

Bridging the Gap: An International Multi-Stakeholder Investigation of Programmes Curricula, Graduate Attributes and Skills in Geospatial Surveying for Sustainable Built Environment Practices

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Mapping Our Future: Navigating the Shortage of Land Surveyors in Illinois

HLR • Apr 13, 2023



Land surveyors play a crucial role in a wide range of industries, especially in civil engineering. It is no secret that, despite the importance of their work, there is a shortage of land surveyors in Illinois and many parts of the United States. Why the shortage...and what can we do as industry professionals to reverse the trend?



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Land Surveyors in High Demand: Why the Industry Can't Keep Up

Written by [dontucker](#) - February 27, 2023

Land Surveyors opinion in the Anniston, Talladega, and Oxford, Alabama

Land surveying is an essential service that plays a crucial role in many industries, including construction, real estate, and infrastructure development. However, despite the importance of the profession, the industry is struggling to keep up with demand, leading to a shortage of qualified professionals.



Land surveyors play a crucial role in the United States despite the importance of the profession. Why the shortage...a



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Research Into the Demand and Supply of Surveying and Geospatial Professionals

Land Surveyors in the US Can't Keep Up

Written by dontucker - February

Land Surveyors opinion in the Annist

Land surveying is an essential service for infrastructure development, and infrastructure development is struggling to keep up with demand, I

The 2022 research reveals the true impact of the surveying skills shortages across Australia

The Association of Consulting Surveyors is committed to industry research to provide insights for the profession and government to better understand core issues and how to resolve them. Over the past 12 years, we have commissioned research by BIS Oxford Economics following each Australian Census into the demand and supply of surveying and geospatial professionals, with the most recent study released in January 2023.

Determining the Future Demand, Supply and Skills Gap for Surveying and Geospatial Professionals: 2022-2023 is a comprehensive economic analysis of the situation across all states and territories in Australia.

The research reveals that the ongoing skills shortfall in the surveying and geospatial profession will reach nearly 1,400 professionals nationally by 2024, eventually reaching over 2,000 in 2029 - which is an average of 1,500 extra surveyors and geospatial professionals required each year to meet national demands.



Land surveyors play a crucial role in infrastructure development despite the importance of the profession in the States. Why the shortage...a



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Determining the Future Demand, Supply and Skills Gap for Surveying and Geospatial Professionals: An economic analysis of the situation across all states and territories in Australia

The research reveals that the ongoing skills shortfall in the surveying and geospatial fields is projected to reach 2,000 by 2024, eventually reaching over 2,000 in 2029 - which is an average of 1,000 per year to meet national demands.

Tackling the surveying and spatial skills shortage

By jnally on 18 October, 2021



Image © iStockphoto/SB-8NIHAT

The government acknowledges a shortage of surveying and spatial professionals, but more needs to be done to solve the problem.

By Jonathan Nally

Canberra has moved to address the shortage of skilled professionals in the surveying and geospatial fields. In June the federal government added surveyors, cartographers and other spatial scientists to the Priority Migration Skilled Occupation List (PMSOL).



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Is There a Shortage of Land Surveyors?

November 2, 2020



Many industries are facing a shortage of qualified professionals. Healthcare, skilled trades, IT, and engineering are just a few of the fields that are feeling the pinch in attracting new talent. One of the most overlooked professional shortages is occurring in the field of land surveying. Although the number of land surveyors is expected to only grow by 2% by 2030 according to the U.S. Bureau of Labor Statistics (BLS), it's that lack of opportunity that may be driving potential newcomers away from the profession.

The Land Surveyor Career

Land surveyors make precise measurements to determine property boundaries. They provide data relevant to the shape and contour of the Earth's surface for engineering, mapmaking, and construction projects. They typically work for survey companies or architectural or engineering firms. Some work for developers that work to subdivide properties into parcels or real estate firms to confirm boundaries upon the sale of a property.

Land surveyors typically need a bachelor's degree because they work with sophisticated technology and math. Some colleges and universities offer bachelor's degree programs specifically designed to prepare students to become licensed surveyors.



