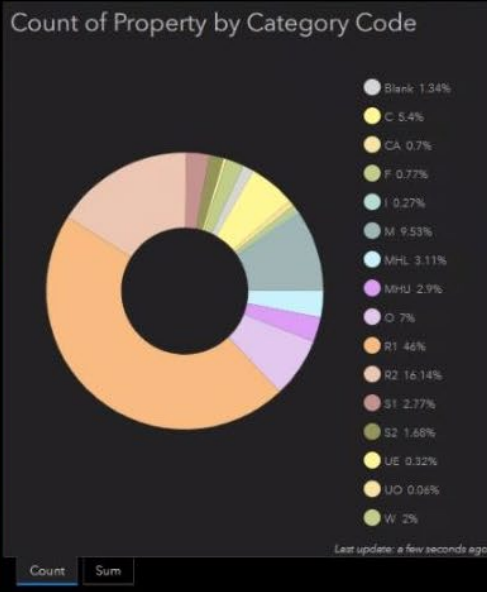
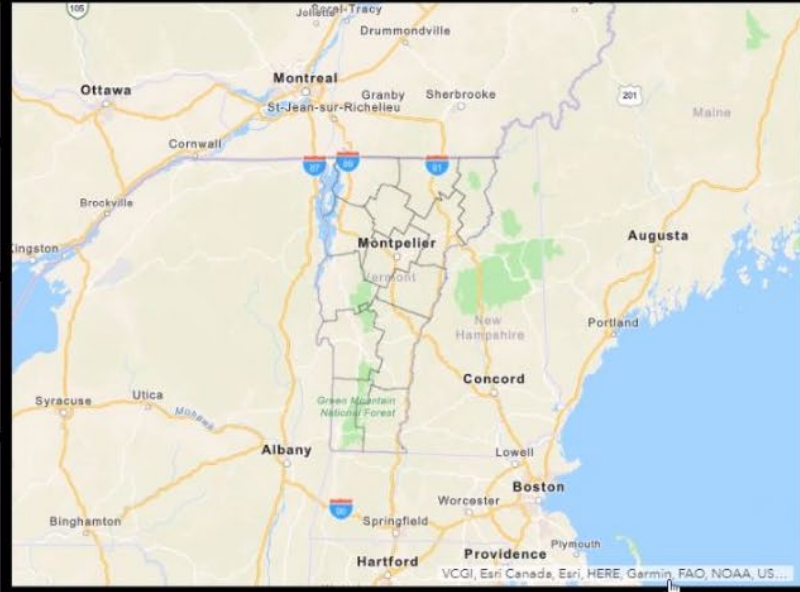
Non-Res Parcels
174,285

Current Use Parcels
19,365

Full Value (All Parcels)
101.28B
4.93% Increase

Full Value (Hstd. Parcels)
41.34B
2.58% Increase

Full Value (Non Res Parcels)
59.94B
6.62% Increase



New Uses of Parcel Data: Review of Unmatched Parcels

[Learn More Here.](#)

Vermont Parcel Program Town Mapping Status

Search and Select a Town: Statewide

Active Parcels | Most Recent Publish
336,964

August Inactive Parcels | Most Recent Publish
40,065

Unmatched Active Parcels | Most Recent Publish
8,161

Grand List Unmatched Active Parcels

Select a town at top right. Then select one or more records to locate them on the map. More than one record can be selected by holding control key. Unclick record(s) to deselect.

Selection required on one or more elements

GIS Recency and Status | Town Mapping Capacity | **Town Match Status** | Town Mapping Practices | Map

Powered by Esri

Select a town from the drop down menu above.
Select town information below to isolate it on the map.

Addison

Published GIS Date	2022-01-20
Current Map Capacity	Contract GIS Vendor
Current Vendor	CAI
Update Month if Known	
Update Frequency if Known	Annual
Contract Length	
Next Estimated GIS Update	
Status Last Updated	3/5/2021
Most Recent Geometry Submittal	2021-09-08
Submittal Reviewed by Town	No
Submitting Entity	CAI
Submitted By	
Submission ID	Addison 2021-09-08T13:13:24.000Z
Regional Planning Commission	Addison County Regional Planning Commission
Published GIS Notes	
Parcel Project (2017-19) Vendor	CAI

All Towns Currently Joined With
2020
Statewide Grand List
*Statewide grand list represents the owner on record on April 1
Status Last Updated: 2022-02-16
Status updated weekly.

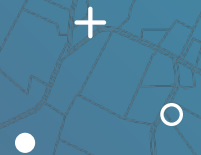


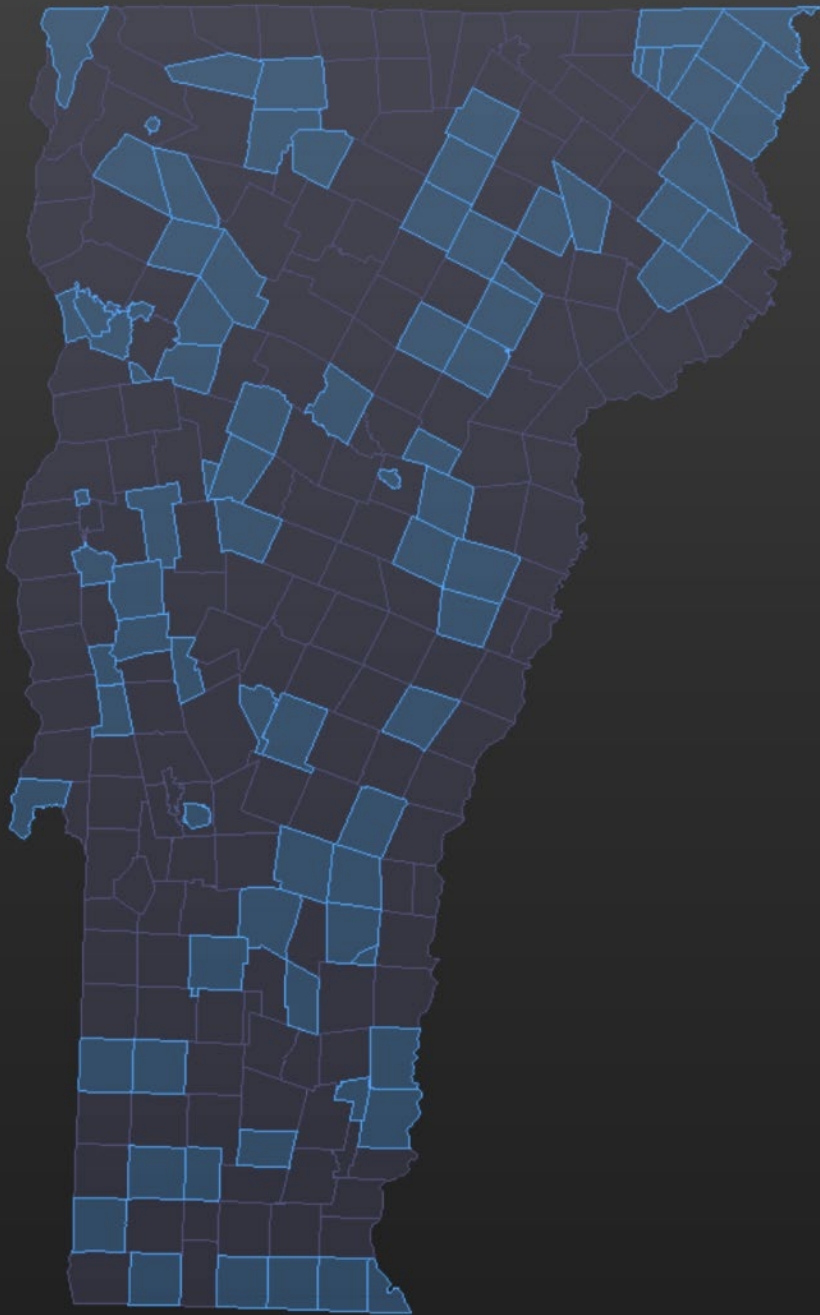
MAPPING STATUS

Town Updates Received
Geometry Revisions and Maintenance

vcgi.vermont.gov/data-and-programs/parcel-program

As of October 27, 2022





Who has sent updates?

