

August 2023

# SIDE SHOTS

Professional Land Surveyors of Colorado

Volume 54, Issue 3



**Young  
Surveyor  
Profile**

**SEE PAGE 35**

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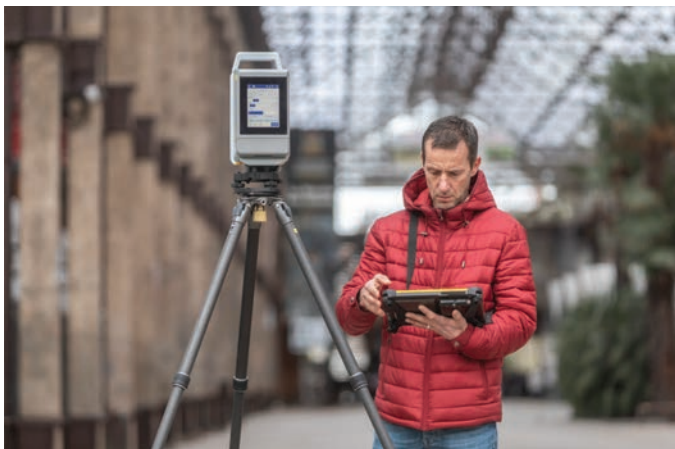
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**PROFESSIONAL LAND SURVEYORS  
OF COLORADO, INC.**

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MEMBER—WESTERN FEDERATION OF  
PROFESSIONAL SURVEYORS

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# SIDE SHOTS

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**VOLUME 54**

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*Side Shots is the official publication of the Professional Land Surveyors of Colorado, Inc.  
and is published quarterly for the betterment of the surveying profession.*

**Brian Dennis**  
*President*

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**Deadlines for editorials, articles, pictures and advertising are January 1, April 1,  
July 1 and October 1. All material received after the current deadline will appear  
in the next issue of Side Shots.**

*We would like to invite anyone who is interested to advertise in Side Shots.  
Do you have something you want to sell, trade or buy? Why not use Side Shots for your  
next ad? We can also reproduce business cards for advertising. Ad space reservation must be arranged with  
Becky Roland, PO Box 441069, Aurora, CO 80044; 303-551-3266.*

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## NSPS DIRECTOR (2022-2023)

TODD BEERS  
(O): 303-353-3528

STEVE PARKER  
Alternate  
C: (719) 641-3355

Hello Fellow Members

As I have spoken to many of our fellow surveyors throughout the state, the responses have been consistent.....they are busy with work, especially now that the weather has warmed, the rain is less and dirt is moving. Always great news to hear! The economy has definitely fluctuated the first half of the year, with interest rate increases, developers reorganizing and overall inflation. The spring weather did not help either, but development continues despite the challenges. I hope we all see continued good fortunes through the fall/winter months as well.



The PLSC Board and committees have also been very active for the first half of the year. 2024 Rocky Mountain Surveyors Summit with the Planning committee, 2024 Sunset review through our Legislative Committee, Career Fairs and introductions through our Outreach committee to name a few. Several Board members met at the PLSC storage unit in July to inventory and catalog the equipment and supplies preparing for the new PLSC auction portion of the website, preparations for the upcoming PLS/LSI Refresher course, Coordination with NSPS for the CST Exam process and attending a NSPS/CST meet and greet in August, developing the resources on the website to organize, house and preserve unrecorded documents discovered throughout the state, developing new ways to enhance *Side Shots* with our publishing team, working with Chapter Presidents and their events, coordinating with Paul Bacus for his new book, coming available soon, as well as a book/merchandise portion of the website being discussed.

I am intentionally listing without a lot of details because I know we have write ups and articles from some of the folks leading these efforts for this and future issues of *Side Shots* and I don't want to spoil their well-deserved thunder for the achievements gained or action items in motion. But at a minimum, the Board and committees have been very active with agendas big and small that we will benefit from as a profession in Colorado. There is always room for volunteers in these committees, if you are interested or want to know more, feel free to reach out to the committee chairs, Becky Roland or myself for more information or how to participate and help keep these committees moving forward.

Rest assured, we have been working hard for you and our goal, as a Board, is to ensure the PLSC membership is being served and your membership creates value. To listen to membership so we continue with the work they tell us is important, abandon the ones that are deemed not important or are no longer needed, pursue new ideas and goals to remain current, relevant, and helpful and protect us from ourselves and adjacent professions while providing educational opportunities to enhance our own practices. Surveyors have never been shy of expressing their point of view and we encourage all the membership to help us and give us their thoughts on what is working, what is not and what we should look at next for the future.

I hope everyone has a great summer!

Brian Dennis, PLS  
PLSC President

# FROM THE EDITOR

We may need a new name for this letter. Letter from the Chair sounds a little grisly. I am no longer the co-editor of *Side Shots*, but the Chair of the *Side Shots* Committee. The Chapters have all stepped up to join the effort of gathering material for each edition of this magazine. I am proud of the members of our organization for deciding that this is how we get things done – together and collaboratively. We still have to meet and work out the kinks, but submissions are already coming in from our committee partners. Please thank Randy Fortuin, Dave Berglund, Brian Kelly, Steve Parker, Todd Johnston, Brian Bowker by sending content their way!

This edition contains a thorough report from the PLSC Board of Directors and Secretary-Treasurer. I will echo Shaun Lee's request to log onto PLSC.net to update your profile information to gain access to new resources planned by the PLSC and to stay informed about upcoming events. We hope both the transparency of the

reports and invitation to participate encourage you to engage with the PLSC at all levels.

Scott Thompson has been working with the Legislative Committee to refine the topics to be addressed in Sunset review. We have a finite budget, so the committee is focused on core topics. Part of their analysis of what is supported by our membership was derived from the Continuing Education poll, the results of which have been included in this issue. Please review Scott's article, the survey poll results, and the article by Dennis Mouland on the same topic.

I am happy to have received my print copy of the May issue of *Side Shots*. If you did not receive yours, please check in with Becky Roland at [broland@plsc.net](mailto:broland@plsc.net).

For Editorial Correspondence, contact:  
Laine Landau at [sideshots@plsc.net](mailto:sideshots@plsc.net)

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# PLSC Board of Directors

## Meeting Minutes

### May 25, 2023 • 4:30 p.m.

1. Call to Order: Pettit

Name	Position	Chapter	Attending?
Shaun Lee	Secretary/Treasurer	Central	x
Becky Roland	Executive Director	n/a	x
Heather Lassner	Director	Northern/TrigStar	
Brian Bowker	Director	Western	
Ian Cortez	Director	Central	x
Todd Johnston	Director	Southwestern	x
Steve Parker	Director	Southern	x
Tom Sylvester	Director	Western	
Scott Thompson	Director	Western,	x
		Legislative	
		Co-Chair	
Dennis Moulard	Director	Northern Chapter	
Ralph Pettit	Ex-Officio	Central	
Todd Beers	Non-Voting	NSPS/WFPS Delegate	
Guests:			
John Hunter		Geo-Coordinator	
Peggy Streicher		GIS in the Rockies	
Randy Fortuin		Central Chapter	x
David Berglund		Northern Chapter	x
Brian Kelly		NW ¼ Chapter	
Brian Shaw		NOAA/NGS	
James Combs		YSN	
Cole Conger		YSN	

2. Determined Quorum (6 voting): Lee

3. No changes to the Agenda: Dennis

4. Approve April 2023 Minutes: Dennis  
 MOTION: To approve the April 2023 Minutes as presented. (TJ/ST):  
 Approved unanimously

5. Financial Report: Lee/Roland
- a. Checking: \$65,969 Savings: \$62,856  
 Investments: \$165,702 at Key Bank and \$189,000 at NSPS Foundation
  - b. NSPS Foundation Membership  
 MOTION: To not join NSPS Foundation at this time. (IC/TJ)  
 Approved unanimously
  - c. Approve pricing for Paul Bacus book
    - i. Complimentary copy to all Voting Members
    - ii. \$75 to all others
    - iii. Provide copy to WCCC students each semester
    - iv. Paul Bacus receives 20 free books.

