New Jersey Society of Professional Land Surveyors

SurvCon 2020
41st Annual Conference and Exhibition

February 5-7, 2020
Bally’s Park Place Hotel
Atlantic City, New Jersey
We are looking forward to welcoming you to SurvCon 2020. We hope that you will find the following FAQ helpful as you plan for the conference:

- **Early Bird Discount of $25** will be in effect for registrations received by December 16, 2019. Regular rates will apply starting December 17, 2019.

- **Hotel Information** - Bally’s Park Place Hotel and Casino on the Boardwalk in Atlantic City is the site for SurvCon 2020. The NJSPLS room rate is just **$65.00** per room in *Bally’s Tower*. These rooms are available on a **first-come, first-serve basis**.

  **CALL-INS:**
  - Room Reservations: 888-516-2215 (8:00 AM - 2:00 AM EST seven days a week)
  - Group name: **SurvCon 2020**
  - Group code: **SB01CN0** (All callers will be asked for this code, but can also book by saying “SurvCon 2020”)

  **ON-LINE BOOKINGS:**
  - If you prefer to book online, please use the following link:
    - [https://book.passkey.com/go/sb01cn0](https://book.passkey.com/go/sb01cn0)

**NEW THIS YEAR!** The Certified Survey Technician (CST) Review Class and Exam (Levels 1, 2 & 3) will be held during SurvCon. The Review class is on Thursday and the Exam on Friday. Please refer to page 9 for the Review class and page 11 on how to register for the Exam.

Please remember that the Exam registration is a TWO-STEP process.

For our members and colleagues licensed as engineers in New Jersey, many of the course offerings have been designed to fulfill your PE continuing education requirements. Engineers should look for **[PE]** for qualifying courses.

- **NJSPLS is an approved provider** of continuing education for New York. Course offerings for Maryland, Delaware, Pennsylvania do not require preapproval but must be of a technical nature in order to receive continuing education credits from the states.

- **Digital Handouts** - Workshop handouts will not be distributed at the conference but will be posted exclusively online at [www.njspls.org](http://www.njspls.org) prior to the conference.

- All continental breakfasts, lunches and breaks are included in your registration fee.

**NEW THIS YEAR!** **Keynote Session: “Disruption and Land Administration”**

Join Brent Jones, PE, PLS, Global Manager, Cadastre/Land Records at Esri who will discuss “Disruption and Land Administration” how it affects surveyors, and what to do about it.

Thursday morning at 7:00 AM (during the continental breakfast)

Exhibit Hall – Open to all attendees
WORKSHOPS

Wednesday, February 5, 2020

(1) Power, Water and Sewer – Understanding Utility Easements
Kristopher Kline, PLS

This course focuses on easements “in gross” associated with municipal and regional utilities. Topics include exclusive vs. non-exclusive rights; overburden and “piggybacking” of additional easements within an existing easement; apportionment of exclusive rights; discovery rule for underground utilities.

8:00 AM - 12:00 Noon
4 PDH [NY-PA-PE] $90 – Member
$150 – Non-Member

(2) Have your Cake and Eat it Too – Using Modern Survey Packages, Workflows and Applications with Civil 3D
John Cooke

Autodesk Civil 3D® is a very powerful – and popular – solution applicable in many Civil Engineering and Survey firms. Despite its power, Civil 3D’s core survey functionality has not kept pace with developments by other vendors, including Leica, Trimble, Carlson and others. This class, drawn on real-world experience in a medium-size survey and engineering firm, focuses on two major areas: First, the class identifies core functionality within Civil 3D essential and common to survey and engineering applications, and looks at configuring that environment to work optimally. Secondly, the class identifies and focuses on better survey solutions in other products, including Leica and Carlson, and looks at the integration of these more modern solutions as replacements for the dated aspects of Civil 3D. The implementation strategy is to pull the best pieces from different, and sometimes competing, software products to develop the most efficient solution possible.

8:00 AM - 12:00 Noon
4 PDH [NY-PA-PE] $90 – Member
$150 – Non-Member

Digital Handouts
Workshop handouts will be posted exclusively online at www.njspls.org for you to download to your iPad or tablet to print.

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IMPORTANT DATES:
December 16: Last Day for Early Bird Discount
January 5: Hotel Reservations Due
January 24: Preregistration Deadline (online, mail or fax)
January 24: Last Day to Request a Refund or Submit a Cancellation
February 5: On-Site Registration Begins
(3) Asset Management Toolbox and Large-Scale Mapping Projects
Robert Vargo, Northeast Mobile Imaging & GIS Consultant; Justin Brooks, Trimble Applied Geospatial

As technology continues to evolve, and the tools we add to our organizations continue to cut time out in the field, it is important for us to take a step back and look at all we have gathered. The equipment and practices we use generates a tremendous amount of data, and sometimes we are not making the best use of it. We would like to take a step back with you, and help you see your workflow thru our eyes. We want to use this time to help you make the most out of your on-site time and ensure the most simple and efficient workflows back in the office. This seminar will encompass field and office techniques including mission planning, ground control, data collection and post processing using the Trimble MX-9 and MX-7. Come join and help us form a better understanding of the data at your fingertips.