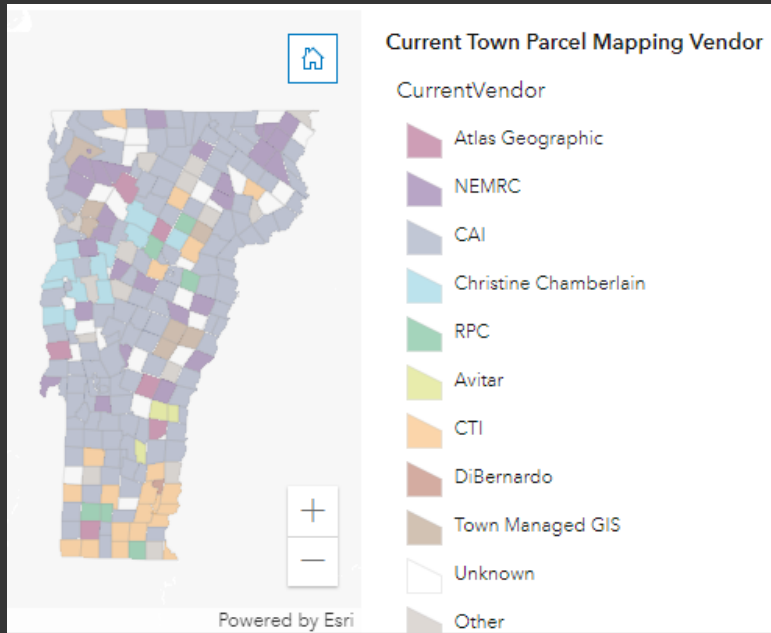
1 Town	5 submittals	>1% of All Towns
5 Towns	4 submittals	2% of All Towns
41 Towns	3 submittals	16% of All Towns
55 Towns	2 submittals	21% of All Towns
68 Towns	1 submittal	27% of All Towns
86 Towns	0 submittals	34% of All Towns

170 (66%) Towns Have Submitted Updates

86 (34%) Towns Have Not

Since beginning of program on January 1, 2020,
as of Oct. 27, 2022

Who has sent updates?



10 Non-VCGI Updating Entities - 326 Submittals Total (156 Towns Submitted >1)

Updating Entity	Total Submittals	
CAI	233	(71%)
CTI	41	(13%)
Christine Chamberlain Mapping	21	(6%)
NEMRC	11	(3%)
Town Managed GIS	6	(2%)
Town Managed Lister	6	(2%)
Atlas Geographic	5	(2%)
VHB	1	(<1%)
John Deleo	1	(<1%)
Avitar	1	(<1%)

170 Currently Published Town Submittals (Non-VCGI Update)

Updating Entity	Published Towns	
CAI	116	(68%)
CTI	18	(11%)
Christine Chamberlain Mapping	12	(7%)
NEMRC	10	(6%)
Atlas Geographic	4	(2%)
Town Managed GIS	4	(2%)
Town Managed Lister	3	(2%)
VHB	1	(<1%)
John Deleo	1	(<1%)
Avitar	1	(<1%)

Since beginning of program on January 1, 2020, as of Oct. 27, 2022



**Who
hasn't?**

86 Towns No Submitted GIS Updates Total

Vendor as Known	Outstanding Towns	
Unknown	28	(33%)
NEMRC	19	(22%)
CAI	9	(10%)
RPC	6	(7%)
CTI	4	(5%)
Town Managed GIS	3	(3%)
Avitar	2	(2%)
Main Street GIS (now CAI)	3	(3%)
Christine Chamberlain	1	(1%)
None	1	(2%)
Town Managed Lister	2	(2%)
DiBernardo	1	(1%)
Brow Survey and Engineering	1	(1%)
Landvest	1	(1%)
LaRose Survey	1	(1%)
CDM Smith	1	(1%)
Atlas Geographic	1	(1%)

Since beginning of program on January 1, 2020, as of Oct. 27, 2022



86 Towns No Submitted GIS Updates Total

VCGI-updated Towns (37) → 49 towns total not GIS updated

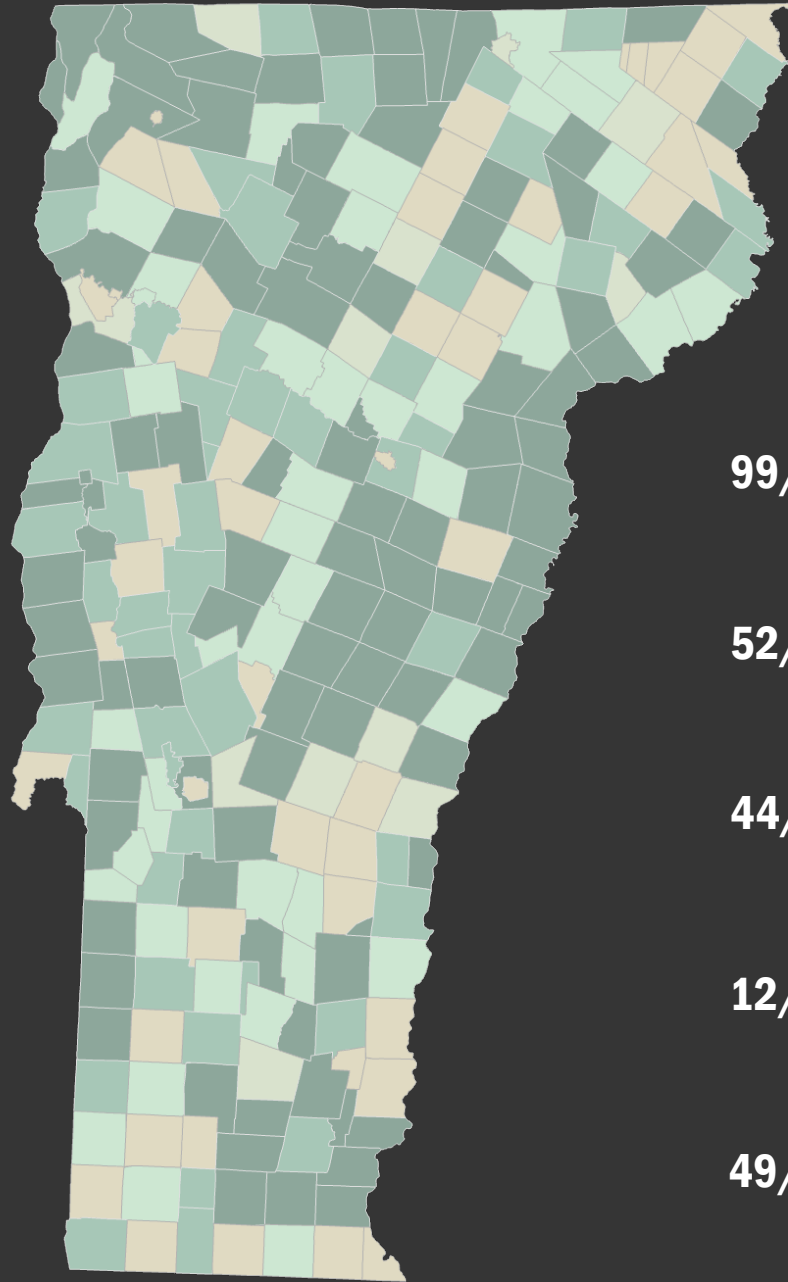
Vendor as Known	Outstanding Towns	
Unknown	28	(33%)
NEMRC	19	(22%)
CAI	9	(10%)
RPC	6	(7%)
CTI	4	(5%)
Town Managed GIS	3	(3%)
Avitar	2	(2%)
Main Street GIS (now CAI)	3	(3%)
Christine Chamberlain	1	(1%)
None	1	(2%)
Town Managed Lister	2	(2%)
DiBernardo	1	(1%)
Brow Survey and Engineering	1	(1%)
Landvest	1	(1%)
LaRose Survey	1	(1%)
CDM Smith	1	(1%)
Atlas Geographic	1	(1%)

Since beginning of program on January 1, 2020, as of Oct. 27, 2022

How recent are geometry?

as of Oct. 27, 2022

2022	139 Towns	54%	} 74%
2021	51 Towns	20%	
2020	15 Towns	6%	} 26%
2019	31 Towns	12%	
2018	20 Towns	8%	



99/39% Updated within last 6 months

52/20% Updated 6–12 months ago

44/17% Updated 1–2 years ago

12/5% Updated 2–3 years ago

49/19% Updated over 3 years ago

as of Oct. 27, 2022

How recent are geometry?



