

## 2022 Surveying Taskforce Final Report to Address the Shortage of Licensed Surveyors in Oregon



### 2022 Surveying Taskforce Co-chairs

Steve Townsen, PE, FLS, City Engineer of Portland

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### Surveying Taskforce 2022 - Participants

Oregon State Board for Engineering Examiner's and Licensed Surveyors (OSBEELS)

National Council of Examiners for Engineering and Surveying (NCEES)

ASCE Utilities Engineering and Surveying Institute

Professional Land Surveyors of Oregon (PLSO)

National Society of Professional Surveyors (NSPS)

Construction Managers Assoc of America (CMAA)

NW Utility Contractors of America (NWUCA)

American Public Works Association (APWA - Oregon)

David Evans & Associates (DEA)

PBS Engineering & Environmental

Westlake Consultants, Inc.

City of Springfield

Clark College (CC) in Vancouver, WA

Portland Community College (PCC)

Oregon State University (OSU)

Portland State University (PSU)

Land Surveyors Association of Washington (LSAW)

Associated General Contractors (AGC)

Home Builder Association (HBA)

American Council of Engineering Companies (ACEC)

Civil Engineering Cooperative Program (CECOP)

KPFF Consulting Engineers

RQ4D Surveying

City of Portland

Oregon Dept of Transportation (ODOT)

Chemeketa Community College

Umpqua Community College (UCC)

Oregon Institute of Technology (Oregon Tech)

## 2022 Surveying Taskforce Final Report to Address the Shortage of Licensed Surveyors in Oregon

**Executive Summary:** The number of licensed surveyors in Oregon has dropped by 63% in the last twenty years. Of those remaining surveyors, 69% are over the age of 51 and 43% are over the age of 61! Very few students are graduating surveying programs across the state. Surveyors and Engineers are both licensed by the Oregon Board of Examiners for Engineers and Licensed Surveyors (OSBEELS) and the requirements for education, testing and training is similar for both. However, engineers make 15-20% more than surveyors with similar education and experience. This must change or even fewer will pursue surveying in the future.

In addition, McKinley Advisors recently performed a survey comprised of Surveyors, Higher Education Faculty, Surveying Students and High School Counselors. The results of that survey showed that a large portion of surveyors weren't exposed to the surveying field until after college/technical school and most high school counselors were not aware of Land Surveying colleges, entry requirements, careers, or licensure.

Surveying is becoming the critical path on utility, infrastructure, and building projects. A shortage of surveyors affects the ability of landowners, engineers, contractors, and suppliers to complete projects in a timely manner. This includes all levels of our society from individual property owners, businesses (from a small business to Amazon and Intel) and all levels of government agencies. This will ripple across the economy if something is not done.

As a result, a broad coalition of groups including surveying, engineering, design, construction, industry associations, licensing boards, community colleges, and universities came together to address and to improve the situation. Many of the recommendations have been implemented but work remains to be done. **To get in front of the tsunami of retiring surveyors, we believe that PLSO and ACEC, working with industry, should lead the effort implementing the remaining recommendations and look for other ideas to get more qualified people licensed in surveying, both now and in the future.**

**PLSO should rapidly refocus fund raising and financial investment efforts to support the recommendations that follow. The PLSO Education, Goals and Action Committee would be the logical committee to lead this effort with the support of the board and partnership with other organizations listed in this report. PLSO should also create liaison positions to both AGC and ACEC to partner and communicate with those organizations.**

## 2022 Surveying Taskforce Final Report to Address the Shortage of Licensed Surveyors in Oregon

**Background:** The number of licensed surveyors in Oregon and the country has been in decline and the design and construction industry is recognizing that surveying work is becoming critical path on many projects. Without changes, this will have an impact on engineering firms, contractors, suppliers and ultimately the economy of the region and the country. Steps need to be taken to get more folks licensed in Surveying!

The number of licensed surveyors in Oregon and the US has been in decline. The information below was supplied by the Oregon State Board of Examiners for Engineering and Land Surveyor (OSBEELS).

