

Cornerpost

Journal of the Vermont Society of Land Surveyors

Volume 49, Number 3 | Fall 2018



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The Cornerpost

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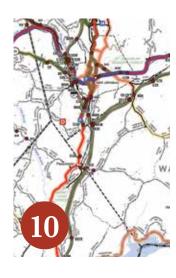
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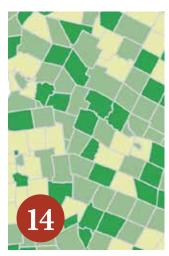
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On the Cover

Dan Rexford, L.S., provided this photo from a driveway and house site project off Mount Philo Road in Charlotte. While he didn't do the boundary survey, Dan was responsible for all the layout and grades. He receives a \$50 restaurant gift certificate for sharing this image for the cover.







President's Corner





"The Executive Committee has offered input to the State as they inch toward rolling out a Statewide Parcel Mapping program and an associated online database of surveys. You can learn more about this at the December Round Tables."



APPY FALL, EVERYONE! I hope you are all enjoying the transformation of the seasons, even though it has gone right from rain to cold. Some of us really needed the rain, so we probably shouldn't complain too much. My favorite line to the surveyors here at my office is "So, you say you want to be a surveyor..." after the many recent

wet, cold and snowy days in the field. Nonetheless, a miserable day in the field is better than a day in the office.

The Executive Committee has been busy working on some really fun stuff: the budget and a dues increase. In the last issue of *The Cornerpost*, we published a warning for a vote on an increase to our dues rates. Based on a review of our income and expenses, along with discussions with the membership, we feel that it is both necessary and generally accepted. I encourage you all to reflect on the values and strengths of who we are and what we do as an organization. Personally, I am very proud to be an involved member of the VSLS and I really do hope the majority of you feel the same. Let's embrace the challenge to make the Vermont Society of Land Surveyors sustainable and committed to the future of our profession.

The Executive Committee has focused on other notable tasks, including working with the State by providing a useful perspective as they inch toward rolling out a Statewide Parcel Mapping program and an associated online database of surveys. You can learn more on this at the December Round Tables, as David Fox from the Vermont Center for Geographic Information (VCGI) will moderate a table on this topic.

We are also working through a changing of the guards within the Education Foundation. As I am sure most of you know, Pete Chase, Mike Raboin and Norm Smith - the three "members at large" - are ready to move on. No surprise, since they have been in the position since I was in diapers (or close to it, anyway). Thank you – Pete, Mike and Norm-for many years of service to the Foundation and Society. Scott Taylor and Bob Holt have both volunteered to fill their positions; Scott will serve as chair of the Foundation, and Bob will be vice chair. We do, however, need one more person to step up. If you are willing and able to bring your energy to the Education Foundation, please send me a note at **mark.day@tcevt.com**.

Thank you for your support through my first year as president. See you at the Round Tables in December!



MARK DAY, VSLS PRESIDENT





FALL CONFERENCE

FRIDAY, SEPTEMBER 14, 2018 HILTON GARDEN INN, LEBANON, NH





THANK YOU TO OUR SPEAKERS

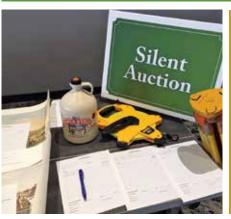
- Laser Scanning and Applications by Michael Carter, L.S., Director of 3D Mapping, Doucet Survey Inc.
- Highway Case Study: U.S. 7 by Ryan Cloutier, L.S., Geomatics Director, VHB South Burlington
- Wallace Road: A Muddled Path by Joe Flynn, L.S., Survey Manager, O'Leary-Burke Civil Associates











VIEW ALL THE CONFERENCE MATERIALS ONLINE

- Go to www.vsls.org
- Look under "resources"
- Click on "conference presentations"

News from the NSPS Conference

Vermont Director Travels to National Meeting in Maryland

BY GAYLE BURCHARD, **VERMONT NSPS DIRECTOR**

HE FALL CONFERENCE was held in Maryland in conjunction with the Maryland Land Surveyors Society meeting. Both Meetings (NSPS and Maryland's) were very well attended. I didn't attend any of the seminars put on by Maryland, but the topics looked very interesting. They even did a Polaris shot one night.

This was my first meeting representing Vermont, so I had a lot to figure out. I attended Committee meetings Thursday and Friday morning, and then Friday afternoon and Saturday Morning was the Board of Directors Meetings.

The big item was the proposed dues increase for states with 100% membership. This was approved with only one state voting against. The membership committee meeting that I attended worked out how to amend the states MOUs. It was decided and voted on to send each state affiliate an amendment to the existing affiliate MOU to raise the dues \$10 from \$40 to \$50. This will take place on the first billing after the first of the year. Each state will also be able to revise the wording in their existing MOU if they feel that it is necessary.

NSPS also approved supporting FIG in their bid to host the FIG work week in 2023 in Fort Lauderdale, FL. By hosting this conference NSPS will If you have any ideas or questions about NSPS, send them to gayle@littleriversurveyvt.com

make a lot of money, which in turn will help with their budget.

I also attended the Joint Government Affairs Committee, which was very interesting. It is amazing how much legislation affects the surveying profession. I know I often don't think about it because in our day to day business it doesn't appear to matter. Some of the legislation that is being watched is a bill regarding aerial mapping of pot growth - now that it's legal in Vermont, this may have an impact on some of us. They are also watching a bill regarding subsidence. "Nationally an area of more than 15,000 square miles in 45 states experience land subsidence." (Land Subsidence in the United States). And of course, Light Squared is still around – it is now known as Ligado Networks LLC. I won't list all the bills that are being followed here, but if you have any questions please contact me and I will do my best to find the answer for

I have several "homework projects" from the conference that I will share with you at the round tables in December – I know we will have lots of good input to share with NSPS.

See you December.

2019 Map/Plat **Design Competition** Is Now Open

NSPS is inviting all its state surveying association affiliates to submit maps and plats to the 2019 competition. Entrants need not be members of NSPS, however a member of NSPS must sponsor the submission.

Freehand and machine or computer drafted maps and plats completed after 6/30/2017 are eligible for entry. Previously entered maps or plats will be disqualified, and no more than two entries per category will be considered.

