

A Surveying Makeover: 8 ideas for attracting and training new talent

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Today there is an overriding question facing the land surveying profession: how do you attract new surveyors and train them well?

Numerous articles in this publication have chronicled the dangers of an impending surveyor shortage as experienced professionals retire in the coming years.

The team behind the Geoholics podcast has delved into the question for two episodes and counting.

Their goal? To ask young surveyors exactly what challenges they've faced and what ideas they have to smooth the road into the profession.

They recently tapped three young surveyors to share their stories: Ryan, Davis, and Luigi. Here are some of the ideas that emerged.

1. Rebrand the profession



Dare we begin with the contentious comment that surveying just... isn't sexy?

For anyone outside of the profession, it's often very unclear what being a surveyor actually means.

Davis shared a story that is humorous yet cringe-worthy.

"A crew chief that I worked with previously when he got into surveying he thought he was going to be in the mall handing out surveys. That was his idea of what surveying was," Davis said.

Luigi has been surveying for just three months. However, he agreed that he was clueless about surveying until recently.

"I had never heard of surveying before 2019. I didn't know it existed. I didn't know what surveyors did. I kind of fell into it. It opened up so much possibility, so much opportunity. It's something that I really want to share with everybody I know," he said.

Even veteran surveyor and Geoholics podcast host Kent Groh admits to getting creative when explaining what he does.

"A lot of times, it's you know, 'what do you do?' I'm like, I'm a land surveyor. And it's like, 'you're a landscaper?' I'm like, no, I'm a land surveyor," Kent said.

Kent got so tired of getting a confused response that he started telling everyone that he's a geomatics professional.

"They're like, 'oh my God, tell me more.' And then, all of a sudden, I engage in this amazing conversation," said Kent.

It seems surface-level, but this trend makes one thing clear: the general public has no idea what surveying means. And it's up to us to change that.

Because once people understand surveying, they're often hooked. You're spending time outside. You're making great money. You're working side by side with engineers, architects, and construction teams. And you're contributing to a physical piece of history on every project.

2. Increase elementary exposure

One area to start sharing surveying is at the very beginning: with elementary school children.

Expanding programs like Get Kids Into Survey and partnerships with local scout troops makes a lot of sense if you want to get surveying on the population's radar at a young age.

Davis thinks surveying should be mentioned as soon as children start learning how to read maps. However, he's already done some local recruiting and has only been surveying for several years.

"I went and talked to a STEM class," he said. "They were more interested in the GIS cause it was like, 'oh, Pokemon Go kind of uses GIS,' and stuff like that. Of course, that's when Pokemon Go was big."

Not every group of kids will be equally interested in learning about surveying, but that's OK. The ones who do remember surveying will be the ones you want working for you in another 15 years.

"My kid loves coming to see where I work. She loves to come walk around the back. She sees all the robots laid out, and she sees that UPS's, and then you look over and the other side and she'll see all the trucks and then she'll see the four-wheelers," said Ryan, a surveyor with ten years experience.

Ryan has been looking into Get Kids into Survey so that he can volunteer with his daughter's Girl Scout troop.

"They were all doing robots," he said of one Girl Scout meeting. "The robot thing is very important, and it's very cool. But you could tell the kids were just getting burnt out with it. And I'm like, OK, we should do something different. Let's get them outside. Let's get them getting in the dirt. Let's have them look for pins."



Kent was shocked when he got involved with the Boy Scouts in his home state of Arizona and brought back the Survey Merit Badge.

"The survey merit patch hadn't been offered in like 30 years here in Arizona. Then the United Surveyors of Arizona that I preside over started doing it about four years ago. Every time we offered it, it was completely booked out. It filled up fast, completely sold out. But, every time we administered it, and the kids were out there, they were engaged. They loved it," he said.

If you're a surveyor with young children, consider volunteering to visit your child's school or scout troop to do a short presentation.

3. Create a PR campaign for parents

One lightbulb idea is that perhaps marketing surveying to kids isn't the most effective step. Perhaps we really need to market the profession to parents, who have such a significant influence on their children's lives.