8:00 AM - 12:00 Noon
4 PDH [NY-PA]
$90 – Member
$150 – Non-Member

(4) GIS for Surveyors
Brent Jones, PE, PLS, Esri

GIS is a strong and growing industry that surveyors can apply their skills to develop new areas of practice, fulfill new deliverable requirements, and better manage their own operations. GIS is not a desktop application but an entire location platform, geospatial infrastructure – desktop, mobile, server, cloud with data, applications, developer tools, industry templates, and a lot more. In this workshop you will get a surveyor’s and GIS professional’s point of view. Topics included in workshop will be:

- What is GIS today?
- Overview of modern services-based technology
- How to use your GPS with GIS
- Data available and how to find it
- ArcGIS Online
- Apps
- Story Maps
- Opportunities for Surveyors in GIS
- And more……

Bring your questions and join us for an interactive GIS workshop – whether you have worked in GIS for years or just getting started, this workshop will give you some tools to either get started, learn what’s new, and how to address the dynamic GIS market.

8:00 AM - 12:00 Noon
4 PDH [NY-PA]
$90 – Member
$150 – Non-Member

(5) Surveying Best Practices – PSEG and The Port Authority of NY & NJ
Shehzad C. Khan, PLS, PMP, PSE & G and Richard W. Carlson, Jr., PLS, CP, Port Authority of NY & NJ

Surveying for or near large public companies can present challenges such as acquiring right-of-entry, access to records, or just speaking with a knowledgeable individual who can answer your questions. Furthermore, requirements for safety, security and other legal policies add to the scope and complexity of your project. In this class you will learn how to navigate some of these surveying challenges for PSEG and Port Authority, including the following:

- Extent and type of property owned by these entities
- Types of land records available to the public
- Process to acquire the records
- Access protocol on or near these properties
- Common mistakes to avoid
- Best practices for surveying on or near these properties

8:00 AM - 12:00 Noon
4 PDH [NY]
$90 – Member
$150 – Non-Member
(6) Making Tracks – Railroad Problems
Kristopher Kline, PLS
Numerous lawsuits emphasize the problems facing the surveyor who attempts to determine the limits and nature of property rights associated with rail lines. This course focuses on Railroad easements and rights of way with specific focus on understanding how the courts determine the location and ownership of a rail corridor. This class includes hands-on problems for the student.
1:00 PM - 5:00 PM
4 PDH [NY-PA]
$90 – Member
$150 – Non-Member

(7) When It’s Time to Move On
William Beardslee, PLS, PE
Based on national statistics, the average age of a Professional Land Surveyor is ever increasing. Many will consider retiring and selling their businesses. But over the years, have they prepared their businesses to be sold or passed on to staff or family? And for the younger surveyors, do they know the key elements to consider when buying a firm? This course will provide information to help both these groups. With input from a PLS, a business planner, and an insurance planner the attendee will receive a broad range of points to increase the probability of success when moving on from their firm or current management position.
1:00 PM - 5:00 PM
4 PDH [PE]
$90 – Member
$150 – Non-Member

(8) Comparative Ethics: What Can Surveyors and Engineers Learn from Other Professions?
David Lee Ingram, PLS
What can Surveyors and Engineers learn from other professions? And why are other professions’ Ethics different (and the same) from Surveyors’ and Engineers’?
Ethical considerations of business and professional practice have always been of concern to surveyors and engineers, but in recent years surveyors and engineers have seen an increasing emphasis on the need to understand and put into practice positive ethical attitudes. Attempts are made to impose ethics on surveyors and engineers from several directions including legal, professional and moral. An understanding of the implications of each is important.
Additionally, surveyors and engineers find themselves interacting with other professions on a daily basis where an understanding of their ethical obligations is critical to a positive outcome for projects that require input from many different sources. However, it is frequently observed that priorities of different professions may be in conflict with each other.
To focus thoughts for the remainder of the class, the workshop will begin with a review of ethical guidelines that surveyors and engineers from New Jersey are expected to adhere to and look at areas of common interest as well as areas of difference. After a discussion of the history of ethics for surveyors and engineers and an examination of modern ethical guidelines for surveyors and engineers, ethical guidelines for several other professions will be examined with an eye towards areas of commonality as well as areas of conflict. Some of these groups will be closely related professions to surveyors and engineers while others will be examined not for their areas of common interest, but rather to see what we can learn from them.
Finally, the workshop will conclude with a guided discussion time where the class will discuss what ethics guidelines should be included in a code of ethics for surveyors and engineers and why these are important for professionals to keep in mind and adhere to.
1:00 PM - 5:00 PM
4 PDH [NY-PA-PE]
$90 – Member
$150 – Non-Member
(9) Creating Accurate Point Cloud Data Using Terrestrial Scanning and UAS Drone Surveys

Jim Carlson, Carlson Software and Lukas Dunnuya, DiCarlo Precision Instruments

The first half of this workshop will focus on the latest field surveying techniques using all three methods:

1) Carlson Hybrid+ GNSS (GPS/Glonass/Galileo L1/L2/L5) and Robotic Total Station Surveys
   Carlson SurvCE6/SurvPC6 Hybrid+ using both GNSS and Robotic Total Station simultaneously, outputs both control and field to finish coded points for plotting symbols and linework in 2D and 3D layer based to National CADD Standards

2) Terrestrial Scanned Field Surveys
   Terrestrial Scanners output registered and classified point cloud files and 360 degree photo imagery from each scanned location

3) UAS Drone Flown Surveys
   Drone Surveys output photo processed registered and classified point cloud files with Geo-referenced imagery files along with movies for visual inspection and marketing purposes.

