



AUSTRALIAN
INDUSTRY
STANDARDS

RAIL IRC WORKPLAN



**SECTOR
OVERVIEW**

A black and white photograph of a long freight train with multiple locomotives and cargo cars, stretching into the distance on a set of tracks.

EMPLOYMENT

A photograph of a worker in a dark jacket using a circular saw to cut through a metal rail track. The image is overlaid with a semi-transparent magenta filter.

**SECTORAL
INSIGHTS**

A photograph of two men in work clothes, one in the foreground and one slightly behind, looking towards the camera. The image is overlaid with a semi-transparent magenta filter.

**SKILLS
OUTLOOK**

A photograph of a close-up view of a rail track with gravel stones, showing the metal rail and the underlying bed.

**TRAINING
PRODUCT
REVIEW PLAN
2016-17 - 2019-20**

A photograph of a person standing on a train platform, looking towards a train that is stopped at the platform. The image is overlaid with a semi-transparent magenta filter.

**IRC
SIGNOFF**

A solid magenta rectangular block.



RAIL IRC WORKPLAN

This Four-Year Workplan has been submitted by the Rail Industry Reference Committee (IRC) to Australian Industry and Skills Committee (AISC) for approval.

The Workplan identifies the priority skill needs of the Rail industry following a research and stakeholder consultation process conducted by Australian Industry Standards on behalf of the IRC.

Once approved by the AISC the Workplan informs the development of a four year rolling National Schedule for development and review work of the Rail specific components of the Transport and Logistics Training Package. More information on the National Schedule can be found at:

www.aisc.net.au/content/national-schedule

This Workplan was agreed to by the Rail IRC Chair on Monday, 26 September 2016:

Jo-Anne Galea
RAIL IRC CHAIR

HOW TO USE THIS DOCUMENT



This document contains links to assist the reader to navigate efficiently through the content of the Workplan. The tiles on the cover page, and the divider pages will link to the relevant content when clicked with a mouse, or touched on a tablet device.

The tiles at the bottom of pages can be clicked to return to the beginning of each section, or the front page of the Workplan as required.

RAIL INDUSTRY REFERENCE COMMITTEE

The Rail industry Reference Committee has been assigned responsibility for the Rail specific components of the Transport and Logistics Training Package.

The TLI Transport and Logistics Training Package provides the only nationally recognised Vocational Education and Training (VET) qualifications for occupations involved in: Rail Infrastructure, Track Protection, Shunting, Rail Track Vehicle Driving, Tram or Light Rail Infrastructure, Customer Service, Rail Driving, Rail Track Surfacing, Signalling, Electric Passenger Train Guard, Track Protection, Heritage Locomotive Assistant or Steam Locomotive Fireman, Train Driving, Safety Investigation, Network Control, Safety Management, Tram/Light Rail Control and Rail Operations Management.

More information about the Rail IRC and its work can be found here:

<http://www.australianindustrystandards.org.au/committee/rail-industry-reference-committee/>

Name	Organisation
Adam Saab	Sydney Trains
Caitlin Ryan	V/Line Pty Ltd
Carol Hedrick	Queensland Rail
Chris Koch	SCT Logistics
Dani Gentle	Asciano/Pacific National
Gabby Peters	Office of the National Rail Safety Regulator (ONRSR)
Gary Talbot	Rail, Tram and Bus Union Australia (RTBU)
Jo-Anne Galea	Genesee and Wyoming Australia
Judy Reynolds	Brookfield Rail
Laurie Wilson	Rail Industry Safety and Standards Board (RISSB)
Nicole Catterson	Australian Rail Track Corporation (ARTC)
Patricia Thomas	Department of Planning, Transport and Infrastructure, SA
Paul Bashford	Aurizon
Phil Allan	Australasian Railway Association
TBA	Public Transport Authority - Government of Western Australia
Tony Landi	John Holland Group Pty Ltd
Victoria Kent	Rio Tinto

RAIL SECTOR OVERVIEW



**RAIL
INDUSTRY
OVERVIEW**



**TRAINING
PACKAGE
OVERVIEW**



**BUSINESS
ANALYSIS**



**KEY
STAKEHOLDERS**



**INDUSTRY
CHALLENGES AND
OPPORTUNITIES**

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RAIL INDUSTRY OVERVIEW

The Rail industry underpins Australian business as it carries people and commodities on 35,015 kilometres of track across the country. It has an estimated annual revenue of \$27.1 billion, adding \$12.4 billion to the Australian economy in 2015-16. The industry employs more than 55,500 people across more than 170 companies comprising private and public operators, passenger and freight operators, track owners and managers, manufacturers and suppliers that operate in urban, regional, and rural areas of Australia.

The rail components of the TLI Transport and Logistics Training Package provide the only nationally recognised Vocational Education and Training (VET) qualifications for occupations involved in: Rail Infrastructure, Track Protection, Shunting, Rail Track Vehicle Driving, Tram or Light Rail Infrastructure, Customer Service, Rail Driving, Rail Track Surfacing, Signalling, Electric Passenger Train Guard, Track Protection, Heritage Locomotive Assistant or Steam Locomotive Fireman, Train Driving, Safety Investigation, Network Control, Safety Management, Tram/Light Rail Control and Rail Operations Management.