The maps or plats submitted can be black and white (halftone/ shaded), blueline or color prints.

Submit seven prints for each entry with a maximum map size of 34" x 44". Prints allow the judges to have a more comprehensive view of the entry overall, but if you must submit electronically please send a PDF of each entry to trisha.milburn@ nsps.us.com. Submissions must be a single drawing. They may originate as a set but must be entered as a single sheet.

Use one entry form per document submitted (download the form at: www.vsls.org/2019map-plat-design-form). An entry fee of \$30 must accompany each form.

CATEGORIES

- Subdivision Plats
- Boundary/Cadastral Maps
- Topographic Maps
- ALTA/NSPS Survey Maps
- Miscellaneous Maps

DEADLINE

5 рм on April 30, 2019

SEND ENTRIES TO:

NSPS Map/Plat Contest 5119 Pegasus Court Suite Q Frederick, MD 21704



"It is amazing how much legislation affects the surveying profession. Some of the legislation that is being watched is a bill regarding aerial mapping of pot growth – now that it's legal in Vermont, this may have an impact on some of us."

BY KNUD E. HERMANSEN,

What's New with P.L.S., P.E., PH.D., ESQ. Surveying Education?

believe informing survey practitioners about the efforts to educate future surveyors is important. Sharing information is necessary for a productive partnership between practitioners and educators.

In a previous article I have discussed the University of Maine's effort to offer dual degrees and an online education option. The University of Maine is not unique in these efforts. Many surveying programs are pursuing these and other options.

In this article, I would like to provide some insight into the means and methods I use to provide distance education. Before explaining these means and methods, I will state that it is my opinion that the traditional classroom is superior to the learning methods I will describe. In the traditional classroom, the interaction between the student and instructor provides immediate visual and verbal interaction and feedback. Oftentimes, for the 18-22 year old student, the compulsory attendance in a scheduled class is a necessary requirement in order to create an effective learning environment.

Using Technology to Deliver Education to More Students

Technology and software have allowed faculty to record lectures, integrate audio and visual stimulations, and animate the visual display. Technology and software have allowed faculty to produce videos on a variety of topics.

To date I have prepared over 116 videos. My colleagues in surveying education have created many more. In only one of the 116 videos is my face shown. These videos are not the 'talking head' video comprised of a video taken of a classroom presentation.

Currently, I use Camtasia software to produce education videos. Once the video has been prepared on Camtasia, I convert the video to mp4 format and upload the video on to YouTube. The YouTube address is sent to students who can enter the address into their web browser and view the video.

Students can ask questions via e-mail or using Zoom software. Zoom software allows face-to-face viewing and conversations much like a Skype

connection or Go-To-Meeting software. Zoom allows the entire class to interact with each other and with the instructor.

Exams are scheduled on Blackboard software. The exam is scheduled for a certain date and time period. My exam questions are composed of multiplechoice, multiple answer, and true/false questions. The exam format is very similar to the fundamentals of surveying exam and the principles and practice surveying exam. Question and answer choices are scrambled so that students sitting side-by-side will not likely see the same question at the same time. Even if two students view the same question at the same time, the correct answer to the same question will be in a different order for each student.

Video Formats Vary

There are three general formats for the videos that I prepare. The format depends on the course content. Some



courses are predominantly computation or design courses. These videos will display nomenclature, equations, constants, coefficients, and sources for variables followed by example calculations.

The video I prepared explaining vertical curves is an example of this format. The equations and the equation development for vertical curve equations are presented in one video. (https:// youtu.be/vZ1Xwpozax0) In another video, the vertical curve equations are applied using an example. (https:// youtu.be/o2cw5nDY4do)

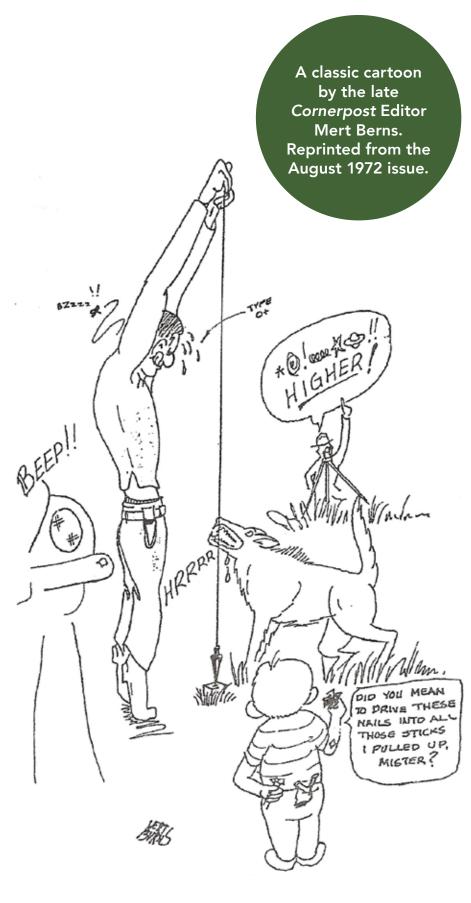
The second format is used to explain the realities of surveying practice. Background, scope, and matter-of-fact aspects of practice are presented in this video format. The format usually shows an example explaining the procedure along with suggestions, explanations, and practical advice. The video on public record research is an example of this format. (https://youtu.be/ rt1BIU0s5YM)

The third and final format I employ is used for explaining legal doctrines and principles that must be utilized by surveyors. The video is an explanation on how the doctrine or principle applies in a particular situation. This video format explains the elements required for the doctrine and application of the doctrine or principle to be employed by the surveyor. A video explaining practical location is an example of this format. (https://youtu.be/ FSLmUoi7H08)

What's Available

The near future will bring many more changes and innovations used for the education of surveying students and practitioners. If you want to receive information on earning a surveying degree by taking online courses, always contact your local or regional surveying program first. The local surveying program will offer a quality education at a reasonable price.

If you don't have a local or regional program offering what you need, contact Dr. Raymond Hintz at the University of Maine: Raymond.Hintz@ maine.edu. 🈮



*contributed by Harris Abbott, L.S.