MOTION: To provide books to the Chapters for distribution at meetings. Chapters are to keep track of which Voting Members receive a copy. The cost is \$40 per book (pending actual cost of publishing being under \$35/book) for non-Voting Members. WCCC students will receive complimentary copies. (SP/IC)

Approved unanimously

d. Approve RMSS payouts to Chapters  
 MOTION: To pay Chapters a portion of the RMSS surplus based on MOU and input of 2023 RMSS Planning Committee Chairs. (SL/IC)

Approved unanimously

- e. Signers updated
  - i. Key Bank suggests a different type of savings account with better yields. SL, BD, SP and BR to review options/information with Key Bank.

6. Reports

- a. NGS Update: Shaw
  - i. No report
- b. Education/Scholarship Committee: Sylvester
  - i. WCCC/Scholarship Report: Sylvester
    1. No report
    2. BR to ask for Scholarship committee recommendations for two scholarships to send for Board approval via email
      - a. Thomas Bretnaur Application
      - b. Kathryn Rocha Application
- c. Side Shots Report: Parker
  - i. Send material to sideshots@plsc.net – copies Steve, Laine and Becky
  - ii. Need volunteers to help with editing and soliciting articles
    1. Chapters please ask for volunteers
    2. Need a Side Shots Committee with President/Delegate of all Chapters
    3. SP/BR to meet with Lain Landau to discuss how best to structure the process

MOTION: To establish a Side Shots Committee made up of Chapter Presidents or their appointed delegate. The Committee will meet quarterly to plan and develop content for each issue. (SP/SL)

Approved unanimously

- iii. May issue is in publishing
- iv. SP to reach out to Brian Kelly on a Memoriam for Willy Whelan
- v. Add a YSN Report to regular content in Side Shots

1. NSPS should report on YSN and other initiatives – BR to ask for quarterly reports
  - a. Add CST information
- vi. Reprint News and Views content in *Side Shots*
- d. Chapter Reports
  - i. CCPS
    1. Met at City of Arvada – Dan Smith
    2. May meeting with Jason Emery
    3. June 11 golf tournament
    4. July meeting with Early Henderson
    5. Issuing CE certificates for meetings
    6. Summer seminar September 15 with John Stahl
    7. September meeting – Michael Polk – gun situations/safety
  - ii. Southern
    1. June 20 presenter had to cancel – please let him know of possible replacement
  - iii. Northern
    1. On hiatus
  - iv. Southwest
  - v. Reminder: please report work being done by PLSC at Chapter Meetings
- e. Legislative Committee: Thompson
  - i. Pursuing Continuing Education and Exam process changes to match current practice for Sunset Review
    1. BD will send surrounding state CE requirements to ST
    2. Dennis Mouland will be sending an article for *Side Shots* and DORA
    3. ST has reached out to Gene Kooper to discuss plan and answer his objections from last sunset review
    4. Want to make CE requirement proactive instead of current reactive requirements
    5. BR to send survey reminder with a June 10 deadline and send current survey results to Board
- f. Outreach Committee: Dennis
  - i. Women in Engineering event staffed by CCPS
  - ii. City of Arvada redoing plating requirements – reached out to BD and Randy Fortuin for input
    1. Article for *Side Shots* BD/Dan Smith November issue
7. RMSS Report: Berglund/Lassner
  - a. Finalizing contract with Westin Westminster
  - b. March 25-28, 2024 (Monday-Thursday)
  - c. Next planning meeting is 5/30
  - d. Contact Shaun Lee for any additional access to Google Drive
  - e. BR look up competing org dates at that time
8. NSPS/WFPS Reports: Beers
  - a. No report
9. Action Items status from previous meetings – FYI only
  - a. Shaun was able to sell some of the Aztec equipment on ebay for \$492, which he will transfer to PLSC.
    - i. SL and BR to confirm
  - b. Need to re-establish relationship with new staff at RR Museum
    - i. TB
  - c. Move to personal account setup for Key Bank and allow a single person approval process
    - i. Set up within 2 weeks
    - ii. Haven't made the change to date – wait for VP to be filled
    - iii. BD added – SL needs to finish
  - d. Google Earth fee subscription as of 4/15/23: Dennis/Boehm
    - i. SL to follow up with DORA/SP to follow up with CDOT resources
    - ii. \$250 for a company subscription/free to public agencies
10. No new Business
11. Next Meetings
  - a. Working Group on website/process to sell storage unit equipment
    - i. Need to view items at storage first and set value
    - ii. How do we keep equipment replenished
    - iii. IC volunteered to be on Committee
    - iv. BR to send inventory list to Board
    - v. BR to ask resource re: taxing
    - v. Add document preservation/digitization to this discussion
  - b. BOD Call June 22
12. Adjourn SL/SP

# PLSC Secretary Report:



Shaun Lee  
PLSC  
Secretary/  
Treasurer

*Don't forget to log onto PLSC.net to update your profile information! This will help you to gain access to new resources being planned by the PLSC (special record library, meeting recordings, and more). Also to stay informed through general communications, event invitations, surveys issued by the PLSC, and much more.*

- h. Proposal to require report of area as a result of a survey, statute not identified.
- i. The issue with the required identification of the author of a legal description being ignored by attorneys, and others was brought up.
- j. PLSC comments are to be sent Scott Thompson within a week so he can send a written response to DORA/Jennifer Lockwood. Scott Thompson will post items in a Google docs. BR to send link and deadline to Chapters.

## *Continuing Education Board of Directors Resolution*

- Whereas the Professional Land Surveyors of Colorado, Inc. (PLSC) stated purpose includes "To provide educational and instructional opportunities for those persons presently licensed as land surveyors within the State of Colorado, and for any other persons who are in any manner interested in learning of the profession of land surveying;"
- Whereas a passing score on the tests required for licensure as a Professional Land Surveyor is indicative of only "minimal competence;"
- Whereas it is the PLSCs belief that working toward the "maximum competence" is a more appropriate goal;
- Whereas the PLSC recognizes that the profession of Surveying is a career long learning experience;
- The PLSC hereby resolves to support a requirement for mandatory continuing education as a condition of licensure as a Professional Land Surveyor in the State of Colorado

## *New Committee – Side Shots*

- It was brought to the Board of Directors that there is a need for more input and collaboration between the chapters and the state board in the drafting of the *Side Shots Magazine*.
- It was unanimously approved to create the committee and nominated Laine Landau as chair. She has gracefully accepted the nomination. The PLSC thanks and appreciates her efforts and looks forward to supporting this position.
- Following the new Committee creation, the PLSC is asking for support by also creating a similar chair position or supporting through the Secretary/ Communications position within the chapter.
  - To include but not limited to the solicitation of articles, topics of discussion, announcements, chapter events, chapter reports, etc.

## **Happenings**

### *Board Positions Open:*

- Vice President of the Professional Land Surveyors of Colorado,
  - PLSC - Membership Committee Chair

### *Legislative:*

Brian Dennis, Scott Thompson, and Becky Roland met with Jennifer Lockwood of DORA to discuss Sunset Review issues. Previously presented to her were documents supporting mandatory continuing education. The salient points presented in those documents were briefly discussed to clarify our support of MCE.

Other stakeholder issues raised in the preliminary Sunset Review process:

- a. 38-53-101 & 38-53-104 The time period allowed for monument records and deposit plat (6 months v 1 year)
- b. 38-51-106 (k) a suggestion to require as-measured distance and record distance.
- c. 38-51-102 (9) a suggestion to require building dimensions on an Improvement Survey Plat
- d. 38-51-106 (b) a suggestion to require a title commitment to base the survey on
- e. 38-51-107.2 the scenario presented was of a subdivision less than 20 years old but in which the lot corners were not set by the original surveyor, the suggestion that in this case a deposit plat should not be exempted.
- f. 38-53-103 seeking clarity on when a controlling corner must be set or found instead of using a calculated position.
- g. 38-51-104 (3) a suggestion to require the distance to the actual location be stamped on a witness corner (WC) monument.