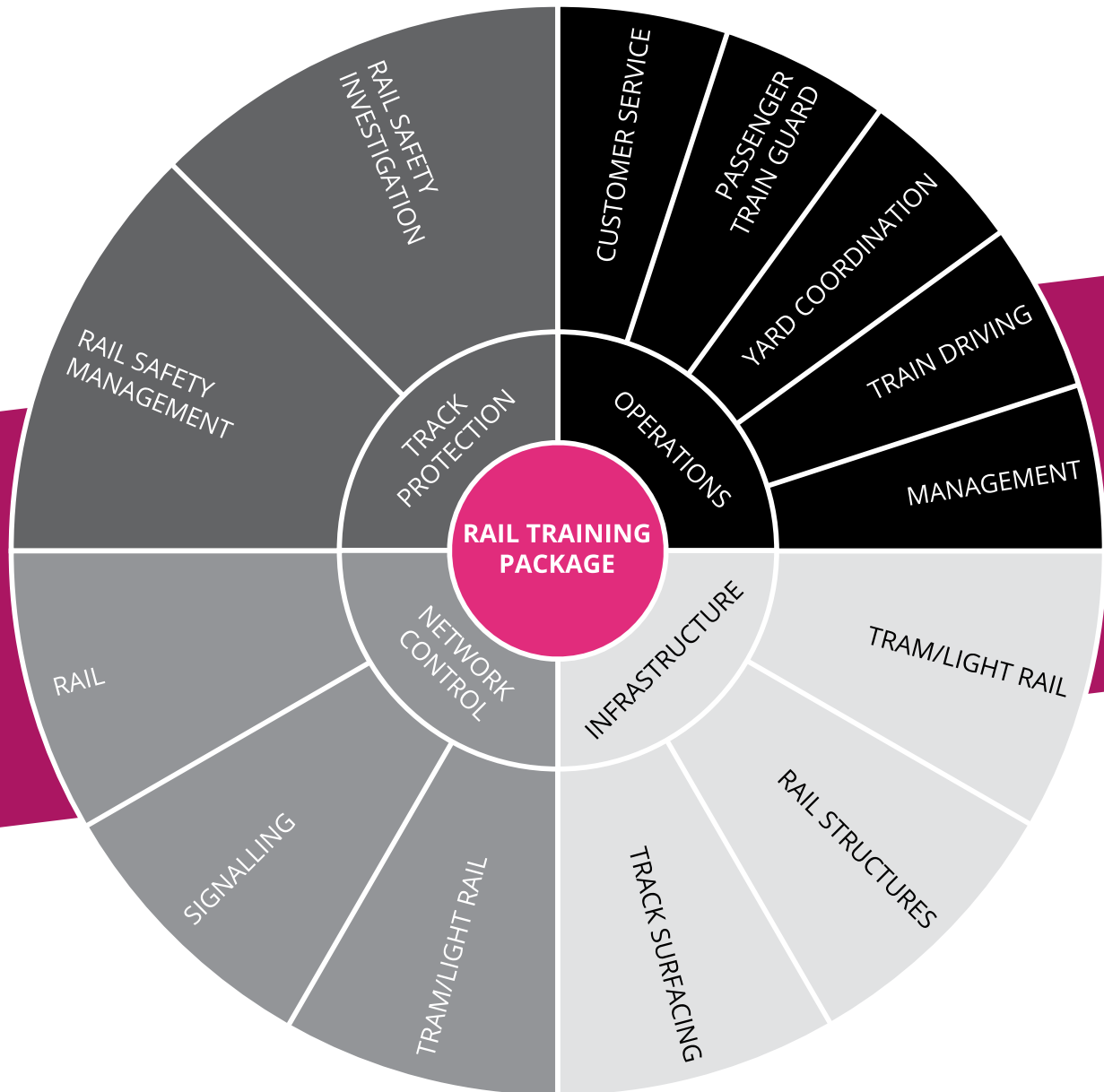
The TLI Transport and Logistics Training Package contains the following Rail-specific components: 26 qualifications, 245 units of competency and 53 skill sets which cover: Rail Infrastructure, Light Rail, Tram and Train Driving, Rail Operations Management, Signalling and Safety Management.

The Rail-specific qualifications in the TLI Transport and Logistics Training Package are:

- Certificate II in Tram or Light Rail Infrastructure
- Certificate II in Rail Customer Service
- Certificate II in Rail Infrastructure
- Certificate II in Rail Track Vehicle Driving
- Certificate II in Shunting
- Certificate II in Track Protection
- Certificate III Heritage Locomotive Assistant or Steam Locomotive Fireman
- Certificate III in Rail Driving
- Certificate III in Tram or Light Rail Infrastructure
- Certificate III in Mechanical Rail Signalling
- Certificate III in Rail Track Surfacing
- Certificate III in Rail Structures
- Certificate III in Electric Passenger Train Guard
- Certificate III in Rail Infrastructure
- Certificate III in Track Protection
- Certificate III in Rail Signalling
- Certificate III in Terminal Train Driving
- Certificate III in Rail Yard Coordination
- Certificate III in Rail Customer Service
- Certificate IV in Tram/Light Rail Control
- Certificate IV in Rail Network Control
- Certificate IV in Rail Safety Investigation
- Certificate IV in Rail Infrastructure
- Certificate IV in Train Driving
- Certificate IV in Rail Safety Management
- Diploma of Rail Operations Management



