

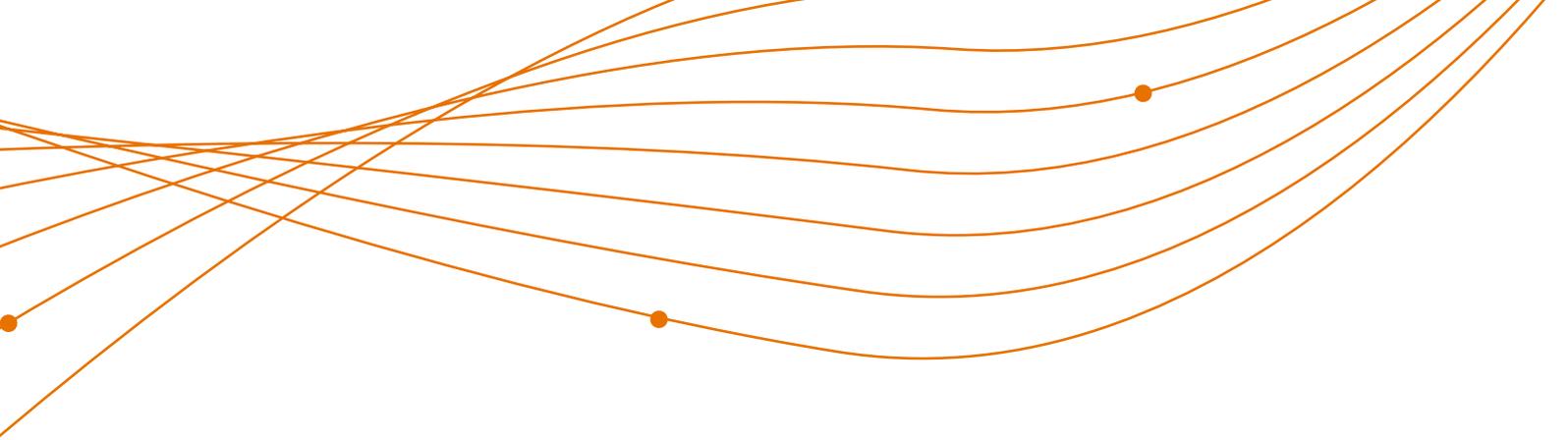


DIVERSITY & INCLUSION:

Thinking differently about difference.

An action plan for boosting innovation and collaboration in the **spatial sector** through diversity and inclusion

April 2019



This paper has been developed by the **Spatial and Surveying Diversity Leadership Network**, based on research and consultation in 2018. It will be distributed at the Locate conference in Melbourne, April 2019, to encourage further discussion and promote actions that support greater diversity and more inclusive workplaces in the sector.

This Action Plan is the first iteration of the process and will be refined and improved continually. If you want to be involved in its implementation and improvement by being part of the initiatives, please contact us at Diversity@2026agenda.com or visit <https://2026agenda.com/diversity-and-inclusion/>.

The Diversity Leadership Network comprises a cross-section of members from government, industry and academia. The full list of Network participants is provided at the back.

The paper has been prepared with editorial assistance by Dr Katie Spearritt, Chief Executive Officer of **Diversity Partners**, a specialist consultancy in Australia.





Achieving more diverse and inclusive workplaces is an important priority as the spatial sector prepares for new opportunities and challenges as reflected in the *2026 Spatial Industry Transformation and Growth Agenda (2026Agenda)*¹.

Our ambition of global leadership, innovation and collaboration will only be as effective as the people who share our aspirations.

We need thinkers who can challenge the status quo by bringing new solutions to old problems, harness new technologies, and deliver quality outcomes to help Australia become an even stronger economy through our spatial and surveying engagements.

We also want our workplaces to be representative of our diverse communities and clients.

These challenges and opportunities are the focus of the Diversity Leadership Network. *Thinking differently about difference: An action plan for boosting innovation and collaboration in the*

Spatial Sectors through diversity and inclusion shares our learnings to date, and asks for your support and action in 2019 and beyond. 'Spatial' or 'sector' in this document encompasses the professions known as surveying and spatial².

'Diversity' refers to all the differences we bring to work.

It includes diversity of **background** - such as gender, cultural background/identity, sexual orientation, gender identity, disability, age, education, professional discipline, experience - as well as diversity of **thinking approaches**.

The paper looks at the current state of diversity in the sector, why diversity and inclusion are important, what gets in the way, and how we can achieve more diverse and inclusive workplaces that underpin the sector's future success.