BY DICK BOHLEN, L.S. #7, retired

Interstate cecision

"Our contract was for the survey of the highway from a point just westerly of **Barnet Village** to a point just northwesterly of the Village of Lyndonville. About 18 miles!"

hen Bob Smith and I signed the contract for the preliminary survey of Interstate 91, we knew that our survey accuracy would be a major factor.

There are USGS elevation bench marks along the way that we could check into as we proceeded with the survey. The State of Vermont under the direction of Leroy Carlson (LS #1) had established horizontal control points every mile or two along the corridor of the interstate. Leroy used a Geodimeter for his work, which was the forerunner of the EDM's presently in use. These control points were things like concrete monuments, church steeples, drill holes in pump islands, or drill holes in ledge. Leroy maintained a precision of 1 in 50,000 or no more of an error than 1 foot in 10 miles. We signed on to maintain a precision of 1 in 5000 or no more of an error than 1 foot in 1 mile. We were required to check into these control points as we went so as to determine the precision of our work.

We dealt with the vertical control by using a "lovar" level rod that had a very low coefficientof-expansion. We also checked the rod every

week or so to check the accuracy of the metal face. We had a state-of-the-art level. The level work was done for us by Leonard Lamoureux (LS # 38) and crew. He set temporary bench marks along the highway every quarter mile or so. These TBM's were things like railroad spikes set in the roots of trees, drill holes in ledges, or points of boulders.

The horizontal control was another matter! The angles given to us were recorded to the second. We were using transits that read to the closest 20 seconds, which meant that we could estimate the angles to the closest 10 seconds. So, we measured or turned the angles at least 4 times, sometimes 8 times, and I remember some occasions when we turned them 16 times. We felt that doing this meant that we established the angles to the closest second or two.

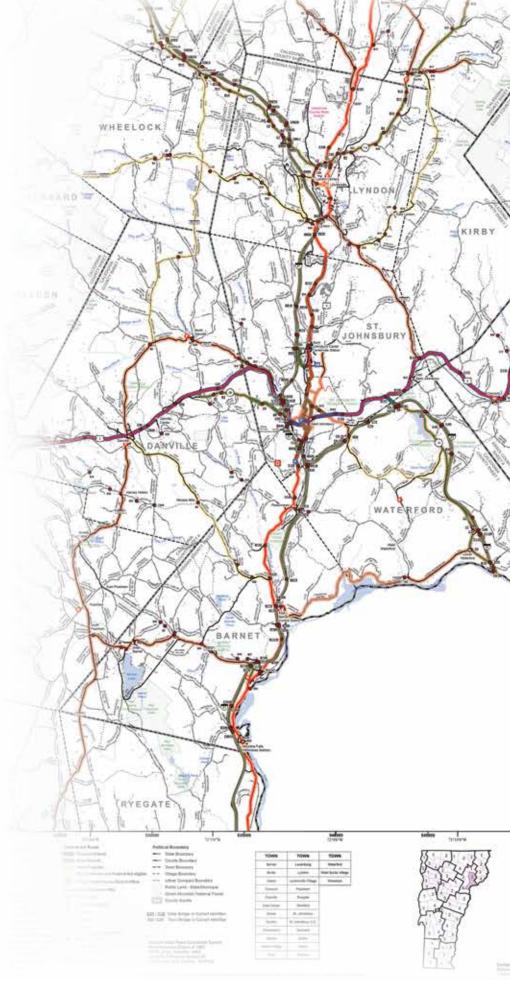
Then came the precision of the distances!! We bought a new 100 foot steel tape and sent it to Washington D.C., and the United States Bureau of Standards. They calibrated the tape for us, and returned it with a number stamped on the tape itself. They gave us a table that told us the amount of tension required to make an exact 100 feet, at 68 degrees of temperature with the tape supported thruout, supported in the middle, or fully unsupported. This is Vermont, so fully unsupported is the norm! I was living on "Rocky Ridge" in St. Johnsbury at the time, and we had a gully beside our house that proved to be about 100 feet across in places. We found a great spot across the gully, about level, where ledge outcrops were 100 feet apart. We grouted in two brass rods at this spot, 100 feet apart, and using the new tape, at about 68 degrees temp., and applying the right tension, we put in two Xs exactly 100 feet apart! We also grouted into the ledge a large "C" clamp behind one of the X marks so that we could clamp one end of a tape solidly to the ledge. We checked the tapes that we were using to these control points every week or so and adjusted the tape tension that we were using as needed. We used tension springs doing the work, and carried mercury thermometers with us, held close to our tape: This to record the temp at any given moment. The tension used was usually around 20 pounds. We also adjusted our taping for the difference in

temperature from 68 degrees by using the formula of a hundredth of a foot variance for every 15 degrees change it temperature from 68 degrees. A lot to keep track of!

Our contract was for the survey of the highway from a point just westerly of Barnet Village to a point just northwesterly of the Village of Lyndonville. About 18 miles! Smitty and I decided that he would establish that most northerly point on the center of the northbound lane, and run the northbound lane in a southerly direction. I would establish that most southerly point, and run the northbound lane in a Northerly direction. This Northbound lane was the control line for the rest of the work. We were to establish the tangents (or straight lines), mark every 50 feet on the highway centerline where the road was tangent, set the start and end of the curves and mark the intersections of the tangents, called the points of intersection (P.I.'s). We had other crews running the curves, the southbound lane, the ramps, setting bench marks, running levels, doing cross-sections, and topography

So, we went to work! I was able to see three of Leroy's control points from a spot near the starting point westerly of Barnet Village. I established a baseline, and using triangulation, I was able to set the starting point on the centerline of the northbound lane, and north, my crew and I headed. We went up and over Barnet Mountain and to East Barnet where we were able to check into one of Leroy's control points. We found that we were off of his data by about 2 1/2 inches. This was after about 3 miles of work, and well within the 1 in 5000 precision that was required.

We continued northerly with our centerline survey, and continued to check into the control points as we came to them. Our error remained about the same. Finally we met Smitty coming toward us in the area where exit 21 of I-91 presently is located. This was on the old Gilman Farm that was owned by Howard Calkins of Danville. We checked into one of Leroy's control points near where Smitty and I came together and found that we were off about the same 2 1/2 inches!! Again, well within the required precision! I do recall that Leroy offered to split the error with us, which I took as a compliment!!



