



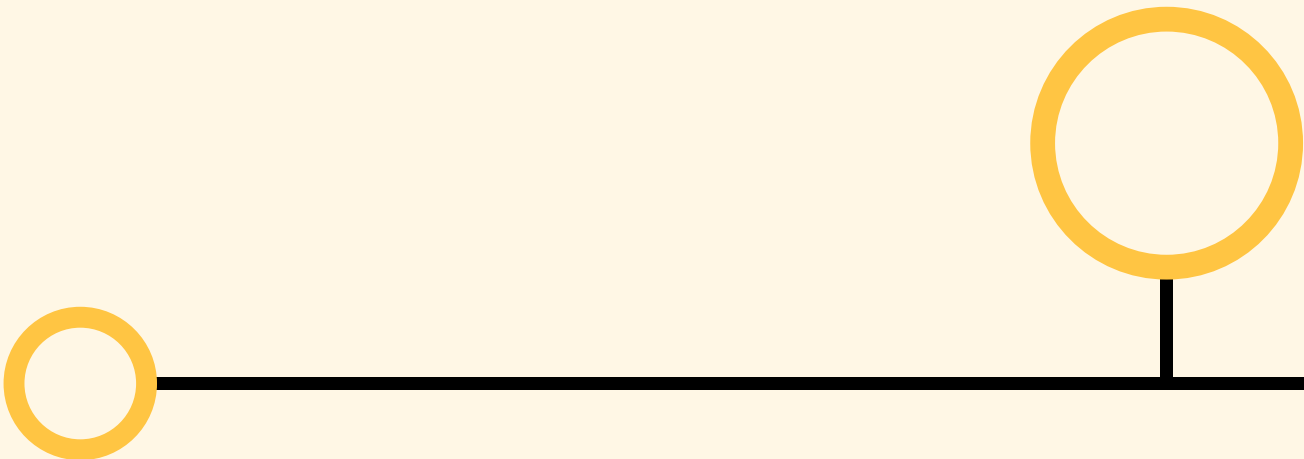
Women in Rail

Accelerating opportunities
for women in the rail industry



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Foreword

Having worked in the rail industry for over 40 years, I've had some incredible opportunities to work on community-shaping rail projects around the world. Sadly, I know women who were never presented with the same opportunities or who had to turn down opportunities because of family or caring commitments.

Australia's rail industry is undergoing an interesting transformation. Like many countries around the world, our population is growing, new houses are being built further and further away from cities, and the impacts of climate change are driving rapid decarbonisation. The rail industry plays an important role in each of these areas, offering a sustainable way to connect more people to jobs and critical social infrastructure like schools and hospitals.

However, Australia's rail industry has some challenges to overcome. There are roughly 70,000 additional workers needed to deliver the \$155 billion pipeline of rail infrastructure projects over the next 15 years.¹ With women only making up 24 per cent of the rail workforce and a perception of the industry as being manual and labour-intensive, we need to improve the profile of rail as a fulfilling career option, particularly for women.

Increasing diversity in the workplace enhances productivity and innovation, broadening the talent pool and giving companies a competitive advantage. But more importantly than the economic rationale, a diverse and inclusive workforce unlocks insights that otherwise might not be gained. Diverse workforces are more reflective of our society and therefore put us in better positions to serve our communities.

While this report focuses on women's representation in rail, we also recognise that gender identity may not be the only facet that is likely underrepresented in the industry.

Indeed, more work needs to be done to understand representation of First Nations people, people with a disability, neurodivergent people, LGBTQIA+ people, and other minority groups within the rail sector.

Through this report, we want to highlight the experiences of women working in rail and share examples of those who have had rewarding and fulfilling careers in the industry to date. We also want to raise awareness of the barriers to increasing diversity across the sector and provide recommendations for how we can build and expand the workforce required to deliver the pipeline of work.

Our surveys and interviews with high-school students, rail professionals, and leaders from across the sector provide some fascinating insights, which I'm thrilled to share with you.

It's clear that making the rail sector more appealing and inclusive to potential candidates is key to realising the ambitious program of rail infrastructure investment over the next five years. Every woman brings her own unique attributes and perspectives through her culture, physical ability, neuro-cognitive process, age, sexual orientation, caregiver status, and religious or spiritual beliefs. This is why inclusion is the most important part of the puzzle. A rail industry that is open to and inclusive of different perspectives can help us understand our communities' unique challenges and deliver creative solutions to solve them.

As we shift perceptions and accelerate opportunities for women in rail, I'm confident that the rail sector of the future can be one that is as diverse as the communities we serve, inclusive of all people, and sustainable for generations to come.



John Cranley

National Rail Leader – Australia, GHD



Introduction

When the first steam-powered locomotives were introduced to Australia in the mid-1850s, they changed many people's lives.² Wherever the railways went, prosperity typically followed. Trains connected country towns to the cities and were an efficient and cost-effective way to transport food and goods. They supported the advancement of agriculture and other primary industries, making it much easier to transport products to markets.

Trains connected families and friends between towns and made it easier for trips to the city or the beach. They also revolutionised the sharing of information, delivering newspapers, books and mail from the ports and cities to regional towns.

Today, the Australian rail industry remains a critical infrastructure connector across the nation, bridging the gap between urban centres and rural regions. With its extensive network, the rail sector plays a crucial role in facilitating the movement of people and goods, contributing to economic growth, and enhancing connectivity in both urban and remote areas.

The involvement of women in the rail industry has varied over the years. In wartime, many took on roles traditionally held by men (sometimes even dressed as men so as not to draw attention to themselves). However, once the wars ended, men returned to their roles and women were often unable to progress their careers in the industry.