Year	# of Licensed Surveyors in Oregon	
2000	2100	
2011	1487	
2014	1022	
2017	963	(711 Oregon residents)
2018	875	(640 Oregon residents)
2020	774	(665 Oregon residents)

### Breakdown of Licensed Surveyors in Oregon by age groups:

- 21-30: < 1%
  - 31-40: 10%
  - 41-50: 21%
  - 51-60: 26%
  - **61 and over: 43%**
- The typical requirements for Surveying and Engineering careers are the same and are administered by the Oregon State Board of Examiners for Engineers and Licensed Surveyors (OSBEELS). The requirements are as follows:
    - Obtain a 4-year degree in the appropriate discipline or gain the requisite experience without a degree
    - Pass the national exam (Fundamentals of Engineering (FE), Fundamentals of Land Surveying (FLS))
    - Pass the national exam, and in the case of Surveying also a state exam to become a Professional Land Surveyor (PLS).
    - These exams can be taken at any time. However, they must obtain 4 years of experience before they can receive their PE or PLS.

The only school in Oregon to offer a 4-year degree option in Surveying is Oregon Tech (OT). At Oregon State University (OSU,) people can get a degree in Civil Engineering and also fulfill the requirements to sit for the FLS.

- OIT graduates 5-15 students per year in Geomatics/Surveying
- OSU has about 15 students per year from OSU's Civil Engineering Department and another 10-15 in Forestry Engineering complete the necessary classes to take the FLS exam.
  - Anecdotal evidence from the past few years is that very few, if any, of the OSU students get their PLS given only 11% of people with a PLS are under the age of 40 based upon OSBEELS's data.
- The number of new people obtaining their PLS by either experience or degree programs has not kept up with the number that have been or will be retiring.

Comparing compensation for an engineer and a land surveyor with similar experience, education and training, the Engineer typically make 15-20% more than a surveyor. This must change!

### Surveyors play a critical role in design and construction of projects

- Utilities (water, sewer, stormwater, etc)
- Infrastructure (roads, bridges, airports, etc)
- Buildings (residential, commercial, schools, hospitals, factories, and other facilities)
- All aspects of platting new subdivisions to meet the housing demands

## 2022 Surveying Taskforce Final Report to Address the Shortage of Licensed Surveyors in Oregon

### Without surveyors

- Property, Road, and Easement boundaries cannot be reliably located or created
- Engineers don't have the information they need to design plans for construction.
- Without design plans, contractors can't order materials from suppliers and can't build projects.
- Construction layout cannot be completed with certainty
- These impacts would have significant consequences on the economy of the region and the country.

**Surveyors are the sole profession licensed to determine boundaries in the United States.** If Surveyors went away who could do the work?

- **Surveyors must know both the laws related to Surveying and mathematics.**
  - Lawyers can learn the law, but don't know the required math.
  - Engineers know the math, but don't know the required Survey laws.

The lists above are just the tip of the iceberg that the declines of the surveying profession will have on the economy and society. Because these issues and concerns a Surveying Taskforce was formed.

**Purpose of the Surveying Taskforce:** Assemble a broad coalition across industries to see what could be done to get more people in to Surveying and to let people know about the shortage.

**Mission for the Surveying Taskforce:** To broaden the level of awareness of the critical role Surveying plays and increase the number and diversity of Licensed Surveyors for the benefit of the community, industry, and the economy

**Vision for the Surveying Taskforce:** To create public/private partnerships through internships and scholarships to incentivize students into surveying.

The taskforce met for almost two years and was chaired by Steve Townsen (City Engineer for Portland) and Pat Gaylord (David Evans and Associates, Inc., Surveying and Geomatics Market Leader, Oregon). The taskforce was comprised of representatives from the following:

### **Surveying Organizations**

- Professional Land Surveyors of Oregon (PLSO)
- Land Surveyors Association of Washington (LSAW)
- National Society of Professional Surveyors (NSPS)

### **Construction Organizations**

- Associated General Contractors (AGC)
- Construction Managers Assoc of America (CMAA)
- Home Builders Association (HBA)
- NW Utility Contractors of America (NWUCA)