The second half of this half day workshop will focus on using both point cloud files combined with traditional field surveyed GPS and robotic total station data, for use in mapping back at the office. Point cloud files are without a doubt becoming the single most powerful tool for helping map existing topo, as-built conditions or for monthly, weekly and even daily visual field inspections. This workshop will show how professional surveyors in several surveying and civil firms have capitalized on using all three field surveying techniques at the job site to output maps and create new and better mapping and inspection products. Carlson Survey, PtCloud and P3D Topo modules will be used to show how to combine point cloud files with traditional field data points and linework to output a 100% DWG CAD map accurately, quickly and easily.

1:00 PM - 5:00 PM
4 PDH [NY-PA] $90 – Member
               $150 – Non-Member
Keynote Session: Disruption and Land Administration

Significant technology developments and new business models are disrupting industries, governments and communities. Particularly combinations of technology used in ways never dreamed of when they were initially developed. These disruptions are affecting all of us – putting companies out of business, eliminating traditional work and causing disruption in our organizations.

We invite you to join Brent A. Jones, PE, PLS, Global Manager, Cadastre/Land Records at Esri who will discuss some of these disruptions, how they affect surveyors, and what to do about it.

7:00 AM - 8:00 AM
OPEN TO ALL ATTENDEES
Exhibit Hall

(10) What Did You Really Mean? – The Intent of the Parties
Kristopher Kline, PLS

The concept of the Intent of the Parties is central to many of our boundary retracement decisions. Not only is this concept prominent in easement law and deed interpretation, but is also applicable when dealing with Wills, Quasi-easements, and Adverse Possession. This seminar considers Intent of the Parties and the significance of surrounding circumstances, Intent as it affects deed interpretation, Common-Law Dedication and Acceptance of Easements, and Practical Location of Easements.

8:00 AM - 12:00 Noon
4 PDH [NY-PA]
$90 – Member
$150 – Non-Member

(11) Railroad Rights of Way – Interests, Rights, and Rail-to-Trails
Gary Kent, PS

Professional Surveyors frequently encounter railroad rights of way in their work as they retrace boundaries, deal with questions of seniority between public roads and railroads, address abandonments or reversionary rights, or guide clients on their needs for permits, licenses or easements over railroad rights of way. In the process they often face confusion over the status of a railroad right of way: Is it a fee ownership or just an easement? Is it abandoned or just inactive? Is it active? How does one know? How does one find Railroad Valuation Maps and vesting deeds? What about “Rails-to-Trails?” In this session, we will review several Federal and state court decisions regarding railroad rights of way including Preseault v. Interstate Commerce Commission (U.S. Supreme Court, 1990), Atglen-Susquehanna Trail v. Surface Transp. Bd., 252 F. 3d 246 (Court of Appeals, 3rd Circuit 2001), Howard v. U.S. (Indiana, 2012). We will also examine the National Trails System Act of 1969 and its progeny in order to better understand the “Rails-to-Trails” process and how the standing of a railroad’s right of way can be perplexing.

8:00 AM - 12:00 Noon
4 PDH [NY-PA-PE]
$90 – Member
$150 – Non-Member
Dress Code
Attire at SurvCon 2020 is business casual. Feel free to be comfortable in slacks, polo shirts, sweaters, blazers, blouses, and most importantly, comfortable shoes! Suits, ties, nine-to-five dresses are not required.
Certified Survey Technician (CST) Exam Review Class (Levels 1, 2 & 3)

Are you interested in becoming a Certified Survey Technician (CST) and increasing your opportunities?

What is the CST Program? CST is a comprehensive national certification program for survey technicians and is sponsored by the National Society of Professional Surveyors. The program is recognized by the U.S. Department of Labor within its National Apprenticeship Program and the NSPS CST Program enables survey technicians and employers to evaluate and establish various levels of competency through proper testing of appropriate work elements.

A CST Designation:
- Provides a career ladder for technicians
- Provides credentials to technicians
- Provides a standard way for employers to evaluate capabilities of prospective applicants
- Can be used as an assessment tool in conjunction with survey education programs

NJSPLS believes that building a career track for technicians is critical to the future of the surveying profession, thus NJSPLS has adopted the NSPS Certified Survey Technician (CST) Program. The CST Program is composed of four levels and two tracks.

In preparation for the CST Exam, the Review Class the following topics and more will be covered:

- Introduction to CST
- How to Take a Test
- First Aid
- Public Lands
- Conversions, Field Equipment and Adjustments
- CST Level 1, Basic Math, Field Surveying, and Sample Problems for entry-level field personnel and other related Survey items
- CST Levels 2 & 3, Advanced Math, Coordinate Geometry, Curves, GPS and other survey-related subjects
- Sample Test
- AND MUCH MORE!

NJSPLS has compiled a resource of training materials to help you with the review and the testing. Please click here to access the information: CST Training Resources. Download the online version for the links.

8:00 AM - 4:00 PM

**There is no Session Fee for the Review Class, just the SurvCon daily registration fee**

(15) Property Boundaries vs. Regulatory Authority

Kristopher Kline, PLS

Confusion is common when municipal, state or federal regulations come into apparent conflict with principles associated with real property law. This class considers this problem as it pertains to: Riparian Issues; Marketable Title; Zoning Restrictions; Wetland Delineation; Tax Maps and Railroad Valuation Maps; Floodplain mapping; Recording Statutes; Subdivision Regulations.

1:00 PM - 5:00 PM
4 PDH [NY-PA]

$90 – Member
$150 – Non-Member

(16) Rail Surveying Techniques

Ryan Leonard, Leica Geosystems

Learn about rail surveying techniques for freight and transit systems, including technology advancements in Trolley based measurements and Mobile LiDAR highlighting benefits and limitations. This class will focus on terminology, common transit and contractor survey requests, and new measuring service markets beyond the right of way and top of rail.