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Image © iStockphoto/SB-8NIHAT

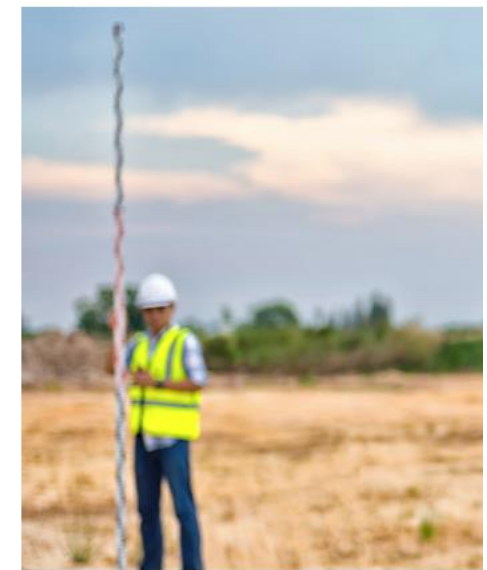
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Housing Crisis Could Be Exacerbated By Shortfall In Surveyors



NEWS / 2ND FEBRUARY 2023 / GEORGE MORAHAN

Many industries are facing a shortage of qualified professionals in a few of the fields that are feeling the pinch in attendance is occurring in the field of land surveying. Although according to the U.S. Bureau of Labor Statistics newcomers away from the profession.

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Land surveyors typically need a bachelor's degree colleges and universities offer bachelor's degree licensed surveyors.

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Image © iStockphoto/SB-8NIHAT

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November 2, 2020

Shortage of surveyors may threaten construction output

Updated / Thursday, 2 Feb 2023 07:17



Housing Exacerbates Shortage in Surveyors



The SCSJ estimates that the shortages will be worst felt in the property area



By Will Goodbody Business Editor

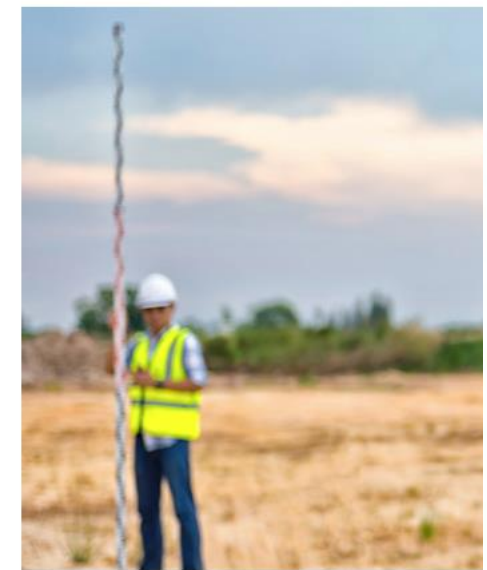
The country is facing a significant shortfall in the number of surveyors it needs, creating further challenges for the ramping up of the residential construction market, a new report has concluded.



photo/SB-8NIHAT

Shortage of surveying and spatial skills must be done to solve the problem.

Shortage of skilled professionals in the sector. The federal government added surveyors, and this is a priority migration skill.



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NEWS / 2ND FEBRUARY 2023 / GEOGRAPHY

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Shortage of surveyors causes construction output to fall

Updated / Thursday, 2 Feb 2023 07:17



The SCS estimates that the shortage of surveyors is causing a significant drop in residential construction output.



By Will Goodbody Business Editor

The country is facing a significant shortage of surveyors it needs, creating further delays in the residential construction market, a new report has concluded.



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Severe surveyor shortage set to become worse

By jnally on 17 March, 2023



Australia needs thousands more surveyors over the next decade and beyond.

The completion of infrastructure for the 2032 Brisbane Olympics and several other major projects around the country may be affected if action is not taken to address the severe skills shortage in surveying, new data has revealed.



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Employment Opportunities and Future Skills Requirements for Surveying Professions

2018-2021

Dr. Róisín Murphy

June 2018

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Petition details Comments

SAVE TU Dublin's Bachelor of Science (Honours) in Geospatial Surveying

SAVE

TU Dublin's Bachelor of Science (Honours) in Geospatial Surveying



Started 21 September 2023

Petition Closed

This petition had 616 supporters



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Why this petition matters

Started by [Sarah Sherlock](#)

We, the undersigned, have come together out of deep concern about a recently expressed intention of TU Dublin.

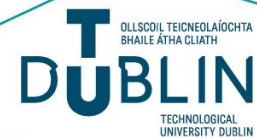
As members of Ireland's Geospatial Community and our colleagues, we express our profound concern over the decision not to offer the TU834 Bachelor of Science (Honours) in Geospatial Surveying Programme at TU Dublin to prospective students in 2024.