# PLSC Treasurer's Report:

## PLSC Treasurer's Report:

- Following a meeting with our new KeyBank account representative and the review of the investment account; it was agreed that the account is on pace with current market norms and no adjustments were made.
- The PLSC voted to create an endowment with the NSPS Foundation in the name of the Professional Land Surveyors of Colorado Educational Fund.
- Paul Bacus is drafting a new Colorado Land Surveying Laws book for the PLSC and its members.
  - a. Becky R. will be sending the books to Chapters for distribution at meetings. Chapters are to keep track of which Voting Members receive a copy. For those voting members not able to pick up a copy at a chapter meeting the Chapters are asked to send addresses for its members for shipping books.
  - b. The cost will be \$40 per book for non-Voting Members and will be available for purchase on PLSC.net and at the 2024 RMSS Conference.
  - c. WCCC students will receive a complimentary copy.
  - d. PDF posting on website in January for member only access.

## Current assets:

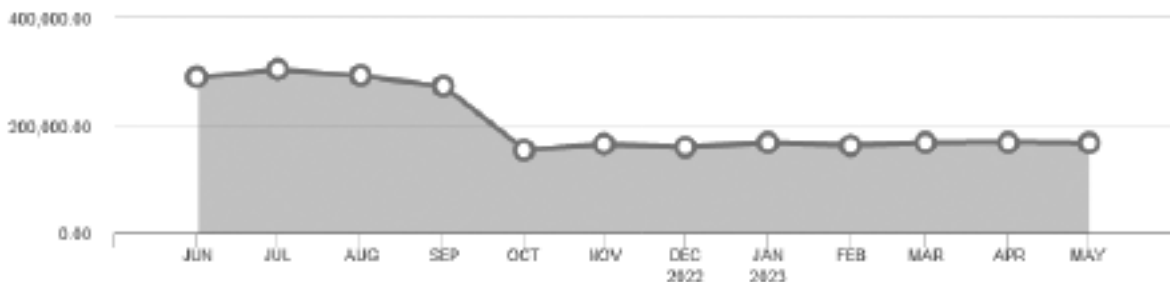
Checking:	\$37,135
Savings:	\$62,856
Investment Account	
(Education Fund):	\$169,798
	\$269,789

## Past Quarter in Review:

- Deposit sent to the Westin Hotel in Broomfield for the up-coming RMSS 2024 Conference.
- Lobbyists Paid for 3rd quarter 2023 at "Active" Level Status; fee \$3,750
- Investments:
  - Vanguard Bd Index Fds Vanguard Long Term Bd Etf
  - Vanguard Bd Index Fds Vanguard Intermediate Term Bd Etf
  - Vanguard Bd Index Fds Vanguard Short Term Bd Etf
  - Vanguard Intl Fd Ftse Developed Mkts Etf
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Market Value (Last 12 Months) As of 11:32 PM ET 08/27/2023

[→ Go to Valuation Over Time](#)



## Composition



ASSET CLASS	CURRENT VALUE	PERCENT OF TOTAL
<b>EQUITY</b>	166,143.09	97.28%
<b>CASH, MONEY FUNDS, BANK DEPOSITS</b>	4,623.36	2.71%

# 2024 PLSC Refresher Course

“First get the right people on the bus (and the wrong people off the bus) and then figure out where to drive it.” This management philosophy, roughly translated as “first who, then what” is the first step in taking a company from good to great, according to Jim Collins, author of *Good to Great*. Below are the profiles of the Refresher Course cadre. We have the right people; we are working diligently on the direction of the bus. Your opportunity awaits to take a ride.

## Public Land Survey System Concepts and Computations



Sean Mullen is the lead land surveyor for the Southwest District, Bureau of Land Management's (BLM) Cadastral Survey Program, Colorado, conducting riparian and dependent resurveys primarily in western Colorado. Sean is an instructor at the BLM National Training Center and serves on the Board of Directors for the Western Colorado Land Surveyors. He holds a Bachelor of Science degree in Geomatics from the Oregon Institute of Technology.

## Overview of NCEES FS and PS Exams



Scott Thompson-Buchanan is the Chief Cartographer for the National Park Service (NPS) for the Branches of Cartography, Mapping and Boundary Management. Scott's varied career includes service in the United States Army, City of Colorado Springs and Colorado Springs Utilities and has conducted multiple dependent resurveys and research for the NPS and BLM Cadastral Survey. Scott holds a Bachelor of Arts degree in Geography from the University of Colorado.

## GIS, State Plane, Geodesy & Boundary Law and Legal Terms



Dr. Jan Van Sickle has been a featured speaker at many conferences including MAPPS, GITA, the Institute of Navigation (ION) Annual Meeting, delivering the 2021 keynote for the NSPS and URISA Summit. He is an ASPRS Certified Photogrammetrist and a Certified Lidar Mapping Scientist. He was a Senior Lecturer at Penn State University for many years and is currently the Principal Geodetic Engineer at Maxar. Jan is the author of *GPS and GNSS for Land Surveyors*, *Basic GIS Coordinates*

and *Surveying Solved Problems*. Jan earned his Ph.D. in geospatial engineering from the University of Colorado.

## Survey Computations I



Lynn Patten teaches algebra, trigonometry and precalculus at Front Range Community College. Lynn's experience includes 15 years of work with land surveying and engineering firms with duties ranging from draftsman, mathematician, programmer to office manager. His award-winning tenure as a college

teacher has spanned 30 years. He also has an online presence known as Terrametria intended to provide review courses for professional surveyors, surveyor interns and mathematics students interested in real-world applications. Lynn holds a Bachelor of Science in Mineral Engineering Mathematics (1972) and a Master of Science in Mathematics (1974), both from the Colorado School of Mines.

## Survey Computations II



Never offer Tom Sylvester ice water. He won't drink it - by solemn agreement with his U.S. Seabees (U.S. Navy Construction Battalions) buddies after two Austral Summer tours with Operation Deep Freeze in Antarctica. Tom has 24 years of experience as an engineer, supervisor,

and manager in the mining industry. He has operated an engineering and land surveying practice in Grand Junction for the past 25 years. He teaches and directs the successful and growing Land Surveying and Geomatics programs at the Colorado Mesa University/Western Colorado Community College. Tom is a P.E. and PLS, receiving his Engineer of Mines Professional Degree (5-year program) from the Colorado School of Mines.

## Professional Ethics



Warren Ward has come full circle: He attended the Refresher Course in 1988 and is now back as an instructor. He has served as the Grand County Surveyor for the past 34 years. He is the past president of PLSC, member of the legislative committee since 1996, past

president of the Colorado and National Association of County Surveyors and author/presenter on many

topics including, *Building a Country - How Surveyors Built a Country With The Courts Following In Their Footsteps*, *The Art of Retracement*, *The Four Corners Legacy - The Establishment and Preservation of a State Corner Through the GPS Era*. Warren has worked as a consultant for the Department of Regulatory Agencies (DORA) for multiple years. Warren has attended the University of Northern Colorado, Fort Lewis College, and Metropolitan State College of Denver.

### Colorado Law, I & II



Roger Nelson is the past president of PLSC, past legislative committee chair, a longtime leader in the PLSC and presenter at numerous conferences. For the past 35 years he has provided Public Land Survey System expertise in the federal, state, and private sector in the

western United States. He is licensed in 12 states and is registered as a CFedS. Roger is a survey manager at Bohannon Huston. He holds a Bachelor of Science degree in Production Management and Associate of Science degree in Survey Technology, both from Louisiana Tech University.

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Colorado

June 22, 2023

Steven Parker and Laine Landau, Side Shots Co-Editors  
PO Box 441069  
Aurora, Colorado 80044

Dear Mr. Parker and Ms. Landau:

This letter informs you of official BLM cadastral surveys in Colorado that have been accepted from December 2, 2022, through February 8, 2023, officially filed, and are now available in the Public Room, Bureau of Land Management, Colorado State Office, Denver Federal Center, Building 1A, Lakewood, Colorado 80215. The surveys will also be available at <https://glorerecords.blm.gov>.

The accepted surveys are listed below by township, range, meridian, group number, type, acceptance date and number of plats.