1:00 PM - 5:00 PM
4 PDH [NY-PA]

$90 – Member
$150 – Non-Member
(17) **The Art of Retracement**

Gary Kent, PS

Every professional surveyor across the United States knows the phrase “Follow in the Footsteps” as it relates to conducting a boundary retracement survey. But what does it really mean and what is the basis for following the footsteps? And exactly whose footsteps are we talking about? Surveyors also know the effect of the statute of frauds is that what is written in the conveyancing document is considered by the courts to be the highest and best expression of the parties’ intentions. But what happens when the evidence of the footsteps on the ground conflicts with the written title? And what happens if there are seemingly no footsteps to follow? In this program we will explore the concept of retracement, how it relates to and is dependent on the document of conveyance, and what controls when conflicts are inevitably encountered. When armed with a full understanding of the concept of retracement, surveyors will be much better equipped to help steer their clients (and their affected neighbors) away from the pain and cost of litigation, and towards an amicable solution based on well-placed confidence and understanding of their respective roles and responsibilities.

1:00 PM - 5:00 PM
4 PDH [NY-PA]

$90 – Member
$150 – Non-Member

(18) **What to Know – FEMA, NFIP and the Elevation Certificate**

Tom Little, CFM, CGP

This FEMA and National Flood Insurance Program (NFIP) class will provide up to date information on the outcome of the September 2017 NFIP reauthorization and the proposed bills to extend and modify the insurance program. We will review how these changes will affect your Elevation Certificate services you provide and what information you need to know to educate your clients. Private Flood Insurance is a growing market segment and we will review the differences these polices have as compared to the NFIP program. We will provide an in depth look into how the Elevation Certificate is utilized by the insurance industry to rate a properties flood risk for NFIP Flood Insurance, in addition we will explain how a local municipality uses the form to enforce their Floodplain Management Ordinance. CRS communities continue to grow and with that comes more stringent flood construction requirements that will be reviewed in the class to better equip you in the field. We will have a full discussion on flood vent compliance as it continues to be the number one red flag that translates into higher flood insurance premiums for your clients. At the end of this upbeat class participants will be better equipped to complete the Elevation Certificate correctly and more accurately.

1:00 PM - 5:00 PM
4 PDH [NY-PA-PE]

$90 – Member
$150 – Non-Member

(19) **Counting Down to 2022 – A Lot to Do Before 2022**

Dan Martin, NGS, Northeast Regional Geodetic Advisor

In 2022, NGS will be replacing the US horizontal and vertical datums (NAD 83 and NAVD 88). In this workshop we will review the need and process for these changes, and discuss the progress made over the last year. We will begin with a brief discussion of the history of the North American Datum of 1983 and the North American Vertical Datum of 1988, their relationships to other reference frames, and the reasons for their ongoing evolution. We will then discuss individual projects that have been, or are being undertaken to ensure a smooth transition to include new State Plane Coordinates, GPS on BM for the new vertical transformation tool, NGS Conversion and Transformation tool (NCAT), Geoid Slope Validation Surveys, new Data Delivery System, Geoid Monitoring Service, and modernized CORS.

1:00 PM - 5:00 PM
4 PDH [NY-PA-PE]

$90 – Member
$150 – Non-Member
Certified Survey Technician (CST) Exam
(Levels 1, 2 and 3)
Sponsored by NJSPLS and NSPS

The National Society of Professional Surveyors (NSPS) sponsors a comprehensive national certification program for survey technicians. The program is recognized by the U.S. Department of Labor as part of the National Apprenticeship Program. The Survey Technician Certification Board (STCB), which administers this program, recognizes the importance of technicians to the surveying and mapping profession. Certification also provides employers with a method of determining job assignments and advancement since certification is an indication of one’s ability to perform specific job tasks.

If you plan on sitting for this examination, the registration is a TWO-STEP process. You must complete BOTH the NSPS application and NJSPLS registration requirements:

STEP 1. REGISTER WITH NSPS: To download the CST Exam Application, go online to: https://cstnsps.com. Click on “GET DETAILS” link under “START THE PROGRAM”. Select either “APPLY ONLINE” or “PAPER APPLICATION”. Your cost to NSPS is $150 for the exam.

Complete the application online or send directly to NSPS as indicated on the form.

If you need additional information, please contact Sara Maggi at NSPS at 240-439-4615, ext. 112 or sara.maggi@nsps.us.com to apply for your appropriate level examination.

STEP 2. REGISTER WITH NJSPLS: Complete your one-day registration for SurvCon with NJSPLS which includes lunch and breaks.

Any questions? Please contact Mark Husik at 800-853-5263 or marklhusik@gmail.com.

8:00 AM - 3:00 PM

ALTA/NSPS Land Title Surveys
Gary R. Kent, PS

This program is an in-depth, section-by-section overview of the 2016 Minimum Standard Detail Requirements for ALTA/NSPS Land Title Surveys which become effective in February of 2016. The program will include details on the changes from the previous 2011 version and important information on the changes to Table A – some of which have confused attorneys and lenders alike. The program also takes a fresh look at the measurement standard - relative positional precision - and other significant issues such as HUD surveys and to whom surveyors should be certifying their surveys.