Navigable Waters of the United States in New England

Subject to Section 10, Rivers and Harbors Act Jurisdiction

Published by the US Army Corps of Engineers New England District, July 18, 2006

The following have been determined to be Navigable Waters of the United States subject to permit jurisdiction in the New England District area. Jurisdiction under Section 10 of the Rivers and Harbors Act of 1899 shall be exercised for these waters. This list represents only those waterbodies for which affirmative determinations have been made; absence from this list should not be taken as an indication that the waterbody is not navigable.

- → All tidal waters and their tributaries to the head of tide.
- → MAINE: Kennebec River to Moosehead Lake; Penobscot River to the confluence of the East and West Branch at Medway, Maine; Lake Umbagog within the State of Maine.

NEW HAMPSHIRE: Merrimack River from the Massachusetts - New Hampshire state line to Concord, New Hampshire; Lake Umbagog within the State of New Hampshire; Connecticut River to Pittsburg, New Hampshire.

MASSACHUSETTS: Merrimack River to the New Hampshire state line; all of the Connecticut River within the State of Massachusetts.

CONNECTICUT: Connecticut River to the Massachusetts state line.

VERMONT: Navigability studies and determinations have been completed in Vermont. The following lists show the results of these determinations:

Navigable waterways based on present or potential future use for interstate commerce:

- Lake Champlain
- Lake Memphremagog
- Connecticut River
- Ompompanoosuc River to Mile 3.8
- Waits River to Mile 0.9

Navigable waterways based on past historical use for interstate commerce:

- Black River from mouth to Mile 25 Craftsbury
- Battenkill River to Mile 50 Manchester
- Lamoille River from mouth to Mile 79 Greensboro
- Missisquoi River from mouth to Mile 88.5 Lowell
- Otter Creek from mouth to Mile 63.8 Procter
- Winooski River from mouth to Marshfield
- Moose River from Passumpsic River to Victory Town line
- Nulhegan River from its mouth to its source including the East Branch,
- Black Branch, and Yellow Branch
- Paul Stream from mouth to source
- East Branch, Passumpsic River from Passumpsic River to East Haven
- Passumpsic River from mouth to the East Branch
- Wells River from mouth to Groton Pond
- White River from mouth to its source

We received this useful document from Jay Doody, PS/PE, one of our past conference speakers.

I spoke about the fact that there was no complete list of federally accepted putting together a seminar on riparian USACOE document listing navigable rivers in New England, and lo and behold rivers in Vermont. I have attached this document for use of the VSLS, if

Thank you, Jay!



Congress has declared in various statutes that certain waterways are nonnavigable waters of the United States within the meaning of the Constitution, even though some such waters are actually navigable in fact. The effect of these statutes is that Congress has removed such waters from the jurisdiction of the Corps of Engineers under Section 10 as a matter of law. Listed below are such Congressionally declared nonnavigable waterways within the New England District, as well as citations to the relevant statutes in the United States Code. The specific locations within these waterways that are deemed nonnavigable and therefore not subject to Section 10 are described specifically within these portions of the Code.

Waterway	Location	Pursuant to:
Park River	Hartford County, CT	33 USC 52
Burr Creek (portion)	Bridgeport, CT	33 USC 54
Fort Point Channel and South Bay	Boston, MA	33 USC 56
Acushnet River (portion)	New Bedford and Fairhaven Harbor	33 USC 58
West River (portion)	West Haven, CT	33 USC 59
Back Cove (portion)	Portland, ME	33 USC 59a
Boston Inner Harbor and Fort Point Channel (portion)	Boston, MA	33 USC 59f
Kenduskeag Stream	Penobscot County, ME	33 USC 59p

what can you contribute to The Cornerpost?

send your article, info or photo to kelly@vsls.org

BY DAVID FOX, VCGI

An Update

ON VERMONT'S PARCEL PROJECT & DIGITAL SURVEY REPOSITORY

he Statewide Property Parcel Program (19 V.S.A. § 44) is an interagency undertaking led by VTrans and the Vermont Center for Geographic Information (VCGI) to modernize and update access to parcel data across Vermont's 255 towns. As part of the Parcel Project, state funding has been used to support the digital conversion of tax parcels into GIS data that meet a consistent standard and must match the Town's grand list entries to at least 99%.

Phase 1 of 3 of the project is complete and we have 72 towns with parcels joined to the grand list. The data for these 72 towns (and older non-standardized data) is available through the VCGI open data portal geodata.vermont.gov and the interactive map viewer maps.vermont.gov/vcgi.

Phase 2 of the project is now under way and we are already reviewing data submissions for new towns. This data will be continuously added to the joined parcels available online and all 103 towns in Phase 2 will be complete in the Spring of 2019. We plan for all remaining towns in Vermont to be complete by the end of 2019 (see map).

VCGI will also be making available a simple, parcel specific web map where anyone with internet access can view this new parcel data. You'll be able to search by SPAN, address, and owner name. Parcel

data can be selected and downloaded with complete grand list data. We'd like to hear from you about other functionality that can make the viewer useful to surveyors. (Send your thoughts to David.N.Fox@ vermont.gov).

As we complete this work and communicate with various stakeholders, we continue to emphasize that parcel data is not a substitute for professional survey work. Parcel data is only an index to land ownership, and we're making every effort to make sure that the general public doesn't perceive the data to be something it is not. If anything, we hope that this data will make people more aware that there are inaccuracies in the land records that need to be addressed with the help of a licensed surveyor.

How will we improve and keep parcel data up to date? The Statewide

Property Parcel Advisory Board is currently working on a report that will include recommendations to maintain the data over time. (The VSLS representative on the Board is Randy Otis, L.S.) One of the top recommendations identified by the Board is the creation of a digital survey repository that would include any survey recorded in the land records that creates a new parcel or changes a boundary line. VCGI polled the surveying community about this idea and found strong support (see pie chart). This would involve legislation that would require a digital copy of these recorded surveys to be submitted to a central repository. While the details of these recommendations are being refined, some of the feedback we've received from surveyors and others includes: digital surveys should only be copies and all official signed surveys with a raised seal will still reside with the town clerk; the accepted digital format should be a PDF, unless otherwise specified by the Board of Land Surveyors; the inclusion of State Plane

coordinates should not be required; the digital repository should be made publicly available.