According to Industry Skills Australia, there are more than 165,000 people directly and indirectly employed in the Australian rail industry, and of those, women make up 24 per cent.³ When we look at similar rail industries

around the world, the representation of women in rail in the Australian market is a much higher percentage of the workforce where for example, in the UK, women make up only 16.4 per cent and in the US, women make up less than 10 per cent of the rail industry. We have much to be proud of in Australia in the work that has been done to increase the number of women in the rail industry, however, there is still significant scope to remove barriers and a much longer road to achieve equity.

To understand the inhibitors and accelerators for recruiting and retaining women in the rail industry, we undertook a comprehensive survey of high-school students, rail professionals, and employees from GHD's own transport teams. What emerged from our research paints an interesting picture.

165,000
people are directly and indirectly employed
in the Australian rail industry

Percentage of women in the rail industry per country

Australia	UK	US
24%	16.4%	> 10%

In early education, primary and high-school students have little to no awareness of what the rail industry offers in terms of careers, beyond train drivers and station guards. Many high-school students revealed some common misconceptions around the rail industry. For example, some students believe there is no connection to science or environmental engineering in rail, while others believe rail is responsible for environmental damage and involves difficult, manual labour that is often dangerous.

Our survey responses indicate that at the tertiary education level, those who study engineering find there is very little information in the curriculum about how their degree could be applied to the rail industry. And professionals now working in the rail industry commented that rail engineering remains a niche area of engineering with low visibility or discussion amongst peers.

For 84 per cent of survey respondents, working in the rail industry was not their first career choice. Many 'fell into' the industry by chance. However, once people enter the industry, a large proportion of them stay. Nine out of ten rail professionals surveyed said they would not leave the industry in the next five to ten years.

84%

survey respondents said
working in the rail industry was
not their first career choice.

9/10

rail professionals surveyed said
they would not leave the industry
in the next five to ten years.





A snapshot of the rail industry in 2023

Where are we now?

The peak body for the rail industry, the Australasian Railway Association (ARA), says there are currently 70,000 jobs to fill across the sector, ranging from engineering and trades through to customer service and administration roles.⁴

In 2014, the ARA identified that women make up roughly 17 per cent of the rail workforce. Ten years later, women now make up 24 per cent. But while the industry appears to be making some progress, research by the National Rail Skills Hub has found that just 11 per cent of those enrolled in rail-related training are women.⁵

With \$155 billion worth of investment into rail modernisation projects across Australia over the next 15 years⁶, attracting and retaining women will be key to filling the workforce gap in rail and ensuring the long-term sustainability of the industry.

“The significant investment in rail, peaking with the concurrent delivery of programs of work including Sydney Metro and Cross River Rail, was a turning point. A turning point which saw a positive change – a more inclusive rail industry. Prior to this boom, the mindset of a hiring manager in a rail delivery project was that if you hadn’t worked within the rail corridor before, you probably weren’t a good candidate.”

– Rebecca Want,
Market Leader, Transport, GHD

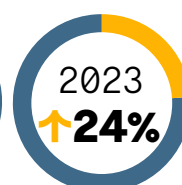
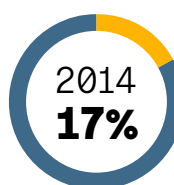
70,000 jobs


to fill across the Australian rail industry

\$155 Bn worth of investment in Australia's rail modernisation projects anticipated in the next 15 years



Women in Australia's rail industry



but only **11%** 
enrolled in rail-related training are women

How we measure up to similar countries

United Kingdom

In 2015, women made up just 16.4 per cent of the United Kingdom's rail industry workforce and an even smaller number were in senior decision-making positions.⁷ In 2022, that number dropped to 14.6 per cent, the lowest since 2018.⁸

There are signs the industry is working to change these numbers. In 2022, the UK's Rail Industry Association and Women in Rail launched its first joint annual report for the Equality, Diversity & Inclusion Charter for Rail.⁹ The report aims to raise awareness of the need for greater diversity, inclusion and gender balance across the rail sector, as well as a workforce that is representative of the communities in which rail operates.

Signatory companies of the charter have recognised that an inclusive workforce makes good business sense. The charter is open to all organisations and companies working across the UK rail sector who are committed to driving meaningful change in the industry.

Similar to the national figures, in 2016 women made up 16 per cent of Network Rail's 38,000 workforce. With targets to reach 26 per cent women by 2024, Network Rail implemented a gender equality network, Inspire, to foster a more open, diverse, and inclusive organisation.

Originally set up to encourage women to see Network Rail as an employer of choice, it now has a wider focus. Network Rail engages with schools and colleges to encourage young women to study science, technology, engineering and maths (STEM) at school and in higher education, inspiring the next generation of professionals to choose a career in rail.

Europe

Across Europe, the proportion of women in the rail sector is about 20 per cent, a figure that has remained largely stagnant since 2013.¹⁰

Increased participation of women in the rail industry is a key priority for the European Transport Workers' Federation (ETF). In 2019, the Community of European Railways (CER) and the ETF joined forces to create an agreement to promote the employment of women in rail. The aim of the agreement is to provide measures that can be implemented by all parties in favour of attracting, retaining and promoting female employees.

However, barriers still exist. For example, France's national rail company SNCF received backlash for offering workers driving freight trains washable period underwear to compensate for the lack of access to sanitary facilities. Access to appropriate sanitary facilities is essential for attracting and retaining women in the rail sector.