RAIL TRAINING PACKAGE ARCHITECTURE



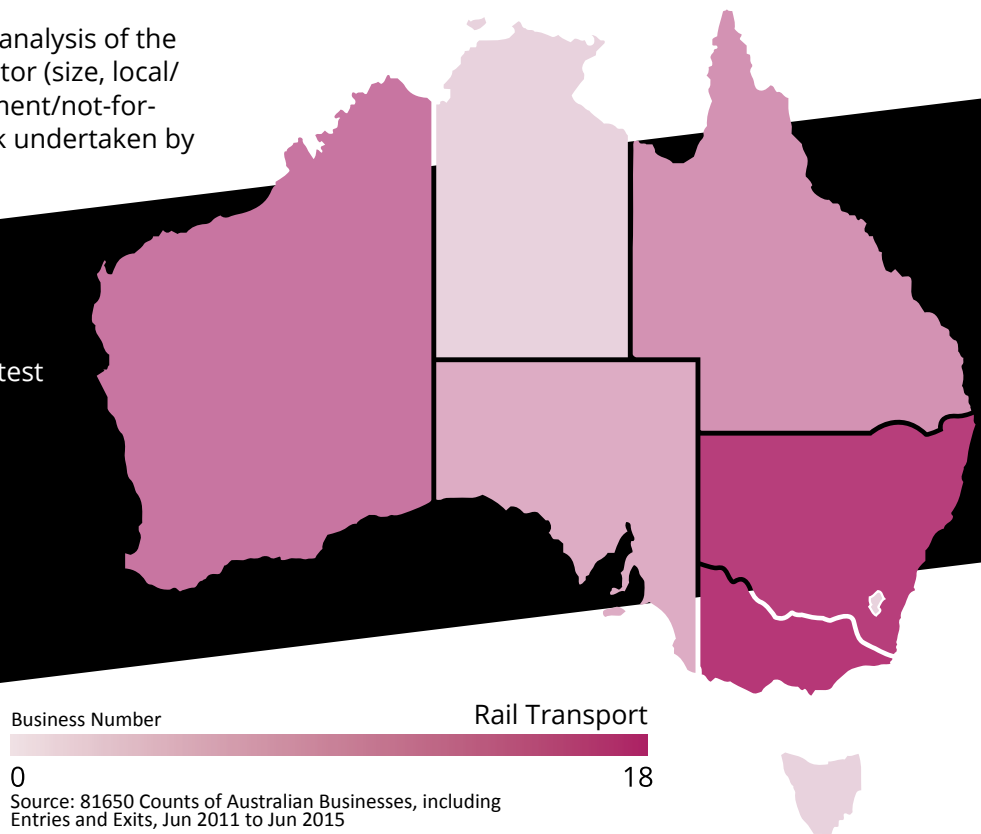
SECTOR OVERVIEW

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RAIL BUSINESS ANALYSIS

The following image provides analysis of the businesses involved in the sector (size, local/state/national/global, government/not-for-profit/for-profit, scope of work undertaken by those businesses).

The Rail industry has the greatest enterprise representation per capita in Victoria and Western Australia where businesses number 33% and 70% higher than average, respectively.



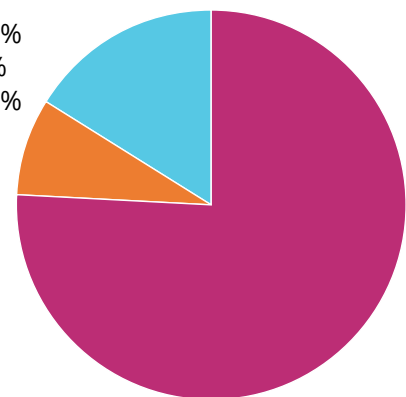
Business Analysis Metrics

Revenue (\$ m)	27,135.50
Profit (\$ m)	1814.7
Average Wage (\$)	94,550.39
No. of Businesses	3068
Employment Growth (% to 2021)	11%

Note: Figures above include Railway Track Construction, Urban Bus and Tramway Transport.

Business Size (Composition)

Small	76%
Medium	8%
Large	16%





KEY RAIL STAKEHOLDERS

Stakeholder Category	Organisation	
Employers	Accell Pty Ltd Asciano/Pacific National Aurizon Australia Western Railroad Pty Ltd BHP Billiton BlueScope Steel Brookfield Rail Pty Ltd Downer Group Fortescue Metals Group Limited Genesee and Wyoming Australia Great Southern Rail John Holland Group Pty Ltd KDR - Yarra Trams Manildra Group Metro Trains Melbourne	Public Transport Authority Queensland Rail Rio Tinto Roy Hill Infrastructure Pty Ltd SCT Logistics TasRail TransVolution V/Line Passenger Pty Ltd voestalpine VAE Railway Systems Pty Ltd Voith Turbo Pty Ltd Wabtec Control Systems Watco Companies WA WS Atkins International Limited
Employer Representatives	Australasian Railway Association Rail Industry Safety and Standards Board	
Employee Representatives	Association of Tourist & Heritage Rail Australia Inc. Australian Manufacturing Workers Union Australian Services Union	Rail & Maritime Transport Union Inc. Rail Track Association Australia Rail, Tram and Bus Union Australia
Licensing/Regulatory	Office of the National Rail Safety Regulator	
Government	Federal, State/Territory Departments Australian Rail Track Corporation Australian Transport Safety Bureau	
Industry Advisory	Automotive Training Board - NSW Industry Skills Advisory Council - NT Logistics Training Council - WA	TDT South Australia TLI Connect
Training Organisations	TAFEs, Private RTOs, Enterprise RTOs	

175 Registered Training Organisations have Rail-specific qualifications from the Transport and Logistics Training Package on their scope of operations.

INDUSTRY CHALLENGES AND OPPORTUNITIES

TECHNOLOGY CHANGE

While the need for train drivers will continue well into the 2020s, the skill requirements of these drivers will change much earlier. They will need to become more technologically aware, as they begin to drive the trains remotely which means they will have to learn a different way of handling the trains.

Technology is changing and the pace of change presents an even greater challenge for the Rail industry. Mechanised track patrols and Unmanned Aerial Vehicles (UAVs) are being used to inspect bridges and structures, which means that instead of performing a physical assessment on site, workers now have to identify defects on a computer screen. This has significantly changed the skill requirement of the job, a situation that will continue as the use of these and other technologies continue to grow throughout the Australian rail sector.

Whilst technology associated with driverless trains will undoubtedly raise skills issues in the future, of more immediate concern is skills required for the implementation and maintenance of ETCS (European Train Control System) and CBTC (Communications Based Train Control). These new technologies will be increasingly implemented in major suburban rail and metro networks in the capital cities, initially in the Eastern States. Communications technology is rapidly improving, providing more efficient and safe working systems on trains.