We hope that the creation of a repository will be important resource for the surveying community, creating a central, easyto-access system where you can look for surveys in your area of interest, hopefully cutting down on research time. We also hope this can be a place where historically-important surveys can be uploaded so that they are preserved for the benefit of the community.

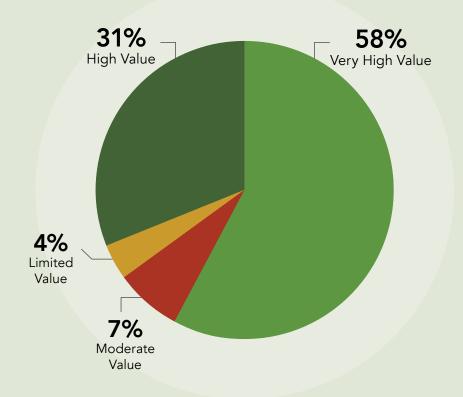
We would like to specifically thank Ryan Cloutier, Paul Hannan, and Randy Otis for serving on our technical committee that helped review these ideas. We welcome feedback from the surveying community on the project. David Fox, the Parcel Program Technical Lead, will be on hand at the VSLS Round Tables in December, so if you have questions about the parcel program or the proposed survey repository, he will be there to answer your questions.

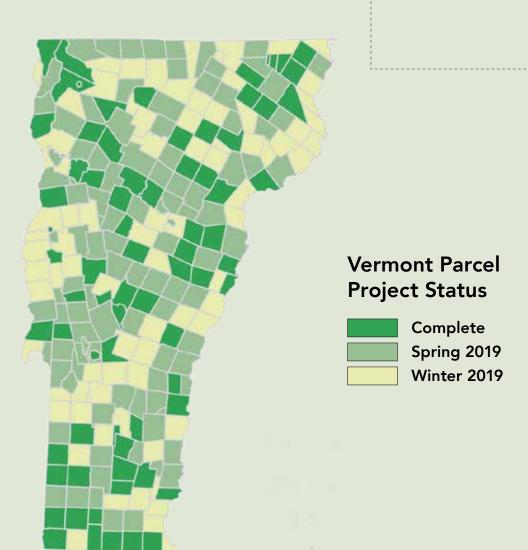


"As we complete this work and communicate with various stakeholders, we continue to emphasize that parcel data is not a substitute for professional survey work."

Spring Survey Question to VSLS **Members**

How much value do you see in having access to a centralized statewide digital survey repository for municipal land records?







July 19, 2018 · 6 p.m. · AIV Building, Montpelier VT

This meeting was called to order at 6:02 P.M. In attendance were Mark Day, Nate Yager, Lisa Ginett, Gayle Burchard, Becky Gilson, Keith Van Iderstine, Paul Hannan and our Administrator: Kelly Collar.

STATEWIDE PARCEL MAPPING PROGRAM INITIATIVE John Adams of VCGI addressed the group about ongoing efforts to create a survey repository as part of the Statewide Parcel Mapping program. The program is mainly being funded by VTrans. John was joined by new VCGI employee David Fox. David will be taking over Leslie Pelch's previous position at VCGI. There is now a State Parcel Mapping Advisory Board which met several weeks ago and included VSLS representative Randy Otis. The new board is putting together a small team to look at technical details of the Statewide Parcel Mapping program. They hope to assemble the team in August and need someone in the survey community to assist in looking at current statutes and proposing future statutes. Paul Hannan volunteered to be a part of this group due to his experience with the Vermont Legislature. The group will need to provide input for future statutes as related to creating a digital repository for surveys statewide, available to the public, which would improve the parcel mapping. We discussed that it should possibly be required to record a survey for any subdivision or boundary line adjustments in the future with a digital copy required for the repository. The group would need to review requirements for types of digital files and what level of geo-referencing would be required, as well as looking at prototypes for building the repository library. After the working group meets in August, it was suggested that we field another survey for the GIS and survey communities after which they hope to contact municipalities and the planning community with some preliminary ideas.

SECRETARY'S MINUTES

It is noted that the Executive Committee did not meet as planned on June 21st due to lack of members to attend. Minutes for the Executive Committee meeting dated May 17th, 2018 were reviewed. Upon motion duly made and seconded it was unanimously RESOLVED: to approve the minutes of the May 17, 2018 Executive Committee meeting.

TREASURER'S REPORT

Treasurer's report for the period of Jan 1st to July 17th 2018: Total income for the period is \$ 32,325.12. Total expenses were \$32,486.19 for a Net Income of \$ -161.07. Bank Account Total = \$56,234.81. There has not been much of the travel budget spent this year, but starting in September the NSPS director and our young surveyor representative will be traveling to the NSPS meeting. Other New England state society annual meetings will be take place September through December.

ADMINISTRATOR'S REPORT

Kelly is working on "The Cornerpost" and plans to mail it

in early August. Kelly provided a great interactive map for finding local surveyors as well as graphics, pie charts, etc,. to illustrate the need for raising membership dues.

She has had a conference call with the Hilton Garden Inn in West Lebanon, NH in reference to the cost for our Fall Seminar, which will be held there on September 14th, so that she can set the fees for attending the seminar. We will be inviting the State of Vermont engineering community to our seminar, as per the May 17th minutes we know that the VT P.E.'s will require some educational credits in order to renew their licenses. Neither the Vermont Society of Engineers nor the ACSM VT chapter are active in presenting any method to complete the necessary CEUs, and there is apparently no pre-approval required for course work for CEUs. This could mean that we can pick up some engineers attending our educational seminars for their credits. We will offer the engineers the same rate for the seminar as our full members to encourage attendance.

VIDEO UPDATE

Mark reports that Brad and the videographer shot an old map found at UVM as the truly final scene for the VSLS video. Brad hopes to have it available for the Executive Committee's review before showing it at the Fall Conference.