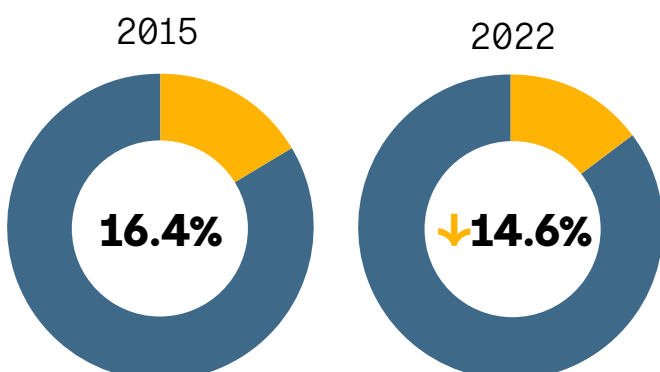
In 2022, the European Commission announced the winners of the first Women in Rail Award, which aims to recognise European employers in the railway sector who have gone the extra mile to prioritise and embed gender balance in their day-to-day operations.

Taking out best employer, Germany's Deutsche Bahn established a goal to increase the proportion of women in leadership positions from 20 to 30 per cent by 2024. Its 2021 DB Women's Month recruitment campaign, held in March, led to 20 per cent more women being hired than in the previous month, increasing the proportion of women in its workforce by 23 per cent.

The European rail supply industry association, UNIFE, advocates for greater gender equality across the rail sector. It recently announced its Gender Equity Policy in 2022, calling for increased equity and highlighting working conditions that limit the full participation of women and those outside of the gender binary (e.g., non-binary, transgender, gender diverse, etc.).



Women in United Kingdom's rail industry



The proportion of women in Europe's rail sector

20%

This figure hasn't shifted since 2013.



Americas

In the United States, less than 10 per cent of rail jobs are held by women and the situation is even more dire when looking at technical, operations and other non-support roles.¹¹ Data collected from the Federal Rail Administration indicates that while the rail industry is attempting to improve diversity, it acknowledges more needs to be done, especially against the backdrop of an ageing workforce.

Research conducted by Iowa State University on women in operational rail roles found that roughly 66 per cent of respondents said they did not think it would be difficult to bring women into traditional operational roles. Additionally, most respondents agreed that women should be working in operational rail jobs.¹²

The Department of Transportation (DOT) has also recognised the need to attract more women into

STEM industries to help meet future transportation workforce demands. Some initiatives that they have led or supported include the DOT Youth Employee STEM Mentoring Program, which gives DOT employees an opportunity to teach students about transport related occupations and technologies.

In late 2022, the University of Memphis' Southeast Transportation Workforce Center was awarded a multi-year project from the Federal Rail Administration to understand barriers to diversity and develop tools to support more inclusive working environments. The research will inform a detailed set of recommendations for increasing representation of women in the rail sector as well as a resource toolkit that can support public and private sector organisations to improve gender diversity in their workplaces.

In the United States,

less than **10%**



of all rail jobs are held by women

66%

of survey respondents

said they did not think it would be difficult to bring women into traditional operational roles.





Challenges and barriers to progress

While there are many great initiatives and programs across the global rail industry, a deeper look reveals several challenges that need to be addressed. A lack of role models and biased attitudes remain barriers for women to pursue or advance their careers in rail.

Australia's National Transport Commission Chief Executive Michael Hopkins said the gap between the number of workers in the rail industry and the amount required was substantial – he claims 70,000 additional workers are needed. To achieve such numbers, the rail sector clearly needs to be more attractive to women and young people.

Governments around the world are investing in rail, recognising its ability to help decarbonise economies and support population growth.

To meet these needs, the rail industry cannot ignore half the workforce. Increasing women's participation is key to keeping the industry sustainable in the long term.

**If we keep doing the same thing,
we'll keep getting the same result.**

– John Cranley

National Rail Leader – Australia, GHD




Perception issues

From the outside, the rail industry can appear out-dated. And negative perceptions towards flexible working arrangements can sometimes create resistance in workplaces. Rail industry leaders need to understand how to effectively embrace work-life balance and flexible working practices as part of a broader push to attract and retain women.

High school students are an important target to drive change, especially considering students as young as Year 8 are deciding which subjects to choose for their higher education. Awareness campaigns targeted at this age group need to convince young women that rail can offer a rewarding career and make a difference to communities.

A recent study by Engineers Australia uncovered a damaging perception that students need to be exceptional at maths and science subjects to meet the demands of studying engineering.¹³ The study also found that engineering is not perceived as impactful or fulfilling.



“I think the biggest hurdle in the rail industry is the perception of it being highly dominated by men – and unfortunately that perception can be accurate.”

– Kate Cole
Senior Rail Leader

I try to do a lot of work with schools, especially in those areas that have less opportunities. There needs to be more exposure to role-models that have navigated career pathways around STEM that are now in roles that can deliver sustainable outcomes and have a positive impact on communities. There are many pathways in engineering, beyond high school subjects!

