

# Inside the 2022 Summer edition:

2022 Symposium

Board Bids Farewell to Members Erin Austin and Amin Wahab

Board Welcomes New Member Erica Rooney

Land Surveying and Geographical Information System Mapping

### Mission

The mission of the Oregon State Board of Examiners for Engineering & Land Surveying (OSBEELS) is to regulate the practice of engineering, land surveying, photogrammetric mapping, and water right certification in the state as they relate to the welfare of the public in safeguarding life, health and property.

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### On the cover: Cape Arago State Park

Cape Arago is a scenic headland jutting into the Pacific Ocean. Long used by native Americans, Cape Arago was first sighted by Europeans during one of Sir Francis Drake's expeditions in the late 1500s. Modern visitors can scan the horizon for migrating whales and other marine mammals, as well as fishing boats and ships entering and leaving nearby Coos Bay.

In the 1970s, a theory was posed that English privateer and explorer Sir Francis Drake anchored in the south cove of Cape Arago in June 1579. Followers of this theory believe Drake mistook the dune area between the Coos and Siuslaw Rivers for low, snow-covered hills and sailed down the coast to California, having abandoned hope of discovering a northwest passage back to England. A monument to Drake was placed in the park in 1977.

2022 marks the 100-year anniversary of Oregon State Parks. Find out more.

# **Upcoming at OSBEELS:**

August 1, Symposium Registration Opens

August 11-12, Committee Meetings

September 13, Board Meeting

September 29-30, OSBEELS Symposium

Register for your MyOSBEELS account today at <a href="https://online.myosbeels.org">https://online.myosbeels.org</a>





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# Director's Corner

From the desk of Jason Barbee, Board Administrator & Agency Director

In the first part of May, I was able to attend my first in-person Professional Engineers of Oregon (PEO) conference in Lincoln City. Not only was I able to attend the speaker sessions, but PEO also invited our agency to host an OSBEELS information table. During the conference, we were able to connect with PEO Board members, students that would soon be entering the profession, as well as established engineering professionals. It was a wonderful event that provided topnotch educational sessions in addition to impressive guest speakers. If you ever

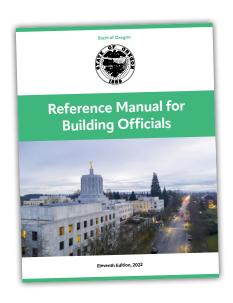
have an opportunity to attend a future PEO event, I highly recommend you do.

At the end of May, I was also able to attend my first in-person meeting of the National Council of Examiners for Engineering and Surveying (NCEES). Again, being able to connect with, share with, and learn from NCEES staff, western states' agency leaders and other board members was incredibly valuable. There is a lot of knowledge and experience gathered into one place when events like these occur, and I feel

fortunate that I was able to glean some of that knowledge and experience during my stay.

At OSBEELS, we strive to develop and maintain partnerships with professional networks in Oregon and nationwide. If you know of an organization or networking opportunity that might be beneficial for OSBEELS to become more involved with, please contact me, by email at:

Jason.Barbee@OSBEELS.oregon.gov or by phone at 503-934-2117.



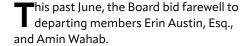
The eleventh edition of the Reference Manual for Building Officials was prepared and published in a joint effort by the OSBEELS and the Oregon Board of Architect Examiners, with updated information and commentaries. This Manual has been developed by both Boards over the past 20 years to aid Building Officials and the general public in understanding the laws governing the practices of engineering and architecture in Oregon.

This information is provided as part of a continuing effort to safeguard the health, safety, and welfare of the public through proper enforcement of the legal requirements for design, supervision, construction, and inspection of buildings in Oregon.

Please take a moment to view the new Manual online at <a href="https://www.oregon.gov/">www.oregon.gov/</a>
<a href="https://www.oregon.gov/">OSBEELS/Resources</a>



# **Board Bids Farewell to members Erin Austin and Amin Wahab**



Appointed by the Governor in 2018, Erin Austin served as the Chair of the Rules and Regulations Committee and participated on the External Relations, Finance, and Examinations and Qualifications during her term.

Professionally, Erin is a Senior Vice President and General Counsel for David Evans and Associates, Inc. She is an attorney licensed to practice in the states of Oregon and Washington and has been with David Evans and Associates for over 24 years.

Looking back on her experience serving on the Board, Erin recalls being "particularly proud of the quality of staff employed by OSBEELS, who are dedicated to providing great customer service to our members." She was pleased to see the agency invest in an updated licensing database system during her term and is excited to see the benefits it provides to state registrants.