Big Data – sensors developed to capture data have had a major impact on rail and tram operations. Used for predictive condition monitoring and maintenance systems, analysed data provides early detection of faults and indicates maintenance requirements on an as-needs basis, reducing the labour requirement.

EXTERNAL INFLUENCES

Challenges to the sector include population growth and the increase in demand for cost efficient transport services, increased trade volumes both domestically and internationally, increasing energy prices and scarcity of urban land¹.

Reduced mining traffic from Australia's mines will see major rail operators decrease rail freight over the next few years. This will result in job cuts and other cost saving measures. Smaller providers may leave the industry. New markets offer hope for the future, such as the emerging markets of India and other South Asian economies².

INLAND RAIL

The new 1700km rail line will connect Melbourne to Brisbane via regional Victoria, New South Wales and Queensland. Initial reports indicate that 16,000 new jobs will be created with an average of 700 additional jobs per year³.

EMPLOYMENT



**EMPLOYMENT
STATISTICS**



**WORKFORCE
CHALLENGES AND
OPPORTUNITIES**

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EMPLOYMENT

EXPLANATORY NOTES

Workforce

The size of an industry's workforce is established by the Australian Bureau of Statistics (ABS) using two different approaches. The Labour Force survey, which provides a 30-year view of the industry, assigns each industry category based on the main job of the respondent. The Australian Industry dataset (which the Workforce Projections charts are based on), uses a top-down approach where industries are primarily classified by the single predominant industry class associated with a business' ABN. An industry's workforce therefore is bounded in the first instance by the occupations of workers and in the second by the primary business of an enterprise. The different approaches can therefore result in quite different workforce figures.

AIS has chosen to distinguish these approaches using the terms **Workforce – Occupation based** and **Workforce – Employer based**.

Enterprise size

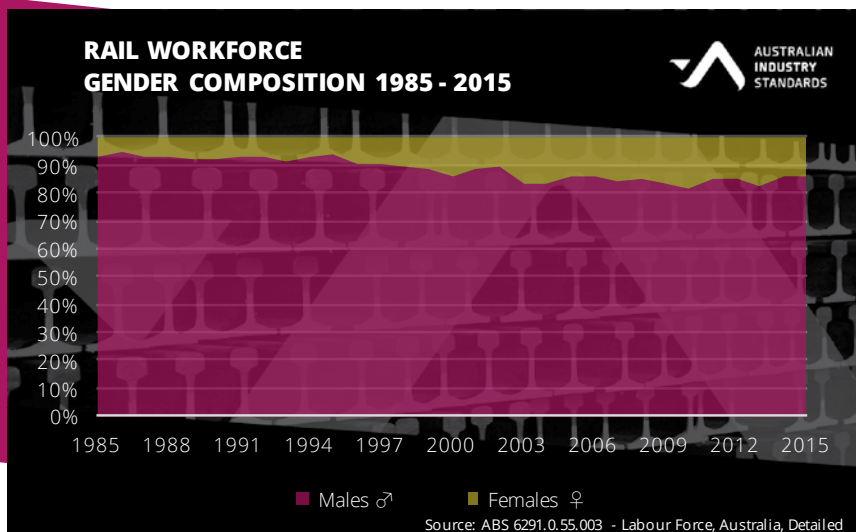
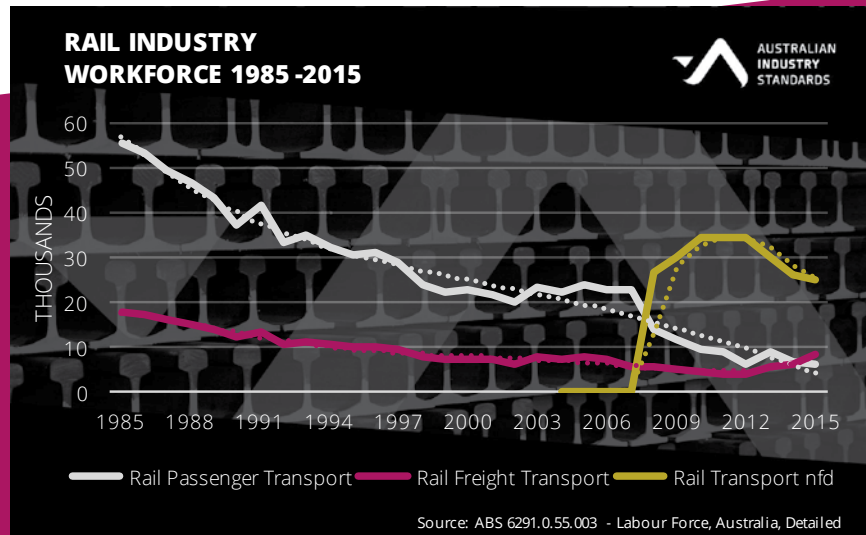
Industry definition by ABN also applies to the Counts of Australian Businesses data (size and distribution). Furthermore, low level values in these tables are subject to perturbation to anonymise the data. This may result in some areas with a low level value being perturbed to zero.

Exemptions

The scope of the Labour Force Survey is limited to the civilian population of Australia and therefore members of permanent defence forces are excluded from the survey.