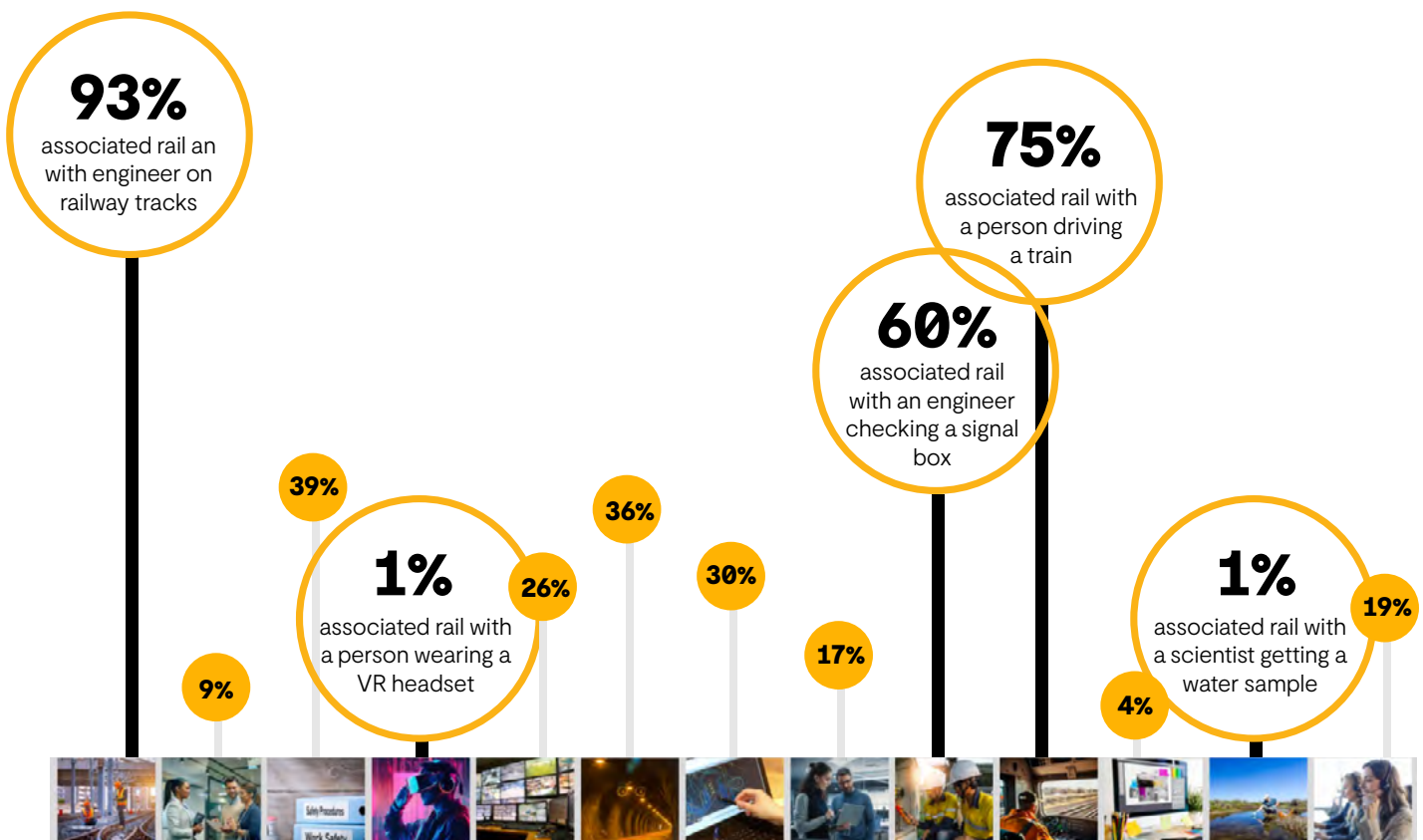
– Samiha Najem

Associate Director Operational Technology,
Sydney Trains

Our survey of Year 9–11 students revealed that young students perceive the rail industry to involve predominantly manual labour jobs. They associate rail with images of an engineer on railway tracks (92.6 per cent), a person driving a train (75.0 per cent) or engineers checking a signal box (60.3 per cent). Only 1 per cent of students associate an image of a scientist getting a water sample and a person wearing a VR headset with the rail industry. This appears to confirm what many suggest is a damaging image of the rail industry as being old-fashioned. It also suggests students only associate rail with engineers, rather than scientists or digital technicians.

There is a clear need to raise awareness that the rail industry offers much more than just engineering. For example, there are people involved in designing new uniforms for train staff, customer experience training for front line staff and train guards who service customers and to make announcements. To shift perceptions around the career possibilities in rail, we need to show that there are different entry points and a wide range of opportunities.

Our survey revealed that young students perceive the rail industry to involve predominantly → manual labour jobs.



Rail is not just the people doing track design or overhead or power design. It's also people doing urban design, it's branding for new trains and stations, it's art, graphic designers, communication professionals. There is so much more beyond the technical.

– Rebecca Want

Market Leader – Transport, GHD

Rail has come a long way from a digital engineering perspective. Building Information Modelling (BIM), 3D, virtual reality (VR) and augmented reality (AR) technologies are increasingly being used in the rail industry.

Unfortunately, rail is not an industry known for being cutting-edge. It's seen as having a rigid compliance approach and lacking in opportunities for innovation. Diversity is critical to bringing new ways of thinking into the rail sector.

The industry can be very old-fashioned in the way that 'things have always been done this way and should continue to be done that way'. Embracing and empowering diverse thought is an important part of unlocking innovation while still promoting a safe outcome.

– Kate Cole

Senior Rail Leader



I always cringe a little when I see the oft-repeated ways railways are portrayed, for example with a steam locomotive or a man in overalls with oil over his face. We should be showcasing all the new technology that we're now bringing into the public transport sector, technologies that provide customer information, help journey planning, and enhance the overall customer experience. We need to think more about outcomes, not input.

– Peter Lensink

Chief Operating Officer,
Transdev Australia & New Zealand



Behaviours and attitudes

In recent years there has been positive change in behaviours and attitudes in the rail sector, something acknowledged by many survey respondents who have experienced first-hand the shift in culture from when they first started working in the industry.

When I first started, it wasn't necessarily a welcoming environment for women – it could be very blokey. It was a very different era, a very different atmosphere, a very different environment .

– Steve Butcher

Executive General Manager & Managing Director Rail & Transport Division, John Holland

However, there are still challenges facing women. In some cases, efforts to increase gender representation in the sector can be perceived as tokenism. This sometimes results in internal cultural issues where women feel the burden of having to 'prove' themselves in their roles or move on.

I think there is still a challenge to convince some senior level men in the industry that gender diversity is a good thing and not just tokenistic – we're not just meeting quotas or having another morning tea.

– Kate Cole

Senior Rail Leader



Inflexibility is another major challenge and can sometimes be a barrier for attracting prospective employees. Some shift roles, which are typically eight-hours per shift, have restricted those with family or personal commitments. To combat this and increase the appeal for a wider pool of individuals, some organisations have introduced split shifts.