With her time on the Board now complete, Erin is looking forward to seeing future registrants earn their professional license with OSBEELS and the continued growth of the professions.

Amin Wahab first served on the Board from 2007-2013 and was reappointed in 2014 following a one-year assignment as the Water Technical Lead with the United States Agency for Internal Development in Kabul, Afghanistan. During his time on the Board, Amin has served as the Chair of the External Relations Committee and participated on the Oregon-Specific Exams Task Force, Customer Service and Communications Task Force, as well as the Rules and Regulations, Professional Practices, Legislative, and Finance Committees.

Amin is currently the Westside Watersheds Program Manager for the City of Portland's Bureau of Environmental Services.

Reflecting on his tenure on the Board, Amin was most proud of the agency's transition to computer-based testing



for the fundamental exams through the National Council of Examiners for Engineering and Surveying (NCEES) and the increased participation by Board members on the NCEES's various task forces and committees.

In his spare time, Amin is looking to continue to participate on other city and state-based boards. He was recently reappointed to the City of Lake Oswego's Transportation Advisory Board.

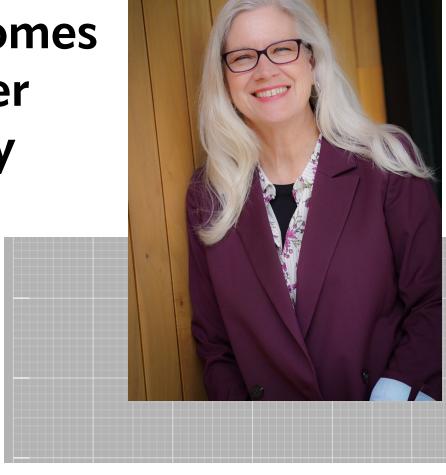
The Board and OSBEELS staff would like to thank Erin and Amin for their dedication to improving the engineering, land surveying, and photogrammetric mapping professions and wish them the best in their future endeavors.

# Board Welcomes New Member Erica Rooney

The OSBEELS is pleased to announce the addition of new board member Erica Rooney, P.E. Erica was appointed by Governor Kate Brown to the Board as of June 2022.

Erica is the Public Works Director and City Engineer for the City of Lake Oswego, overseeing the City's Engineering and Maintenance Divisions, as well as the Water Treatment Plant. These divisions are responsible for providing full services for water, wastewater, stormwater, and transportation infrastructure throughout the City. Erica has been with the City of Lake Oswego since 2009, serving as the City Engineer since 2015, and possesses over 30 years of engineering experience in both the private and public sectors.

Originally from Spokane, WA, Erica attended the University of Idaho earning a Bachelor of Science in Civil Engineering. Following the completion of her education, Erica relocated to California to gain engineering training before landing in the Pacific Northwest and beginning work with the City of Portland as the Assistant City Traffic Engineer. She's also previously worked for the City of Beaverton and in the private sector with OTAK. Erica became registered as a Professional Engineer in Oregon in 1990.



An active member in the engineering community since college, Erica was the first female president of the American Society of Civil Engineers' (ASCE) student chapter at the University of Idaho. Early in her professional career, she was a member of the Institute of Transportation Engineers, where she became the first female president for the Oregon Chapter in 1995. Currently, Erica is a member of the ASCE, the American Water Works Association, and the American Public Works Association.

Looking ahead to the opportunity to serve on the Board, Erica said, "it feels good to be in a position of giving time and effort to the overall advancement of engineering as a profession and career.

It will be an honor to be on the Board and assist with the future development of the engineering and land surveying professions in the State of Oregon."

Outside of work, Erica spends her time getting outdoors, kayaking and hiking, and considers herself a coffee enthusiast. The mother of three children, all of whom are grown and living across the country, she looks forward to getting to visit and see each of them in the future.

The OSBEELS is looking forward to having Erica participate on the Board and share her vast professional engineering experience.

# **GROUNDBREAKING**



All sessions virtual (Zoom account is required)

# 25% OFF limited time offer

Registration is open and for a limited time save 25% off the \$100 cost.

The sessions will be recorded for viewing during the re-air event on October 10-11.

You must have registered for the Symposium to attend the re-air event.

Attendees will have the opportunity to earn up to 14 PDH credits toward their license renewal.