as of Oct. 27, 2022

253/99%

Not in publishing queue

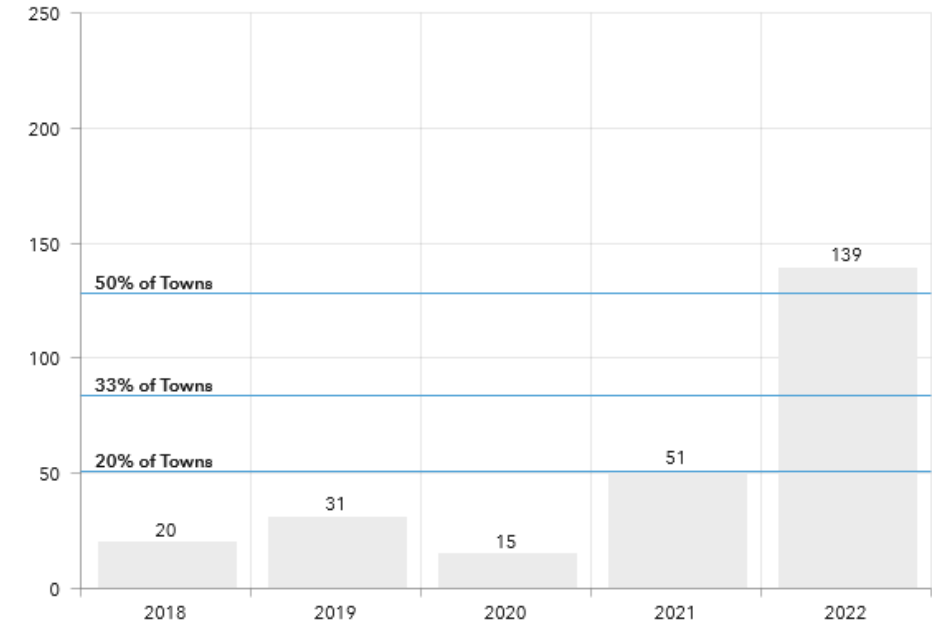
3/1%

In publishing queue

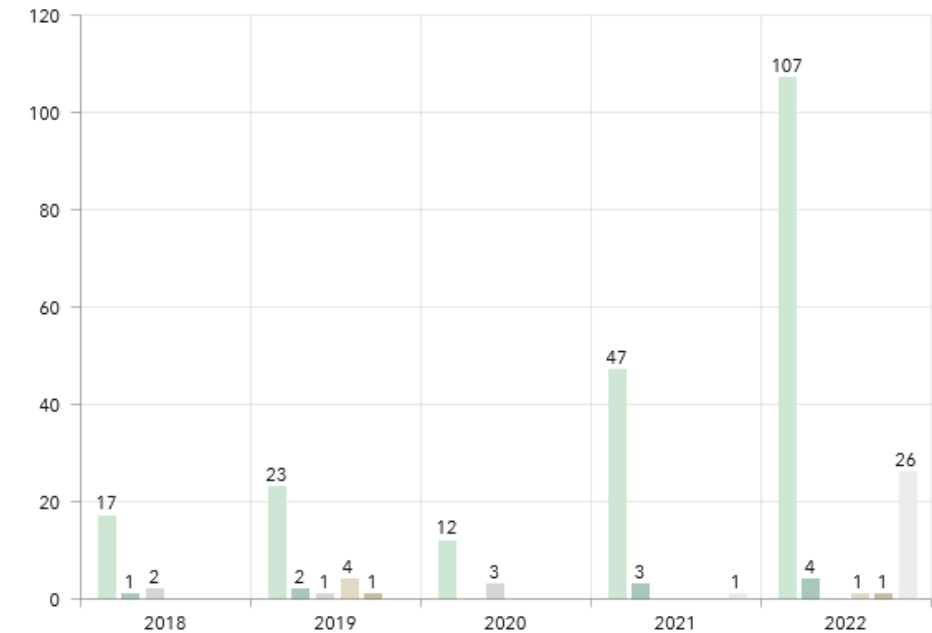


- GIS Vendor
- Maintain Own GIS
- No Capacity
- RPC
- Unknown (VCGI Update)
- CAD Vendor

Most Recent Published Town GIS Updates by Year



Most Recent Published Town GIS Updates by Year by Known Map Capacity



How are geometry maintained?

Vermont Parcel Program Town Mapping Status

Search and Select a Town: **Statewide**

VERMONT
VERMONT CENTER FOR GEOGRAPHIC INFORMATION

This tool displays information about the best available parcel data that VCGI has received from each Vermont municipality, their date of most recent receipt and ultimate publish, submitting entity information, and overall known parcel mapping practices. It is refreshed weekly.

Use the [Vermont Parcel Viewer](#) to view these data in your browser.

Parcel data in GIS format are freely available [here](#).

For Town Officials
Spot incorrect or out-of-date info? Please contact VCGI and we'll update your town's information, Parcel mapping guidelines and contract guidance resources are also available.

For Map Vendors
Parcel data submissions should sent via the Parcel Data Submission Form from the [Share Map Data](#) page at [vcgi.vermont.gov](#). Further questions? See these [FAQ's](#), or contact VCGI.

For Property Owners
Spot errors in parcel data? Issues should be brought to the attention of the respective Town Clerk and officials. But before you do, be sure to understand what parcel data are and are not, how they are maintained and updated, and answers to frequently asked questions.

Statewide Parcel Program Info
Learn more about the program [here](#).

View answers to [Frequently Asked Questions](#) about Vermont municipal parcel data.

GIS Update Recency

Legend:

- Avery's Gore: 2-3 Years Old
- Bakersfield: 2-3 Years Old
- Baltimore: 1-2 Years Old
- Barnard: Less than 6 Months Old
- Barnet: 6-12 Months Old
- Berre Chy: 2-3 Years Old
- Barre Town: 1-2 Years Old
- Barton: Less than 6 Months Old
- Belvidere: Less than 6 Months Old
- Berrington: More than 3 Years Old
- Benson: 2-3 Years Old
- Berkshire: 2-3 Years Old
- Berlin: Less than 6 Months Old
- Berthel: More than 3 Years Old

Publishing Review Status

Legend:

- In Publishing Queue
- Not in Publishing Queue

Selected Town: **Addison** Not in Publishing Queue

Addison

Select a town from the drop down menu above. Select town information below to isolate it on the map.

Published GIS Date	2019-06-17
Current Map Capacity	Contract GIS Vendor
Current Vendor	CAI
Update Month if Known	
Update Frequency if Known	Annual
Contract Length	
Next Estimated GIS Update	
Status Last Updated	3/3/2021
Most Recent Geometry Submittal	
Submittal Reviewed by Town	
Submitting Entity	
Submitted By	
Submission ID	
Regional Planning Commission	Addison County Regional Planning Commission
Published GIS Notes	

All Towns Currently Joined With
2019
Statewide Grand List


Status Last Updated: 2021-03-24

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VCGI, Esri, Canexa, Esri, HERE, Garmin, FAO, NOAA, USGS, EPA, NPS

GIS Recency and Status | Town Mapping Capacity | Town Mapping Practices

Practices tracked and updated weekly at:
maps.vcgi.vermont.gov/parcelstatus

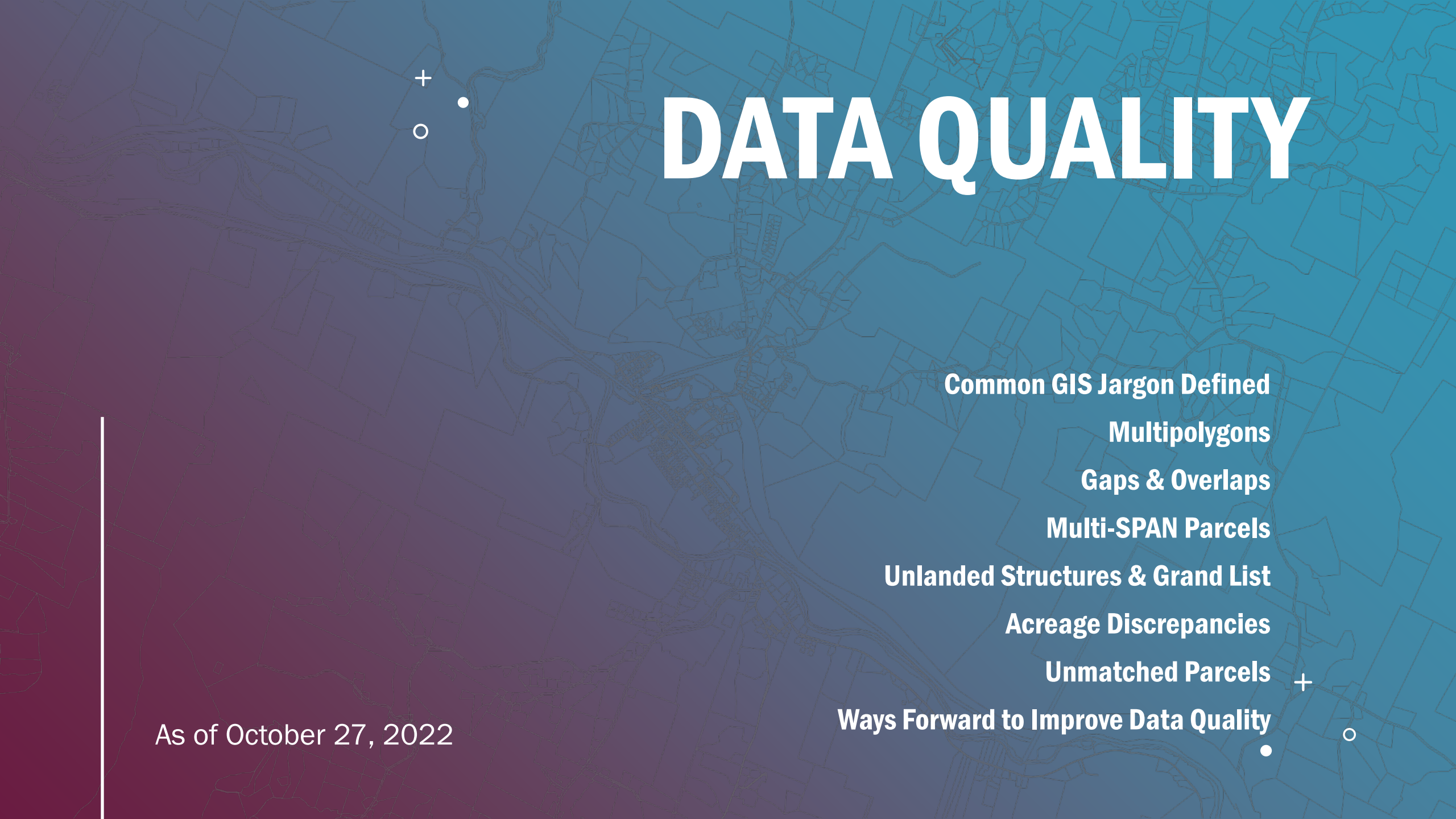
The background is a map of Vermont with parcel boundaries overlaid. The map is semi-transparent and has a blue-to-purple gradient. In the top-left and bottom-right corners, there are white navigation icons: a plus sign, a circle with a dot inside, and a circle with a dot inside. A white vertical line is on the left side of the image.