<u>Township</u>	<u>Range</u>	<u>Meridian</u>	<u>Group No.</u>	<u>Type</u>	<u>Accepted</u>	<u>Plats</u>
T. 12 S.	R. 72 W.	Sixth	1744	Plat & Notes	12/02/22	1
T. 49 N.	R. 7 W.	NMPM	1747	Plat & Notes	01/22/23	2
T. 8 S.	R. 78 W.	Sixth	1500	Plat & Notes	02/08/23	1

As other surveys are completed, I will advise you of their acceptance. You may circulate this letter among the membership of the Professional Land Surveyors of Colorado.

Sincerely,

Digitally signed by DAVID  
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David W. Ginther  
Chief Cadastral Surveyor for Colorado

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John B. Stahl, PLS, CFedS, is a licensed professional land surveyor in the states of Utah and Montana, currently owning and operating Cornerstone Professional Land Surveys, Inc., and Cornerstone Land Consulting, Inc., in Salt Lake City. Mr. Stahl specializes in surveying land boundaries, resolving boundary conflicts, performing title and historical research, land boundary consultation services, mediation, and dispute resolution. He has been qualified as an expert witness in numerous boundary, access, and negligence cases and has actively participated in the preparation of amicus curiae briefs to the Utah Supreme Court. He has furthered his education by participating in a state-qualified mediation training program and earning recognition as a Certified Federal Surveyor. Mr. Stahl has served his profession as state chairman of

the Utah Council of Land Surveyors and a Utah delegate to the Western Federation of Professional Surveyors. He is an adjunct instructor for Salt Lake Community College and Utah Valley University, where he has taught mathematics, ethics and liability, and boundary law courses for land surveying students since 1991. He is also a licensed Real Estate Instructor in Utah. Mr. Stahl received his A.A.S. degree in land surveying from Flathead Valley Community College in Kalispell, Montana, and has authored numerous articles and publications covering topics on boundary laws, research, and resolving conflicts of evidence. He has also conducted historical research and written articles on several important milestones in surveying history, including the Uintah Special Meridian Initial Point, the Four Corners Monument, the Stansbury Expedition to the Great Salt Lake, and the Gunnison Massacre. John is president of Cornerstone Professional Land Surveys, Inc., specializing in boundary dispute resolutions, retracement and litigation assistance.

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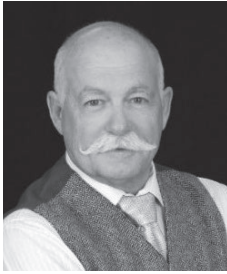
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# Sunset Review 2024



K. Scott  
Thompson, PLS  
PLSC Legislative  
Committee Chair

The 2024 Sunset Review of the Architects, Engineers and Surveyors Board kicked off in February 2023 with an invite to PLSC to participate as a stakeholder in the process. The Legislative Committee of PLSC solicited topics for consideration from members. About eight items were shortlisted and discussed at length in committee meetings over March and April.

On May 9<sup>th</sup> a meeting was held with the Policy Analyst for DORA.

The sunset review process was explained and the criteria was presented. Among the thirteen criteria items the most significant were considered by the Analyst to be:

Whether regulation or program administration by the agency is necessary to protect the public health, safety, and welfare;

If the program is necessary, whether the existing rules and regulations establish the least restrictive form of governmental oversight consistent with the public interest, considering other available regulatory mechanisms;

Whether administrative and statutory changes are necessary to improve agency operations to enhance the public interest.

After consideration and consultation with others, it was determined that we should concentrate on Title 12 statutes, those that establish the criteria, testing and licensing of Professional Land Surveyors. Title 38 statutes, those that govern how we survey, would be saved for another day. The reasoning for this is that the Title 12 statutes are truly the focus of Sunset Review. Inclusion of the other items are prone to controversy and the more complex a bill becomes the more opposition it is open to. The statutes we are pursuing are changes in the criteria for testing to align with the current use of NCEES by the AES Board and the addition of Mandatory Continuing Education to the requirements for licensing as a Professional Land Surveyor.

DORA was provided draft statutes prepared by Tom Sylvester to address the NCEES practices and articles of testimony by the committee, Dennis Moulard and Scott Thompson, a spreadsheet showing the status of continuing education in surrounding states prepared by

Brian Dennis, and the result of the poll conducted by PLSC on the question of continuing education. The poll results revealed that 75% of the 143 respondents were in favor of Mandatory Continuing Education.

On June 21 another meeting was held with the Policy Analyst for DORA. The discussion was regarding other stakeholders submitted issues. These were all Title 38 statutes such as those PLSC had chosen not to address in this sunset review process. Regardless, DORA requested our input on these proposals. When asked for clarification of these were appropriate for the sunset review process, an if so, can we submit our previously set aside Title 38 subjects, we were advised the research phase is closed and no new issues will be accepted. It is my opinion that the Title 38 issues will not be included in the eventual bill.

DORA's report is due in October, and if continuance of the AES Board is recommended the appropriate House committee will draft a bill. We are optimistic that our proposed changes will be implemented.

---

The PLSC Board approved the following resolution:

*Whereas the Professional Land Surveyors of Colorado, Inc. (PLSC) stated purpose includes **"To provide educational and instructional opportunities for those persons presently licensed as land surveyors within the State of Colorado, and for any other persons who are in any manner interested in learning of the profession of land surveying;"***

*Whereas a passing score on the tests required for licensure as a Professional Land Surveyor is indicative of only "minimal competence;"*

*Whereas it is the PLSC's belief that exceeding "minimum competence" is a more appropriate goal;*

*Whereas the PLSC recognizes that the profession of Surveying is a career long learning experience;*

*The PLSC hereby resolves to support a requirement for mandatory continuing education as a condition of licensure as a Professional Land Surveyor in the State of Colorado.*

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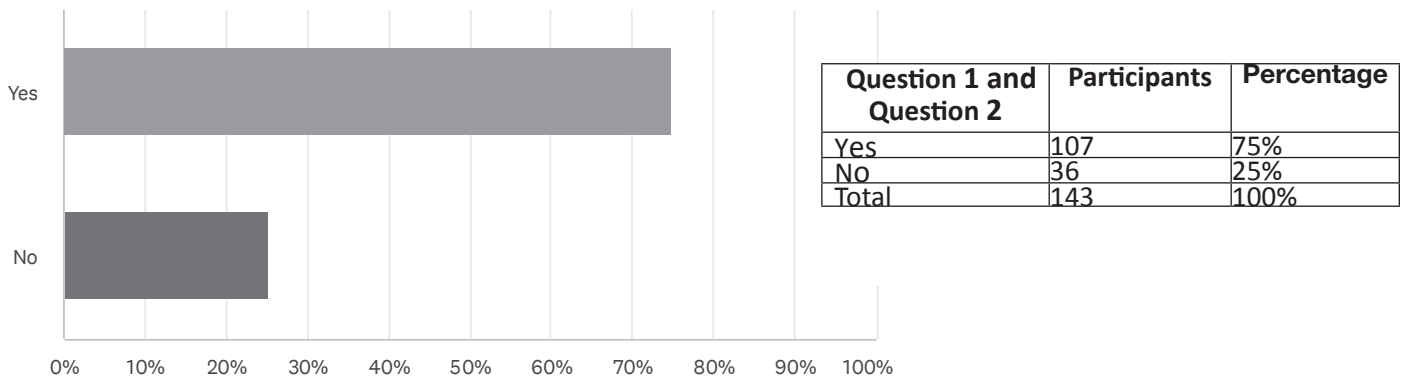
# The Question of Continuing Education

The Legislative Committee sent out a survey to solicit input regarding the role continuing education should play for land surveyors in Colorado. The results are in!

**Question 1** Do you think a State requirement for continuing education would improve the quality of work provided by this profession?

**Question 2** Do you think Colorado should have a continuing education requirement for licensed surveyors?

The responses for Question 1 allowed 3 types of answers, yes, no, and comments. To tabulate the results into “yes” or “no” categories, the comments were generalized into “yes” or “no” camps. Though the questions were slightly different, Question 1 and Question 2 ended up with the same percentages.