### **Engineering Associations**

- American Council of Engineering Companies (ACEC)
- American Public Works Association (APWA) – Oregon Chapter
- Civil Engineering Cooperative Opportunities Program (CECOP)

## 2022 Surveying Taskforce Final Report to Address the Shortage of Licensed Surveyors in Oregon

### State and National Licensing Boards

- Oregon State Board for Engineering Examiner's and Licensed Surveyors (OSBEELS)
- National Council of Examiners for Engineering and Surveying (NCEES)

### Consulting Firms

- David Evans & Associates (DEA)
- KPFF Consulting Engineers
- PBS Engineering & Environmental
- RQ4D Surveying
- Westlake Consultants

### Public Agencies

- City of Portland
- City of Springfield
- Oregon Dept of Transportation (ODOT)

### Community Colleges

- Chemeketa Community College
- Clark Community College (CC)
- Portland Community College (PCC)
- Umpqua Community College (UCC)

### Universities

- Oregon Institute of Technology (Oregon Tech)
- Oregon State University (OSU)
- Portland State University (PSU)
- University of Portland (UP)

**Recommendations:** It was fantastic to have such a broad coalition come to together. With this breadth of knowledge and participation, subcommittees were formed, and numerous ideas and recommendations were generated over the 2 years the taskforce met. To get in front of the tsunami of retiring surveyors, we believe that PLSO and ACEC, working with industry, should lead the effort implementing the remaining recommendations and look for other ideas to get more people licensed in surveying, both now and in the future.

### Recommendations that have been implemented

- **The compensation for a licensed surveyor with similar education, experience and training should be similar to that of a licensed engineer.**
  - Typically, licensed surveyors make 15-20% less than a licensed engineer even though the liability of surveying is much higher than that of an engineer.
  - Given the shortage of surveyors, the compensation has naturally been rising due to competition in the job market.
  - This should make it easier to attract folks into Surveying, however, it is important that wages increase at all levels of surveying to create incentives to bring entry level people into the profession.

## 2022 Surveying Taskforce Final Report to Address the Shortage of Licensed Surveyors in Oregon

- **Worked with OSBEELS and they implemented changes to provide more pathways to become a Licensed Surveyor (PLS). We want to thank OSBEELS for these changes which we believe are very beneficial!**
  - Implemented an experience for education in a matrix form like what is in place for engineering
  - Changed the experience only path from 12 years to 9 years
  - Changed path of ABET Accredited B.S. in Land Surveying to include only 3 years of qualifying experience instead of 4 years.
  - Created a path for both engineering and survey A.S. degrees that have institutional accreditation and six years' experience
  - Created a path for ABET accredited B.S. Engineering degrees with no surveying coursework and six years' experience
  - Additional surveying coursework can substitute for experience
  
- **Aligned curriculums between the community colleges and universities so that the classes from the community colleges transfer seamlessly to the universities for those who pursue a 4-year degree and with OSBEELS for licensure.**
  - In what may be a first for the region, the participating colleges worked collectively and with OSBEELS to align curriculums and learn how each can better support the others and their students for transfers and eligibility for licensure processes.
  - The community colleges and universities have decided they want to continue to meet at a minimum of twice a year to continue to look for opportunities to work together.
  
- **Created a “one stop shopping” for companies to post surveying internship opportunities and for students who are looking for internships to post their resume on the PLSO website.**
  - Schools agreed to work with students on their resumes and to get them posted.
  - PLSO will mention this opportunity in their bimonthly newsletter to members.
  - For a student to post their resume, they must be a member of PLSO. Student membership is \$10.
    - If a student is volunteering at the PLSO conference, PLSO will register them for the conference and their membership is free.
  - If students are applying for NSPS scholarships, they must be a member of NSPS to receive one. The cost to join NSPS is \$10.
    - If each school coordinates a group sign up for PLSO, PLSO will get them signed up with NSPS and provide the PLSO membership for free.
  