DEMO: PARCEL STATUS APP

<https://maps.vcgi.vermont.gov/parcelstatus/>

How-To:

<https://vcgi.vermont.gov/how/improving-parcel-data-quality-reviewing-match-status>



DATA QUALITY

Common GIS Jargon Defined

Multipolygons

Gaps & Overlaps

Multi-SPAN Parcels

Unlanded Structures & Grand List

Acreage Discrepancies

Unmatched Parcels

Ways Forward to Improve Data Quality

As of October 27, 2022

Common GIS Jargon Defined

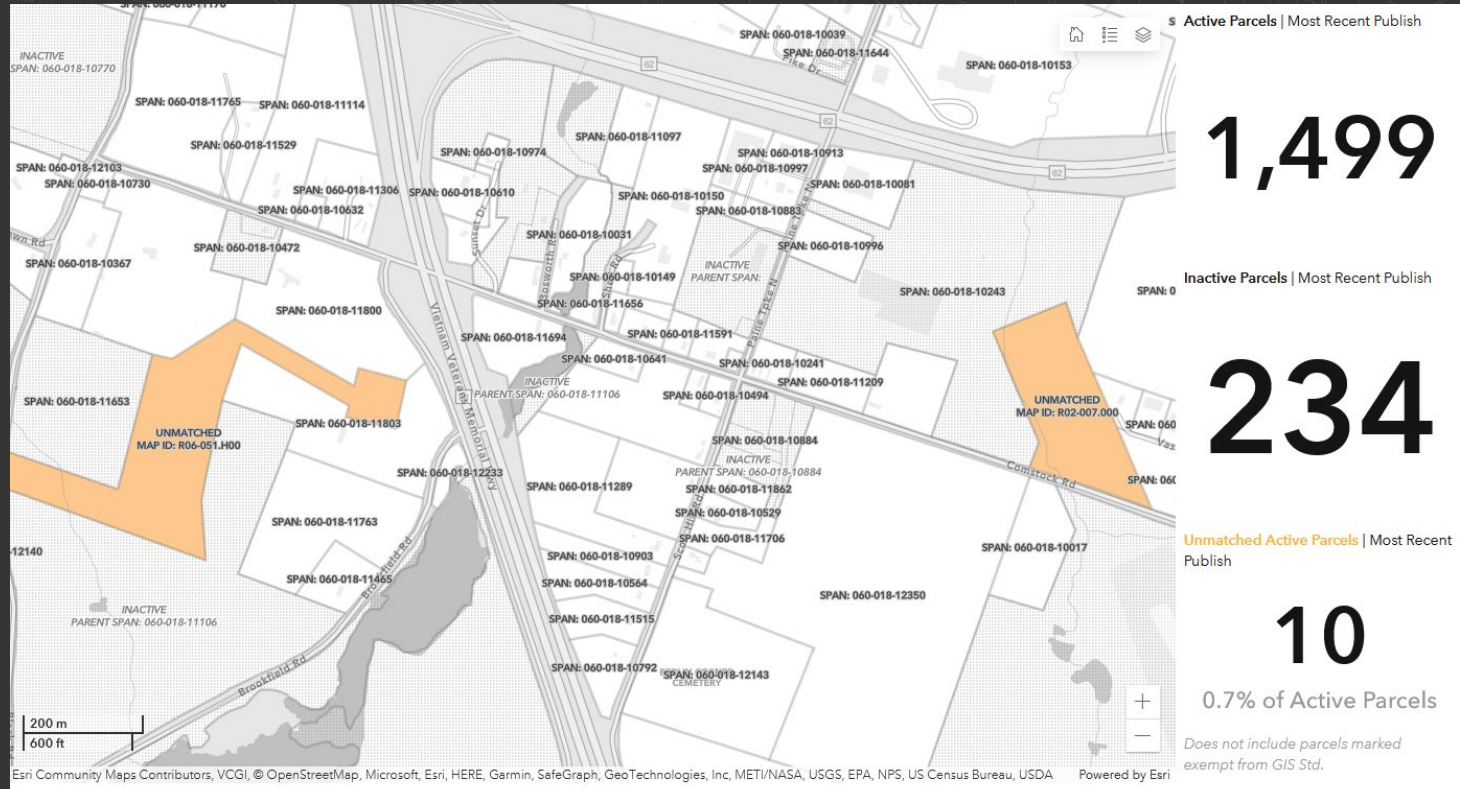
Attribute: A piece of information related with a map feature, listed in a table

Feature: A point, line, or polygon item on the map

Polygon: A multi-sided area shape

Symbology: Style and colors of map features

Unmatched Parcels



Addressing the Issue:
Municipal parcel data stewards should review digital map updates with their map vendor/maintainer to check for any inadvertently unmatched or misclassified parcels before their submittal to VCGI for publishing + after to catch next time.