**Question 3** NCEES recommends 15 continuing education hours per year. How many hours per year do you think should be required?

The average was 10 hours, mean was 12, and mode was 15.

**Question 4** NCEES approves of a carry-over of hours earned of 15 continuing education hours every two years. How many do you think should be allowed?

High was 100, low was 0. Hard to work statistics when sarcastic surveyors are involved!

## Comments

Roughly half the responding surveyors added comments at the end of the survey. Just over half of those comments support continuing education. Others felt we need better continuing education offerings before mandating education requirements. Still others criticized the quality of surveys conducted in Colorado but said voluntary, rather than mandatory, improvement was the only way to get better. Still others suggested that better enforcement of the current rules would produce more improvement than continuing education classes. There is still concern about the cost and availability of continuing education and concern about it being a revenue generator rather than an education mechanism. Several people mentioned supporting CE credit for non-traditional formats ranging from self-reported participation in webinars to on-the-job experience. The consensus is that the responding surveyors recognize that licensed Colorado surveyors could improve and that some form of improvement is needed.

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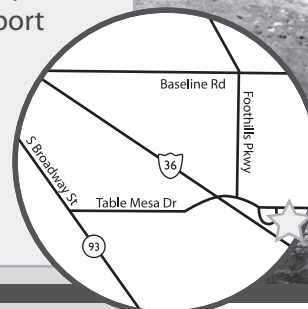
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# The Education Conundrum

By Dennis J. Mouland, PLS



Dennis J. Mouland  
PLS

## Part One---

Each state has its own set of requirements before a person is allowed to sit for a surveying examination for licensure. Some have moved to require a 4-year degree in surveying or something similar. Others only require a certain number of years of increasingly relevant experience. And others have chosen a middle ground of

requiring a certain number of hours in survey-specific college education.

The national exam, as administered by NCEES (National Council of Examiners for Engineering and Surveying), and the individual state-specific examinations are designed to test for the “minimum entry level”. I cannot disagree with that goal or doctrine. 25 years ago, I wrote an article that suggested we raise the bar on what we call “minimum”, and I got quite a bit of negative feedback from various test writers.

But let’s for the moment agree that testing is at exactly the level it should be to protect the public and other clients from shoddy survey work of any nature: Technology has forced the Professional Land Surveyor (PLS) to be an expert on far more subjects and services than in my day. Hopefully, the various exams are keeping up with those subjects.

Once the PLS is licensed, the states range from virtually no further education required all the way to extensive continuing education for the PLS. It is assumed the continuing education credits are substantively adding education to the items deemed “above minimal” in the initial testing.

Many assume continuing education is for the purpose of keeping up with the latest gadgets and processes. Additional education certainly can provide a great source for all PLS’s to keep up with those advances. But I have always felt continuing education was just as much for filling in the gaps that existed at initial licensure due to the minimum entry level doctrine. And there are significant gaps, depending on the subject.

The conundrum is found when a state licensing board acquiesces to the minimum level doctrine, and then washes its hands of *mandatory continuing education*. The boards completely drop the ball on protecting the

public and following through with the full process.. And while many Boards deal with technical complaints, some are not staffed or funded to investigate this type of problem adequately.

In the mad rush to have interchangeable licensing for surveyors (once you are licensed in one state, just pay the fees for all others and get licensed by reciprocity with no exams), we have even more endangered the public’s safety and well-being from the PLS. I met a President of NCEES a few years ago who was pushing for this. I asked him what would happen if a PLS in New Jersey were to get licensed in a public lands state without any training or testing. His response was “We’re sick of hearing about public lands. Don’t you think your NJ PLS would do his or her “due diligence” to learn what he or she needed for public lands work?” I said “no, not at all.”

I have 50 years of experience in Public Land Survey System states that indicates a large portion of those already licensed in those states have never done their “due diligence”. In many cases, they simply do not know how far short they fall of “due diligence”. You see evidence of this everyday: The multiple monument syndrome at so many corners is excellent proof that many PLS’s do not understand basic boundary law.

If I were to decide to work in New Jersey, I am not sure I would know what to look up or what sources exist for me to do my due diligence. Years of experience would be needed to understand the complex metes and bounds nuances in that state. There are likely hundreds of items I would need to understand before performing a boundary survey in that or any other colonial state. And on top of that, each state would have a myriad of rules and regulations unique to them for management of the profession.

So, we see this educational dichotomy in many states of limited testing to get licensed and no requirement to keep learning afterwards. This is like a doctor who got into the field with a minimal level of knowledge (scary), who never has to learn anything afterwards; as new research, procedures and technologies expand, the doctor could be completely left behind by the choice of the licensing agency.

For those states which have a mandatory continuing education requirement, keep up the good work by making sure the offerings are really educational, not just sales pitches by a technology vendor.

But where the state boards have not instituted mandatory continuing education, you have let the profession down, as well as the public you exist to protect. How else will the gaps be filled?

## Part Two----

If you've ever been in a position to review work by other PLS's, you know how far askew some practitioners are from really knowing what they are doing. When conducting a project you often review work done in the area by others. County Surveyors know, some state surveyors know, and I experienced it en masse as a surveyor for the US Forest Service for 16 years in the three different states. Not only did I review work by others in and around my projects, I also reviewed hundreds of plats submitted to the agency by firms hopeful of being awarded a cadastral contract. I was frequently stunned at what poor boundary work firms would submit to impress us.

I am 100% convinced that at least half of the PLS's in the country are lacking in knowledge critical to making legal and proper decisions about boundary law and evidence. It ranges from lost corners being reestablished at record bearing and distance (instead of proportioning), to section subdivisions that even a layman would spot as bad. Land descriptions without one bound, "surveys" based on record data without one measurement, and surveys done without any reference to senior adjoining deeds, all exist out there in large quantities.

The source of these unqualified individuals can come from states with or without educational requirements. I know a PLS in Texas who has a BS and MS in surveying. And he never had a class in boundary law! Their boundary classes were limited to all the ways you could mathematically adjust boundary measurement data. When I took the NCEES exams (in 1979) I was disappointed with the lack of boundary questions. In the four PLSS states in which I was examined, the only PLSS question was "How many sections are in a standard township?" That is an example of the minimum they thought should exist.

This lack in boundary law is further explained by the fact that most of the degree awarding programs in the country are run by a Ph.D. in geodesy or engineering; smart people, but few ever really trained in boundary law and evidence.

When the Board (DORA in Colorado) tells us only 0.8% of surveys are complained about, it sounds as if all is well. But let's compare apples with apples. When a doctor errs, the patient is usually quite aware of it, via pain, mobility issues, or unexpected side effects. When the dentist spends two hours on a tooth, and charges you \$2000, there is a problem if the tooth still hurts a couple of days later. When an architect or structural engineer blows it on a new building or other structure, the collapse of it is clear to all concerned. Their clients are far more likely to complain.

But I would guess that 95% of my clients over the past 50 years would not have a clue if the survey was bad. If they don't see some glaring error, they will not complain about the Center 1/4 corner not being set by bearing-bearing intersection. They don't know they should complain. And surveying is a complete mystery to most clients, including many engineers, architects, and developers. That lot survey for "Grandma Jones" might get a complaint about your fee, but she will never know you just pinned her fence corners rather than performed a real survey.

The bottom line is that we have *so much knowledge* we need to offer and receive in order to catch-up in our profession. And mandatory continuing education is the only solution I know of. Our state exams are often woefully inadequate, focusing on how soon we have to file a monument record, versus real surveying competence subjects. Many of those already licensed assumed all knowledge was bestowed upon them when they got their license. They don't even know what they don't know.

Let's put this profession on a truly professional track. Let's make sure everyone is fully competent to perform surveys.

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## CCPS

We began the new year with a full board and a desire for a busy year. In April our first general meeting was hosted by the City of Arvada, courtesy of Dan Smith, Chief Surveyor, who presented the new City of Arvada Subdivision guidelines and updated control information. Dan's team was instrumental in making the meeting a success.