CLICK HERE TO REGISTER

Thursday, Sept. 29	Time	Friday, Sept. 30
8:00 - 8:15 a.m Welcome & Intros		
Achieving Seismic Resilience for the Oregon State Treasury's New Headquarters Reid Zimmerman, PE, SE KPFF Consulting	8:15 - 9:15 a.m. Session 1	Engineers of Destruction - The Reser Stadium Demolition Story Eric McKune, PE Smith Monroe & Gray Engineers and Paul Rose, PE
Wheatridge Renewable Energy Facility Scott Mara, PE, PMP and Allison Dobscha Portland General Electric	9:30 - 10:30 a.m. Session 2	Stuck Between a Lake and a Hard Place, The Lake and Everett Roundabout  James Carothers, PE City of Camas, Greg Jellison, PE PBS Engineering and Environmental, Cory Kratovil, PE PBS Engineering and Environmental, and Hermanus Steyn, PE Kittelson & Associations
Hydro Surveying Our Waters Blair Carlson, PE, CH AKS Engineering & Surveying	10:45 a.m 11:45 a.m. Session 3	Surveying Trends Shaping Education Michael Olsen Oregon State University - Geomatics, Surveying and Geomatics Educators Society
11:45 a.m. to 12:00 p.m Spotlight Session		
12:00 - 12:30 p.m Lunch Break		
Oregon State University's Mass Timber Forest Science Complex Omer Mohammed, PEng, PE Equilibrium Consulting Inc.	12:30 - 1:30 p.m. Session 4	OSBEELS Application Process Updates OSBEELS
Closing Corners in Wonderland Royce Hill, PLS US Bureau of Land Management	1:30 - 2:30 p.m. Session 5	Restoring the Oneonta Tunnel George Freitag, CEG GRI, Molly Davis, PE David Evans and Associates, and Thomas Braibish, PE ODOT
2:30 to 2:45 p.m Spotlight Session		
Solving Wildfire Mysteries  David Blunck Blunch Research Group	2:45 - 3:45 p.m. Session 6	Improving Fish Passage During Turbine Replacement on the Snake and Columbia River Alan Feistner, PE, PMP and Jeff Jackson U.S. Army Corps of Engineers
3:45 - 4:00 p.m Closing Remarks		



# Interested in making a difference?

# OSBEELS has vacancies on the Board and needs you.

The OSBEELS has two (2) vacancies on our state Board. The openings are for public member positions. Public members play an important role on the Board, as they offer a unique and important perspective as non-professionally licensed individuals. Our Board encourages individuals who have had exposure to or are passionate about the engineering or land surveying industries to consider applying for this volunteer role! If you know someone who may be a great fit, please let us know!

As a Board member, individuals will have the opportunity to work alongside public and professional members, and agency staff, to license individuals, address questions from the professional

community, and uphold the Board's mission to regulate the professions as they relate to the welfare of the public in safeguarding life, health, and property. The Board welcomes individuals from all areas of the state to apply today!

Interested in learning more about the application process and prerequisites? Visit the state boards and commissions' website.

If you are interested in applying or learning more about becoming an OSBEELS board member, please contact Board Administrator, Jason Barbee, at <a href="mailto:lason.Barbee@osbeels.oregon.gov">lason.Barbee@osbeels.oregon.gov</a>.



# A Tale of Two Professions: Professional Land Surveying and Geographical Information System Mapping Authored by Board member Tim Fassbender, PLS, CWRE

ver the course of my career, I have had the privilege of working with exceptional land surveyors and geographical information systems (GIS) mapping professionals. While often confused as interchangeable, land surveying and GIS mapping are two different professions that deliver their own unique products to their clientele. While there are similarities between the two, it is important to understand the difference between them and identify the limitations that exist for those practicing GIS mapping without a Professional Land Surveyor's (PLS) license in Oregon.

In Oregon, you must have a license to perform professional land surveying work outlined in Oregon Revised Statute (ORS) 672.002(5). In order to receive a license, you must meet certain education and experience requirements, and have passed two national surveying exams along with one Oregon specific land surveying exam. The practice of professional land surveying is highly regulated and subject to many laws and rules found in ORS Chapter 672, ORS Chapter 209, ORS Chapter 92, and Oregon Administrative Rule (OAR) Chapter 820. GIS mapping is not a regulated practice in Oregon and does

not require a professional license. These two professions have similar subject matter but vastly different requirements in order to practice them.

GIS mapping work is important and adds significant value for its intended purpose. GIS mapping is built on locations provided by the science of surveying and geodetic measurement. The GIS parcel map is built by compiling surveying information from varying sources. It generally provides a practical understanding of where locations and boundaries are but is often compiled from data produced in multiple eras. Some data is compiled from the original surveys (in Oregon, that begins in the 1860's) and is likely not as accurate as today's technology. These differences may not be apparent to the general public, and therefore, the public could see GIS maps as authority for setting property lines or boundaries.