Attendance at networking events held after work hours can also be challenging for women who have parental or care commitments. Hosting events during work hours may improve attendance and give equal opportunities for women to network and support their professional development.

Thankfully, not all experiences of women within rail are negative.

There were some clear themes among the many people who could see themselves working in rail in the next five to ten years. Notably, amongst these respondents, rail is seen as a stable, secure and well-paying industry to work in. With the growing demand for workers and expertise, there is a view that there is a lot of interesting and varied work to get involved in.



“My experience within the rail industry has always been positive. I’ve never felt like I was stereotyped or categorised or disregarded over someone else because of my gender. When I speak to people at conferences, I never feel judged or treated any differently because of my gender. In client meetings, I’ve never been talked over, I’ve always been encouraged to contribute to the conversation and have my voice heard.”

– Pei Shan Chow
Rail Engineer, GHD

Underrepresentation

Despite the positive attitudes of many in the rail industry, women remain underrepresented in many areas of the sector. While there are many significant roles within rail that are held by women, these appointments are rarely promoted or celebrated and therefore not visible to other women across the sector.

Having women in leadership positions, and profiling those roles is vitally important to demonstrate the importance of diversity at those levels.

– Kate Cole
Senior Rail Leader

While historically, women often only held administrative or clerical roles, their increased representation in more technical roles has led to positive changes for many organisations. It's also led to a change in mindset and culture.

When I first started working in rail in the early 80s, the only woman I saw was the woman working behind reception; the rest of the building was all men. In the early 90s, after I had worked my way up to a leadership position, I employed the first female train driver in the UK. I remember people were surprised, asking me what I was doing. I'm glad to see that mentality has changed.

– Steve Butcher
Executive General Manager & Managing Director Rail & Transport Division, John Holland



When I think about how to encourage more women into STEM, I think about my own daughters. My eldest daughter has been interested in STEM since primary school. How do we encourage it? It starts with taking away old-fashioned role modelling. As parents, teachers, carers or mentors, we all need to contribute to removing stereotyping around the role of women in society.

– Peter Lensink
Chief Operating Officer,
Transdev Australia & New Zealand

I attended an all-girls middle school. This meant that all women were taking science and it wasn't a question of whether it was a boy thing or a girl thing. We did science.

– Amy Lezala Zahr
Chief Engineer – Rail, Department of
Transport and Planning, Victoria

In engineering, science and maths subjects at school, women are significantly underrepresented. Many young women are not encouraged to pursue STEM subjects in school, which reduces their likelihood of undertaking prerequisite subjects needed to study engineering at university.¹⁴

GHD actively seeks out women engineers from across the transport team to attend career fairs at universities to showcase the breadth of career pathways available for both females and young engineers.

– Pei Shan Chow
Rail Engineer, GHD

At the university level, women engineers and rail professionals need to be visible to students studying engineering to encourage more interest in rail. This could include initiatives like peer mentoring that go beyond just the first year of study, tutorial formats that support better learning outcomes, and more project-based, hands-on work that helps students engage with the industry.





On the right track

What are we doing well?

The rail industry looks a lot different today than it did 50 years ago. While some pockets of the industry are still dominated by men and ensconced in out-dated behaviours, there are many champions who understand the importance of a diverse workforce and are driving change at all levels.

In the last 10-15 years, there has been a significant increase in the number of women working in rail, with recruitment campaigns encouraging more women to join the industry. This has attracted women leaving school, tertiary graduates and others looking to change careers to the industry, often as train drivers.

Melbourne's Metro Trains is a leader in this space. In 2009, only 12 per cent of Metro employees were women and there were just 26 women train drivers. By 2022, 30 per cent of the Metro workforce were women, including more than 500 women train drivers – representing over a third of all train drivers across the Metro network.

In New South Wales, organisations across the rail sector are doing their part to increase women's representation too.

Sydney Trains has initiated many programs for women, including the establishment of mentoring programs, creation of development and training opportunities. There's been a big focus on developing leaders, as well as on networking to connect different areas of the business and provide safe spaces to share stories and drive change.

– Samiha Najem

Associate Director Operational Technology,
Sydney Trains

When I started out as managing director for Transdev Auckland, I inherited an all-male senior leadership team. Within one and a half years, 50 per cent of the leadership team was female. For me, change is something that needs to be driven from the top. In under five years we had doubled the percentage of female train drivers from 6 to 12 per cent and that was because we had a senior leadership team that was driving new values and behaviours.

– Peter Lensink

Chief Operating Officer, Transdev
Australia & New Zealand

Workplaces that prioritise inclusive practices and policies can be much more attractive to women. Leaders who promote women in a range of leadership and technical roles create an environment where women – and others – want to work.

The Department of Transport and Planning's workforce is 45% female overall and 44% at the senior employee level. It's very diverse and open. I interviewed for my role when I was 36.5 weeks pregnant, was offered a position on the day I gave birth, and they held my role for 6 months. They showed support by removing the usual barriers that women can often face in the workplace.

– Amy Lezala Zahr

Chief Engineer – Rail, Department of
Transport and Planning, Victoria



With a huge pipeline of work, there are plenty of opportunities and job security for anyone who wants to join the industry. There's also the ability to travel around the world for work. And the culture is shifting. Women are welcomed and encouraged to get on board and make a difference. Being in the rail industry today means contributing to solutions that put people and communities at the heart.

I think what's changed with rail, particularly in Australia in the last 20 years, is the significant amount of investment and scale of projects. Rail is a lot more visible now. You can see it with projects like Brisbane's Cross River Rail and Sydney's Light Rail which are truly city shaping projects. These kinds of projects raise the profile of the industry and open people's eyes to the possibilities.