1. The current state of diversity in the sector

We're facing a shortage of talent. By 2025, there will be a shortfall of approximately 1,300 graduate or licensed surveyors and 300 geospatial specialists with university degrees³. At the same time, almost 20 per cent of us working in this space are over 55 years old⁴.

The sector is male-dominated. While women make up around 50 per cent of Australia's workforce, only one quarter of the spatial workforce is female⁵.

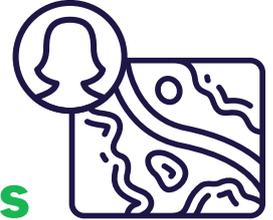
In New South Wales and Victoria, less than three per cent of registered surveyors are women. In Western Australia, it's less than one per cent. The pipeline for gender diversity is tight, with women representing 15-20 per cent of surveying course participants in Australia⁶.

In organisations with more than 100 employees in the 'survey and mapping services' category (who report to the Federal Government's Workplace Gender Equality Agency), women represent only 21 per cent of leaders. Around 30 per cent of appointments, including promotions, go to women⁷.

There are significant pay gaps between men and women in the sector. Women surveyors earn on

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average \$27,000 less than men per year. Women spatial scientists earn on average \$20,700 less than men. Female cartographers earn on average \$17,200 less than men⁸.

More broadly, there is limited evidence of cultural diversity, indigenous employment, or people with disability in the sector⁹.

What's more, diversity in thinking style and background is likely to be limited in workplaces where people come from similar industry backgrounds. This impacts the ability to bring new thinking approaches and experiences into our workplaces.

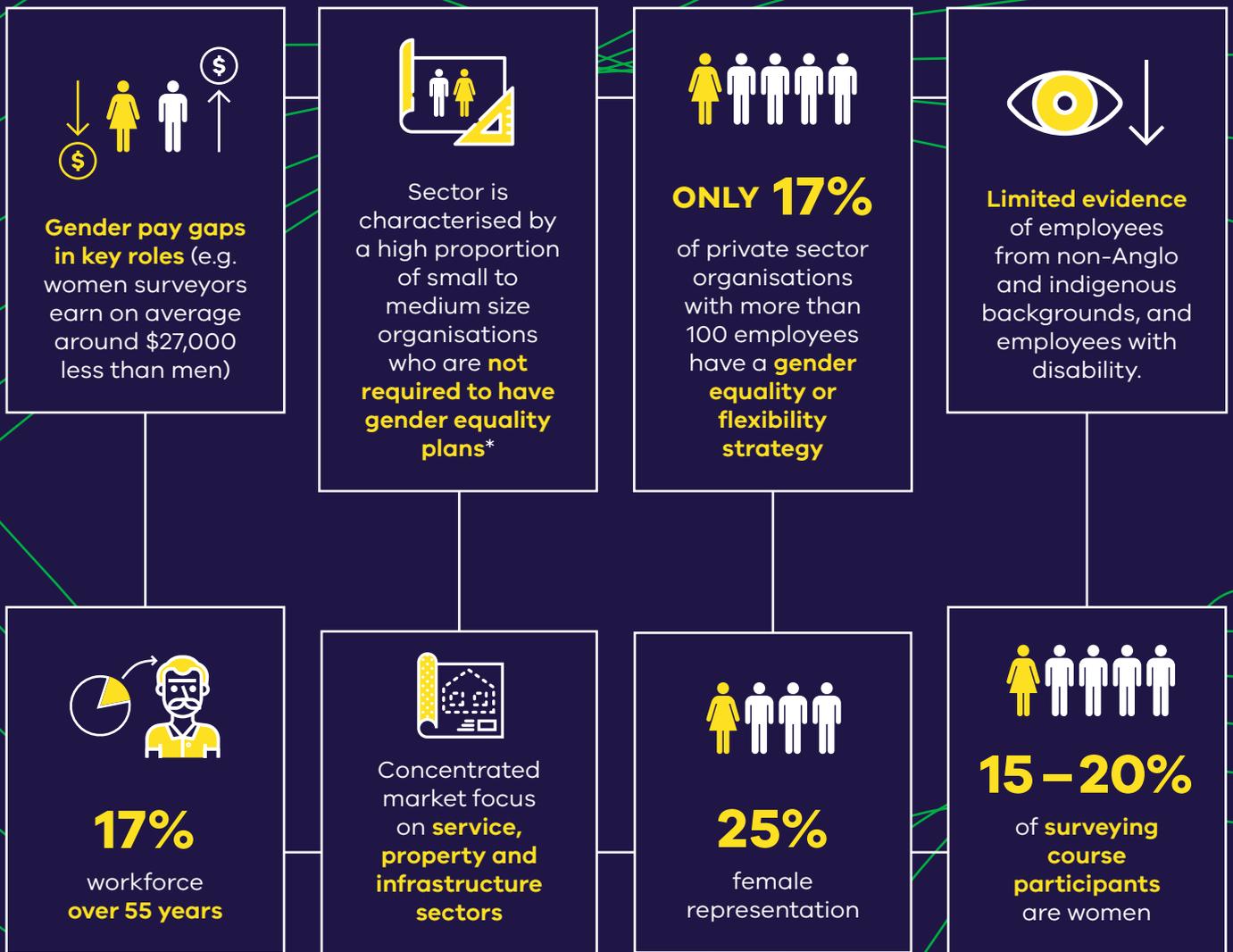
If we are to remain innovative, deliver leading and useful research, and grow the knowledge and skills of our practitioners, it's time to think differently about our workforce composition across the sector.