Jason Emery of Boulder Land Consultants gave an in-depth and entertaining presentation on the Hayden Atlas for our May meeting. The presentation solidified Jason's stature as a true gift to our Surveying community. June was the time for the annual golf tournament held at the Homestead Golf Course in Lakewood. We had full attendance and success was evident in the stories told and the laughter heard.

Earl Henderson of Zenith Surveying (Boulder) will present at our July meeting the complex and often encountered scenario of conflicting corner monuments and evidence as well as leading a discussion on the differences between record, measured and calculated dimensions as shown on a plat.

On September 15th the CCPS will host our first annual Summer Seminar at the Arapahoe Community College, also to be offered for remote viewing statewide. This one-day event will offer practical lessons derived from the seminal and often cited Legal Elements of Boundaries and Adjacent Properties by Ray Skelton. How a sample of court decisions cited in the book have stood the test of time (or not) and an in-depth review of several cases will be the subject of the seminar intended for the working professional by John Stahl. John is president of Cornerstone Professional Land Surveys, Inc., specializing in boundary dispute resolutions, retracement and litigation assistance. He is licensed in the States of Utah and Montana.

In coordination with PLSC we have begun issuing CEU's for the technical/professional portion of our general meetings. Our education committee chaired by Amara Hildebrand, PE has been active in attending school activities and helping promote the most wonderful Profession of Surveying.

There is much to be done to further our Profession and we look forward to the tasks. Thank you all for making this a very good year.

Respectfully,

Randy Fortuin  
President, CCPS

## NW1/4

The NW1/4 met for the first time- this year! On June 27th at the Dry Creek Café in Hayden, Colorado. Virtually every Land Surveyor in Moffat and Routt County were there, and those that were not will remain anonymous. Perhaps the biggest news of the evening was Dave Ginther, who until a month ago was the Craig Region Surveyor, becoming the BLM Chief of Cadastral Survey for Colorado and still remaining in Craig. My, how the times have changed. Congratulation Dave! Tom Effinger- Routt County Surveyor, and Bill Baker- Moffat County Surveyor, then led a discussion into plat filing statutes and filing methodologies that differed between the Counties. It appears this is a statewide issue and the busier counties are running out of storage space and going digital and the less busy counties are still filing and recording many survey plat by mylar. Tom also went over the elimination of filing new Recorded Plats with the County Surveyor as it is not required by statute.

Our next meeting should be in mid-August.

Respectfully submitted,  
Brian T. Kelly, President, NW1/4 PLSC

## SCPLS

The Southern Chapter presented two academic scholarships and one gift during the August members meeting. Rafael Bombacini received \$1,000, Jordan Johannes received \$1,500 and The Sawyer Garstin Map Collection at Miramont Castle received \$500. In July, the Southern Chapter sponsored the establishment of a final mark in remembrance of past El Paso County Surveyor Richard Mariotti. Also, in July the Southern Chapter held the Annual Paul Grout Golf Outing at Holy Dot Golf Course in Colorado City. Our Annual Christmas Party is scheduled for Friday December 8th at the Miramont Castle, the cost is \$50/couple, \$25/single, cash bar. We have periodic guest speakers throughout the year, be watching the chapter website scpls.net.

Steve Parker  
719-641-3355

## SWC – PLSC

On May 23rd, Mike Boeckman, PLS (retired BLM Surveyor) gave a presentation to members of the Southwest Chapter (SWC). This was a follow-up to his previous presentation on the 1877 erroneous Fahringer survey in La Plata County. Here was the abstract to

Mike's presentation: *"The presentation follows Fahringer around Colorado during the Era of Fictitious Surveys as presented many years ago by Lin Livermore of Colorado Cadastral Survey. It presents the topic of Special Deposit Surveys, an era of survey fraud from 1879-86. Much like the Benson Syndicate in California, there did affect Colorado. Fictitious and fraudulent surveys resulted in numerous resurveys which led to independent and dependent resurvey methods."* A big thank you goes out to Mike for presenting his material and educating our Chapter!

The SWC held an in-person/virtual meeting on June 20th at the La Plata County Fairgrounds.

Here were highlights to that meeting:

- Treasurer's Report: Funds have been moved from the old account at Wells Fargo Bank to the new account at Alpine Bank. The balance is \$14,760.29. Justin Bonnell, PLS (Treasurer) will work to make the \$1,000 donation to the Fort Lewis College Village Aid Project as voted by the SWC in December 2022.
- Steve McCormack, PLS (La Plata County Surveyor) provided an update to the County effort to scan 8700 monument records and provide them as a new layer on the County GIS site. Progress is being made on that effort but is being slowed by lack of County resources.
- Rita Caffey, PLS (Montezuma County) is in the process of drafting checklists for the required items needed on the different types of surveys and plats required in Montezuma County.
- The PLSC *Side Shots* publication needs help. Chapter Presidents are now a part of the *Side Shots* Committee. Todd Johnston, PLS (President) wrote an article on monuments that are found in CDOT ROW in the Southwest Counties. This was submitted in June for the August issue. An article is due by the end of September for the November issue. Volunteers from the Chapter are being sought to write articles.
- The "Surveyor Rendezvous" Committee announced that the event will take place at the Roadhouse Restaurant on August 12th. This dinner is open to everyone in the survey community (PLSC members and non-members). Todd will make an email announcement in mid-Summer.
- A six-hour field-training class with Wilderness Medic, LLC for Chapter members will be held on Saturday, October 14th. A syllabus will be generated and sent out to those who are interested in taking the training.
- Todd Johnston (President) and Josh Casselberry (Vice President) will serve in their Chapter officer roles

through 2023, then step down. Nominations and elections will be held at the September 2023 meeting. If anyone is interested in being President/Vice President, please contact Todd. Justin Bonnell (Treasurer) and Brian Boniface (Secretary) will serve another term (two years).

- Due to other events happening in late Summer the Chapter will not hold a "GPS on Benchmarks" event as done in year's past.
- Ongoing goals for the SWC are to develop/formalize the bylaws and use the SWC page on PLSC.net to archive important documents, meeting minutes and agendas.

Our next meeting is scheduled for September 12th at the La Plata County Fairgrounds.

Everyone have a great Summer!

Todd C. Johnston, PLS  
President - SW Chapter PLSC

## WCLS

We had our July Picnic at Lincoln Park again this year. Thank you to all who helped, especially Chris Ransier and Alex Lheritier. WCLS is excited to have Dennis Moulard as a speaker for our Fall Seminar. This year it will be held at the Lincoln Park Hospitality Suite on Friday, September 1st. Information will be available as to topic and fees on the PLSC website. Also in September at our regular Chapter meeting we plan on having Aaron Clay do a brief presentation on Water Law, on Wednesday, September 13th.

Stay Safe

Brian K. Bowker  
WCLS President



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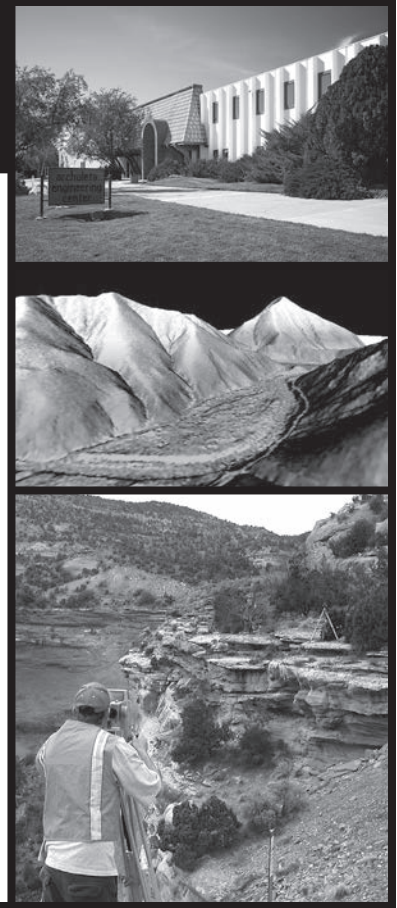
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# What Are Those Survey Things In Our ROW?