- **Modified Teaching With Spatial Technology (TWST)** which is a workshop that has been used to show middle school (MS) & high school (HS) teachers how Surveying can be included in their curriculum
  - TWST is already developed for 4-day trainings that have been taught in the past.
  - We pulled out the GIS part and reduced this to 1-2 day trainings that
    - Can be used by the colleges or the community colleges with MS & HS teachers
    - Can also be taught at teacher in-services for math teachers as professional development hours to keep their teaching license


## 2022 Surveying Taskforce Final Report to Address the Shortage of Licensed Surveyors in Oregon

- **Coordinated with AGC on social media videos on TikTok and Instagram about Surveying**
  - AGC connects with social media influencers through platforms like TikTok and others to create short videos to attract people to their professions. AGC has connected with at least one surveying influencer, “LadyLandSurveyor”, to create content on construction trades and surveying.

### INFLUENCER ENGAGEMENT

Collaborated with @BiggieClean and @Ladyland\_Surveyor on four partnerships. Combined reach included:

- 20K website referrals
- 1.6M video plays
- 198K likes



- [https://www.tiktok.com/@ladyland\\_surveyor/video/7167043572317932842](https://www.tiktok.com/@ladyland_surveyor/video/7167043572317932842)
- AGC is willing to partner with PLSO and others on the cost of future videos.
- Videos with an influencer can cost anywhere from a few hundred dollars to several thousand depending on the number of followers they have, etc., however, the results have the potential to be immediate and substantial in the number of inquiries or hits generated on the topic. –
  - Look at the stats for the “LadyLandSurveyor” above! Very impressive!
- More work needs to be done by PLSO and ACEC in this regard. AGC has indicated that they are willing to partner on future efforts.

## 2022 Surveying Taskforce Final Report to Address the Shortage of Licensed Surveyors in Oregon

### Recommendations that have not been implemented

- **Expand the Certified Survey Technician (CST) Program in Oregon.**
  - Work with OSBEELS and employers to create financial and licensure incentives for this program.
  - Offer CST testing at every PLSO and LSAW conference
  
- **Expand Outreach to Students and Schools about Surveying**
  - Committee to be led and implemented by PLSO
  - Take a new look at how and where licensed surveyors went to high school
    - PLSO data shows most Surveyors come out of small schools (Knappa, Vernonia, Clatskanie, Estacada, Colton, etc)
  - Put our effort into schools that are rural or have a rural/urban mix (OC, Hillsboro, etc)
  - Provide students with different options for how they become Surveyors which match with the revisions OSBEELS has made for licensure.
  - Work with AGC to pursue opportunities with “technical” high schools like Cascadia Tech in Vancouver and Career Technical Education Center (CTEC) in Salem.
  - Look at changing how we “sell/market” Surveying
    - Rather than sell as a branch of mathematics. . . .
      - Sell it has being a detective – out looking for monuments
        - Branch of history – reviewing historical documents
      - Then market it and get it out to the target audience through the Communications Committee and student/school outreach.
  - Get high school, CC, and potentially middle school students out for ride-alongs with surveyors
  - Reach out to schools that are under served to encourage more women and minorities to go into surveying.
  
- **Diversity, Equity, and Inclusion** – Exploration of this topic has just begun with regards to how to expand the surveying profession, however, surveying is notoriously a white male dominated profession.
  - By implementing an aggressive DEI program, surveying can be expanded to recruit from populations which include gender, racial, socioeconomic, and other previously underrepresented segments of society.
  - This effort represents a large untapped resource of potential future surveyors which should be aggressively pursued
  
- **Expand the ODOT and Oregon Tech (OT) Partnership to other locations in the state.**
  - ODOT and OT have partnered to bring HS students interested in Surveying to a 3-day experience on campus.
    - It is a combination of time in the classroom and hands on time in the field.
    - Feedback has been very positive.
    - This could be used to focus on bringing a broader diversity of people into Surveying depending upon the outreach to HS in the area
    - Need partnerships with industry and universities or community colleges to expand to other locations.
  - **This model is also being used successfully in other states**