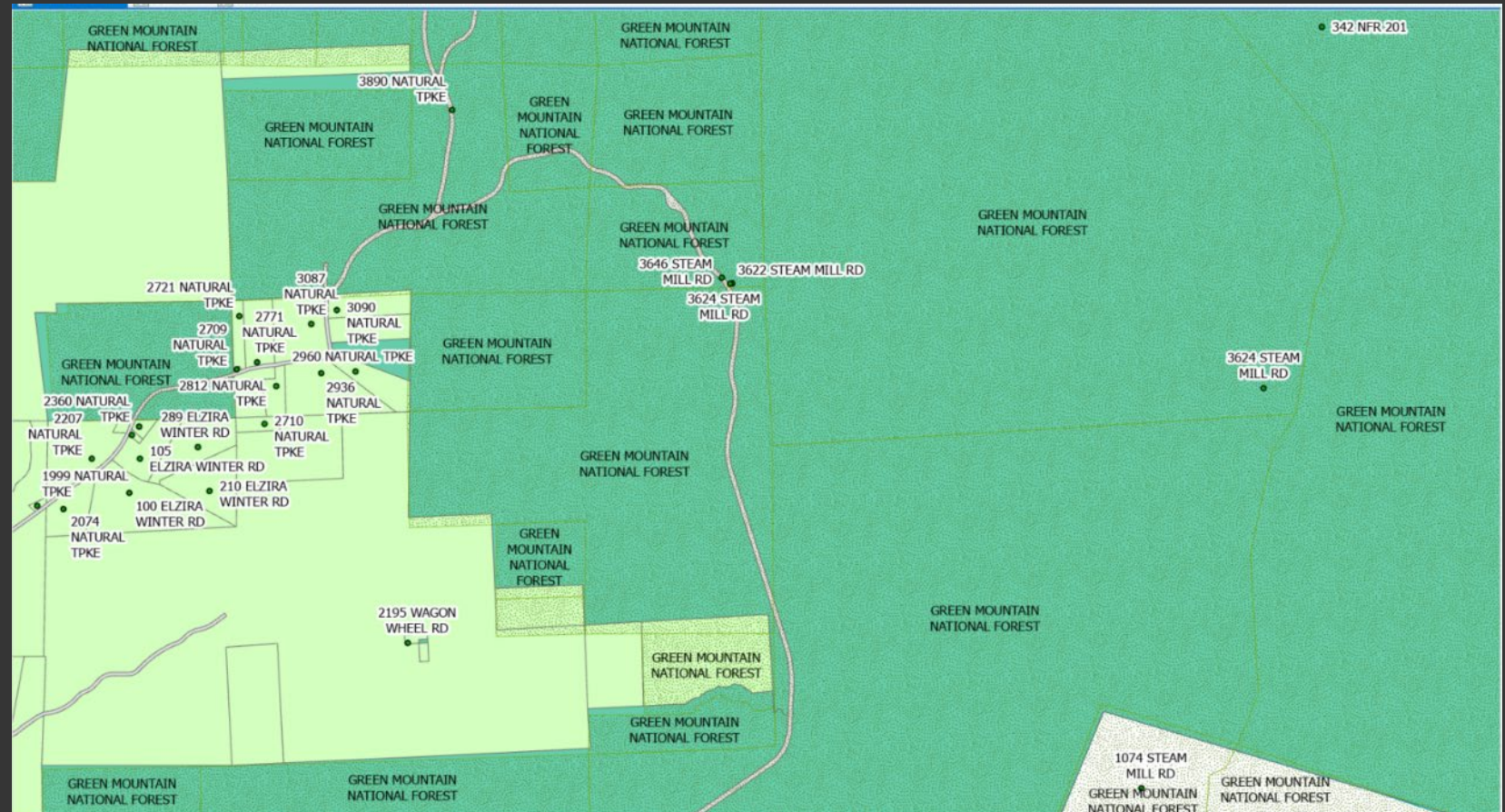
Grand List Unmatched or Exempt from GIS Standard Active Parcels
Select a town at top right to filter by town. Then select a record to locate it on the map. Unclick record(s) to deselect.

TOWN	GIS SPAN	Grand List SPAN	MAPID	PARCEL ID	PROPTYPE	MATCHSTAT
BERLIN			R01-022.COM		PARCEL	UNMATCHED
BERLIN			R09-010.000		PARCEL	UNMATCHED
BERLIN			U04-027.A00		PARCEL	UNMATCHED
BERLIN			R11-078.000		PARCEL	UNMATCHED
BERLIN			R06-051.H00		PARCEL	UNMATCHED
BERLIN			No Number		PARCEL	UNMATCHED
BERLIN			U03-018.000		PARCEL	UNMATCHED

Unmatched Parcels

Unmatched parcels that are conserved lands such as the Green Mountain National Forest.

Addressing the Issue:
All "PARCEL" PROTOTYPE parcels should have a SPAN.



Multipolygons

VT Parcels - polygons (Standardized) - <Null>

OBJECTID	9697814
GIS SPAN	705-224-10537
Grand List SPAN	705-224-10537
MAPID	04-01-01.000
Parcel ID	140101-
PROPTYPE	PARCEL
GIS Year	2017
Grand List Year	2019
TOWN	WEATHERSFIELD
Grand-List Town-Name	Weathersfield
SOURCENAME	<Null>
SOURCETYPE	UNKNOWN
SOURCEDATE	UNKNOWN
EDITMETHOD	UNKNOWN
EDITOR	UNKNOWN
EDITDATE	UNKNOWN
MATCHSTAT	MATCH
EDITNOTE	UNKNOWN
Owner Name 1	FOLEY RHONDA & THOMAS H
Owner Name 2	FOLEY MARK A
Mailing Address 1	721 LITTLE ASCUTNEY RD
Mailing Address 2	<Null>
Mailing Address City	PERKINSVILLE
Mailing Address State	VT
Mailing Address Zip	05151-9801
Property Description	LAND & BUILDING
Location	<Null>
Category (Real Estate only)	Residential-2
Resident Ownership Code	T
Total Acres	5.9
Listed Real Value (Full)	138500

Image 1

SPAN	YEAR	TOWN	EDITOR	EDITDATE	MATCHSTAT	EDITNOTE
1	705-224-10537	2021	WEATHERSFIELD	UNKNOWN	UNKNOWN	MATCH
2	<Null>	2021	WEATHERSFIELD	VCGI	20220315	UNMATCHED Separated non-adjacent multipolygon.

Image 2

State statute defines a **parcel** as "all contiguous land in the same ownership, together with all improvements thereon" (32 V.S.A. § 4152(a)(3)). Though not specifically stated above, the accepted interpretation is that division of a tract by a road does not create two parcels (multi-part parcels, non-contiguous parcels, or **multipolygons**).

- Multipolygons are OK if they are split by an "exempt" feature such as a road or body of water.
- **Addressing the Issue:** check for multipolygons that are geographically very far away, they're often erroneous.

Gaps & Overlaps



Image 1

Addressing the Issue: Review with vendor/Check if there are any gaps between features or if any features are overlapping. Here, we've identified a gap present in Saint Albans Town parcel data.

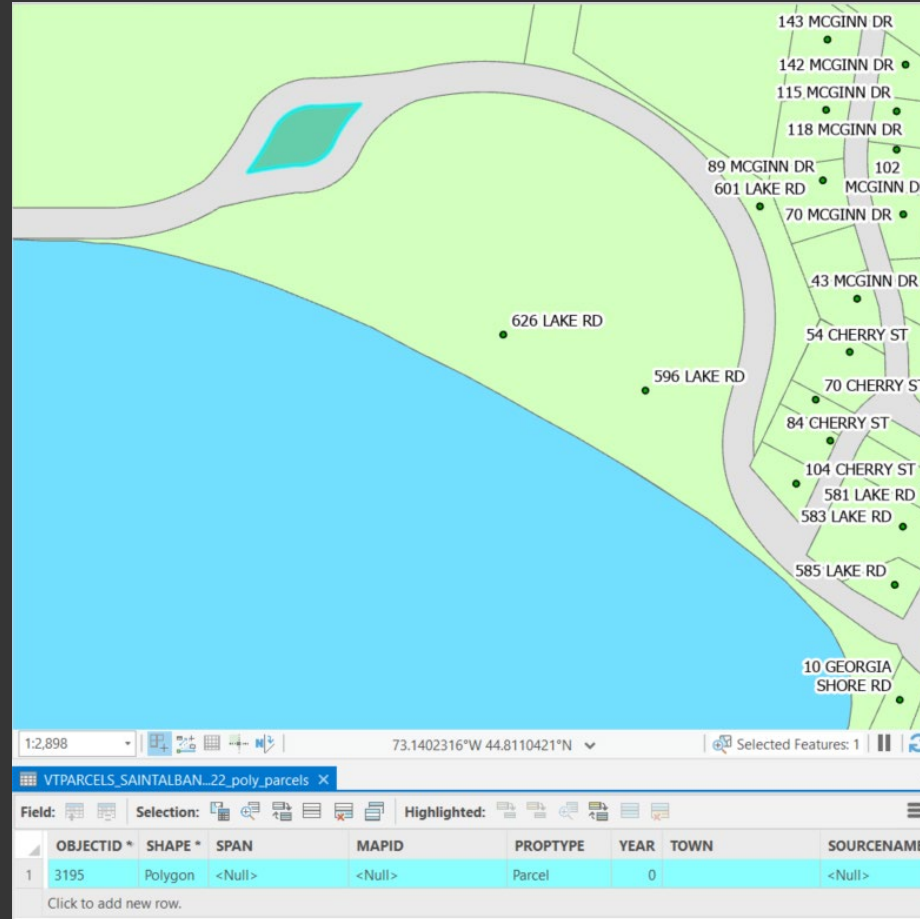


Image 2

Create new feature to fill gap which created a new row in the attribute table.

Edit attribute table fields to match existing features.

New features are usually left **unmatched** (without a valid SPAN in the Grand List).

OBJECTID *	SHAPE *	SPAN	MAPID	PROPTYPE	YEAR	TOWN	SOURCENAME
1	3195	Polygon	<Null>	<Null>	Parcel	0	<Null>

Multi-SPAN Parcels

Condos / Common Interest Ownership in Concept

By definition, there is common property involved in condominium ownership, and in property subject to the Uniform Common Interest Ownership Act (UCIOA) contained in Title 27A of the Vermont Statutes Annotated. The assessment of each unit must include the value of that unit's percentage of undivided interest in the common areas and common facilities. [27 V.S.A. § 1322](#) and [27A V.S.A. § 1-105](#).