EMPLOYMENT HISTORY - OCCUPATION BASED

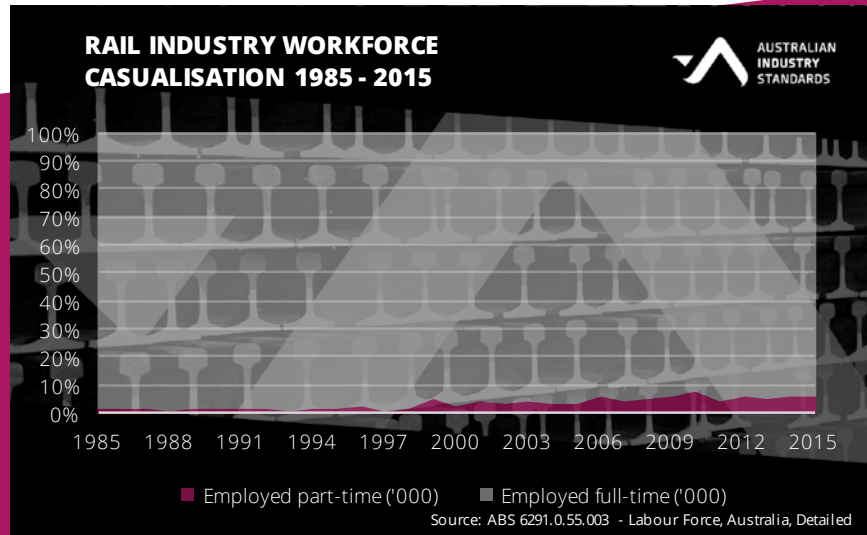
The long term decline of the Rail workforce was arrested from 2006-2012, perhaps reflecting the increased rail freight task of the mining boom. The increasing share of "Not further defined" (nfd) is contributing to the apparent continued decline in Passenger and Freight workforce since.



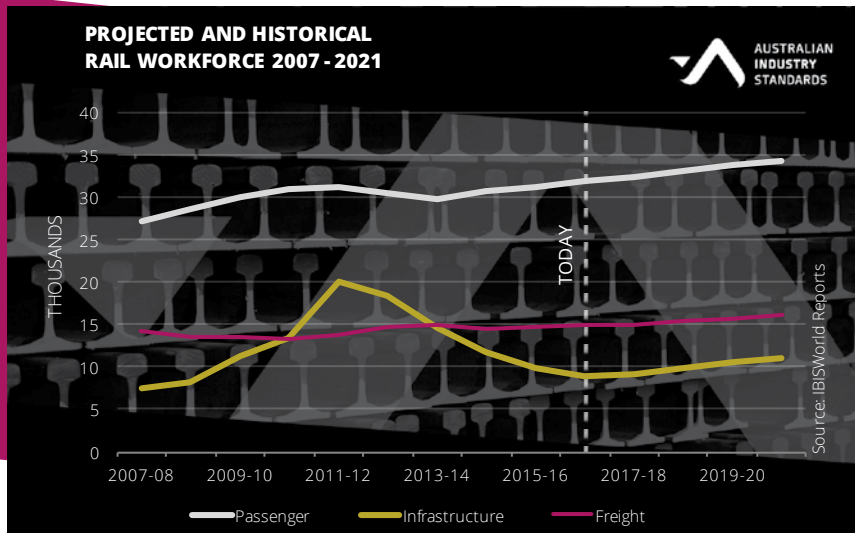
While the total workforce is reported to have dropped by 45% in thirty years, female participation has actually grown by 12% over the same period

**EMPLOYMENT
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The Rail industry has among the lowest levels of part-time work, measuring only 5.6% in 2015.



EMPLOYMENT PROJECTION - EMPLOYER BASED



The mining boom and decline is most visible in the Rail infrastructure sector with Passenger and Freight increasing to meet population growth and freight task, respectively.

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WORKFORCE SUPPLY-SIDE CHALLENGES AND OPPORTUNITIES

AGEING WORKFORCE

The ageing workforce is compounded by the impact of other health-related conditions which can be associated with ageing and other lifestyle factors. These can have specific impacts in the Rail industry, for example sleep apnoea and diabetes may impede a train driver's ability to pass the stringent medical tests associated with the role, and which may lead to early retirement. Career options for these drivers can be limited, as most have very little training in other areas, and consequently few transferrable skills.

DEMOGRAPHICS

The Rail industry is largely represented by men, making up 87 per cent of the workforce in 2015. The rail sector is also an ageing workforce – with 60 per cent of tram and train drivers, 44 per cent of railway track workers and 46 per cent of railway signal operators 45 years or older⁴.

The industry is also affected by the operational expansiveness, which sees many of those in the industry working in remote areas. Attracting suitably skilled persons to undertake these roles is imperative. If companies can provide workplaces that are culturally inclusive and also attractive to women, that could go a long way to address the ageing industry.

HIGHER-ORDER SKILLS

Higher-order leadership, management and problem solving skills have previously been identified by the Rail industry as the leading skill requirements⁵. Skills in safety management leadership in particular are becoming highly regarded within the industry. Safety critical communications will become a higher priority as the industry embraces technology, and needs to provide a level of comfort to the public who are likely to have reservations about the safety of the technology.

Training in Human factors in Rail industry roles will assist with the implementation of new technology for rail workers, and will also assist in providing a level of comfort to wider community.

QUALIFICATION UPTAKE

There has been an increase in the uptake of individual units of competency to train staff. Full qualifications offer a set of job specific skills which holistically address the skills requirements of the industry. This is largely driven by cost parameters.

ATTRACTION OF SUITABLY QUALIFIED AND EXPERIENCED TRAINERS

There is increasing demand for trainers and assessors who have exceptional systems understanding and e-learning capacity, as well as the ability to deliver high quality training within a simulator learning environment. Attraction of adequately experienced trainers is extremely tough in the industry, as the remuneration and benefits are skewed in favour towards drivers and operational staff.



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SKILLS OUTLOOK



**INTERNATIONAL
/ NATIONAL
WORKPLACE
TRENDS**



PRIORITY SKILLS

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SKILLS OUTLOOK

INTERNATIONAL / NATIONAL WORKPLACE TRENDS

The Rail industry will be profoundly impacted by technology changes. Driverless technology, communications systems and big data have all seen the industry change rapidly in the last decade and will continue to impact.