8:00 AM - 12:00 Noon
4 PDH [NY-PA]
$90 – Member
$150 – Non-Member

The “How” and “Why” of Digital Signatures
Joseph Gaffney

In response to rapid advances in technology, many states, jurisdictions, and agencies are developing and promoting electronic application processes that include the electronic submission of plans. To submit plans electronically, the site plan must adhere to specific digital requirements. This workshop will explain the process for affixing digital signatures and seals to plans and will introduce everyone to the key terminology, the key components of the procedure, and an acceptable process to digitally sign/seal plans. The course will also identify the differences between electronic and digital signatures, how to understand basic code requirements, as well as the importance of having a third-party verification system. The course will conclude with video demonstrations of the process, as well as a quick overview of how to verify projects that have been digitally certified.

8:00 AM - 12:00 Noon
4 PDH [NY-PA-PE]
$90 – Member
$150 – Non-Member
**Hands-On Legal Research Basics: A Practical Applications Class**

Wendy Lathrop, PLS, CFM

Surveying is intimately tied to the law. Defining professional practice, identifying elements for enforceable contracts, distinguishing between land ownership and possession – these are just a few of the applications of statutes, regulations, and case law to our work. This session will introduce the principles of legal research, point to some free on-line sites, and include hands-on practice to answer sample questions and, if time permits, others posed by participants.

Why should we know how to do legal research ourselves instead of simply hiring someone to do it for us? The first answer is similar to why we study different technologies that we may not operate ourselves but need to know enough about to properly identify scope and application of the work we contract out.

But we also want to be able to speak the same language as the attorneys we either work with or face during depositions and trials, whether as defendants, as plaintiffs, or as expert witnesses. As experts, we can guide attorneys to the most useful laws and cases, and suggest lines of questioning to them that may assist in drawing out the facts of a case.

**Attendees must bring their own laptop, tablet, iPad, or other device capable of accessing the web to participate in the hands-on exercises. (A phone is likely to be too small to see everything.)**

At the end this session, participants will be able to:
- Identify and locate appropriate resources for different kinds of legal questions
- Frame questions using terms that are more likely to succeed in providing useful results
- Understand why some reported cases should not be relied upon.

8:00 AM - 12:00 Noon
4 PDH [NY-PA] $90 – Member $150 – Non-Member

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**Amazing Situations**

Mark Amirault, Deb Christen and John Becker

A discussion on the liability traps that affect surveyors and engineers. This course will examine real situations where a surveyors & engineers found themselves in situations where there was potential negligence, lost productivity, lost income, and more.

During the session the attendees will learn about what caused the problem, how the problem was resolved, and how the problem could have been avoided. We will discuss Professional Liability insurance policies that will aid in the assistance and the recovery including lessons learned from these situations.

Learn first-hand from an attorney on what is takes to prepare for a deposition and trial; addressing your time lost, the impact on your income and the role your Professional Liability Carrier plays for both pre-claims and claims.

8:00 AM - 12:00 Noon
4 PDH [NY-PA-PE] $90 – Member $150 – Non-Member
(24) Ethics and Standards – Guidelines
Gary R. Kent, PS

In this program, we will explore New Jersey guidelines as spelled out in the rules of professional conduct, and discuss various ethical dilemmas that surveyors may find themselves in. We also review the state’s rules that lay out New Jersey’s standards of practice, including for ALTA/NSPS Land Title Surveys. The speaker draws on his 15 years as a state board of registration member and liaison to the state Attorney General’s office to explain problems and issues that surveyors encounter (or create) no matter what state they practice in, including the disposition of complaints through hearings and disciplinary sanctions.

1:00 PM - 5:00 PM
4 PDH [NY-PA-PE] $90 – Member
$150 – Non-Member

(25) What Services Will You Be Providing in 2025 and Beyond?
William Beardslee, PLS, PE

Where have we been? Where are we now? But more importantly, where are we going?

The advance of technology has opened the lens of the surveyor to clients and projects unimaginable 20 years ago. In this seminar the discussions include a review of the history of surveying and will be visualizing new venues and markets to expand the surveyors’ scope of practice, as well as the equipment being used, as we plunge further into the 21st century.

1:00 PM - 5:00 PM
4 PDH [NY-PA] $90 – Member
$150 – Non-Member

(26) Introduction to Pipeline Surveying
S. Wayne Burnett, PLS

This course introduces surveyors and survey technicians to the unique concepts and realities of a pipeline survey job. Unlike a boundary survey, pipeline surveys have many different stakeholders, including pipeline owners/operators and often unwilling or unaware landowners. Additionally, unlike boundary surveys, pipeline survey projects have major safety hazards including heavy machinery, significant inclement weather, and necessary tools such as machetes. This course will familiarize surveyors and survey technicians with pipeline survey data collection, Federal Pipeline and Hazardous Materials Safety Administration (PHMSA) regulatory concepts such as “traceable, verifiable, and complete,” and the unique demands/requirements of working for pipeline owner/operator companies.

1:00 PM - 5:00 PM
4 PDH [NY-PA] $90 – Member
$150 – Non-Member
I submit one entry map in the following category:
Each submission will be for one entry in one category.