Todd Johnston, PLS – Region 5 Survey Coordinator

*A note from the Author: This article was originally written for internal CDOT Region 5 (Southwest 15 Counties) staff. It was particularly intended for Maintenance/Permits personnel who work and/or operate inside CDOT ROW, in hopes that monuments can be identified and preserved. I hope land surveyors who read this can get some benefit. The information that follows is based from my experience surveying for CDOT Region 5 since 1998 and is specific to the Southwest 15 Counties. If you are working in a different part of the State, please contact the applicable CDOT Survey Coordinator(s) if you have questions regarding highway monumentation. <https://www.codot.gov/business/manuals/survey/cdot-survey-contacts.pdf>*

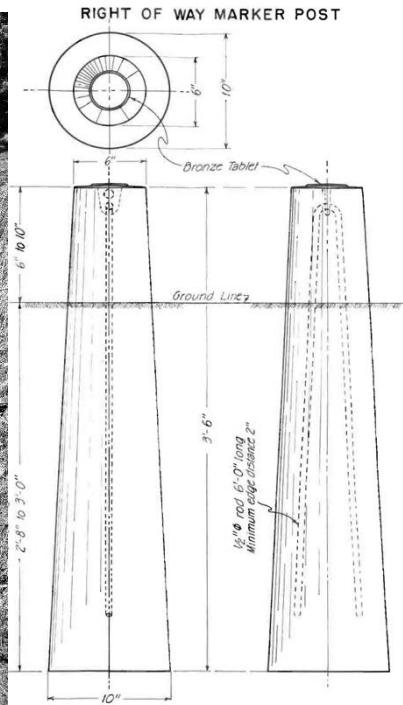
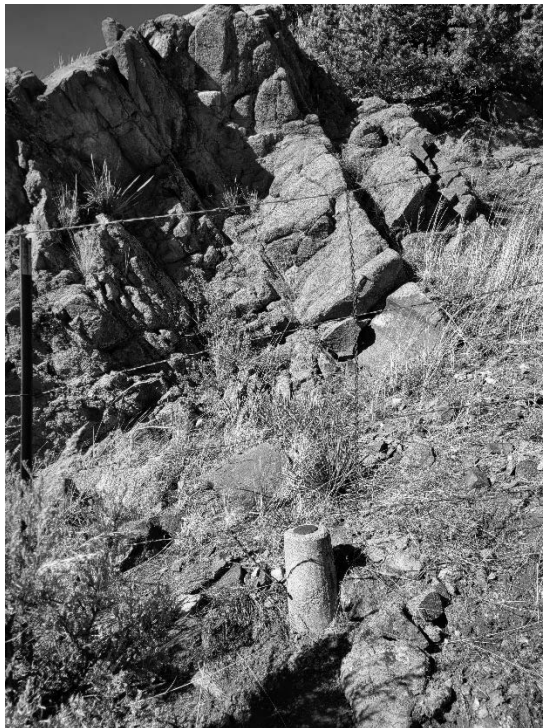
The Colorado Department of Transportation (CDOT) has been conducting field surveys of our highway facilities and ROW since the early 1910s (we have field books to prove it!). During the course of that 110+ year period, surveyors have set all kinds of monuments. Below are pictures of some of these monuments with a brief history. Monumentation is still the corner stone (no pun intended) of the surveying profession and their preservation is of utmost importance. I hope you history buffs find this interesting. For those of you working in the field or writing contracts/permits with Contractors, I hope the following helps to identify survey monuments and keep them safe.

## Right-of-Way (ROW) Monuments These monuments delineate the CDOT ROW

This is our earliest type of ROW monument. It is call a “Washington” style monument and was set from the 1910s – 1930s. They have “STATE HWY R of W” up the side and protrude from the ground about 3ft. You will see these monuments on US Highway 160, east of Cortez and on US Highway 550 just outside of Silverton.

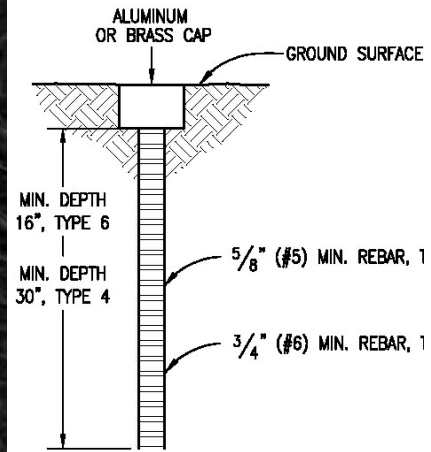


This next monument is our most common ROW monument and you will see these throughout Region 5. These monuments were set from the 1930s up into the 1960s. It must have been a lot of work to set them, but they are SUPER TOUGH to obliterate. You need heavy machinery to take one of these out!

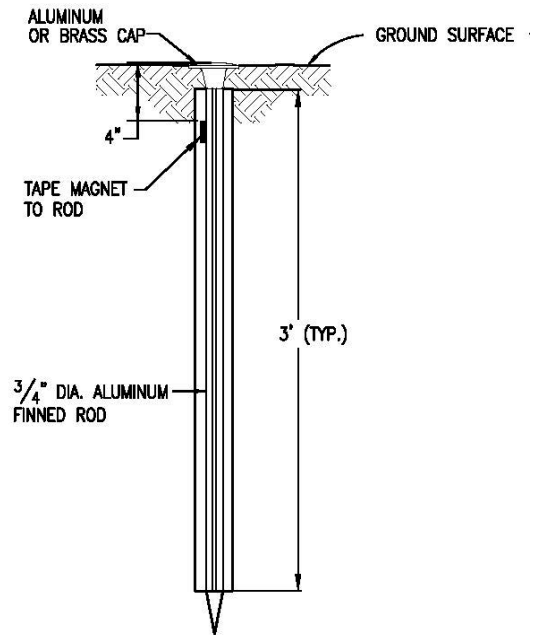


Sadly, heavy machinery sometimes does the trick.

This next ROW monument was set from the 1960s to the 1980s. It consists of a 1-1/2 inch aluminum cap on 5/8 inch or 3/4 inch rebar.



This final ROW monument is the standard we currently set. We have been setting these "Type 1" monuments since the 1980s. They consist of a 3-1/4 inch aluminum cap on a 3 foot aluminum rod.



## Control Monuments

These monuments were set by either CDOT or Federal surveyors and have coordinates (X, Y, elevations) assigned to them. These monuments are critical for constructing our highway projects.

These are CDOT Control Monuments. Much like the "Type 1" ROW Monuments they are a 3-1/4 inch aluminum cap on 3 foot aluminum rod (Region 5). They are usually accompanied by a fiberglass marker that is about two to five feet away.



These monuments are very susceptible to heavy construction equipment as you can see from the photo above and below. ....yes, yes I know, that was in the days before hard hats, notice the date. Please no comments on how I used to have more hair.....



These are Federal monuments that were used to establish very accurate latitude/longitude and elevations. The monument on the left was set in 1984 and the monument on the right was set in 1934.



In 2016, Region 2 (Pueblo) and Region 5 teamed up with a Federal Agency called the National Geodetic Survey (NGS) to set monuments on US Highway 160 from Durango to Walsenburg. These monuments were set at 1-mile intervals and were used by the NGS to conduct gravity/elevation studies. The Regions participated by allowing the NGS to store equipment at our facilities, allowing the NGS to take gravity measurements in our Maintenance offices, supplying equipment and personnel to auger holes for the NGS's monuments, providing environmental clearances, reviewing traffic MHTs and issuing public announcements.





## Section Corner Monuments

These monuments are set by Federal, CDOT and private land surveyors. They mark corners within Public Land Survey System (PLSS) and come in all shapes and sizes. They can even be stones that were set in the late 1800s! These types of monument are extremely important to preserve because they are used to establish private and public boundary lines.



There are many other types of monuments that you may see within CDOT ROW, but the ones mentioned above represent the bulk. As an organization, we try very hard to keep these monuments safe through our permits, manuals and construction processes. They are historical items that give us a glimpse into our past. If you have any questions about surveying or survey monuments, please feel free to reach out to anyone in the Region 5 Survey Unit.