Major freight companies are looking to use automated systems to implement driverless technology, with some innovations now seeing proposals for smaller scale metropolitan projects. This could have a dramatic consequence for train drivers in the short to medium term as these technologies become more viable.

Australia is following European models and implementing European Train Control Systems (ETCS). This international trend has identified that specific skills are required to implement and maintain these systems.

Communications technology and big data are also contributing to workplace and job design through rapid changes to workplace systems such as wireless signalling and sensors developed to capture data for use in predictive condition monitoring and maintenance systems.

Moving to technology-based workplaces has impacts on the workforce, with upskilling required to ensure the right skills are developed to meet flexible job demands.

PRIORITY SKILLS

RAIL TECHNICAL SKILLS

Australian Industry Standards has developed a list of technical skills from analysis of the Rail-specific qualifications in the Transport and Logistics Training Packages.

These skills can be grouped into two categories:

1. Train Operations (including Passenger, Freight, Light Rail, Tram)
2. Rail Infrastructure Operations

An overwhelming number of IRC responses indicated that Rail Technical Skills were the highest priority for the Industry.

GENERIC SKILLS

Ranking of the 12 generic workforce skills in order of importance to the Rail industry.

Skill	Priority
Design mindset / Thinking critically / System thinking / Solving problems	1
Managerial / Leadership	2
Learning agility / Information literacy / Intellectual autonomy and self-management	3
Communication / Virtual collaboration / Social intelligence	4
Technology	5
Data analysis	6
Customer service / Marketing	7
Language, Literacy and Numeracy (LLN)	8
Science, Technology, Engineering, Mathematics (STEM)	9
Financial	10
Entrepreneurial	11
Environmental and Sustainability	12

There were no Rail IRC responses indicating that Generic Skills were more important than Technical Skills



CROSS-SECTORAL SKILLS

A list of cross-sector skills was derived from analysis of the qualifications in the Transport and Logistics, Aviation and Maritime Training Packages.

The five most important cross-sectoral workforce skills are listed below in order of importance to the Rail industry

Skill	Priority
Safety	1
Training	2
Equipment Testing and Maintenance	3
Quality Assurance	4
Vehicle Operation	5

There were no Rail IRC responses indicating that Cross-Sectoral workforce skills were more important than Technical Skills.

RAIL SKILLS - RELATED INSIGHTS

The Rail industry is a key element of Australia's transport network, freight distribution and a major contributor to the national economy.

The Rail industry employs more than 55,500 people and has an estimated annual revenue of \$27.1 billion, adding \$12.4 billion to the Australian economy in 2015-16. Industry activity comprises private and public operators, passenger and freight operators, track owners and managers, manufacturers and suppliers.

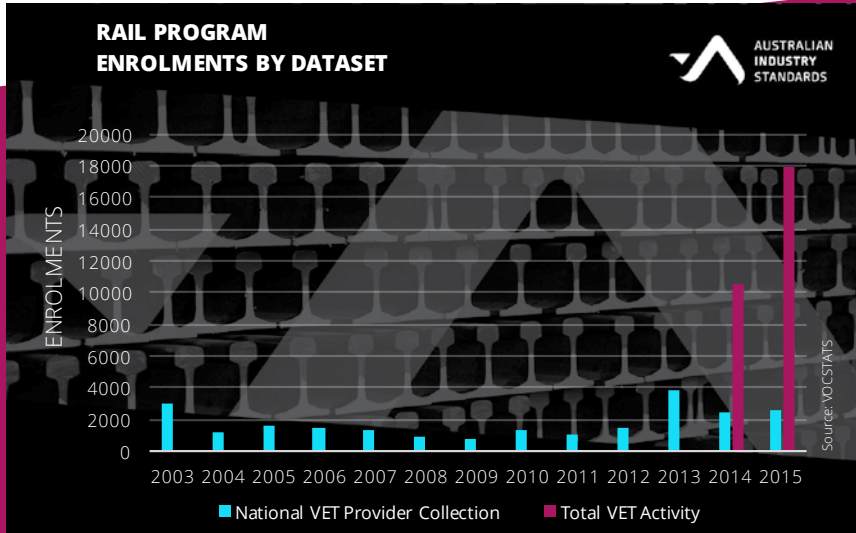
The sector is becoming increasingly automated on a range of fronts, including driverless vehicles, monitoring and maintenance, safety systems, requiring training and new skills for the workforce. Safety is also a major focus, subject to regulation and requiring resourcing and training.

The Rail industry Reference Committee (IRC) has overwhelmingly indicated that Rail Technical Skills are the highest priority for the industry. It has highlighted the need to prepare the workforce for current and future challenges. Technical skills focus on areas related to Train Operations (including Passenger, Freight, Light Rail, Tram) and Rail Infrastructure Operations. Safety-related and communications skills were noted as especially critical.

The industry strongly identifies the importance of ensuring a properly designed and maintained rail corridor, stressing the limited opportunity for maintenance and development is small due to the heavy use and service volumes. Stakeholders also identify the importance of continuing to embrace and utilise technology and the need for well trained staff to operate drones and systems.