Since 1911, TU Dublin has been a primary gateway to those entering our



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SAVE TU Dublin's Bachelor of Science (Honours) in Geospatial Surveying

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TU Dublin's Bachelor of Science (Honours) in Geospatial Surveying



Started 21 September 2023

Why this petition matters

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UNDERGRADUATE

Geospatial Surveying and Mapping BEng Honours

UCAS code: H245

The science, technology and maths behind map-making and coordinate systems.

Course Withdrawal

This course has been withdrawn for 2024 entry. This means we're unable to accept applications for 2024.

Depending on your background, you can explore other courses related to your subject of interest for 2024 entry, including:

- Civil Engineering
- Geography

How to apply

Support for your application

Sign up for an Open Day



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This research will investigate the perception of the geospatial surveying profession, and requirements by various jurisdictions on qualifying as a geospatial surveyor.

By conducting a thorough analysis of the existing curricula and identifying the gaps in graduate attributes, domestically and internationally, this research seeks to develop a framework and curriculum that aligns with industry requirements and the United Nations Sustainable Development Goals (SDGs), fosters sustainability in the built environment, promotes student mobility, and embraces diversity and inclusion.

This framework will facilitate the development of targeted training programs and educational curricula, equipping aspiring geospatial surveyors with the essential competencies needed to thrive in their roles.



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Geospatial Surveying Profession Outlook

<https://forms.office.com/e/6GAyMkTtxB>



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* Required

Welcome

Dear Respondent,

Thank you for participating in this survey. It is expected that completing this questionnaire will take ten minutes of your time.

Your expertise and insights are not only invaluable to this research, but also pivotal in shaping the future of the surveying profession.

Research Title: Bridging the Gap: An International Multi-Stakeholder Investigation of Programme Curricula, Graduate Attributes and Skills in Geospatial Surveying for Sustainable Built Environment Practices.

This research is being carried out in the School of Surveying and Construction Innovation, Technological University Dublin (TU Dublin). The output will try to bridge the existing knowledge gap, drive transformative change within the Built Environment industry, and support the professional growth and development of surveying professionals. By addressing the identified gaps and incorporating sustainability, mobility, and diversity considerations, this research will contribute to the advancement of geospatial surveying education and employment practices in Ireland, Europe and worldwide.

Please be aware of the following:

- participation is voluntary
- you can quit the survey at any stage
- all data collected is confidential
- you will not be identified or associated with any data or findings
- each person should complete this survey only once

The data uncovered will form part of a PhD in Surveying Industry Education being undertaken in the School of Surveying and Construction Innovation at Technological University Dublin.

Please note that this survey is completely anonymous. As such, once your responses have been submitted, we are unable to remove or alter them because we have no way to identify individual participants.

Many thanks for your time, and should there be any queries or further discussion related to this survey and the research, please do not hesitate to contact me.

Eugen Nicolae
Lecturer and PhD Researcher at Technological University Dublin
Eugen.Nicolae@TUDublin.ie | D18127661@mytudublin.ie

1. Consent: By ticking this box, you hereby agree to participate in this survey and agree that your responses can be used in the analysis of data for this research study. *

- Yes, I agree to participate in this survey
- No, I do not agree to participate in this survey

Next

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Section 1: Background Information

To provide context about the respondent's experience and location, which can help interpret their responses and identify regional trends or differences.

Section 2: Professionals' Skill Profiling

In this section we profile the skills and knowledge possessed by professionals. By understanding their strengths and areas for improvement, we can enhance professional development programs.

Section 3: Gender Diversity Assessment

In this section, we aim to assess gender diversity within the surveying profession in different countries. These insights are valuable for understanding the current landscape and identifying opportunities for improvement.

Section 4: Sustainability and the UN SDGs

Understanding how the profession aligns with the SDGs can help identify opportunities to promote sustainability and contribute to global development goals.

Section 5: Stakeholder Engagement

This section can provide insights into how to effectively engage with stakeholders to promote the profession and other objectives.

Section 6: Future Research and Contact

This section allows respondents to opt-in for future research, providing a valuable resource for ongoing data collection and feedback.



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<https://forms.office.com/e/BVasbpECXs>

Thank you all for your active participation in this workshop.

If you're interested in being involved in further research or wish to contact me, please use this link provided or email me directly at Eugen.Niculescu@TUDublin.ie

Your contributions and insights are greatly appreciated!



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