OTHER BUSINESS

As NSPS is going to raise its dues this coming years by \$10 per person, VSLS is proposing to raise dues by \$50 for full members and \$25 for all other members to cover that cost as well as our own future budget(s). We also discussed revising the Bylaw requirements for "life membership" by adding to the language of Article III: Membership Part G Life Member the words "and are no longer surveying as your primary source of income." We propose to warn the dues raise and the bylaw revision to Life Membership requirements in this coming "Cornerpost," assisted by Kelly's informative graphics, and to discuss the issue at the Fall Conference and vote at the December meeting.

President Mark Day will write the letter regarding the falsely advertised services by Vermont Land Design, which is advertising Land Surveying and Civil Engineering services, although the business does not employ any Registered Land Surveyors or PE's. Mark is unwilling to sign the letter due to conflict of interest with his business. It was decided that the letter would be signed by the VSLS Executive Committee and not by any person and be sent to the Board of Registration, the Attorney Generals' Office, and the business owner.

There being no other business, the meeting was adjourned at 7:29 P.M.

Respectfully submitted,

Lisa Ginett, VSLS Executive Committee Secretary



August 16, 2018 · 6 p.m. · Conference Call

This meeting was called to order at 6:02 P.M. In attendance were Mark Day, Nate Yager, Lisa Ginett, Gayle Burchard, Becky Gilson, Keith Van Iderstine, Paul Hannan and our Administrator: Kelly Collar.

SECRETARY'S MINUTES

Minutes for the Executive Committee meeting dated July 19th, 2018 were reviewed. Upon motion duly made and seconded it was unanimously RESOLVED: to approve the minutes of the July 19, 2018 Executive Committee meeting.

TREASURER'S REPORT

Treasurer's report for the period of Jan 1st to August 14th 2018: Total income for the period is \$ 35,296.37. Total expenses were \$ 35,665.40 for a Net Income of \$ -369.03. Bank Account Total = \$54,887.35.

ADMINISTRATIVE SECRETARY'S REPORT:

Kelly reports that "The Cornerpost" is currently at the printers and will be mailed out next week. She is meeting with representatives of the Hilton Garden Inn in West Lebanon, NH, next week to go over the final details for the September 14th conference. Kelly has invited members of the Vermont Engineering community to attend at the member rate. She notes that the Planning Committee will be putting on a silent auction to raise funds and that if anyone has anything to donate they should let her know. Kelly still needs to extend invitations to the Seminar to the Presidents of other New England State Surveying Societies and will do so tomorrow.

Kelly and Keith report that the travel budget has not been utilized very much to date but Gayle, our NSPS Director, informs us that the NSPS Meeting will be held on October 18-20th at the University of Maryland. This will make the expenses less than some years due to less travel costs. She is hoping to have one of VT Young Surveyors attend the meeting, as that group will be meeting as part of the NSPS meeting. It is noted that none of the New England societies' annual meetings have occurred and that some of the travel budget will be spent on our attendees at those meetings. Also noted is that there is a conflict with NH's meeting. The second day of their Annual Meeting falls on the same date as our December Round Tables.

VIDEO UPDATE

Mark reports that Brad and the videographer shot the last truly final clip for the video and received permission to have some of the old maps from UVM shown as part of the video. Brad hopes to have it available for the Executive Committee's review before the Fall Conference and then to show it at the meeting.

OTHER BUSINESS

President Mark Day informs us that VT Land Design, who is advertising Land Surveying and Civil Engineering services,

now has a master service agreement with the firm that employs him (Trudell Consulting Engineers) to provide surveying and engineering services but that the company name still is not acknowledged on the site. Mark will write a letter to the Board of Land Surveyors about this company advertising land surveying services without having a licensed surveyor on staff, to be reviewed by Paul Hannan and to be signed by the VSLS Executive Committee.

Paul reports that the Digital Survey meeting is scheduled for August 23rd and that he, Ryan Cloutier and Randy Otis will be attending on behalf of the surveying community.

Keith reported on his and Mark Day's adventure running a day's lesson for the Boy Scout Surveying Merit Badge. Keith thanked Mark for spending the day with him and the eight Boy Scouts working on the badge, and he also thanked Gayle for the loan of equipment for the day. The group did a field course and mapping and drafting as part of the badge requirements. Four of the scouts passed and received their Surveying merit badge and the other 4 still had to complete the requirement of obtaining the deed to their families' land from their local town clerk. Keith said that the kids had fun. A counselor took some photos, and Keith will write a short article for the next "Cornerpost" with some of the photos. He also promised and subsequently did send the Executive Committee members the requirements to complete the badge.

There being no other business, the meeting was adjourned at 6:25 P.M.

The next Executive Committee meeting will take place as part of the membership meeting at the Fall Conference.

Respectfully submitted,

Lisa Ginett, VSLS Executive Committee Secretary



ATTENTION MEMBERS!

Executive Committee meetings are held on the third Thursday of every month. All members are welcome to attend. For more information, email kelly@vsls.org.



October 18, 2018 · 6 p.m. · AIV Building, Montpelier

This meeting was called to order at 6:04 P.M. In attendance were Mark Day, Nate Yager, Lisa Ginett, Becky Gilson, Keith Van Iderstine, Paul Hannan and our Administrator: Kelly Collar and guest David Fox of VCGI.

DAVID FOX FROM VCGI

The committee working on the Statewide Parcel Mapping Initiative has met several times and included three licensed Surveyors in its group. They have discussed that based on this program there will now be a requirement, regardless of local zoning requirements, to complete a survey whenever there is a revision made to any boundary line such as a Subdivision or Boundary Line Adjustment in the State of Vermont. Along with a survey, there will be a requirement to provide a .pdf file of the plat to the Statewide Parcel Mapping program. Paul Hannan, who is on the committee, discussed some of the exemptions to these requirements: they should include an exemption for any landowner conveying all land that they own separated from their remaining lands by a town highway. There is still the convention that a landowner may complete their own subdivision survey, which would still be allowed. Obviously, no record plat would be recorded in that case. Geo-referencing the plats would be preferred but not mandatory at this time. There have been some preliminary meetings with VTrans and a realtor group, which have shown a favorable view to the Statewide Parcel Mapping initiative. The Board of Land Surveyors was less enthusiastic about the process. This legislation, should it pass, would require only a survey of the subdivided parcel and not the entire parent parcel. It would supersede the lack of town-based requirements for subdivision. The next step in the process toward creating the Statewide Parcel Mapping program will be to draft a legislative report and find a sponsor for this year. To date, 73 towns have joined the initiative this year and 100 other towns will be joining in the coming year. David Fox will be at the December Round Tables running a table showing the new parcel viewer.