Categories

- A. Small Lot Survey (Title Survey) Leroy/CAD, Sheet size No Larger than 12” x 18”
- B. Small Lot Survey (Under 3 Acres) Leroy/CAD
- C. Large Lot Survey (Over 3 Acres) Leroy/CAD
- D. ALTA/ACSM Survey
- E. Topographic Survey – Leroy/CAD
- F. Boundary and Topographic Survey (Under 5 Acres)
- G. Boundary and Topographic Survey (Over 5 Acres)
- H. Subdivision Plan – Leroy/CAD
- I. Construction Survey, As-Built, Laser Scanning
- J. Miscellaneous Maps (Free Hand, Leroy, CAD, Colored, Road Maps, Tax Maps, Site Plans, “Anything Goes”, etc. that is signed by PLS/PE/CLA)

Contestant Information

This form may be duplicated

Contestant Name ________________________________________________________________
Address _________________________________________________________________________
City/State/Zip ___________________________________________________________________
Business Sponsor/Affiliate _________________________________________________________
Home Phone _____________________________ Business Phone __________________________
E-Mail _________________________________________________________________________

Enclosed is one print for the category entered and a check or money order in the amount of $25 payable to NJSPLS.

If you have never entered the Map Contest, you may enter ONE map at no cost.

Mail Entry to:

Nick Wunner
Cornelius P. Carmody Memorial Map Contest
19 Route 10, Building 2, Unit 22
Succasunna, NJ 07876

Judging

All entries will be checked for compliance with New Jersey Statutes. No map will be judged if it does not comply with the law.

Maps must comply with “Preparation of Land Surveys”, Title Recordation Act and Title Block Statute.

1. Compliance with the law.
2. Originality: any unusual situation, depicted clearly, unusual techniques.
3. Overall appearance: neatness, balance, consistency.
4. Title: name well defined.
5. Lettering: clear, unmistakable.

Regulations

1. Must be of an actual survey of New Jersey Land, drawn in Calendar Year 2019. Only maps addressed by the survey statutes will be reviewed. Design details and engineering construction details will not be reviewed.
2. Title blocks should not be blocked out.
3. Must be drawn by submitting individual.
4. All maps must bear the name of a licensed New Jersey land surveyor.
5. Entries shall be unmounted blue or black lines that become the property of NJSPLS.
6. Entries must indicate category and be accompanied by an entry form and fee of $25.00 per category. One entry is allowed per category per individual.

If you have never entered the Map Contest, you may enter ONE map at no cost.

7. Winning entries will be displayed at SurvCon 2020.
8. All Awards will be presented and all winners will be announced during the NJSPLS Annual Meeting on Thursday, February 6, 2020.
9. Maps and fees must be received on or before the end of business Friday, January 10, 2020.
10. All decisions of the judges are final.
WEDNESDAY
February 5, 2020

Lunch in Exhibit Hall
The buffet lunch is included in your SurvCon registration.
Wednesday, February 5
12:00 Noon

NJIT Reception
Would you like to learn more about the NJIT surveying program? Join the alumni and students of NJIT at an informal gathering. Light refreshments will be served.
Hosted by Leica Geosystems.
Wednesday, February 5
6:00 PM

SurvCon Welcome Gala
(Icebreaker Party)
Join friends and fellow professionals to kick off the conference. The evening includes an impressive buffet, with a two-hour hosted bar.
What a great way to start SurvCon 2020!
Wednesday, February 5
7:30 PM

$50 per person
Tickets can be purchased during your registration.

THURSDAY
February 6, 2020

New for 2020!
Keynote Session:
“Disruption and Land Administration”
Join Brent Jones, PE, PLS, Global Manager, Cadastre/Land Records at Esri who will discuss “Disruption and Land Administration” how it affects surveyors, and what to do about it. (During the continental breakfast) in the Exhibit Hall.
Thursday, February 6
7:00 AM - 8:00 AM

Lunch in Exhibit Hall
The buffet lunch is included in your SurvCon registration.
Thursday, February 6
12:00 Noon

Annual Meeting and Awards Presentation
This meeting is open to all SurvCon attendees and will include the presentation of the Annual Awards, installation of officers and the announcement of the Carmody Memorial Map Contest winners.
Thursday, February 6
5:00 PM

Exhibit Hall Wine & Cheese Reception
Visit with our exhibitors at a special wine and cheese reception in the Exhibit Hall immediately following the conclusion of the Annual Meeting.
Thursday, February 6
6:00 PM

FRIDAY
February 7, 2020

NJSPS Past Presidents and Fellows Breakfast
President Ambrose Gmeiner will host a breakfast for all NJSPS Past Presidents and Fellows. If you are an NJSPS Fellow or Past President of the Society and will be attending the Breakfast, please “check” the box when you register to reserve your place.
Friday, February 7
7:00 AM - 8:00 AM

Lunch in Exhibit Hall
The buffet lunch is included in your SurvCon registration.
Friday, February 7
12:00 Noon
### Tuesday
**February 4, 2020**

- **2:00 PM - 8:00 PM**
  - Registration Desk Open

### Wednesday
**February 5, 2020**

- **7:00 AM**
  - Continental Breakfast
  - Registration Desk Open

- **8:00 AM - 12:00 Noon**
  - Power, Water and Sewer – Understanding Utility Easements
  - Have your Cake and Eat it Too – Using Modern Survey Packages, Workflows and Applications with Civil 3D
  - Asset Management Toolbox and Large-Scale Mapping Projects
  - GIS for Surveyors
  - Surveying Best Practices – PSEG and The Port Authority of NY & NJ
  - Making Tracks – Railroad Problems

- **11:30 AM - 6:00 PM**
  - Exhibit Hall Open

- **12:00 Noon - 1:30 PM**
  - LUNCH in Exhibit Hall

- **1:00 PM - 5:00 PM**
  - When It’s Time to Move On
  - Comparative Ethics: What Can Surveyors and Engineers Learn from Other Professions?
  - Creating Accurate Point Cloud Data Using Terrestrial Scanning and UAS Drone Surveys