## 2022 Surveying Taskforce Final Report to Address the Shortage of Licensed Surveyors in Oregon

- **Expand Oregon State's effort of the past few years where high school teachers and counselors are invited to come to campus to learn about surveying and the need for more surveyors.**
  - Staff perform demonstrations with different technology and give the teachers/counselors a chance to be involved and ask questions.
  - OSU has gotten a lot of positive feedback and the teachers and counselors are excited to share what they have learned with their students.
  - This could be expanded at OSU and to other universities and community colleges
  - Need partnerships with industry to be able to expand this program
  
- **Expand Oregon State's Summer Experiences in Science and Engineering for Youth (SESEY) program**
  - This program brings in a pair of middle/high school students from underrepresented backgrounds to spend a week doing geomatics related research and learning about opportunities in surveying as well as an introduction to college in general.
  - Need partnerships with industry and universities or community colleges to expand to other locations or for more students at OSU.
  
- **Find and utilize opportunities to use Teaching With Spatial Technology (TWST) to teach middle school and high school teachers about Surveying and how it can be included in their curriculum to get students aware of Surveying.**
  
- **Create public and private partnerships for scholarships to encourage more students into Surveying.**
  - It would be great if we could get folks to have one application for multiple surveying scholarships
    - Clark College has this setup for scholarships
    - Opportunity may exist through Oregon Office of Student Access and Completion <https://oregonstudentaid.gov/>
  
- **Pursue the legislature to create a program to pay student loans for those who go into surveying.**
  - There are already models for this in other professions
    - Teachers who teach in economically challenged areas can have their student loans forgiven.
    - In Nevada, veterinarians who agree to work in rural areas can have their student loans forgiven.
  
- **Military Recruiting**
  - Military experience and education can apply towards the experience and education required for licensure
  - Utilize Military Skillsbridge program or other similar programs to recruit military members finishing their careers.
  - Education of employers is needed to implement this effort. Invite speakers to chapter meetings or annual conferences

## 2022 Surveying Taskforce Final Report to Address the Shortage of Licensed Surveyors in Oregon

- **Expand efforts to work with Youth Groups**

- Boy Scout Surveying Merit Badge
- Girl Scouts
- 4H
- STEM

### **Current National Initiatives**

- **The National Council of Examiners for Engineering and Surveying (NCEES) is looking at potential changes to the NCEES exam (it will be voted on in August '23).**

- If this goes forward, we assume states will change licensing structure and we think it will be a big step nationally to get more qualified people licensed as Surveyors. <https://ncees.org/ncees-seeks-professional-surveyors-and-mapping-scientists-expertise-and-advice/>
- Potentially there are a lot of people who do not get licensed because the current version of the PLS doesn't really represent the type of surveying work they are doing. So, they get licensed as engineers or pursue certificates instead.

- **NSPS Boy Scout Committee**

- Working on rewrite of Surveying Merit Badge requirements to streamline teaching and better align hours to earn the badge with other merit badges offered by the Scouts

## 2022 Surveying Taskforce Final Report to Address the Shortage of Licensed Surveyors in Oregon

### 2022 Surveying Taskforce Participants

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## 2022 Surveying Taskforce Final Report to Address the Shortage of Licensed Surveyors in Oregon

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## 2022 Surveying Taskforce Final Report to Address the Shortage of Licensed Surveyors in Oregon

### Appendix A - Notes from the Communications Committee with ideas for the future

Communications Committee met 4-5 times and provided the following recommendations