That's what happened to Ryan when he found himself stumped at junior college, unsure what to do next.

"My mom bumped into a friend who was actually a CEO of a local engineering firm at the time. And they're like, oh, we need an instrument person, has he done this before? No? We'll throw him in it. And the next thing I know, for three years, I was the guy standing behind the drone with a radio," he said.

Ryan was also influenced by his stepdad, who had been a crane operator and knew the value of a good surveyor firsthand.

Davis agreed.

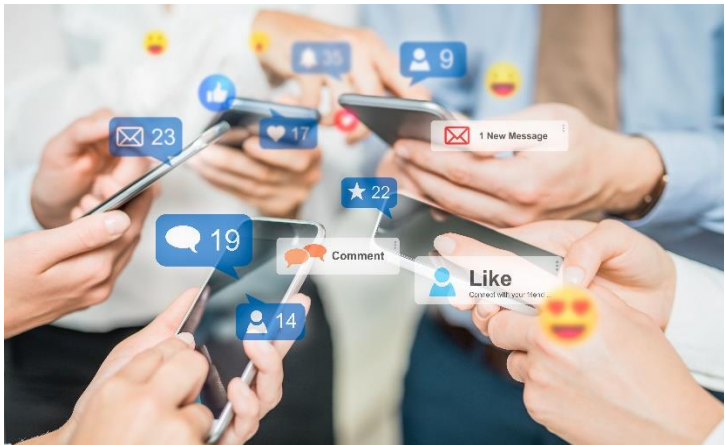


"It starts with parents," he said. "If the only thing they know about surveying is a mom and pop place—and not knocking mom and pop places. I mean, that's kind of how the surveying industry was built—but if that's the only thing they know, they don't know there's this giant company that all they do is aerial surveying LIDAR. They don't know what that is. They don't know how cool that could be for their child to take part in."

It's easy to forget that parents are often the ones guiding young children, whether that guiding is done consciously or not.

But parental influence can't do anything to help the surveying profession if parents aren't aware of the breadth and benefits that surveying offers.

4. Supercharge social media efforts



There's no beating around the bush. Today, if you're not on social media, you might as well not exist.

That's a resounding reason to jumpstart social media surveying campaigns and resources targeted towards every age group: teens, students, and parents alike.

Luigi is 25 years old and knows that the amount of social media young people consume is enormous.

"I help out in the youth pastor role here in my local church. So I can see firsthand the number of kids that have TikTok, Instagram profiles, it blows my mind," he said. "There's a lot of visibility, and frankly, that's kind of how I got engaged in the profession."

Luigi was connected on Instagram with a friend and had been following his posts. He was a surveyor at the company that Luigi now works at today.

"I looked at his posts. I found it interesting. I sent him a direct message, and he was gracious enough to respond and engage in that conversation. The importance of having that visibility on social, it's a great asset that we can use to give good propaganda of our profession," Luigi said.

Davis finds that social media has also been a great connection point to surveyors on a national and global level, giving him a greater sense of professional community.

"On Facebook, I like some of the surveyor groups. I just see how the impact grows that community. For example, I've connected with guys that are surveying in California. Even though I'm over here in Georgia, I like seeing what it's looking like for them to survey in California. It doesn't matter where they're at in the states or really where they're at in the world. They're running into the same problems that we are," he said.

5. Create cross-curriculum opportunities

Dedicated surveying programs can be hard to come by. So why not try to cross-pollinate with other disciplines, introducing surveying as students study related professions?

Davis started in forestry, and Luigi started in engineering. Both found surveying along the way and made the switch. It stands to reason that more students would follow suit if they had the exposure.

"I went to school for mechanical engineering. I did about three years of school, and I started to get disenchanted with what I was learning. I just couldn't see myself sitting in an office in front of a computer for 30, 40 years," Luigi said.



Luigi was in a lackluster civil engineering job after graduation until he contacted the friend he followed on Instagram.

"I think it needs to be offered more in the civil engineering program," Ryan agreed.

"It'd be nice if there were a couple of classes. Some of the engineers that we have that are really good have spent their summers with us, seeing what we do. It gives them a different perspective on how they do their work instead of just going by the theories and the math," he said.