SECRETARY'S MINUTES

Minutes for the Executive Committee meeting dated August 16, 2018 were reviewed. Upon motion duly made and seconded it was unanimously RESOLVED: to approve the minutes of the August 16, 2018 Executive Committee meeting.

TREASURER'S REPORT

Treasurer's report for the period of January 1 to October 16, 2018: Total income for the period is \$48,509.12. Total expenses were \$50,045.81, for a Net Income of \$-1536.69. Bank Account Total = \$54,428.69.

ADMINISTRATOR'S REPORT

Kelly reports that Keith will be providing a brief write up and some photos of the day that he and Mark Day spent at the Boy Scout camp in Eden, VT this past summer helping the

scouts earn their badge in surveying. Kelly is contemplating printing some portions of the article recently sent around to the VSLS Executive Committee members about the interface between Surveyors and GIS or if not, she will provide the link to the article in the next "Cornerpost". Kelly discussed moderators and subjects of the December Round Tables, which will be held in Montpelier on December 7. The information is on our website.

2019 BUDGET

It was discussed that we must either raise our dues or raise our fees for our educational programs. We need to discuss and vote on the dues and the revision to the bylaws regarding the requirements for life membership at our Annual Business Meeting on December 7. Both subjects have been warned in the last "Cornerpost". Kelly will put the dues increase proposed 2019 budget in "The Cornerpost". If the vote fails to sustain the dues increase, we will have the 2019 budget without the dues increase to vote on instead.

OFFICERS

Our current president and vice presidents' terms are not up until December 2019 and can be renewed for one further term of 2 years. The members at large, the directors, the secretary and treasurer need to be voted on every year but have no term limits. Kelly will check with Gayle to see if she wants to stay on.

OTHER BUSINESS

We briefly discussed that Scott Taylor is taking over for Norm Smith on the Education Foundation committee and that we need two more members to take over for Pete Chase and Mike Raboin, who both want to retire after many years of service.

Mark talked briefly about the getting the scans from Brad, who mentioned that he broke into the safe from Meg's office and found some ancient software. He loaded it, converted it to Excel and is giving a copy to Scott. The goal is to index and organize the scans by town on an Excel spreadsheet as well as paring down the repeated scans.

Mark reports that it appears that the owner of VT Land Design, whom the VSLS as a group was preparing to send a letter to regarding the wrongful advertising on his website, has taken the site down. Mark searched the web and could find no mention of the business. We will need to keep an eye on the situation to see if the ad returns.

There being no other business, the meeting was adjourned at 7:38 PM. The next meeting will be held on November 15, 2018.

Respectfully submitted,

Lisa Ginett, VSLS Executive Committee Secretary



September 14, 2018 • Hilton Garden Inn, Lebanon, NH

This meeting was held at the Hilton Garden Inn in Lebanon, N.H., and was called to order at 12:50 P.M. In attendance were Lisa Ginett, Becky Gilson, VSLS Administrator Kelly Collar, along with the general membership.

SECRETARY'S MINUTES:

Minutes for the prior General Business meeting dated April 20, 2018 were reviewed. Upon motion duly made and seconded it was unanimously RESOLVED: to approve the minutes of the April 20, 2018 General Business meeting.

TREASURER'S REPORT

Treasurer's report for the period of January 1 to September 14, 2018:

Total income for the period was \$47,306.20, expenses were \$40,681.49, for a Net Income of \$6,625.13. Bank Account Total = \$63,542.10. The spring seminar brought in \$12,665.00, expenses for the seminar were \$ 5,811.70, with a net profit of \$6,853.30. The report, given by Brad Holden in the absence of Treasurer Keith Van Iderstine, was approved by the membership.

It should be noted that with only two members of the VSLS

Executive Committee in attendance at this meeting, even with Brad's help running the meeting, there was no other business discussed.

Brad recognized the many years of service given by the at-large members of the VSLS Education Foundation: Pete Chase, Mike Raboin and Norman Smith. Scott Taylor will be replacing Norm Smith going forward.

There being no other business the meeting was adjourned at 12:55 P.M.

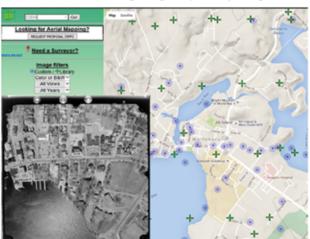
Respectfully submitted,

Lisa Ginett, VSLS Executive Committee Secretary

Send In Your News for The **Cornerpost and Our E-newsletter!** kelly@vsls.org

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URISA Releases White Paper Defining the Boundaries of Practice Between Surveyors and GIS Professionals

Paul Hannan, L.S., sent in this press release from URISA about a white paper that may be of interest to members.

PUBLISHED FRIDAY, OCTOBER 5, 2018, BY WENDY NELSON

n recent years, URISA's Policy Advisory Committee has facilitated several panel discussions at GIS-Pro conferences during which surveyors and GIS professionals have discussed the distinctive, yet complementary, services that each profession provides.

Surveyors and GIS professionals each create, analyze, and draw conclusions from maps and associated data. While their respective skills

Good will and mutual respect have enabled these two professions to arrive at the current "boundary" definition, providing a model for renewed resolution of remaining uncertainties. The goal of this White Paper is to assist with the dialog by providing background and recommendations.

and responsibilities are distinct, there is sufficient overlap to have caused some conflict as to which practices are appropriate to each profession. One might say the "boundary of their professional practices" is somewhat uncertain.