- Asha from AGC has offered information on education externship opportunities PLSO can participate in.
  - Information forwarded to PLSO. Several opportunities exist to partner with AGC on future events.
  - PLSO should take advantage of existing educational relationships by AGC, ACEC and others to partner in events with schools and teachers. This is an opportunity which has not been utilized.
- **STEM Partnership / OIT – Speed Networking Event**
  - Maggie Thornton of Westlake attended this event in Aug. and found it to be great. This annual event is a joint effort between the [South Metro-Salem STEM Partnership/OIT/Wilsonville](#) and [Oregon Connections](#). Career/Technical Education teachers from the Portland and Salem areas attend along with industry professionals. Teachers change tables every few minutes and during the presentation time, each industry professional has a short time to present about their company. I created a short slideshow and handout to promote surveying as a profession (not specifically for Westlake).
  - The “speed” part of this is real: Maggie presented to 32 CTE teachers during 13 very short presentations. I made some great connections with high school engineering/ construction/ math teachers. These teachers are often looking for relevant industry professionals to give classroom presentations (virtual or in person), assist with curriculum, and serve as guest speakers.
  - She highly recommends PLSO attending (or having PLSO member firms take turns attending/whatever works best). The slideshow (presented on a laptop) could utilize the PLSO rebranding images and messaging, along with other current information.
  - Here are the links to more information about this year’s (2022) event:
  - [https://docs.google.com/document/d/1s20Jk86u\\_SMHJa3vVz-Gd613URnOmQqdT4ayVoDSRPI/edit](https://docs.google.com/document/d/1s20Jk86u_SMHJa3vVz-Gd613URnOmQqdT4ayVoDSRPI/edit)
  - <https://docs.google.com/document/d/1cb-ZZ3noE9YOiKhrCwWzChHXV6XKkixHQ2zz8-OlvkY/edit>
- **Social media campaign prepared for survey (AEC industry) firms:**
  - PLSO in partnership with others to pay a creative firm (possibly the same firm that did the rebrand) to create a content “library” of graphics and videos that PLSO member firms and individuals (or really any industry partner) could use to promote surveying as a profession.
  - Along with the actual content, there would be a “user guide” of which posts to use on what platforms, suggested frequency, etc. If these instructions and associated calendar were clear and easy to use, any survey firm or individual surveyor could follow the schedule to post content to their followers on a regular basis. The goal of the content message would be something like “surveying is a great profession – please spread the word (for all these reasons...) to your families, friends, and professional networks”. If individual surveyors, survey/AEC companies had this “set of tools” of professional graphics, messaging, and guidelines, we could reach a very large number of people, especially if people shared both to their professional networks, and their personal networks. Potentially a fairly low-cost endeavor (\$1,000?).

## 2022 Surveying Taskforce Final Report to Address the Shortage of Licensed Surveyors in Oregon

### **Brainstorming Input from Asha Aiello with AGC**

*First, I shared a sector map with you covering the interest areas for workforce boards in Oregon. It might be a great place to start planning and calibrating your outreach and education efforts – partnering with those areas that have already determined an established interest in construction.*

*See next page for the sector map*

# Oregon's Local Workforce Development Boards and Sector Partnerships 2021

**Mid-Willamette:** *Active:* Manufacturing  
Healthcare  
Transportation & Warehousing  
*Emerging:* Construction

**Northwest:** *Active:* Manufacturing  
Healthcare  
Leisure & Hospitality  
*Active:* Maritime (with Lane and Southwest)

**Lane:** *Active:* Technology  
Collaborative  
*Active:* Food & Beverage Manufacturing  
*Active:* Construction/Aggregate

*Active:* Wood Products/Advanced Manufacturing  
*Active:* Maritime (with Northwest and Southwest)

**Southwest:** *Active:* Healthcare  
Transportation  
*Active:* Maritime (with Northwest and Lane)  
*Emerging:* Transportation