- **6:00 PM**
  - NJIT Reception

- **7:30 PM**
  - SurvCon Welcome Gala

### Thursday
**February 6, 2020**

- **7:00 AM**
  - Continental Breakfast
  - Registration Desk Opens

- **7:00 AM - 8:00 AM**
  - Keynote Session: Disruption and Land Administration

- **7:00 AM - 6:30 PM**
  - Exhibit Hall Open

- **8:00 AM - 4:00 PM**
  - Certified Survey Technician (CST) Exam Review Class (Levels 1, 2 & 3)

- **8:00 AM - 12:00 Noon**
  - What Did You Really Mean? – The Intent of the Parties
  - Railroad Rights of Way – Interests, Rights, and Rail-to-Trails
  - NFIP Mapping Issues, Mapping Changes, and Surveyors
  - Fundamentals of Geodesy and Geodetic Datums
  - Structural Monitoring – Tracking Movement in a Fast-Paced World

- **12:00 Noon - 1:30 PM**
  - LUNCH in Exhibit Hall

- **1:00 PM - 5:00 PM**
  - Property Boundaries vs. Regulatory Authority
  - Rail Surveying Techniques
  - The Art of Retracement
  - What to Know – FEMA, NFIP and the Elevation Certificate
  - Counting Down to 2022 – A Lot to Do Before 2022

- **5:00 PM**
  - Annual Meeting and Awards Presentation

- **6:00 PM**
  - Exhibit Hall Wine and Cheese Reception

### Friday
**February 7, 2020**

- **7:00 AM**
  - Continental Breakfast
  - Registration Desk Opens

- **7:00 AM - 8:00 AM**
  - NJSPLS Past Presidents and Fellows Breakfast

- **7:00 AM - 1:30 PM**
  - Exhibit Hall Open

- **8:00 AM - 3:00 PM**
  - Certified Survey Technician (CST) Exam (Levels 1, 2 and 3)

- **8:00 AM - 12:00 Noon**
  - ALTA/NSPS Land Title Surveys
  - The “How” and “Why” of Digital Signatures
  - Hands-On Legal Research Basics: A Practical Applications Class
  - Amazing Situations

- **12:00 Noon - 1:30 PM**
  - Friday Lunch in Exhibit Hall

- **1:00 PM - 5:00 PM**
  - Ethics and Standards – Guidelines
  - What Services Will You Be Providing in 2025 and Beyond?
  - Introduction to Pipeline Surveying
REGISTRATION
SurvCon 2020

Three Ways to Register:

• **Online at [www.njspls.org](http://www.njspls.org)**
  Early Bird Discount of $25!
  Register through December 16, 2019 to receive a $25 discount. No promo codes to enter – discount reflected in your registration fees.
  Regular rate will apply starting 12/17/19.

• **By Mail** – Return the Registration Form with your credit card information or check made payable to NJSPLS to address below:
  NJSPLS SurvCon 2020
  PO Box 101
  Cream Ridge, NJ 08514-0101

• **By Fax** – Fax your Registration Form (Both Sides) with credit card information to 1-888-475-1858.
  *Note: Faxed registrations will only be processed if charged to a credit card (American Express, Visa, MasterCard or Discover)*

Registration Fees

The Registration Fee is required to attend SurvCon. Included in this fee are continental breakfasts, Exhibit Hall lunches and class breaks.

**Spouse Registration**

Registration for your spouse includes admission to all complimentary SurvCon meal functions and the Exhibit Hall. If your spouse is NOT registered for SurvCon, they will not have access to the Exhibit Hall.

- One Day Registration $50
- Two Day Registration $100
- Three Day Registration $150

Registration Deadline

The Deadline to register is Friday, January 24, 2020. After that date, registrations will only be accepted on site at Bally’s on February 5-7, 2020.

Registration Questions?

**Call 1-800-853-5263**

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**Registration Form**

Name ____________________________________________  ____________________________________

Company _______________________________________________________________________________

Address ________________________________________________________________________________

City/State/Zip ___________________________________________________________________________

Phone (DAY) _________________________________  (FAX) ____________________________________

Email Address __________________________________________________________________________

Name as you would like it to appear on your badge:  ______________________________________

**REGISTERED SPOUSE NAME:**

__________________________________________________________

(fee must be included)

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**Conference Totals**

Select the appropriate registration fee, workshop totals and special events (from page 18).

**SELECT ONLY ONE:** (required)

<table>
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<th>Membership Type</th>
<th>Single Day</th>
<th>Two Day</th>
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<td>Non-Member</td>
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- SPOUSE REGISTRATION please check the day(s) you will attend: [ ] Wed. [ ] Thur. [ ] Fri.
- $ ________SPOUSE One Day
- $ ________SPOUSE Two Days
- $ ________SPOUSE Three Days

- $ ________Workshops (from page 18)
- $ ________Special Events (from page 18)
- $ ________On-Site Registration Fee
  ($100 will be added to all new on-site registrations)

- $ ________TOTAL AMOUNT ENCLOSED

**Method of Payment**

- [ ] Check (payable to NJSPLS)
- [ ] AMEX  [ ] VISA  [ ] MasterCard  [ ] Discover

Credit Card Account# ____________________________________________

In the amount of $ ___________  Expiration Date _________________

Name Appearing on Card _________________________________________

3 or 4 Digit Security Code ____  ____  ____  ______

Authorized Signature _________________________________________
Please make your selections here and enter totals on the other side.