As an example, in a 100-unit condominium where each was purchased with an undivided interest in the common land, the grand list would have 100 parcels, each including 1% interest in the common property. The building, the land and any of the common areas and facilities are not to be separately listed.

Multi-SPAN Parcels

Visualization

Multi-SPAN parcels are almost always associated with **unlanded structures** such as a condos, mobile home parks, seasonal camps, solar farms, etc.

Addressing the Issue: **Building footprints** are used to distinguish between the unlanded structures and the common land. Not ideal; instead use entire parcel as “stacked” polygons...but with caveat on next slide.

(When no building footprints are used, all relevant SPANs will be associated with the entire polygon including the common land, as it should be per definition of portion stake in common land.)



Image 1



Image 2

Building footprints

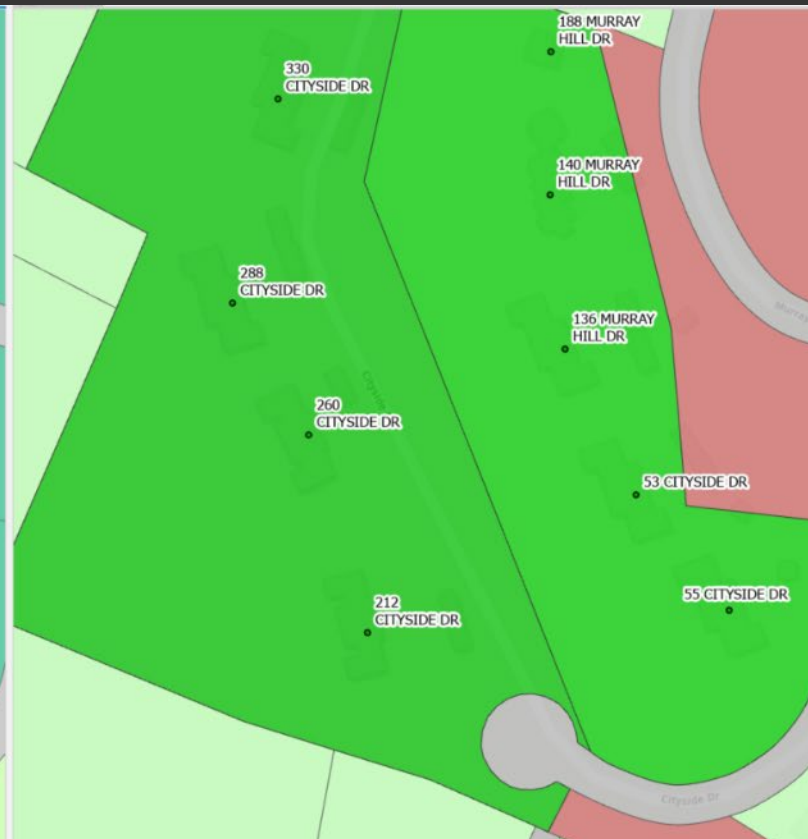


Image 3

No building footprints

Multi-SPAN Parcels

Attribution

When no building footprints are used, all relevant SPANs will be associated with the entire polygon, creating a challenge as every parcel gets one SPAN in the attribute table.

Addressing the Issue: The Intersection Table is used to relate one "placeholder" SPAN in the attribute table to several SPANs in the Grand List.

attribute table

OBJECTID	SHAPE	SPAN	MAPID	PROPTYPE	YEAR	TOWN	SOURCENAME	
1	2629	Polygon	C-12405-46	24-500-023000	Parcel	2021	MONTPELIER	<Null>

Placeholder SPAN

Intersection Table

OBJECTID	GIS_SPAN	GLIST_SPAN	YEAR	TOWN	
1	3548	C-12405-46	405-126-13113	2021	MONTPELIER
2	3549	C-12405-46	405-126-13114	2021	MONTPELIER
3	3550	C-12405-46	405-126-13115	2021	MONTPELIER
4	3551	C-12405-46	405-126-13116	2021	MONTPELIER
5	3552	C-12405-46	405-126-13117	2021	MONTPELIER
6	3553	C-12405-46	405-126-13118	2021	MONTPELIER
7	3554	C-12405-46	405-126-14094	2021	MONTPELIER