Some states have defined the practice of surveying for which licensure is required so restrictively that operation of a public agency's GIS mandates supervision by a licensed surveyor. In some states, GIS professionals are using easily-operated GPS devices to capture the location of new elements

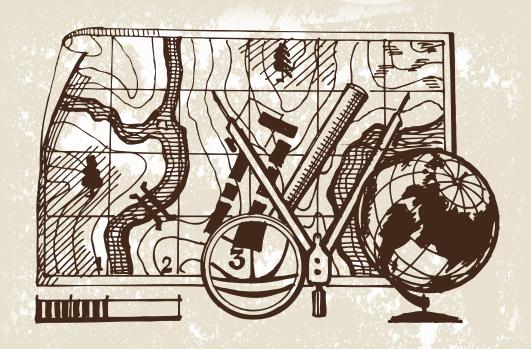
for public agency maps - a practice traditionally reserved for licensed surveyors. This paper reviews the current definition of that professional boundary, and outlines some aspects that remain insufficiently precise. Good will and mutual respect have enabled these two professions to arrive at the current "boundary" definition, providing a model for renewed resolution of remaining uncertainties. The goal of this White Paper is to assist with the dialog by providing background and recommendations.

Both types of professionals can work together to ensure their work products are suitable for the intended purposes, and that they protect the public's health, safety and welfare. As non-licensed map makers, it is up to GIS professionals to ensure that their geodata and maps include the metadata information necessary for

them to be used appropriately.

The community is invited to download, read (and share) URISA's White Paper "Defining the Boundaries of Practice Between Surveyors and GIS Professionals - Background with Recommendations" authored by longtime member Bruce Joffe, GISP and numerous contributors from URISA's Policy Advisory Committee. 🏶

> To read the white paper, go to urisa.org and search for "defining boundaries."



2019 Budget & Officers

2019 Proposed Budget

Income

 Advertising
 \$1,000.00

 Donations
 \$1,000.00

 Interest
 \$800.00

 Membership Dues
 \$25,000.00

 Program Revenues
 \$40,000.00

 Publication Sales
 \$400.00

 TOTAL
 \$68,200.00

Expenses

Accountant Fees **Association Dues** \$5,000.00 Bank Fees \$1,500.00 **Donation Expense** \$750.00 \$200.00 Memorial Contributions News Magazine \$4,000.00 Office Supplies \$1,000.00 Payroll Expenses \$19,750.00 \$300.00 Postage \$27,200.00 **Public Relations** \$2,150.00 \$4,500.00 TOTAL \$68,200.00

2019 VSLS Education Foundation Directors

MEMBERS AT LARGE

Scott Taylor, L.S. Robert Holt, L.S. Ethan Gilmour, Surveyor in Training

VSLS OFFICERS

Mark Day, L.S. Nate Yager, L.S. Lisa Ginett, L.S. Keith Van Iderstine, L.S.

2019 Slate of Officers

PRESIDENT Mark Day, L.S.

VICE PRESIDENT Nate Yager, L.S.

SECRETARY Lisa Ginett, L.S.

TREASURER Keith Van Iderstine, L.S.

DIRECTORS Gayle Burchard, L.S.

Rebecca Gilson, L.S. Paul Hannan, L.S.

2019 NSPS Director

Gayle Burchard, L.S.



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Random Notes



RIDING THE BULL AT 92!

Dick Bohlen, P.E., L.S. #7, and author of our ongoing "Survey Markers" series, recently tried his hand riding the bull at the Texas Roadhouse. He earned many cheers from the crowd. (No word on the bull.)



OLD DOG TEACHES NEW DOG THE ROPES...and tires him out in the process. Paul Hannan, L.S., sent in this photo of his two canine companions at work.



IN THE WEEDS

Tricia Kules, L.S., sent this photo of Gayle Burchard, L.S., bushwhacking in Northfield.



COMING SOON?

Seth Kittredge, L.S., sent this photo in early October as a reminder that the cold weather would be here soon. It didn't take long before that prediction became a reality.



December Round Tables

Friday, Dec. 7, 2018 • Capitol Plaza Hotel • Montpelier, VT



6 PDH

APPROVED

Program Schedule

7:15 AM Registration & Breakfast

(bagels, assorted pastries, fruit, yogurt, granola, coffee, tea, juice)

8:00 AM Round Table Discussions

12:00 PM Lunch & Annual Business Meeting

2:00 PM History of the Burlington

& Lamoille Railroad

3:00 PM Spatial Data Hub

4:00 PM Concluding Remarks

Registration Fee	Through Nov. 28	After Nov. 28
Member in Good Standing*	\$140.00	\$165.00
Non-member	\$190.00	\$215.00
Life Member	\$105.00	\$130.00
Non-member technical staff attending with member	\$119.00	\$144.00
Three attendees from same firm (one must be member)	\$119.00	\$144.00

^{*}Must be current with dues to qualify for the member rate. Members of kindred associations qualify for the member rate. Education credits are valid in Vermont and New York.

Morning Round Tables

- GIS Practices for Surveyors, Shannon Lunderville, VT GIS Coordinator
- New Zealand surveying, Luke Robson
- FEMA Issues and Floodplain Mapping, Rebecca Pfeiffer, CFM, VT DEC Watershed Management Division
- CORS Network, Lloyd MacCormack, VT AOT
- Parcel Mapping Program, Dave Fox, VCGI
- Highway History, Ryan Cloutier, VHB Director of Geomatics
- Rules Changes, members of the Vermont Board of Land Surveyors
- VSLS Program Ideas, Harris Abbott, 1 session
- NSPS Update, Gayle Burchard, 2 sessions

Afternoon Presentations

History of the Burlington and Lamoille Railroad

Presenter: Jerry Fox, Vermont Historian
Jerry Fox will present information on the history of the
Burlington and Lamoille Railroad. Jerry will discuss the
origin of the railroad, the locations of the track and
depots, and hurdles encountered with its construction and
use. He will also discuss the railroad's demise and share
information on the location of historical maps and pictures.

Overview of Spatial Data Hub

Presenter: Dan Jarvis, GIS Professional, Vermont Agency of Transportation Dan will provide an overview of the Vermont Right of Way Spatial Data Hub and explain its applications for the work of land surveyors.

Registration (please complete this form and mail it with your payment, or register online at vsls.org)

Name		
Address		
Email		
Dietary Restrictions		

\square Check enclosed (payable to \	VSLS) for \$
\square Credit card payment: \square VISA	□MC □AMEX □DISC
Card Number	
Exp. Date	_ Security Code

Please return form with payment to: VSLS, P.O. Box 248, Montpelier, VT 05601-0248. Questions? kelly@vsls.org