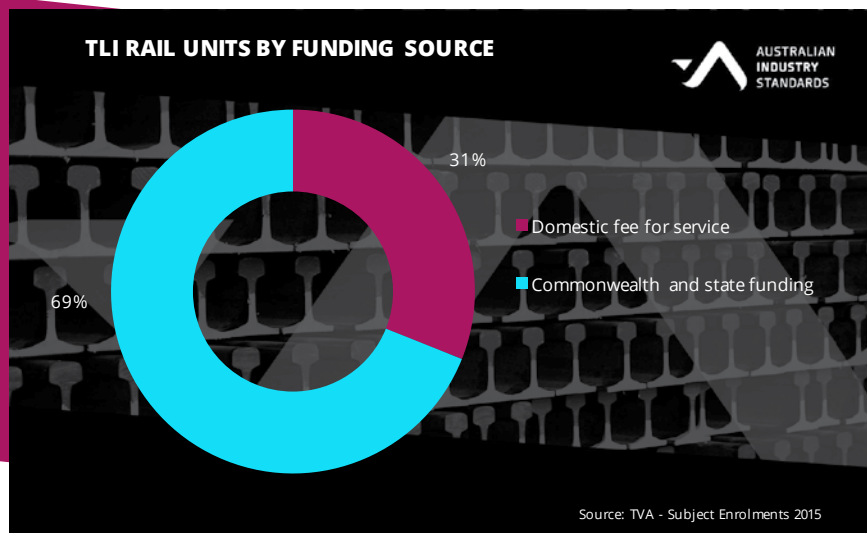
Technology has had a major impact on Rail industry and operations. Big Data sensors have had a major impact on rail and tram operations, providing early detection of faults and maintenance requirements. Communications technology is providing more efficient and safe working systems.

The industry is supported by the Rail-specific components of the TLI Transport & Logistics Training Package consisting of qualifications for rail infrastructure; light rail, train and tram driving; rail operations management; signalling; and safety management. Total VET activity enrolments have greatly increased over the past two years.



Total VET Activity figures dwarf the previous dataset as the effects of regular recertification enter the data. The sudden increase from 2014-15 is most likely due to enterprise RTOs availing of the 12-month grace period for reporting TVA data.

The Rail industry contributed almost 70% of funding towards training in 2015.



Males make up 87 per cent of the Rail industry workforce in 2015. The rail sector is also an ageing workforce – with 60 per cent of tram and train drivers, 44 per cent of railway track workers and 46 per cent of railway signal operators 45 years or older.

While the total workforce is reported to have dropped by 45 per cent in 30 years, it is predicted to grow by 11 per cent through to 2021. Female participation has grown by 12 per cent over the same 30-year period.

The sheer scope of the Australian rail network requires a properly skilled remote area workforce. Attracting, training and retaining suitably skilled persons to undertake these roles presents its own separate challenges.

Recruitment of experienced trainers is challenging, as the remuneration and benefits are skewed in favour towards drivers and operational staff. However, there has been an increase in the uptake of individual units of competency to train staff. Full qualifications offer a set of job specific skills which holistically address the skills requirements of the industry.

Further integration of rail compliance and regulations into the Training Package will become increasingly important.

EXPLANATORY NOTES

The Training Enrolments charts compare two datasets; the **National VET Provider Collection** and the **Total VET Activity (TVA)** dataset. The primary distinction between the two is that Total VET Activity data is collected from all types of providers and not only those in receipt of Commonwealth or state funding. TVA data collection commenced in 2014.

Exemptions

Where the submission of training data to TVA conflicts with defence or national security legislation, or jeopardise the security or safety of personnel working in defence, border protection, customs or Australian police departments, an exemption from reporting training data is available.

Organisations that deliver training for vital services to the community (such as emergency, fire, first-aid and rescue organisations) may have received an exemption to submit data to TVA. From 1 January 2016 however, the exemption from reporting will apply only in respect of training activity not delivered on a fee-for-service/commercial basis.



REFERENCES

INDUSTRY CHALLENGES AND OPPORTUNITIES

¹ ARA National Freight Strategy

² Transport outlook: larger companies will survive global economic downturn and slowdown in mining. The Conversation. March 2016 <http://tinyurl.com/zsgtazm>

³ www.inlandrail.artc.com.au

WORKFORCE SUPPLY-SIDE CHALLENGES AND OPPORTUNITIES

⁴ Labour Force Survey, Annual Average. www.joboutlook.gov.au

⁵ Transport and Logistics Industry Skills Council's 2015 Employer Survey

RAIL TRAINING PACKAGE REVIEW PLAN 2016/17 - 2019/20

REVIEW PLAN – TIMING AND PRIORITISATION

The Workplan review and development priorities for the rail specific components of the TLI Transport and Logistics Training Package have been structured to prioritise the skill needs of industry in particular around the integration of new technology across the Rail industry and the associated skill requirements, and address any regulatory change.

The Workplan will undergo a formal review annually by the Rail IRC.

2016 – 2017

The priority in the 2016 Workplan is maintenance related to the imported units of competency contained within the Rail qualifications. This is being addressed in consultation with the relevant Skills Service Organisation (SSO).

Development of a qualification for Scheduling and Rostering has been prioritised by the Rail IRC to be developed as part of the four-year Workplan. This qualification will support occupations in both human resources and operational resourcing. This development work has a direct correlation to the Transport and Logistics IRC, who have an Activity Order for the development of a Business Case for a Scheduling qualification for the Transport and Logistics sector. The Rail IRC proposes that this development work be considered within the 2016 - 2017 timeline to enable the potential collaboration between the two IRCs to develop a qualification appropriate for both the Rail and Transport and Logistics industries.

2017 – 2018

Training Package development proposed for 2017-18 includes new units of competency and skill sets for:

- Train / rail vehicle automation
- Management of human factors
- Safety critical communications

Autonomous trains and vehicles are evolving rapidly and their use on new rail corridors, as well as on existing rail networks will require new skills in rail. New units of competency are needed to meet the practical and technical skill requirements to address on-board systems issues such as faults and safety management system requirements, autonomous trains and signalling. These new units of competency may be used to create a skill set for autonomous vehicles which may have application in road transport, maritime and aviation.

A skills need for the management of human factors has been identified for rail safety workers. Rail safety work is dangerous, particularly for those working or those responsible for track work and train movements on the rail corridor.

The development of new units of competency has been identified to meet safety critical communications and control skills in the Rail industry with the introduction of new technologies. These skills include meeting communication and control standards and protocols for capturing critical conversations.