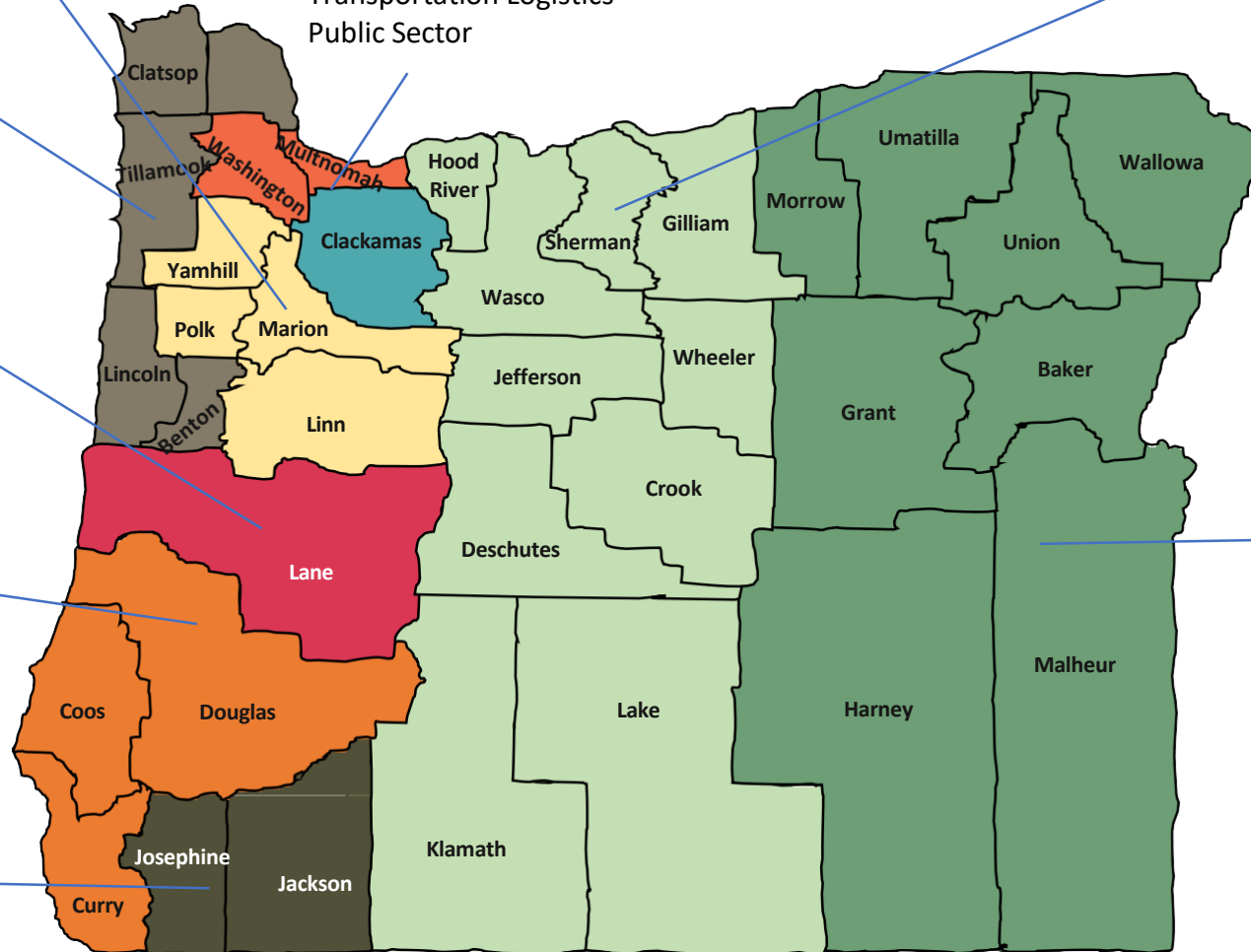
**Southern:**  
*Active:* Advanced Manufacturing  
Technology  
Healthcare  
Natural Resources  
Transportation & Logistics  
*Emerging:* Childcare/Childhood Education

**Portland Metro/Clackamas/SW Washington Collaborative:**

*Active:* Manufacturing  
Healthcare  
Technology/Software  
Construction  
*Emerging:* Early Care & Education  
Transportation Logistics  
Public Sector

**East Cascades:**

*Active:* Manufacturing  
*Active:* Healthcare  
*Active:* Construction  
*Active:* Tech



Northwest Oregon Works

Worksystems, The Portland-Metro Workforce Development Board

Clackamas Workforce Partnership

Willamette Workforce Partnership

Lane Workforce Partnership

Southwestern Oregon Workforce Investment Board

Rogue Workforce Partnership

East Cascades Works

Eastern Oregon Workforce Board

**Eastern:**

*Active:* Manufacturing  
*Exploring:* Healthcare  
Transportation  
Warehousing

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*I mentioned I was taking notes today as my brain fired so below, you'll find questions/ideas/thoughts I had during our meeting. Do I think you haven't thought or discussed these things? Not at ALL! I just knew what I wanted to know more of and where my brain stands from our work at AGC the last few years on this issue and how we've moved forward.*

### Marketing

- Build Oregon by AGC
  - Join forces and help promote and create videos, social content and stills to help promote surveying
  - Blog posts, job board help support numbers
  - Educational programming and information
  - Who would be our resource here? Who would be the recommended partners/members that would be willing to participate?
    - How do you recruit now? What programs are in place?
    - What can you do without a degree? How do you promote that?
    - We have trading cards, posters, etc. that I send to schools. If you'd like to know more, let me know.