Placeholder SPANs

SPANs found in Grand List

Multi-SPAN Parcels

Attribution

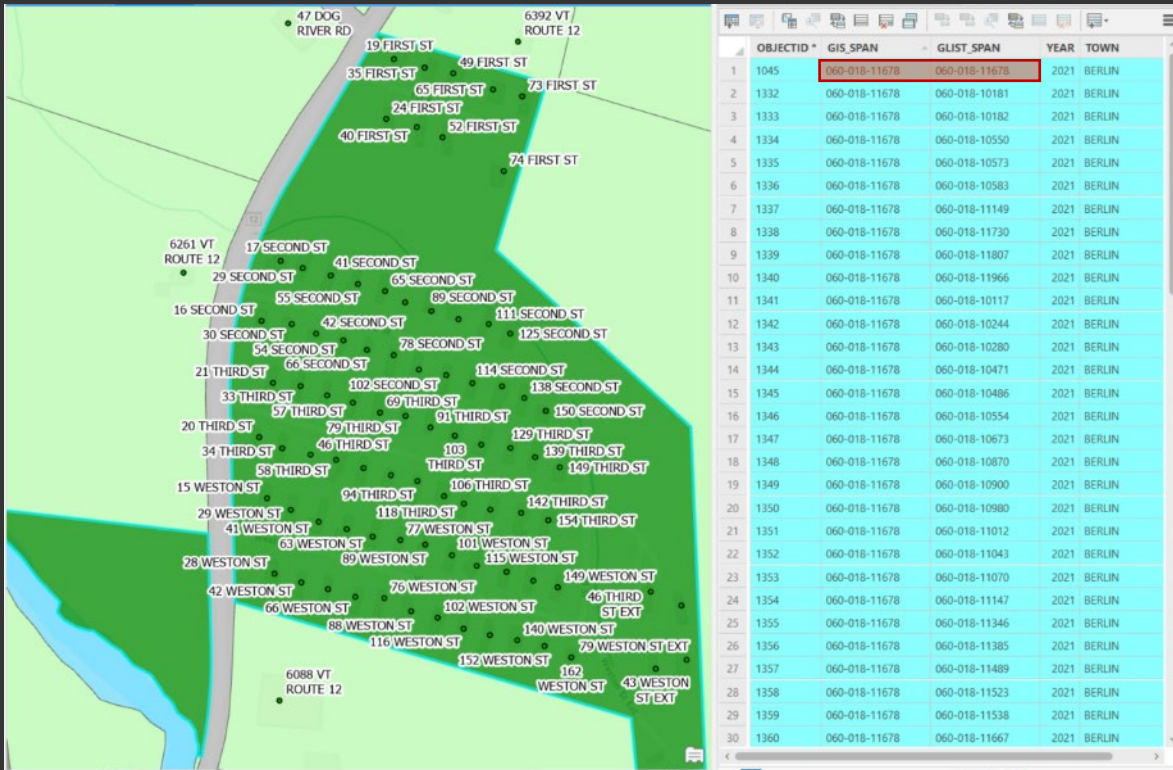


Image 1

Valid SPAN in the Grand List used as placeholder SPAN

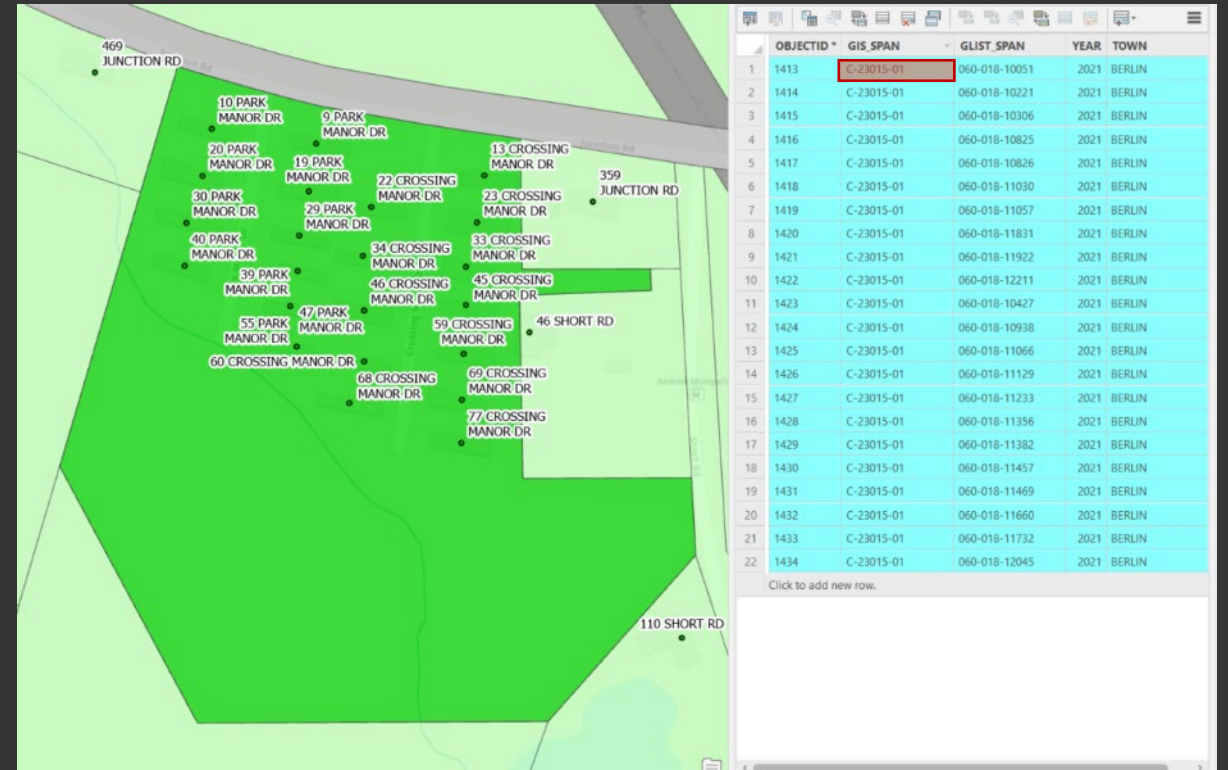


Image 2

Addressing the Issue: Create unique C-SPAN as placeholder SPAN using FIPS code, placing record in same parcel while retaining Unique GL SPAN

Unlanded Structures & Grand List Acreage

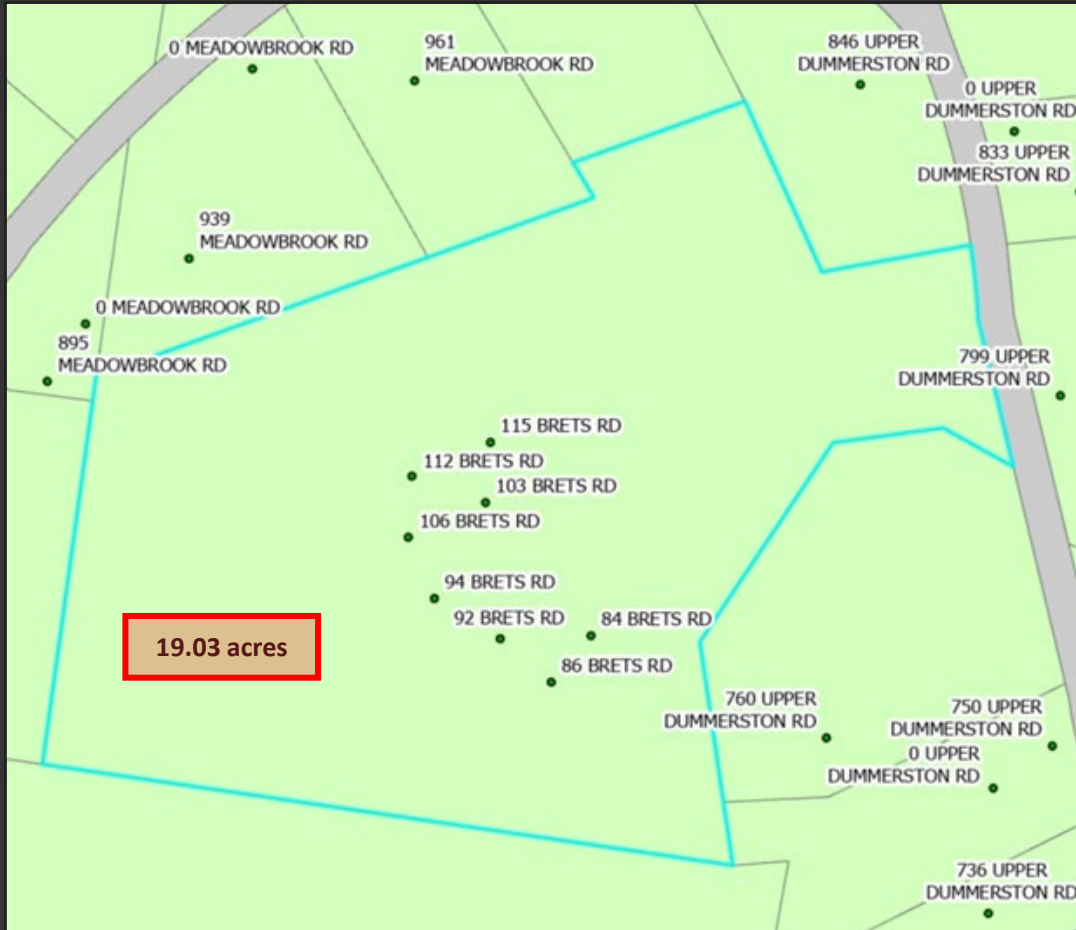


Image 1



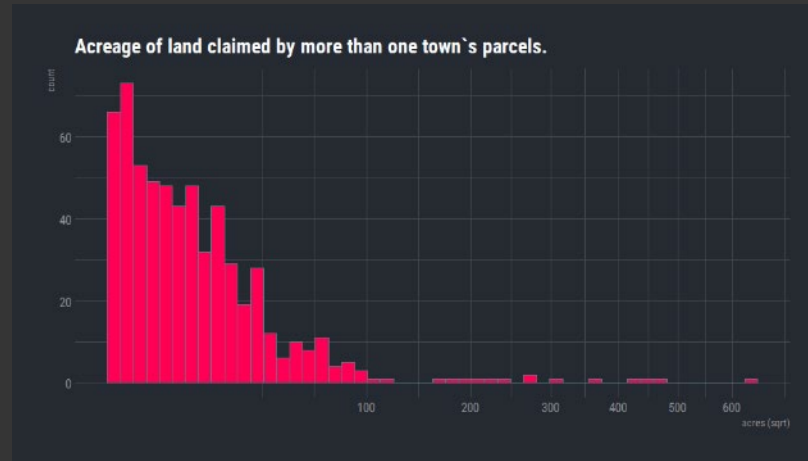
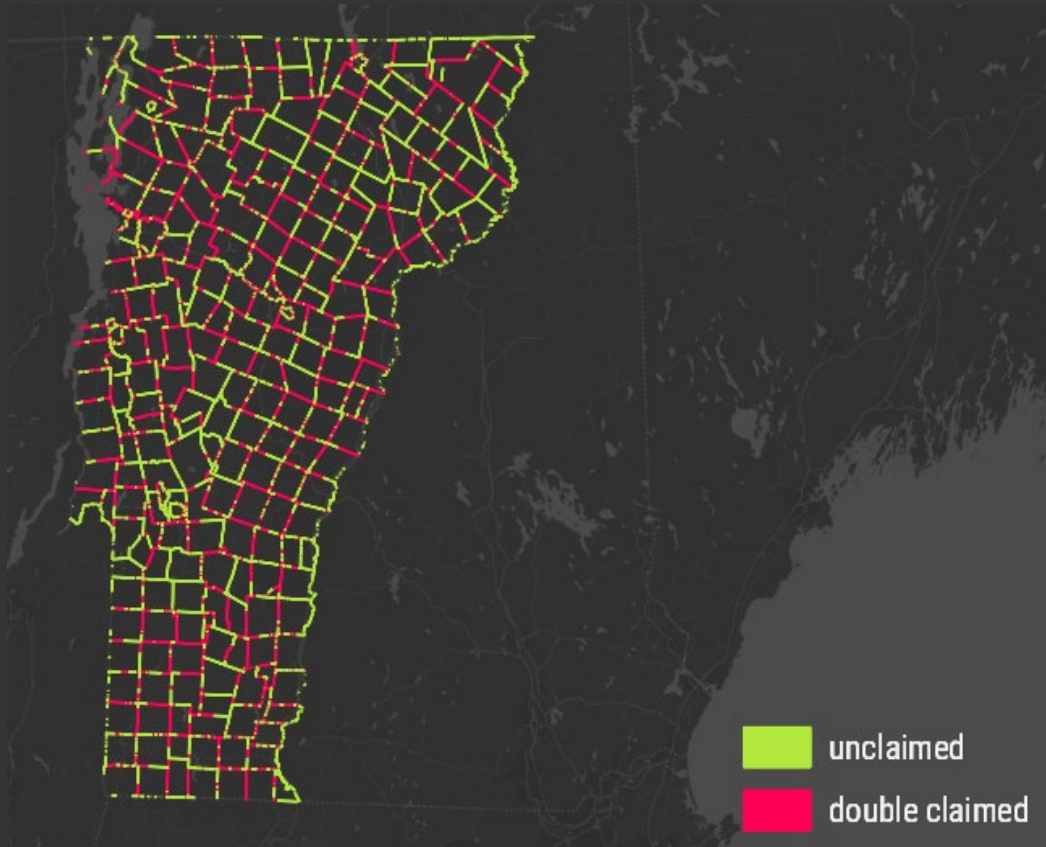
Image 2

Total acres associated with multi-SPAN parcel in Brattleboro and the associated Grand List entries for each address.