WHAT DO WE MEAN BY DIVERSITY AND INCLUSION?

Diversity is about employing people who are different across a range of indicators such as age, gender, industry background, cultural identity, among many others.

Inclusion is about valuing that difference, and creating work processes and cultures that enable a sense of belonging and psychological safety so employees feel valued and respected.

OUR SECTOR NOW



* Organisations with 100 or more employees in Australia must report to the Workplace Gender Equality Agency each year on their gender equality plans and results.

2. A compelling business case for diversity and inclusion

Australian and global research backs the connection between diversity, innovation and better decision-making. Boston Consulting Group reported in 2017 that 'Diversity and innovation move together, and the relationship is statistically significant - meaning that there is a high probability of its repeating in any large population of companies'¹⁰.

Decision-making is more rigorous because diverse workforces contribute to a more holistic analysis of the issues an organisation faces¹¹. Problem-solving abilities are better.

Diversity positively impacts performance. A McKinsey study of more than 1,000 companies covering 12 countries found that companies within the top quartile for gender diversity were 21% more likely to have higher financial returns than their national industry medians and ethnically diverse companies were 33% more likely to outperform¹².

Well managed diverse and inclusive workplaces also contribute to higher levels of employee satisfaction and decreased turnover intentions.¹³

All of these benefits align with the core values underpinning our 2026Agenda, namely: Collaborative, Innovative, User-focussed, Adaptive and Rigorous. These values recognise that our industry is founded on the sharing of knowledge, skills and information for growth.

Developing a well-prepared and diverse workforce that benefits from fundamental spatial skills is a key part of our 2026 transformation agenda.

We require people to be agile in adapting to changes and opportunities, responding to market

disruptors, or taking advantage of technological advancements.

Cultivating innovation and thinking differently to create new solutions is critical to future-proof the spatial sectors. We can achieve that by hiring and retaining employees who bring different life and work experiences. And by encouraging people to speak up, present bold ideas, and challenge outdated norms.

For diversity to thrive in the sector, we need inclusive work environments. Future leaders need to be comfortable in seeking and navigating multiple perspectives, often different to their own. This is called inclusive leadership, and it underpins the goals of our 2026Agenda.

Inclusive leaders create an environment of 'psychological safety' – a term to describe workplaces where people from diverse backgrounds feel accepted and respected, where they can bring their whole selves to work without fear of negative consequences.

A recent global study on the impact of inclusive leadership noted: 'Employees who felt more included were more likely to report innovating on the job, that is, identifying opportunities for new products and processes and trying out new ideas and approaches to problems'¹⁴.

In diverse and inclusive environments, employees feel more engaged. Deloitte found 'when employees think their organisation is highly committed to, and supportive of diversity, and they feel highly included, then they are 80 per cent more likely to agree that they work in a high performing organisation'¹⁵.



3. Barriers to diversity and inclusion

Some industries and organisations have been investing in the diversity and inclusion agenda for some years. This includes a number of organisations in our sector. However, many are just starting out, with a nascent awareness of the impediments to diversity.

Our research and discussion among the Leadership Network identified five key barriers inhibiting diversity in the spatial and surveying sector.

1. Low industry awareness: Spatial or surveying are not well-known professions and sometimes difficult to define. Limited understanding of which subjects to study in secondary education, what the tertiary pathways are, and what job opportunities look like post-study, hinder the ability to attract and retain talent from diverse backgrounds. What's more, we have not explicitly promoted diversity and inclusion as key values. This is a concern because an organisation's commitment to diversity, flexibility, and inclusion is increasingly on the agenda of graduates and talented professionals.