– Rebecca Want

Market Leader – Transport, GHD

Successful initiatives and programs

Many organisations making a concerted effort to increase women's representation are seeing positive outcomes from their initiatives and programs. For example, the Railway Technical Society of Australasia (RTSA) hosts a biennial Conference on Railway Excellence (CORE). Professionals within the first three years of their rail career can apply for a youth scholarship, with a delegate ticket to the conference included.

I've been to the conference twice as part of the youth scholarship. It gives you a good chance to see what's out there and meet other professionals. At the gala dinner, you get to sit at a table with professionals who have been in the industry for 30-40 years. That gives you a great opportunity to work out where a career in rail could take you.

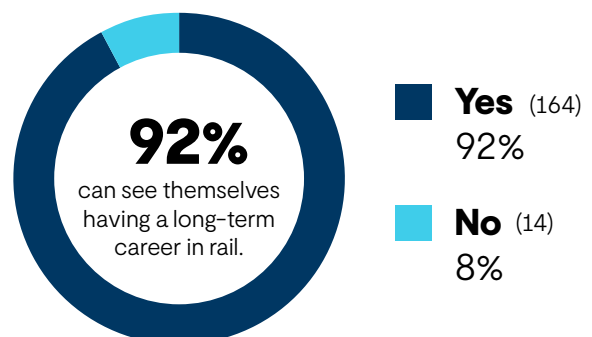
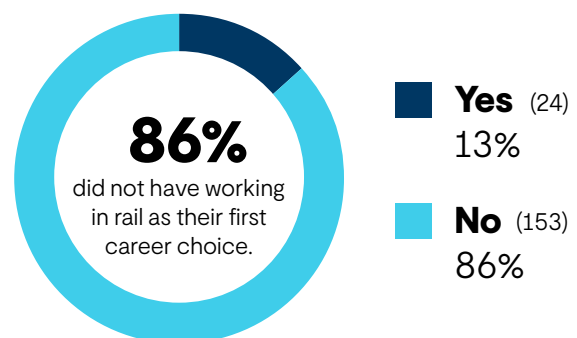
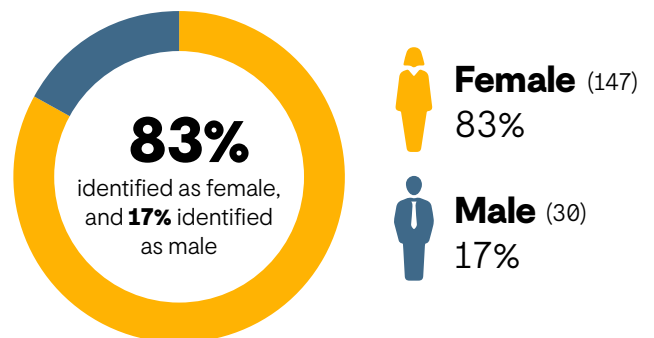
– Pei Shan Chow,
Rail Engineer, GHD

The ARA continues to explore new ways to attract and retain women to the industry and launched their Women in Rail Strategy in August 2023. The initiatives that ARA intend to deliver as part of the Strategy from 2023 to 2026 include undertaking research to better understand women's experiences in rail with a wider gender diversity survey, encouraging more inclusive and respectful workplaces, and growing the capacity and capability of women in rail and promoting rail to women.

Recent initiatives include Work in Rail, a new website promoting rail careers and highlighting the opportunities that exist within the rail sector. The website features around 80 different rail careers, with details around each role, training and education pathways, salary data and links to job vacancies.

The ARA has also established a Women in Rail network and a mentoring program, as well as offering scholarships for young professionals to attend its annual rail conference. They also offer ARA members training on how to cultivate safe and inclusive workplaces, as well as sponsorships for women to participate in professional development programs.

In a survey of 178 rail industry professionals at the ARA's Women in Rail Lunch, we learned:





GHD is dedicated to fostering an inclusive culture and expanding opportunities for women both within the rail industry and throughout the broader organisation. In GHD's rail team, 40% of the leadership team are women. Furthermore, there's an active Women in Rail group that convenes monthly to network and drive initiatives based on wider organisational discussions.

Additionally, GHD has a well-established Women in GHD (WING) employee resource group across Australia and beyond. This offers a platform for women at GHD to feel empowered, connect, learn together, and engage in networking opportunities.

Transdev, a multi-modal public transport operator, also offers a variety of programs and initiatives aimed at empowering and increasing women in its workforce.

To help increase the number of female frontline workers, we have a program called 'On the Launchpad' where women in the early stages of their career can network and build capacity with Transdev counterparts around the globe, including an annual global learning and development seminar. We've found that by taking a global perspective on the work we do, we attract more female leaders to support us on our mission.

– Peter Lensink
Chief Operating Officer,
Transdev Australia & New Zealand

The New South Wales Government has awarded \$3.5 million in grants to a range of construction projects as part of the Women in Construction Industry Innovation Program. The program is intended to support initiatives that increase the number of women working in construction, foster inclusive and safe workplaces, and empower women in leadership roles. Whilst none of the allocations are rail industry specific, funding has been allocated to initiatives such as gender bias training for construction workers which will likely benefit those working in the rail industry.

The rail industry also benefits from related industry initiatives. A number of professional services firms, including GHD, are current WGEA Employer of Choice Gender Equality citation holders. These firms have their own employee reference groups or networks for women, leadership development and mentoring programs, inclusion and diversity training initiatives, pay parity audits, parental leave policies, and targets to increase women's representation.

GHD also supports Women in BIM – to foster diversity in Building Information Modelling (BIM) and digital engineering – and the HunterWiSE program – to support, retain and attract more women into STEM careers. GHD also runs a STEM Pathways program which sees high-school students take on a week-long STEM role to tackle 'real life' project scenarios.

– John Cranley
National Rail Leader – Australia, GHD





Moving forward

Where to from here?