**Wednesday Morning Workshops, February 5, 2020**

$ ________ (1) Power, Water and Sewer – Understanding Utility Easements $90/Member; $150/Non-Member
$ ________ (2) Have your Cake and Eat it Too $90/Member; $150/Non-Member
$ ________ (3) Asset Management Toolbox and Large-Scale Mapping Projects $90/Member; $150/Non-Member
$ ________ (4) GIS for Surveyors $90/Member; $150/Non-Member
$ ________ (5) Surveying Best Practices – PSEG and The Port Authority of NY & NJ $90/Member; $150/Non-Member
$ ________ (6) Making Tracks – Railroad Problems $90/Member; $150/Non-Member

**Wednesday Afternoon Workshops, February 5, 2020**

$ ________ (7) When It’s Time to Move On $90/Member; $150/Non-Member
$ ________ (8) Comparative Ethics $90/Member; $150/Non-Member
$ ________ (9) Creating Accurate Point Cloud Data $90/Member; $150/Non-Member

**Thursday Morning Workshops, February 6, 2020**

N/C ______ CST Review Class* No Workshop Fee* $90/Member; $150/Non-Member
$ ________ (10) What Did You Really Mean? – The Intent of the Parties $90/Member; $150/Non-Member
$ ________ (11) Railroad Rights of Way – Interests, Rights, and Rail-to-Trails $90/Member; $150/Non-Member
$ ________ (12) NFIP Mapping Issues, Mapping Changes, and Surveyors $90/Member; $150/Non-Member
$ ________ (13) Fundamentals of Geodesy and Geodetic Datums $90/Member; $150/Non-Member
$ ________ (14) Structural Monitoring – Tracking Movement in a Fast-Paced World $90/Member; $150/Non-Member

**Thursday Afternoon Workshops, February 6, 2020**

$ ________ (15) Property Boundaries vs. Regulatory Authority $90/Member; $150/Non-Member
$ ________ (16) Rail Surveying Techniques $90/Member; $150/Non-Member
$ ________ (17) The Art of Retracement $90/Member; $150/Non-Member
$ ________ (18) What to Know – FEMA, NFIP and the Elevation Certificate $90/Member; $150/Non-Member
$ ________ (19) Counting Down to 2022 – A Lot to Do Before 2022 $90/Member; $150/Non-Member

**Friday Morning Workshops, February 7, 2020**

N/C ______ CST Exam (Levels 1, 2 and 3)** No Workshop Fee** $90/Member; $150/Non-Member
$ ________ (20) ALTA/NSPS Land Title Surveys $90/Member; $150/Non-Member
$ ________ (21) The “How” and “Why” of Digital Signatures $90/Member; $150/Non-Member
$ ________ (22) Hands-On Legal Research Basics: A Practical Applications Class $90/Member; $150/Non-Member
$ ________ (23) Amazing Situations $90/Member; $150/Non-Member

**Friday Afternoon Workshops, February 7, 2020**

$ ________ (24) Ethics and Standards – Guidelines $90/Member; $150/Non-Member
$ ________ (25) What Services Will You Be Providing in 2025 and Beyond? $90/Member; $150/Non-Member
$ ________ (26) Introduction to Pipeline Surveying $90/Member; $150/Non-Member

**Special Events**

$ ________ SurvCon Welcome Gala (Wednesday) [ _____ ] Tickets @ $50 each
N/C ______ NJSPSL Past Presidents & Fellows Breakfast (Friday) No Fee

* CST REVIEW CLASS – Daily SurvCon registration fee applies, no session fee.
** CST EXAM – Daily SurvCon registration fee applies, PLUS applicant must register with NSPS. Refer to page 11 for details.
Bally's Park Place Hotel and Casino on the Boardwalk in Atlantic City is the site for SurvCon 2020. Once again, we have been able to negotiate a great rate for SurvCon attendees! The NJSPLS room rate is just $65.00 per room in Bally’s Tower. These rooms are available on a first-come, first-serve basis.

**CALL-INS:**
Room Reservations: 888-516-2215
(8:00 AM - 2:00 AM EST seven days a week)

Group name: SurvCon 2020
Group code: SB01CN0 (All callers will be asked for this code, but can also book by saying “SurvCon 2020”)

**ON-LINE BOOKINGS:**
If you prefer to book on line, please use the following link:
[https://book.passkey.com/go/sb01cn0](https://book.passkey.com/go/sb01cn0)

**Bally’s Park Place**
Park Place & Boardwalk
Atlantic City, NJ 08401
888-516-2215
(8:00 AM - 2:00 AM EST, seven days a week)

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**Cancellation Policy**
For a FULL refund, written requests must be sent to NJSPLS by Friday, January 24, 2020. All approved refunds are subject to a $35.00 Administrative Fee.

Cancellations will not be accepted after January 24th. Refunds are not given for no-shows.

Please send written cancellation request to:
NJSPLS SurvCon 2020
PO Box 101
Cream Ridge, NJ 08514-0101
Badge Pick-Up:
SurvCon registrants can pick up their name badge and related registration materials at the Registration Desk located on the 6th floor of Bally’s Park Place Hotel. Hours for Registration and Badge Pick-Up are as follows:

- **Tuesday, February 4, 2020** 2:00 PM to 8:00 PM
- **Wednesday, February 5, 2020** 7:00 AM to 5:00 PM
- **Thursday, February 6, 2020** 7:00 AM to 5:00 PM
- **Friday, February 7, 2020** 7:00 AM to 1:00 PM

Registration Questions?
Contact: NJSPLS at 800-853-5263