2. Anglo-male cultural stereotypes and biases: the sector has been historically male dominated, which is likely to have been reinforced by implicit gender biases. Systemic unconscious gender biases typically exist in recruitment, performance management and assessments of potential¹⁶. The 'think manager, think male' leadership prototype characterises our industry. Where women are in a minority, their behaviour will be under greater

scrutiny and they are more likely to experience micro-aggressions and harassment¹⁷.

3. Recruitment bias: Our future forecast pipeline is well short of the 10-year demand and doesn't explicitly include a focus on hiring for difference. But we may be overlooking talent cohorts due to unconscious biases, specifically our preference for similarity (known as affinity bias).

4. Limited focus on diversity and inclusion in workplaces and education: Few employers in our sector have invested strategically in diversity and inclusion - only 17 per cent of private sector organisations with more than 100 employees have a gender equality or flexibility strategy¹⁸. Overall, there are limited flexible work opportunities that allow employees to balance their work, life or caring needs, while pay equity remains an issue with significant gaps in pay between men and women. Only a few degree programs (through University initiatives) teach and provide training on the roles of ethics, diversity and inclusion in undergraduate and postgraduate degree programs. Diversity progress in organisations rarely occurs without a concerted focus and action.

5. Lack of mentoring and sponsorship: Geographical spread and varied business sizes means that women and people from non-Anglo backgrounds often lack visible role models, networks, sponsors and mentors in their immediate employer. This can limit leadership aspirations, exemplified by the "You can't be what you can't see" adage.

THE SPATIAL AND SURVEYING SECTOR HAS NOT EXPLICITLY PROMOTED DIVERSITY AND INCLUSION AS KEY VALUES.

THIS IS A CONCERN BECAUSE AN ORGANISATION'S COMMITMENT TO DIVERSITY, FLEXIBILITY, AND INCLUSION IS INCREASINGLY ON THE AGENDA OF GRADUATES AND TALENTED PROFESSIONALS.



4. Action plan for change

We believe that investing in opening doors, challenging bias, and creating workplace cultures that foster a sense of belonging and inclusion is how we'll shift the dial and achieve our 2026 vision. This Action Plan is not the final roadmap. It is the first iteration on the road to change and will be refined and improved continually.

We outline calls to action to show what we can do collectively across the sector, within our organisations, and as individuals.

These recommendations are based on sector research, and through a consultative process within the network that involved expert consultants in the field.

CALLS TO ACTION FOR THE SECTOR

- 1.** Establish a baseline for measures we'd like to achieve and commit to an annual survey showing outcomes and impacts.
- 2.** Commit to 50% gender balance and a mix of cultural or lived/identity diversity of experience (e.g. disability, LGBTI) on industry speaking panels. Individuals and industry peaks will pledge a commitment to only appearing on diverse panels.
- 3.** Create a set of profiles for diverse representatives in the spatial sector who can perform keynote speaking engagements or serve on panels, to achieve more diverse role models.
- 4.** Run an education campaign in schools and universities on the increasing diversity of people choosing careers in the spatial sectors¹⁹.
- 5.** Create industry-wide communications campaign for diversity and what we're doing to create an environment of inclusion across the sector.
- 6.** To establish knowledge sharing and a roadmap forward, establish a Spatial Diversity and Inclusion Council.
- 7.** Leverage the male champions of change program adopted by other sectors – encourage high-profile men in our profession to join the program. and be a visible champion of this work.



CALLS TO ACTION FOR ORGANISATIONS

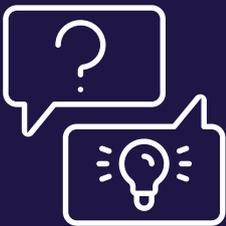
1. Prepare a 'Diversity & Inclusion Commitment Statement' outlining ways you intend to support greater diversity and more flexible, inclusive team environments
2. Design a proforma position description that pitches surveying and spatial as an exciting career choice, using gender-neutral language.
3. Educate hiring managers on unconscious bias in recruitment and consider an anonymous CV assessment process – remove gender and other demographic markers to reduce the potential for unconscious bias to impact hiring.
4. To improve the representation of women in the sector, set targets for shortlisting and hiring of women; and provide mentoring and scholarship opportunities.
5. Provide an education program covering diversity, inclusion and unconscious bias for leaders and staff.
6. Conduct a pay equity audit.