Addressing the Issue: Ideally, equal percentage of total acreage for each unit (e.g., 2.38 ac in this example)

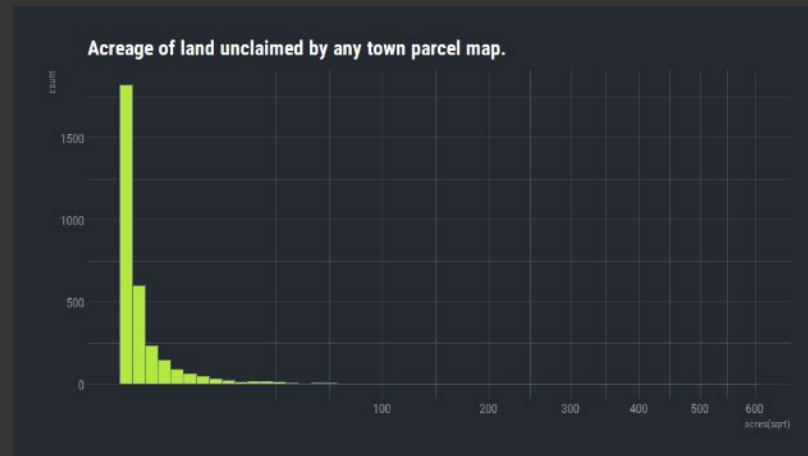
acresgl	descprop	locaprop	cat	rescode	e911addr
0.0	CONDOMINIUM	NULL	Other	T	84 BRETS RD
0.0	CONDOMINIUM	NULL	Other	T	86 BRETS RD
0.0	CONDOMINIUM	NULL	Other	T	92 BRETS RD
0.0	CONDOMINIUM	NULL	Other	T	94 BRETS RD
0.0	CONDOMINIUM	NULL	Other	T	106 BRETS RD
0.0	CONDOMINIUM	NULL	Other	NS	112 BRETS RD
0.0	CONDOMINIUM	NULL	Other	T	115 BRETS RD
0.0	CONDOMINIUM	NULL	Other	T	103 BRETS RD

Border Discrepancies



Ongoing challenge of unclaimed and double claimed land at town boundaries.

Many of the claims represent small slivers of land.

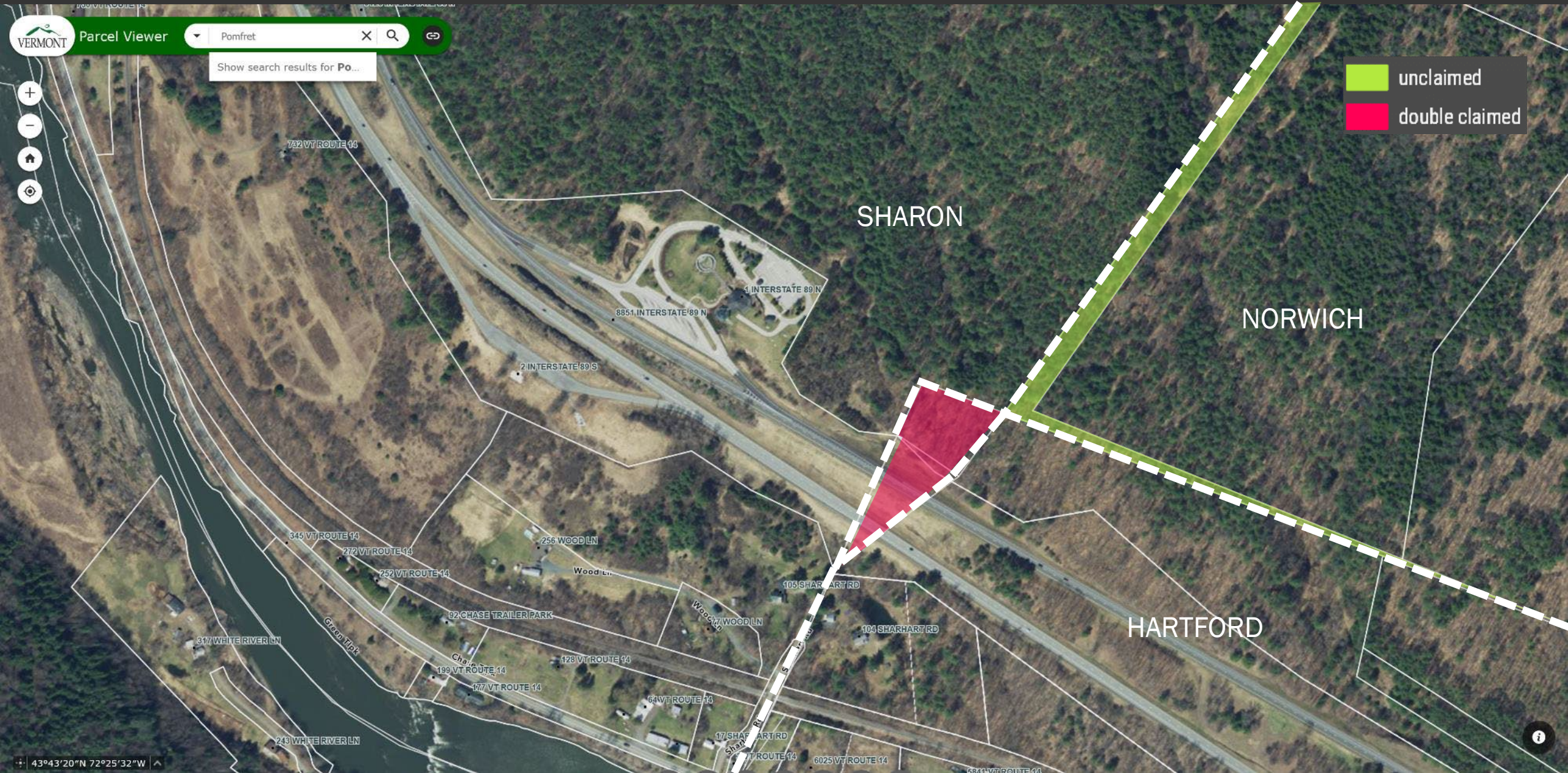


Addressing the Issue:

Likely a larger, statewide effort to accurately document town bounds and establish relationship with parcels. For now, be aware.

Show search results for Po...

- unclaimed
- double claimed



43°43'20"N 72°25'32"W

Addressing the Issue: For now, carefully review parcels with shared boundaries, may have to coordinate cross-town

Inactive Parcels

- A) Maintain them**
- B) Standardize & Require Submittal**





Parcel Program

Recommendations: Ways Forward to Improve Data Quality

- Regular, planned, and **documented continual maintenance** is key: from property transfers (quick) to geometry (slow). **Review vendor's work** regularly and make sure they **share!**
- **SPANS for all parcels** (When in doubt, attribute!)
 - If parcel is not in GL utilize notes to provide context (i.e., utility, common land, national guard, cemetery, etc.), vendor carries to EDITNOTE field
- Normalize tracking of **unlanded buildings** (condos/mobile homes). At the least, make sure all are attributed w/ SPAN
- **Edge-matching** without uniform town boundaries: for now, work with neighboring towns on border properties
- Develop **regular tracking practices** and **cross-referencing of source material** (e.g., plat #, book/page...), YoY changes
- **Review parcels in reference to best-available GIS info** (e.g., aerial imagery, surveys, web tools, published data)
- **Prioritize changes, professionalize maintenance, be in contact**

Questions?

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<https://vcgi.vermont.gov/data-and-programs/parcel-program>

RESOURCES

[Vermont Parcel Program Overview](#)

[Parcel Program FAQ's](#)

[Vermont Parcel Viewer](#)

[Municipal Parcel Data Status](#)

[Improving Parcel Data Quality: Match Status](#)

[Vermont Parcel GIS Data](#)

[Vermont GIS Parcel Data Standard](#)

[Vermont Parcel Mapping Guidelines](#)

[Vermont Land Survey Library](#)



Vermont's Statewide Parcel Program

Municipal Parcel Data: Features, Improving Data Quality,
and the Future

ANR Municipal Day 2022

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