Diversity of thought and experience, no matter one's background or how they identify, fosters innovation and fresh perspectives – which leads to more success in projects. It's clear from our research that change is happening, but it needs significant acceleration.

Critically, the responsibility for progress cannot solely be placed on women; change must also come from men. It's imperative for leaders, directors, employees and the community to understand that increasing women's representation at all levels is a good thing.

“There is a career within rail no matter what your discipline is. It's not just for STEM professionals. We need more people from other disciplines – lawyers, accountants, etc. We need more female and non-binary people in senior level positions.”

– Amy Lezala Zahr

Chief Engineer – Rail, Department of Transport and Planning, Victoria

“As much as there is a focus on improving the figures through good intent, programs, and strategies, it has not substantially changed over the last 10 years. We need a disruption to force action in industry to see a faster moving change to increase diversity.”

– Samiha Najem

Associate Director Operational Technology, Sydney Trains

We need more ↓

diversity

visibility

flexibility

inclusion

training

support

awareness

mentoring

“**Millennials and Gen Z have a completely different view on the value of work. They want to work for organisations that do well for the environment and for society. It's not all about making money and having a massive career and becoming a CEO. It's about the added value of spending your time on something that matters.**”

– Peter Lensink

Chief Operating Officer,
Transdev Australia & New Zealand

In the education space, our research indicates more needs to be done earlier to promote rail industry skills and careers for women. With little awareness of what the rail industry involves, or the types of roles available, many young women will choose other STEM industries to study for and work in.

Changing the industry's image is crucial to attracting and retaining talent. Rail has a great story to tell. It's an industry that is helping to decarbonise economies, delivering sustainable and accessible transport solutions, connecting communities, and creating liveable cities. With a strong appetite for change, there has never been a more exciting time to join the rail industry.



“**When you work in rail, you're helping to connect regional towns to cities on projects like Faster Rail, or metropolitan towns to each other on projects like Sydney Metro. You're also helping to improve liveability in these communities, enabling people of all ages to travel safely and more easily for work and leisure. You're creating vibrant places where people and communities can thrive.**”

–Rebecca Want

Market Leader – Transport, GHD



Recommendations

Encouraging more women into the rail industry is a whole-of-sector job, and together we can drive positive change. It's important to note that whilst this report and its recommendations are focused on addressing challenges within the rail industry, the learnings can be applied to other engineering disciplines and sectors.

The key recommendations listed below integrate the results from our surveys with recommendations from the Future Rail Skills Forum, the Committee for Economic Development of Australia, and the Chief Executive Women Senior Executive Census 2023. They can be used to inform rail marketing campaigns and collateral, language and photography in job advertisements, and internal policies and procedures for workplaces.

1

Raise rail's visibility and attractiveness as a career

- Highlight rail's contribution to sustainability and decarbonisation and how it can make a positive difference to communities.
- Emphasise the various career pathways and opportunities to learn new skills.
- Provide examples of cutting-edge rail disciplines that use newer technologies such as AI to appeal to those interested in digital careers.
- Showcase successful women rail professionals, both technical and non-technical, to inspire others as well as mentoring programs and support available through associations such as ARA.
- Highlight the attractive salary and benefits that many rail organisations provide.

2

Target young people early

- Establish regular programs with local schools to increase visibility of the rail industry and encourage students to study STEM subjects.
- Provide positive role models for young women and girls by increasing the visibility of women in STEM careers in classrooms, public events and the media.
- Embrace new technologies and social platforms to reach students where they socialise and consume information.

3

Encourage cross-collaboration between industry and education

- Develop rail-specific courses for universities to raise awareness of the rail industry as a career option.
- Create programs that give students more opportunities to get hands-on experience in the industry.

4

Set targets with real accountability and transparency

- Strengthen corporate disclosure, compliance and reporting on women's representation targets to understand where things can be improved.
- Tackle gender-based discrimination in talent acquisition and promotion decisions, providing people with training and support materials to initiate change.
- Encourage executive and leadership accountability for contributing to gender-balanced outcomes.

5

Foster inclusive cultures and workplaces

- Support leaders to adopt inclusive mindsets and behaviours so they can become inclusive leaders.
- Strengthen family-friendly policies and formalise flexible working arrangements for men and women.
- Start from the top, requiring boards to be comprised of 40 per cent women at a minimum.
- Provide facilities that accommodate caregivers returning to work in the office and out on the field.
- Transparently and actively advertise positions that can be performed by people with a disability.

6

Invest in an executive leadership talent pipeline

- Be proactive in succession planning to cross-train or up-skill professionals at all levels of the business.
- Encourage executive leaders, particularly men, to sponsor emerging women leaders and unlock the growth opportunities needed for executive positions.
- Promote the upskill of male leaders in their role as allies to realise women's career potential.





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Appendix

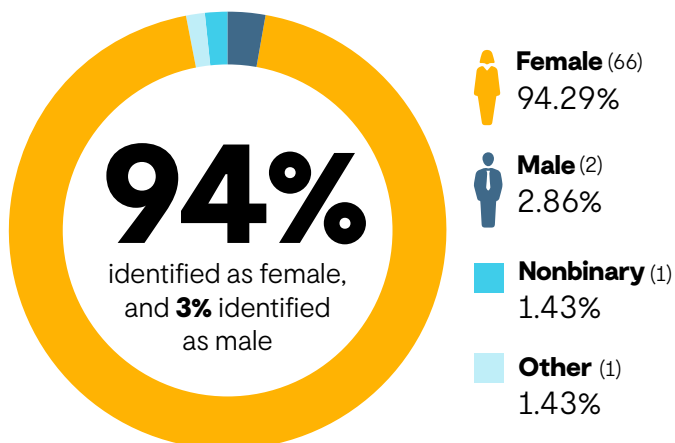
To understand the inhibitors and accelerators for recruiting and retaining women in the rail industry, we undertook a comprehensive survey of high-school students, rail professionals, and employees from GHD's own transport teams.