2018 – 2020

The remaining qualifications, skill sets and units of competency that have not been reviewed or had any development between 2016-2018 will be reviewed in this period.

The review will examine stakeholder feedback and involve consultation with stakeholders, including regulatory bodies, on the appropriateness of the current qualifications, primarily in response to automation within the Rail industry.

Units of competency that are in multiple qualifications or skill sets will only be reviewed once in a four-year period, unless there is a regulatory requirement or urgent attention is required to meet specific industry requirements.

The Rail IRC does not at this time anticipate any of the Rail qualifications, skill sets or units of competency contained within the Training Package will be required to be reviewed more than once in the four-year period. The exception will be if there is regulatory or legislative change, or industry driven change due to safety requirements or specific technology advancement.

The Rail IRC has not identified any training product that is expected to be contentious or lengthy in development.

LEGISLATIVE /REGULATORY REQUIREMENTS

The TLI Transport and Logistics Training Package which encompasses the Rail industry has units of competency that are specified in the requirements of the National Rail Safety Legislation. Rail transport operators must ensure that each rail safety worker who is to perform rail safety work in relation to its railway operations has the knowledge and skills necessary to enable the worker to carry out the work safely.

Requirements are set out in s117 of the Rail Safety National Law (RSNL) and r30 of the Rail Safety National Law National Regulations.

Should legislative or regulatory requirements change, this review or development would take precedence over other reviews planned as these are often associated with a higher workplace risk.

INTERDEPENDENCIES

The Rail specific qualifications within the TLI Transport and Logistics Training Package include imported units of competency, within core and elective qualification packaging rules. Industry sector interdependencies that will potentially initiate future Rail qualification reviews include imported units of competency from 14 separate Training Packages (inclusive of predecessors).

Training Packages that provide imported units of competency into TLI Rail specific qualifications:

- MEM - Manufacturing and Engineering
- RII - Resources and Infrastructure Industry Training Package
- BSB - Business Services Training Package
- CHC - Community Services
- HLT - Health Training Package
- SIT - Tourism, Travel and Hospitality Training Package
- CPC - Construction, Plumbing and Services Training Package
- AHC - Agriculture, Horticulture and Conservation and Land Management Training Package
- TAE - Training and Education Training Package
- NWP - National Water Training Package
- UET12 - Transmission, Distribution and Rail Sector Training Package
- PSP - Public Sector Training Package
- PUA12 - Public Safety Training Package
- CPP - Property Services Training Package

One Training Package imports units of competency from TLI Rail specific qualifications:

- AVI - Aviation Training Package

IRC Training Product Review Plan – 2016/17 – 2019/20
Rail Industry Reference Committee
Contact details: GM IRC Operations, Australian Industry Standards
Date submitted: 30 September 2016

Planned review start (Year)	Training Package code	Training Package name	Qualification code	Qualification name	Unit of competency code	Unit of competency name
2016 - 2017	ZQR00 - Queensland Rail - Civil Infrastructure		ZQR10100	Certificate I in Queensland Rail Civil Infrastructure Trackworker	AISC Decision: The department has identified an initial tranche of potentially obsolete or superfluous qualifications and units of competency. It is proposed that the Industry Reference Committee undertake industry consultation about the impact of removing these qualifications and units of competency from the system. <i>(Note: Consultation has commenced)</i>	
2016 - 2017	ZQR00 - Queensland Rail - Civil Infrastructure		ZQR20100	Certificate II in Queensland Rail Civil Infrastructure Trackworker		
2016 - 2017	ZQR00 - Queensland Rail - Civil Infrastructure		ZQR30100	Certificate III in Queensland Rail Civil Infrastructure Trackworker		
2016 - 2017	TLI – Transport and Logistics Training Package (Rail)		New qualification	Develop a Scheduling and Rostering qualification. Proposal for concurrent development for Rail and Transport and Logistics		
2017 - 2018	TLI – Transport and Logistics Training Package (Rail)		New units of competency / skill sets	Develop new units of competency and skill set for autonomous Train / Rail Vehicle.		
2017 - 2018	TLI – Transport and Logistics Training Package (Rail)		New units of competency / skill sets	Develop new units of competency and skill set for the management of human factors, at entry level, the network control area and train driver.		

Planned review start (Year)	Training Package code	Training Package name	Qualification code	Qualification name	Unit of competency code	Unit of competency name
2017 - 2018	TLI – Transport and Logistics Training Package (Rail)		New units of competency / skill sets	Develop new units of competency to create a skill set for Safety Critical communications meeting communication standards and capturing critical conversation protocols as required.		
2018 - 2020	TLI – Transport and Logistics Training Package (Rail)		Review all remaining Rail qualifications within the TLI Transport and Logistics Training Package that have not been reviewed within the four-year period.			

AUSTRALIAN INDUSTRY STANDARDS

Australian Industry Standards (AIS) provides high-quality, professional secretariat services to the Rail industry Reference Committee, in our role as a Skills Service Organisation.

AIS provide services to 11 allocated IRCs which cover the Gas, Electricity, Electrotechnology, Corrections, Public Safety (including Police, Fire Services, Defence), Water, Aviation, Rail, Transport & Logistics and Maritime industries. AIS supports these important industry sectors using our world-class in-house capability and capacity in technical writing, quality assurance, project management and industry engagement in the production of Training Packages.

AIS was established in early 2016, 20 years after its predecessor the Transport and Logistics Industry Skills Council (TLISC) was established in 1996. More information about AIS can be found at www.australianindustrystandards.org.au

- We support industry growth and productivity through our modern innovative approach to establishing skills standards
- We provide high-quality, professional secretariat services to help our allocated industry reference committees develop the skills that industry needs
- We partner with industry to shape the workforce of the future



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