When schools can offer a teaser curriculum for different professions in related programs, it benefits everyone involved.

6. Make mentoring a priority



It's one thing to attract surveyors to the profession; it's another to retain them.

Mentoring isn't related to attracting new surveyors to the profession. But it is important to keep new surveyors empowered and engaged so that they don't leave the profession in discouragement.

Davis recalls being thrown into the deep end when he started surveying three years ago, and it was a difficult experience.

"We were just so busy that they didn't have time to really put someone on me to train me up. They just kind of put me with a crew chief. It's like, all

right. He knows what he's doing," Davis said.

Davis ended up moving to a new company, where the mentorship experience has been like night and day.

"There's two licensed surveyors and other guys that have been surveying longer than I've been alive. They've been awesome with just taking their time. If I'm working out a boundary resolution and something's just not jobbing off the old deed or plat or whatever, they're so nice about coming to my office and showing me," he said.

Luigi had a similar experience when he started his first job with an equally floundering party chief at a small company.

"He was actually two years younger than me," Luigi said of the party chief. "He kinda got a little short-changed as well because he wasn't able to have a solid, consistent mentor with him either. So in certain situations, it was kind of like the blind leading the blind."

You can be as intelligent and hardworking as possible and still feel like a failure if you don't start your career with proper guidance.

"We toughed it out together. But I came away from that experience with a really deep appreciation for a mentor that's close by, that's consistent with you and willing to answer questions," Luigi said.

In some professions, it's possible to be self-taught. But in a technical profession like surveying, it's much more difficult.

One idea would be to create a remote mentor-pairing service or survey mentor hotline, where young surveyors without a mentor figure could reach out to experienced surveyors with questions.

This could be an excellent opportunity for retired surveyors who are ready for a well-earned break but still want to have a hand in helping young professionals.

7. Firms: don't pigeonhole your surveyors

Another job-retention factor for young surveyors is being able to stretch their wings and experiment with diverse projects.

At a busy surveying company, it's easy to get caught up in the day-to-day rush.

But don't forget that new surveyors are looking for exposure, not just to do one single role or project type for the rest of their career.

"I've noticed that with a lot of guys who go and get their degrees, it's like oh, we're gonna hire this young surveyor right out of college who knows a little bit, train him up, throw him in his own crew. And then he's going to be there for the next five years while he forgets everything he learned in school because the only time he comes in the office is to get a new job," Davis said.

"That's something I personally experienced. So I started looking for a new experience and ultimately landed the jackpot where I'm at right now, having the mentors that I've had."

Ryan had the opposite experience—and as a result, he couldn't be happier.

"I started off my day doing construction staking. I was staking a storm sewer. I think I put fault structures in the ground. That was the morning. The afternoon was doing a parking lot survey," Ryan said.

"I never know what I'm walking into. For the rest of the week, I know I'm doing a big humongous service for an expansion on a building. And I think next week we're doing a solar field. So I am very fortunate that I get to do a lot of different things."

Young surveyors seek companies where they can experience a variety of tasks to add to their repertoire and resume and enjoy the many diverse experiences that being a surveyor offers.



8. Collaborate at a national level



To solve the hurdles facing surveying, it's going to take a group effort.

That means developing and enhancing national surveying resources as well as local ones.

"We've talked to surveyors and geomatics professionals from all over the world. And every single person, every surveyor, and geomatics person we've talked to, they all experiencing the same things that we are," Kent said.

The rewards, the challenges, the shortage of surveyors—none of these issues are confined to one individual state.

For that matter, these issues impact surveyors around the globe.

Surveyors can be passionate, but they can also be prideful.

"Surveyors are very prideful. They can think that their solution is the only solution," Kent said.

"Surveyors as a whole, we need to come together is what it boils down to. You know, if a fellow surveyor has a question or raises a question about a corner that you set, we've gotta be open-minded. We're not fricking perfect."

As you continue to practice, remember that other surveyors, especially young ones, need your support. The more you can build mentorship, growth opportunities, volunteering, and promotion of surveying into your practice, the better off the profession will be.

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