The STEM survey received 70 responses from students in Years 9 to 11. Our rail industry survey, which was conducted at the Australasian Rail Association's 2023 Women in Rail Lunch and among GHD's own Transport team, received a combined 255 responses.

STEM survey results

70 respondents

Q: What is your gender identity?



Q: What would you like to do when you finish high school?

Around

7/69

respondents said they would like to work in fields relating to engineering.

Q: Why would you or wouldn't you work in the rail industry?

66 respondents

said they would not work in the rail industry because it looks...

too hot boring dangerous
manual labour uninteresting
unsafe unappealing hectic
male dominated too much math





Q: Which of the following images do you associate with the rail industry?
Please select all that apply.

Young students perceive the rail industry to involve predominantly → manual labour jobs

Engineer checking rail construction process

93%

Binders on a desk in an office

39%

Tunnel with ventilation equipment

36%

People using a laptop computer in a room with technical equipment

17%

Scientist measuring environmental water quality

1%

City surveillance control centre

26%

A young couple communicating with a women in an office

9%

A graphic design studio

4%

A train driver driving a freight train

75%

Workers use clamp meter to measure the current from solar energy

61%

Engineer working on computer design

30%

A person wearing a virtual reality headset

1%

Female customer service operator with headset

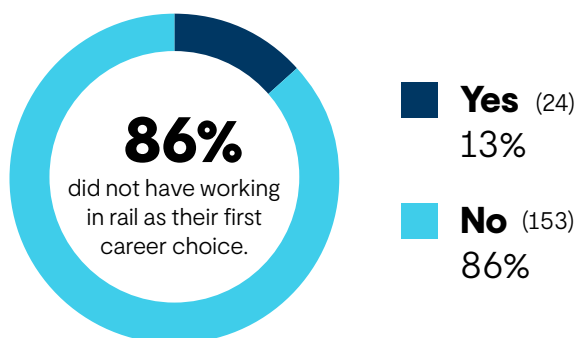
19%



Rail industry survey

255 respondents

Q: Was working in the rail industry your first career choice?



Q: What's one thing you'd like to change about the rail industry?

collaboration visibility inclusion
technology **diversity** recognition
safety **flexibility** more training
gender equity women
public perception

Q: What do you love about the rail industry?

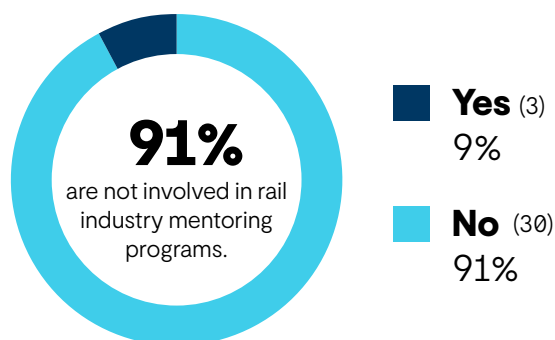
the people helping communities challenge
design sustainability multidisciplinary
challenging projects
technology experience impact
areas of specialisation making connections
scale broad opportunities
problem solving small industry size
complexity

Q: Do you believe there are more technical requirements/skills needed in rail than other industries?

23/31

said yes, there are more technical requirements/skills needed in rail than other industries

Are you involved in any rail industry mentoring programs?



Q: How do you think your gender has influenced your career pathway?

24/31

said yes, gender has influenced their career pathways. Some said it was challenging or disadvantageous because the rail industry is mostly

→ **conservative and male-oriented.**

While others have said that times are changing and attempts to increase diversity across the rail industry have given them more **opportunities and support.**

Q: How can we encourage more girls and young women to develop an interest in STEM fields, particularly engineering?

More

exposure
marketing
visibility of
women in
successful
careers

awareness
support
equal
opportunity
mentoring
programs



Acknowledgements

GHD would like to thank the following people for their contribution to this report.

Authors and contacts



John Cranley
National Rail
Leader – Australia



Rebecca Want
Market Leader
– Transport

Thank you to our interviewees for their contribution to this report

Amy Lezala Zahr,
Victorian Department of Transport and Planning

Kate Cole,
Cole Health

Pei Shan Chow,
GHD

Peter Lensink,
Transdev Australia & New Zealand

Samiha Najem,
Sydney Trains

Steve Butcher,
John Holland

Thank you to the following GHD people for their input into this report

Coralee Fitzgibbon

Joseph Berida

Melania Berehovy

Mikel Alonso

Sarah James

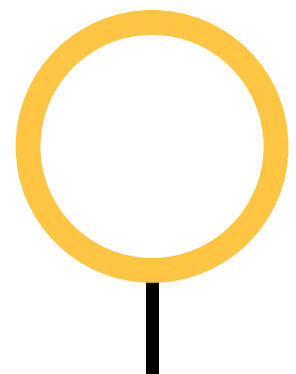
Simone Moyle

Stevie Pitcher

Tim Dilnot

Zoe Gell

GHD would like to thank the
Australasian Railway Association (ARA)
for their support in assisting us to conduct
research at their women in rail event.





About GHD

We're committed to solving the world's biggest challenges to make energy, water and communities sustainable for generations to come.

GHD is global professional services company leading through engineering, design and digital expertise. Our future-focussed approach delivers extraordinary social, environmental and economic outcomes and helps us fulfil our purpose: to deliver lasting community benefit, together with our clients.

Established in 1928, we remain wholly owned by our people. Today, we are 11,000 diverse and skilled individuals connected across 160+ offices in five continents — Asia, Australia, Europe, North and South America, and the Pacific region.

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