### Established channels and partners you might need to build on

- Workforce investment boards
- Community based organizations
- Diversity focused organizations as it relates to your professions and recruitment areas
- AGC Workforce Coalition
- Community colleges
- Pre-apprenticeship programs
- AGC Area Councils (can explain more) – construction industry councils that serve to connect folks to their communities so that they can more easily address local issues and form connections



## 2022 Surveying Taskforce Final Report to Address the Shortage of Licensed Surveyors in Oregon

### Educational partners and recruitment ideas

- JATCs and partners like UA Local 290/Dave Burger and his ideas of expanding the trades
- AGC's Education Externship programming statewide and incorporating time with surveyors
- Pre-apprenticeship programs
- What skill sets do students need to build at the MS and HS level to be successful?
- What CTE programs already exist that partner with similar skill sets?
- What have you done to recruit students so far? Can you do a Google form poll to get feedback?
- Who are your leaders in the industry? Do they look/talk/speak like Gen Z?
- Do you have young people that can speak to the basic level of skill and what interests would be aligned in student and adult learning populations?
- Use AGC coalition and contacts to build the TWIST program and reintroduce it to local partners/programs
- Have you considered using the new WBL requirements to introduce students and adult learners into the industry?
- How do you recruit now? What programs are in place?
- What can you do without a degree?
- Have you connected with STEM hubs in the past, and what were/are the results?
- It sounds like you're reviewing multiple pathways for licensure and education. Might I suggest working with Education NW?
- Have you considered translating/promoting your trade in Spanish or promoting it to different user groups? I'm a hunter, and frequently use OnX Maps, which is reliant on professions such as yours for accurate and legal information when I'm trying to get access to property or ensure I don't break the law and trespass.

### **AGC Externship Information**

AGC provides experiences for teachers all around the state by sponsoring and organizing a roughly one-week deep dive into the construction industry. Below is a rough outline of the schedule. Each region gets to choose their own direction, recruit their own teachers, and form their own connections with local employers. Teachers are given a stipend, continuing education credit if requested, all PPE and most meals are usually covered by us, partnering agencies (think regional education service districts) or the businesses. Teachers learn lessons, tour sites, practice using equipment, and more.

Day 1: Safety, apprenticeships

Day 2: General contractors

Day 3: Construction support and other jobs in the industry (Controller, HR, marketing, surveying, etc.)

Day 4: Heavy Highway and Civil

Day 5: 2/4 year post-secondary visits

## **2022 Surveying Taskforce Final Report to Address the Shortage of Licensed Surveyors in Oregon**

### **AGC Externships that were done in 2022**

June 20-24<sup>th</sup> : High Desert ESD (Bend/Redmond/Prineville)

June 21-29<sup>th</sup> : SOESD (Rogue Valley and Klamath)

June 22-29<sup>th</sup> : Portland Public Schools and Willamette ESD

June 27-July 1<sup>st</sup> : SW WA (Mainly Clark/Cowlitz Counties)

July 12-20<sup>th</sup> : Linn-Benton Counties

August 8-12<sup>th</sup> : SW Coast (Coos/Curry Counties)

August at some point yet to be determined: NW OR Coast

Potentially a collaboration with manufacturing – Douglas County, yet to be determined.

What does it mean to be a partner? You can host a site visit to your location but if you don't have one, we would work to align your presentation with another that makes sense. IE, if we were at a bigger GC one day, we might invite you in to give a presentation or demo in a conference room OR join us on site for a presentation. We (I) book you in usually 1-2 hour blocks depending on how much you have to share/present. We'll help you plan in coordination – you aren't alone trying to figure out what, when, where, and why?