CALLS TO ACTION FOR INDIVIDUALS

Success will come from all of us collaborating on this important issue as well as taking individual action to affect change. In the words of Lieutenant General David Morrison (Retd.) AO, previous Chief of the Australian Army: "The standard you walk past is the standard you accept".

Some simple things you can do now are:

1. Call out inequitable practices and/or jokes, language that may exclude others.
2. Advocate for and sponsor talented people from diverse cohorts.
3. Actively seek out diverse views when making decisions or collaborating with team members.
4. To encourage diversity of thinking approaches and alternative perspectives, appoint a 'devil's advocate' in meetings – a team member who constructively challenges ideas presented - and rotate the role.
5. Learn about unconscious bias and how it can inhibit diversity. Take the Harvard Implicit Association Test (<https://implicit.harvard.edu/implicit/australia/>).
6. Invite feedback from others to see if you may be displaying affinity bias (or other unconscious biases) that may impact the objectivity of hiring decisions (and your decision-making more generally).
7. Reflect if your team is representative of your customers/broader community.



WE'D LOVE YOUR FEEDBACK/ SHARING ON:

1. What other information would your organisation need to enable greater diversity and inclusion?
2. How might we move this forward at a sector level? What challenges can we anticipate in implementation?
3. What success stories do you have which can be shared to demonstrate practical ways to make progress?

Submit your ideas to
Diversity@2026agenda.com 

WANT TO BE PART OF THE ACTION?

Register your interest to:
Diversity@2026agenda.com

LEARN MORE

- **Diversity** includes diversity of thought and experience, not just physical attributes. Find out more: '[Diversity Isn't A Compliance Issue - It's Essential For Innovation](#)'
- **Unconscious bias** – this refers to the implicit assumptions and stereotypes we make based on our life experiences and backgrounds. Unconscious bias is a key barrier to diversity in organisations. Find out more: '[3 Steps To Harnessing The Cognitive Diversity Of Your Team - Starting Today](#)'
- **Inclusion** – this leadership capability can be developed and helps employees feel valued and respected. Find out more: '[Six Characteristics of Inclusive Leaders](#)'

Endnotes

- 1 The 2026 Agenda Working Group, 2017 <https://2026agenda.com/>
- 2 The spatial sector includes areas such as cadastral surveying, geodesy, engineering and mine surveying, remote sensing, GIS, and cartography.
- 3 2026Agenda, as above
- 4 SIBA 2018, 2017 Salary Survey Report
- 5 SIBA 2018, as above
- 6 Information provided by Narelle Underwood, NSW Surveyor data sourced from USQ, UoN, UNSW & TAFE NS
- 7 WGEA 2016-17 Public Reporting data of the 'Survey and Mapping Services' Industry – 2094 employees across six organisations.
- 8 'Women in Surveying', article by Narelle Underwood, Azimuth data sourced from ATO FY14-15.
- 9 Workforce Profile – Survey & Spatial, 2016, DNRM
- 10 Boston Consulting Group, **'The Mix that Matters: innovation through Diversity'**, 2017
- 11 Centre for Ethical Leadership, *'Building a Business Case for Gender Diversity'*, 201
- 12 McKinsey, **'Delivering Through Diversity'**, 2018
- 13 Catalyst. *Diversity Matters*. New York: Catalyst, October 1, 2014 <https://www.catalyst.org/research/infographic-diversity-matters/>
- 14 Catalyst, **'Inclusive Leadership: The view from six countries'**, 2014.
- 15 Deloitte, *'Waiter is that inclusion in my soup?' A new recipe to improve business performance*, 2013
- 16 Binna Kandola and Jo Kandola, *The Invention of Difference: The story of gender bias at work*, 201
- 17 Binna Kandola and Jo Kandola, as above; McKinsey & Company, *'One is the loneliest number'*, McKinsey Quarterly, January 2019
- 18 Based on the Workplace Gender Equality Agency 2016-2017 public reporting data of the 'Survey and Mapping Services' industry: 2094 employees across six organisations.
- 19 Leveraging existing initiatives in this space such as Scholarships and 'Destination Spatial': <https://www.geospatialsience.com.au/>

DIVERSITY NETWORK PARTICIPANTS

The Spatial and Surveying Diversity Leadership Network formed in March 2018 to coincide with International Women's Day with the goal to leverage the reach and support of the network to support a more diverse and inclusive spatial and surveying industry. This aligns with the values of 2026 Agenda.

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