*Project Marker set in the 1930s*

# Young Surveyor Profile – Taylor Rife

Taylor Rife grew up in Salt Lake City, Utah and has always loved the mountains and being outdoors. His family went camping frequently and were involved in the Boy Scouts, where he was exposed to the outdoors more and became an Eagle Scout.

He lived in Oregon for fifteen years where he was eventually introduced to engineering as a millwork drafter. After studying at Clark College in Vancouver, WA, he received an A.S. degree in Land Surveying while he worked for a Civil Engineer as a Survey Technician.

Taylor graduated from the Oregon Institute of Technology in southern Oregon with a B.S. in Geomatics Engineering / Land Surveying. During his studies there, he began his career with the federal government as a Cadastral Survey Technician with the Bureau of Land Management in Montrose, Colorado. The following summer, he began to work at the Arapaho Roosevelt National Forest, Forest Supervisor's Office in Fort Collins.

Working directly for the Rocky Mountain Region of the Forest Service as a zone Surveyor for the Front Range, he became a Registered Professional Land Surveyor last December. Taylor is passionate about live music, skiing, rock climbing, hiking, and traveling. He just went to Costa Rica for the second time which inspired him to continue to learn Spanish, and he plans to travel to South America soon.

## How did you get into surveying?

When I was younger, my stepfather - a biologist, took me into the field with his team to research fish populations. It was in one of the most remote and beautiful places in New Mexico. I was amazed that somebody could have a career in such a great environment. Thinking of this and my experience with the boy scouts, I wanted to find a career that would allow me to work outdoors with new technology. It would be a career that would challenge me physically and mentally and have me serve the public. Land surveying was therefore the most intriguing to me, and so I began my career and education.

## What do you love about surveying?

The thing I love most about surveying is being outside on a nice day and having meaningful tasks to accomplish. I love working in the public lands because it is beautiful. Even if it isn't a nice day, or it's an office day, it takes a lot of effort and problem solving to get through a day of work, which keeps things interesting. In the long term, completing large projects is a great feeling of accomplishment. Working with new technology is also interesting and fun, there's always something new to learn, and plenty of great mentors to learn from.



## Who was your biggest professional influence and why?

My biggest influence was Timothy Kent who is the Land Surveying Program Advisor at Clark College in Vancouver, WA, where I began my education. He was a BLM Surveyor and instructor at Oregon Tech for many years and mentored me and many other students on our career paths. He was the first one to tell me about surveying public lands for the federal government, and encouraged me to get my B.S. and license, which is the path I chose based on the first advising meeting I had with him.

## What are your biggest challenges with this profession?

My biggest challenge is being patient while working toward a bigger salary and living situation. The future is stable and prosperous, but like many professions it takes time and experience to be promoted.

## What qualities make a good surveyor? What do you need to be a good surveyor?

Persistence and professionalism. Having attention to detail and caring about doing a good job are of course primary. But we all make mistakes and figuring out how to problem solve and do things better the next time, including how to communicate better with your team is what progress is all about. Really, getting along with coworkers and trying to maintain a positive climate is the most important thing to me. The golden rule is true, and we spend so much time at work.

## What is the most significant issue affecting surveying as a profession?

The job shortage. It is nice to know that the job security

is good, but there aren't enough surveyors to fill the demand. This reflects on recruitment – the profession needs to do a better job of spreading the word about how great of a career surveying can be to young people. Unfortunately, like many others, I had no idea what surveying was until just recently, really.

### **What industry trends excite you?**

Advancements in GNSS and remote sensing technologies. When I can take a GPS shot or get Lidar point clouds in a deep ravine in the middle of the forest in heavy canopy and have less than a centimeter of horizontal error, I will be very satisfied. And I don't think that day is too far off considering how rapidly technology is advancing, and how many satellites we will soon have available in the constellation of any given day.

### **What would you like to do more of in surveying?**

Get a hold of that technology and those instruments!

### **Where do you see yourself in 10 years?**

Honestly, if I can keep doing just some of the field work on the public lands that I do now, finding PLSS corners, posting boundaries, and doing dependent resurveys, I will be pretty satisfied. Of course, I'm sure I'll be spending more time at the desk, but I look forward to being more knowledgeable. Most importantly, I will still be trying hard to get more new people out in the field and inspire them to join my favorite career.

### **What career accomplishment makes you most proud?**

Getting a permanent professional position with the federal government, working on public land boundaries.

### **Outside of your career, what has been your biggest accomplishment?**

Definitely getting my bachelor's degree and my license. Studying for the exams wasn't so bad once I graduated, but going back to school in my early thirties and surveying at the same time was my biggest endeavor in life. It was well worth it, and it was very exciting. I had a lot of support from great educators. I'm sure I could be much less content with a different career choice.

### **What was your favorite project and why?**

I don't have one single favorite, but I've been to many incredibly beautiful places. I'm very happy to be doing work that is very important for the environment. The majority of the work I do is boundary posting for fuels mitigation projects which help prevent forest fires, and I wrote a title report that was a part of the beginning of the cleanup process for an abandoned mine which is a superfund site. Right now, I'm starting work on a land exchange parcel that will increase the size of the National Forest.

### **If you could start your career again, is there anything**

### **you would do differently?**

I would've started it straight out of high school, that's for sure. But on the same timeline, I don't know that I would have changed much. Starting out doing construction staking wasn't what I wanted to do, but it gave me an appreciation for where I am now and taught me how much I am capable of if I try hard. It would've helped me suffer a lot less recently if back then I had a standing desk, saw the doctor more, and took more walking breaks and less ibuprofen.

### **Do you have any advice for other up-and-coming surveyors?**

One of the best ways to promote the profession is by maintaining professionalism in leadership situations and inspiring new technicians and other students; encouraging them to pursue an education and teaching them as much as possible.

### **My advice to new surveyors is:**

You should try to get an education. It will make you more money. Apply for as many scholarships as possible. A lot of my tuition was paid by them. Be persistent but try to learn and teach as much as you can and remain humble and professional. Which means being a team player by having a positive attitude, being respectful and kind to your coworkers. A big part of my decision-making process as a crew chief when working with others is sharing information about my thought process, the progress of the tasks, and asking for feedback, opinions, and suggestions. By having an open mind, an open channel of communication, and every member of the crew on the same page - tasks can be completed most effectively and enjoyably.

### **What survey books would you recommend?**

The staples of standard collection you need to pass the FS and PS. My favorite is *GPS for Land Surveyors*, by Jan Van Sickle it has a great condensed explanation of Geomatics. *Elementary Surveying* by Charles Ghilani and Paul Wolf, *The Manual of Survey Instructions* (BLM), *Brown's Boundary Control and Legal Principals* by Curtis Brown, Walter Robillard, Don Wilson et. al., and *Elements of Photogrammetry with Applications in GIS* by Paul Wolf, Bon DeWitt, et. al.

### **Are there areas of the profession where you would like more mentoring?**

Leadership. Being a leader is one of the hardest things. They don't teach much of it in school and learning it on the job takes a lot of trial and error. I think part of the problem with this comes back to the job shortage. If there were more experienced surveyors to work with in the field, it would be easier to learn by example. But I think there is value in learning difficult things independently and having mentors to guide me.

# PLSC Around the World!

Ian Jeffries purchased a 1959 VW van from Colorado in 2005. The van had an old PLSC window decal which he proudly displayed. When time and weather took its toll, he reached out to see if we could send him a replacement sticker. We still had one on file, and we thought you would enjoy learning more:

## To PLSC:

I am sending photos of VW van, one showing the camper in Colorado before I bought it. You can see the sticker in the front windscreen (this was back in 2005). Another showing it more recently here in the UK with it in the rear window. I had to replace the broken windscreen so i managed to carefully peel it off and move it to the rear (this was around 2017). As you can see it had started to fade and had got damp.

...

Final photo is showing what's left of the original sticker next to my shiny new one. - Thank you :)

Ian  
Stamford, Lincolnshire, UK  
P.S. Does anyone remember this van and which surveyor it may have belonged to?



Above: The camper in Colorado in 2005.

Left: Partially restored in the UK around 2017.

Below: Old and new stickers side by side.



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