Professional land surveying, on the other hand, requires the understanding and realization that there are pitfalls of compiling different accuracies of data to make one map.

Some land surveyors have reservations regarding GIS mapping and the impact it has on the public's perception. For

example, assumptions made by users can lead to inappropriate application of the GIS mapping data. Consider parcel lines on a map. When someone sees an aerial image of their home depicted with a box around it, they assume that means something authoritative. If the box is labeled "property line", the layperson often interprets it as definitive. I have worked with landowners, and they truly believe a GIS map is the guaranteed property line location. Many of the GIS maps do contain disclaimers explicitly stating that the maps are not to be used for property line location, however it still leaves much of the data to be interpreted by the landowner. It is the responsibility of a professional land surveyor to determine precisely where that line is. Does this mean that GIS products and services shouldn't make parcel data visible? No, it doesn't. The issue is to right this misconception and explain the difference between a survey and a GIS map.

Both land surveyors and GIS mappers are concerned with the precision of location as it is suited for the application

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of data. While land surveyors focus on accuracy, GIS mapping focuses on precision. Land surveyors are trained how to interpret property deeds, including how to use the qualifying calls within the deeds, determining when bearings and distances should not be held and how to resolve conflict between deed elements. Because the GIS mapping professional is mapping out the parcels dimensions to create their parcel map, they are not required to go into this detail.

Here is another example of the difference between professional land surveying and GIS mapping. A common term, that the GIS community uses when fitting parcel lines together, is "rubber sheeting". Meaning, they stretch and pull the line work until parcels line come together. This practice can result in situations such as a parcel line which is 100 feet in the deed becoming 103 feet in length in GIS mapping. It produces a precise but inaccurate map. Not all GIS maps are this way but knowing the limitation of the mapping warns people that the map is a great inventory of where your parcel is next to the neighbors, but it does not show the true location of the property lines.

The bottom line is that data should be well documented and used for the purpose that it is intended. Land surveying and GIS mapping are two different professions that deliver their own unique product to their clientele. PLS and GIS professionals often use GIS maps as a tool to know who may own properties in the area and what certain improvements are in the area. However, only the licensed land surveyor can determine the true boundary location and its relationship with other features.

## **Law Enforcement Cases**

The following list contains law enforcement cases that resulted in disciplinary actions and became finalized.

### Case #2022-4 - David Loomis

The Board issued a Final Order against David Loomis, PLS, assessing a \$250 civil penalty for violation of Oregon Revised Statute (ORS) 672.047(4), proper notice for right of entry. Mr. Loomis entered onto a private property in order to mark a legal easement to which the property owner's neighbors have access. Prior to entering onto the property owners land to perform survey work, Mr. Loomis failed to provide proper notice to the owner.

### Case #2022-2 - James Clancy

The Board issued a Final Order against James Clancy, PE, assessing a \$1,000 penalty for failing to notify the Board office within 45 days of license discipline received in another jurisdiction, violating Oregon Administrative Rule (OAR) 820-020-0045(4). 792 days elapsed from the time the final order from the other jurisdiction was issued and when Mr. Clancy reported it to the Board office.

### Case #2022-1 - Glen Armstrong

The Board issued a Final Order against Glen Armstrong, PLS, assessing a \$250 penalty for failing to notify the Board office within 45 days of license discipline received in another jurisdiction, violating OAR 820-020-0045(4). 267 days elapsed from the time the final order from the other jurisdiction was issued and when Mr. Armstrong reported it to the Board office.

As a friendly reminder, OAR 820-020-0045(4) requires registrants to give written notification to the Board with 45-days of receiving any disciplinary action by another licensing agency related to your professional practice.

The Board would like to remind professional registrants of the requirements for providing notice of right -of-entry. Per ORS 672.047(4), a registered professional land surveyor, or any employee or agent of the land surveyor, may not enter upon land for the purpose of surveying, performing other survey work or establishing a permanent survey monument without first providing notice to the landowner, or current occupant, by first class mail or by personal notice. A notice that is provided in-person must be hand-delivered to the landowner or occupant or be posted in a conspicuous place where the landowner or occupant may reasonably be expected to see the notice. Regardless of whether the notice is delivered via mail or in-person, it must provide all the following information:

- The professional land surveyor's name, address, and telephone number,
- Purpose for entering onto the individual's property,
- Details regarding the availability of the survey, and
- The presence of any temporary or permanent monuments or other markers to be left on the land.